DOKUZ EYLÜL UNIVERSITY

GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES

ASSESSMENT OF A SURVIVABILITY INDEX FOR DROUGHT MANAGEMENT IN RIVER BASINS

by

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İZMİR

ASSESSMENT OF A SURVIVABILITY INDEX FOR FROUGHT MANAGEMENT IN RIVER BASINS

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by

Mert Can GÜNAÇTI

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İZMİR

Ph.D. THESIS EXAMINATION RESULT FORM

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ASSESSMENT OF A SURVIVABILITY INDEX FOR DROUGHT MANAGEMENT IN RIVER BASINS

ABSTRACT

The adverse effects of droughts have been the struggle of humanity from the early ages and still is a truly relevant problem. The efforts to understand, prevent and mitigate the drought has motivated researchers to develop indicators, indices, and action plans for its management. The presented thesis suggests a novel index entitled Survivability from Droughts Index (SDI) to evaluate quantitative and qualitative indicators that represents the WEF Nexus system as well as the three pillars of sustainability: economy, social and environmental aspects. The index consists of four main sub-indices, namely, perception, vulnerability, adaptability and recoverability. Each of which defines the stages when engaging with drought. The SDI capsulates the economic survivability of the agricultural sector from the scale of a river basin, in the case of Gediz River Basin, Türkiye. While the results of the thesis validate the historical droughts, it also indicates that survivability from droughts can be achieved by actions to improve the sub-indices of SDI. The overall framework of SDI demands various data and engagement with stakeholders, but the results represent a strong connection with the analyzed case study. The outcomes of the thesis are most beneficial to the decision-makers to detect and prioritize their measurements such new investments, insurance policies, etc. in drought-vulnerable areas within the analyzed extent.

Keywords: Drought index, risk assessment, WEF nexus, hydrologic modelling, water resources management

NEHİR HAVZALARINDA KURAKLIK YÖNETİMİ İÇİN "HAYATTA KALMA" ENDEKSİNİN TAYİNİ

ÖZ

Kuraklığın olumsuz etkileri ilk çağlardan beri insanlığın önemli bir mücadelesi olmuş ve halen önemini koruyan bir sorundur. Kuraklığı anlama, önleme ve hafifletme çabaları, araştırmacıları kuraklığın yönetimine yönelik indikatörler, endeksler ve eylem planları geliştirmeye motive etmiştir. Sunulan tez, WEF Nexus sistemini temsil eden niceliksel ve niteliksel göstergelerin yanı sıra sürdürülebilirliğin üç sütununu (ekonomi, sosyal ve çevresel yönler) değerlendirmek için Kuraklıktan Hayatta Kalma Endeksi (SDI) başlıklı yeni bir endeks önermektedir. Endeks algı, kırılganlık, uyarlanabilirlik ve kurtarılabilirlik olmak üzere 4 ana alt endeksten oluşuyor. Bunların her biri kuraklıkla mücadelenin aşamalarını tanımlamaktadır. SDI, Türkiye'deki Gediz Nehri Havzası örneğinde, tarım sektörünün ekonomik olarak sürdürülebilirliğini bir nehir havzası ölçeğinden özetlemektedir. Tezin sonuçları tarihsel kuraklıkları doğrularken, aynı zamanda SDI alt endekslerinin iyileştirilmesiyle kuraklıktan kurtulmanın sağlanabileceğini de göstermektedir. SDI'nın genel çerçevesi çeşitli veriler ve paydaşların katılımını gerektirmektedir ancak sonuçlar, analiz edilen çalışma alanı ile güçlü bir bağlantıyı temsil etmektedir. Tezin sonuçları, karar vericilerin, analiz edilen kapsamda kuraklığa karşı hassas alanlardaki yeni yatırımlar, sigorta politikaları gibi önlemleri tespit etmeleri ve önceliklendirmeleri açısından son derece faydalıdır.

Anahtar kelimeler: Kuraklık indeksi, risk değerlendirmesi, WEF bağı, hidrolojik modelleme, su kaynakları yönetimi

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CHAPTER ONE
INTRODUCTION

Throughout history, droughts have been recognized as formidable disasters that affected more people than any other environmental hazard (Willhite, Svoboda, and Hayes, 2007). Enhanced by drivers such as anthropogenic activities, which also affect climate change, population growth, industrial development, etc., droughts which, are natural phenomena, have become more severe and long-term in the last decades. This, of course, attracts the attention of researchers of a broad variety of disciplines to study this phenomenon (Mishra and Singh, 2010). Although there are plenty of drought definitions (Willhite and Glantz, 1985; Goodrich and Ellis, 2006), there has been little communication between disciplines (Kallis, 2008).

From the perspective of hydrologists and engineers, it is a necessary approach to examine this phenomenon and its effects on the water resources assessment, supply vulnerability, estimation of water scarcity, and analyses of droughts (Shi et. al., 2017). The general procedure that the researchers used to monitor the effects of drought on natural processes is either to define sophisticated indices or simply the indicators of the process and observe their change over a period.

Producing an integrated index that covers the aspects of the drought-affected domains such as social, economic, and environmental, requires indicators strongly connected to the system at hand.

Hence this Ph.D. thesis aims to cover not just the water aspect of the drought but also the socio-economic and environmental dimension of a river basin system that has been affected by drought. In order to incorporate these dimensions, the study combines the social, economic, environmental, and water-related indicators to form 4 sub-indices which would finally produce the “Survivability from Droughts Index” (SDI). The underlying 4 sub-indices also represent the stages of survivability; perception, as in being perceptive to incoming droughts; adaptability, as in the ability to adapt to the incoming droughts to avoid their adverse effects; vulnerability, as in the capacity to endure or the fragility to the incoming droughts; and recoverability, as in the potential to economically recover from an experienced drought and to continue the agricultural

activities. The indicators representing these sub-indices and ultimately the SDI, have been decided by the involvement of the stakeholders. Through their experiences and the expert opinions expressed by the consortium of the UNIMED project (TUBITAK Project No:122N412), the SDI has been defined.

The SDI presents a valuable tool for stakeholders, decision-makers, and governmental authorities to assess the drought-vulnerable areas in the river basin, prioritize and plan the drought management plans, and mitigate the possible drought-driven hazards before they occur.

1.1 Purpose & Scope

The concept of drought and its effects have been a topic of interest for the scientific community. In order to understand this phenomenon and mitigate its effects, a plethora of indicators and related indices have been developed (see Chapter Two: Previous Studies). While all of these studies have contributed to our cumulative understanding of drought, most of them usually undertook the drought from a singular perspective, either from natural sciences as in the impact of drought on water resources, environment, social aspects, or from social sciences as in the qualitative understanding of the phenomenon.

The presented thesis aims to produce an integrated drought index to highlight the economic survivability of (depending on the scale) a farmer or a river basin in the case of incoming droughts. While the aim is to answer the economic survivability, the approach includes several other aspects to increase the perspective of the index.

There is a strong link between the stakeholders and the SDI. The SDI includes the farmers' qualitative understanding of the drought through a Value-Attitude-Perception (VAP) Survey. Additionally, the initial list of indicators has been transformed to its final version by the stakeholders' involvement and opinions. Finally, stakeholders have also been involved in validating the SDI results, confirming the historical droughts they have experienced.

On the other hand, the SDI represents the WEFE Nexus domains: Water, Energy, Food, and Ecosystem, as the selected indicators correspond to those aspects. The

awareness of the WEFE or the WEF Nexus concept has been significantly raised after the 2008 financial crisis, concerning the case that ineffective management of finite resources such as water would adversely impact the environment, livelihoods, and economic development (Rockstrom et al., 2009; Beddington, 2010). The trilemma of water, energy, and food security has been emphasized (Wong, 2010) and since 2011, the WEF Nexus concept has accumulated the attention of academics, politics, and development fraternities, encouraging institutions and foundations to fund more studies and projects on the subject (LENSES, 2024).

Finally, the SDI includes the risk of drought, calculated according to the Kaplan-Meier Survivability Estimator Method as demonstrated by Cetinkaya and Gunacti (2024). This addition to the SDI improves the index, as the approach represents the observed time series of the Standardized Precipitation Index (SPI), a cumulative information of the experienced droughts, and allows possibility to its projection into the future and its possible scenarios.

The scale of the study is focused on the river basins. Although the pilot sites of the UNIMED project are the Gediz River Basin, Türkiye, and the Island of Malta, this Ph.D. thesis reports the findings of the Turkish pilot case, Gediz River Basin; Menemen Plain, and Lake Marmara in particular.

CHAPTER TWO
PREVIOUS STUDIES

The phenomenon of drought has intrigued the minds of not just researchers but also the general public since its adverse effects on daily life restrain most of our human activities. The arid climatic conditions appeared to have had such an impact on ancient social-economic activities that they fostered the advancement of ancient meteorological and astronomical measurements. They became the most often written events in characters on bones or tortoise shells, among the world's earliest scripts, along with praying for rain (Hong et al., 2001). The stories such seven years of drought predicted by Joseph, the great famine and political unrest following these events are similar all over the world (Chipman, Avni and Ellenblum, 2021).

The drought research, similar to flood research initially starting from the observations of river levels to sophisticated models and processes, usually focuses on hydrologic systems such as river basins or a region (Hurd et al., 1999; Pasini et al., 2012; Tatar and Eris, 2022; Sarigil et al., 2024; Volpi et al., 2024) and sometimes a country (Al-Saidi et al., 2016). The observation of parameters related to these extreme events has stimulated the researchers to investigate more complex parameters, indicators, or indices that consist of multiple parameters.

The most common indices such as Palmer Drought Severity Index (PDSI) (Palmer, 1965), rainfall deciles (Gibbs and Maher, 1967), Crop Moisture Index (CMI) (Palmer, 1968), Surface Water Supply Index (SWSI) (Shafer and Dezman, 1982), Standardized Precipitation Index (SPI) (McKee et al., 1993), Reconnaissance Drought Index (RDI) (Tsakiris and Vangelis, 2005), SPEI (Standardized Precipitation Evapotranspiration Index) (Vicente-Serrano et al., 2010; Beguería et al., 2014) investigate precipitation in combination to other variables such as soil moisture, temperature, etc.

Other researchers investigated indicators related to drought directly or indirectly such as Gleick (1990), who has connected the concept of vulnerability to climate change and applied five measures to 18 major water resources (surface runoff, soil moisture, groundwater, etc.) regions of the US. Rogers et al. (1997) and Lane et al. (1999) developed environmental and water-related indicators to monitor and assess

systems such as regional or territorial economies and environmental systems. Raskin et al. (1997) used hydrologic and socio-economic indicators to form an integrated water resource vulnerability index. Impacts of climate change on US reservoirs have been assessed by Vogel et al. (1999) with the indicators of reservoir yield, reliability, resiliency, and vulnerability.

Also, there are plenty of indices related to drought and water scarcity such as the water poverty index which connects water scarcity issues to socio-economic aspects (Sullivan, 2002). Another significant definition stated by Tsakiris (2014), is that the vulnerability is the measured degree of susceptibility to damage from the defined hazardous phenomenon or activity. There are various examples such the water stress index and adaptive capacity index, used to measure vulnerability (Pandey et al., 2011). Balica et al. (2009) developed a flood vulnerability index by comparing vulnerability among river basins, sub-catchments, and urban areas. Vulnerability components including resource stress, development pressure, ecological security, and management challenges are used by Babel and Wahid (2009), Pandey et al. (2010), and Huang and Cai (2009). Sullivan (2011) achieved a two-dimensional index by including stakeholders in the indicator-defining process that resulted in an index with two dimensions: one from the part of water systems (supply-driven vulnerability) and the other from water users (demand-driven vulnerability). A study conducted by Gain et al. (2012) revealed research gaps regarding water resources vulnerability assessment and they developed a framework applied at the lower Brahmaputra River basin. Besides these approaches, Torresan et al. (2012) have also used a regional vulnerability assessment methodology to evaluate coastal vulnerability.

In the abundance of indicators and indices related to drought, some categorization of all this information is needed to assess and use for each unique case study. In this context there is a plethora of reviews on drought indicators available (Heim, 2002; Keyantash and Dracup, 2002; Quiring, 2009; White and Walcott, 2009; Mishra and Singh, 2010; Dai, 2011; Sivakumar et al., 2011; Zargar et al., 2011; Belal et al., 2012; Zhang et al., 2013; AghaKouchak et al., 2015; Hao and Singh, 2015; Pedro-Monzonis et al., 2015; Van Loon, 2015) where various indicators evaluated either to their relation to a location, or their strengths and limitations, scope, etc.

The developed indicators and indices are solely the tools for drought impact monitoring and drought management. The drought impact monitoring can focus on a subject such as public health (Stanke et al., 2013), water quality (Mosley, 2015), a community of fish (Matthews and Marsh-Matthews, 2003), natural resources (Dollar et al., 2013), economy (Ding et al., 2011), or can be in general (Lackstrom et al., 2013; Smith et al., 2014; Stahl et al., 2015).

Although the assessment of drought may seem to be concerning mainly the element of water, its integrated nature with other domains of WEF requires a more comprehensive evaluation. This need has encouraged researchers to develop various tools and models regarding diagnostics (Dargin et al., 2019), scenario development and forecasting (Daher and Mohtar, 2015; Dai et al., 2018), and indicator/index sets (Ferroukhi et al., 2015) related to WEF.

The efforts of the mentioned and many unmentioned researchers have helped us better our understanding of drought and mitigate its adverse effects, if not prevent them. Even though many studies extended their research to cover more aspects of drought, there is a gap in the literature, where the integration of quantitative and qualitative indicators related to drought is missing. The novelty of the proposed thesis is that it integrates the various quantitative and qualitative indicators that represent the social, economic, and environmental status of the agricultural community to comprehend their understanding and resources against the drought and evaluate their economic survivability while securing the food production chain.

Additional to this evaluation, the presented thesis examines drought in four stages, defined as perception, adaptability, vulnerability, and recoverability. Together they form the concept of Survivability. This categorization also helps decision-makers highlight weaknesses in their focused area to prioritize the actions to increase their survivability.

CHAPTER THREE
MATERIALS AND METHODOLOGY

3.1 Materials

3.1.1 Gediz River Basin

Gediz River Basin, located in Western Türkiye, has a total drainage area of 17034 km^2. The basin is named after its main river Gediz with its 350 km length. The Gediz River has several tributaries, many of which are dry in summer (Aksoy, 2020). The Marmara, Karagol, Golcuk, and Sazli are the lakes, and Demirkopru, Avsar, and Buldan are the main dams of the basin. The basin has around 578.5 mm of average annual precipitation and has significant importance in the agricultural production of Türkiye.

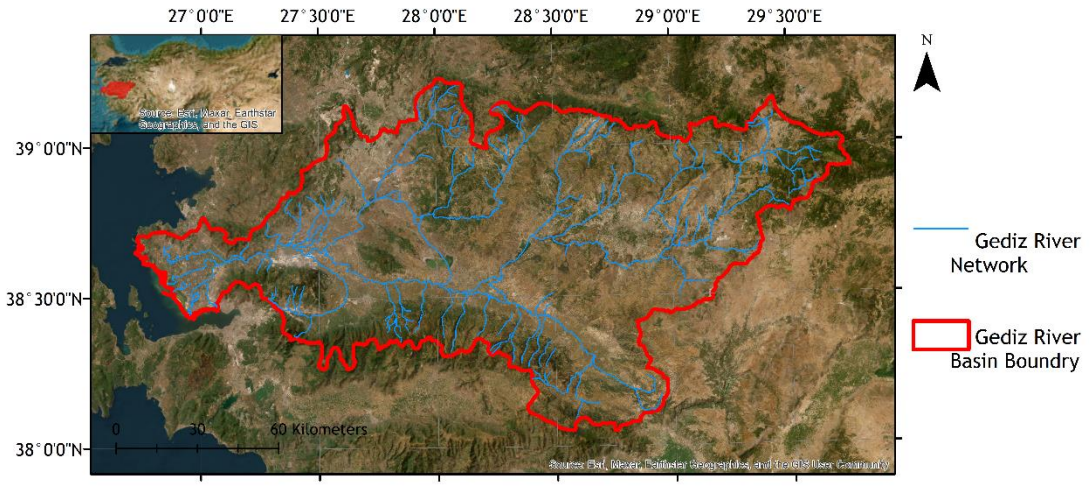

Figure 3.1 Gediz River Basin

In the 1990s, due to population growth, industrial development, and the climate change effects, the water resources of the basin declined and deteriorated substantially. As a result, the downstream end of the basin, Menemen Plain, is suffering from low water quality and quantity at a notable level. Due to low surface water, the farmers depend heavily on the groundwater resources, hence the groundwater levels decrease, and the seawater intrusion and the soil salinity are experienced often.

On the other hand, investments such as Gordes Dam, which couldn't perform its planned purposes due to leakage losses both in the dam lake and on its conveyance route to Lake Marmara through Kumcay, have caused one of the major water resources of Gediz River Basin and a wetland of national importance, Lake Marmara to dry completely. Once a hotspot with high social, economic, and environmental assets, Lake Marmara is now struggling for its existence.

Consequently, with one of the major irrigation water resources of Gediz River Basin, the Lake Marmara, was also supplying Menemen Plain for irrigation, its drying condition also affected irrigation sites in Menemen. Thus, Menemen has started to experience water scarcity and vulnerability to drought more than ever. Hence, the two hotspots of water resource degradation, the Menemen Plain and the Lake Marmara became the focus of this thesis. The local stakeholders of Menemen Plain and Lake Marmara have played an important role by sharing their opinions and feedback on the qualitative parts of the study.

3.1.2 Meteorological Data

The study uses meteorological data in order to calculate drought indicators such as the Standardized Precipitation Index (SPI) and the Standardized Precipitation Evapotranspiration Index (SPEI) and develop hydrologic models by software such as HEC-HMS.

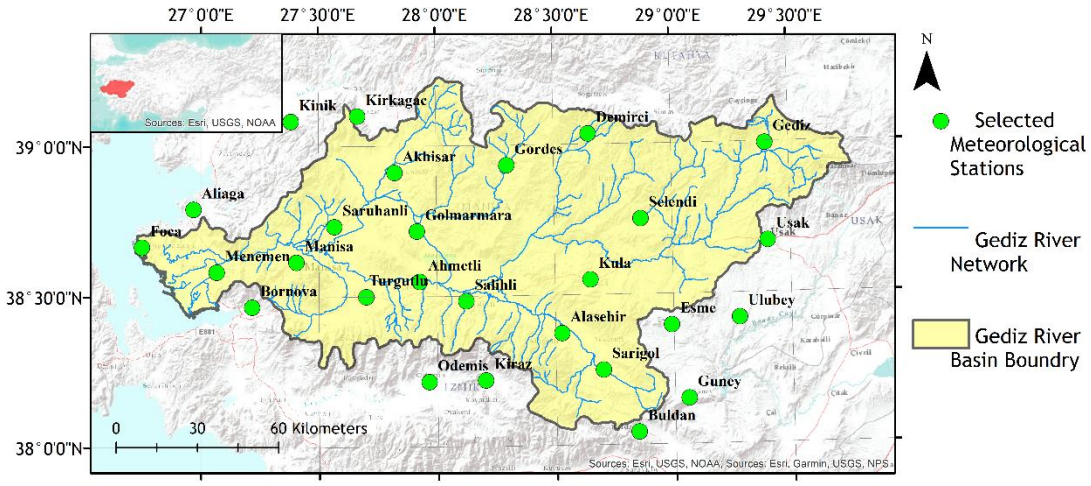

Figure 3.2 Gediz River Basin and selected meteorological stations

The Gediz River Basin has over sixty meteorological stations in and around its extent. Due to the lack of reliable data and homogeneity of data representation, out of 68, 27 stations of Turkish State Meteorological Services (DMI) were selected (Appendix 1). The data period of the stations ranges between the years 1929 and 2013. For the missing data, the package "MICE" was used in the R project software for the data imputation process according to the linear regression (van Buuren and Groothuis-Oudshoorn, 2011).

Furthermore, to assess the future water potential of the Lake Marmara, locally downscaled climate change data of around the representative average year 2050 for RCP8.5 (Moss et al. 2010; Van Vuuren et al. 2011) have been acquired from the Global Climate Model (GCM) Downscaled Data Portal provided by the Research Program on Climate Change, Agriculture and Food Security.

3.1.3 Remote Sensing Data

The remote sensing data of the study can be mainly divided into two categories. The first category is topography, which is used to represent the physical processes taking place in the basin such as rainfall-runoff, river network delineation, etc. The second category is land use data, the CORINE Land Cover data used to determine the Curve Number (CN) of the hydrologic model extent and estimate the future land use maps. In order to represent the terrestrial topography of the basin, ASTER-DEM version 3 data in 30-m spatial resolution has been utilized as the Digital Elevation Model (DEM) (ASTER, 2021).

3.1.4 Survey Data

Within the context of the UNIMED project, 3 surveys have been conducted. The first and the third survey have aimed the farmers of Lake Marmara and Menemen Plain in order to collect data for the SDI indicators and the feedback for the VAP questionnaire (Appendix 2 and 3). These surveys did not focus on any specific farmer group or community, the invitations to the survey events have been distributed by the local chamber of agriculture offices. The second survey was aimed at the CoP members to collect their expert opinion on the weights of indicators and sub-indices of SDI (Appendix 4). The CoP members were consisted of officials of chamber of

agriculture, researchers, and members of university staff. Again, this survey did not focus on any specific group or community, the invitations were distributed to the local researchers and officials of the Gediz River Basin.

3.2 Method

Within the context of the thesis first, the water resources of Lake Marmara have been investigated for the baseline and future scenarios. That is because the dire state of the Lake signalled its struggle by the time this thesis started and along its maturation, Lake Marmara dried completely, and then by the time of submission of this thesis, the Lake began to collect some little amount of water (Figure 3.3).

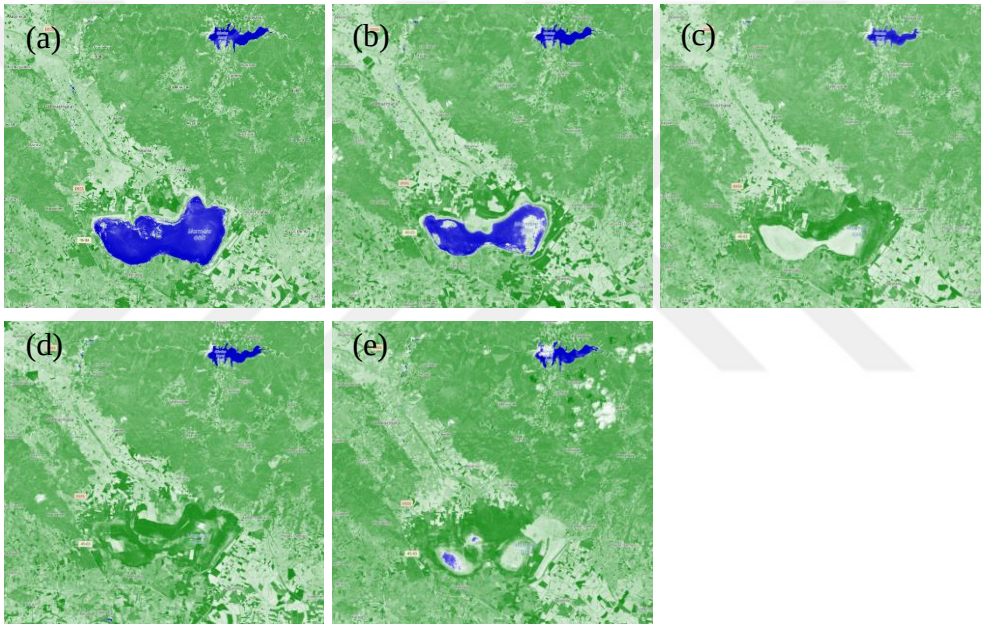

Figure 3.3 Normalized Difference Water Index (NDWI) maps of Lake Marmara for the years: (a) 2020, (b) 2021, (c) 2022, (d) 2023, (e) 2024, respectively (Copernicus, 2024)

A hydrologic model has been developed by the HEC-HMS software to assess the water resources of Lake Marmara for the baseline scenario. Future climate change conditions have been investigated by the RCP8.5 data. In order to include future land use conditions, a Land Use Change (LUC) model has also been developed by the Land Change Modeler Tool of the TerrSet software. Additionally, various demand management scenarios have been examined if either the Lake could be sustainably operated with its sources, or not (Gunacti et al., 2023).

After the assessment of the Lake's current and future water resources, it is clear that the risk of drought plays an important role in its and the agricultural communities' existence. Assessment of drought risk is an integral part of SDI and for a more direct approach to define the risk, the thesis uses an innovative method, the adaptation of the Kaplan-Meier Estimator method to the subject of drought, which is demonstrated by Cetinkaya and Gunacti (2024).

Moreover, the development of the SDI has been initiated by the literature review of the available indicators that represent not only the WEFE Nexus domains but also the sub-indices of Survivability. The literature review and data availability have yielded an initial list of indicators (Appendix 5). The organization of the First Community of Practice (CoP) workshops in both Malta and Türkiye has led to the drawing up of an enlarged set of possible indicators (Appendix 6). Furthermore, this enlarged set of indicators clarified the data requirements for the respective indicators. It also elaborated on the required spatial and temporal extent of the respective data requirements. The enlarged indicator set was then scrutinized once again with all consortium partners resulting in the final version of the set of possible indicators (Appendix 7).

As some of the indicators of the SDI are qualitative data, a VAP survey was developed for the local farmers to gain insights into the underlying factors that shape their attitude towards droughts under conditions of climate change. The VAP surveys' origin is rooted back to the mid-20th century, based on studies concerning psychology (Allport, 1935), sociology (Durkheim, 2023), and marketing research (Lazarsfeld and Merton, 1948). The VAP surveys aimed at the agricultural communities generally study the perception and attitudes of these communities toward the impacts of climate change and extreme events (such as droughts) on social, economic, environmental, and legislative aspects (Udmale et al., 2014; Thompson et al., 2015). Based on the referenced studies and expert opinions, the survey questionnaire has been developed, and translated into Maltese and Turkish (Appendix 3) and the related data has been collected.

Lastly, 2 other surveys have been developed in order to determine the weights of the indicator that eventually defines the SDI and collect other quantitative data (Appendix 2 and 4). This survey was conducted during the second CoP workshop of

the UNIMED project among the experts. The utilized software and methods during this thesis have been introduced in the following sections.

3.2.1 Land Use Change Modelling

The LUC monitoring has been evaluated using TerrSet software's LCM tool. The Multi-Layer Perceptron (MLP) and Markov Cellular Automata (MCA) methodologies have been utilized to estimate the land cover classes of the future map of 2050 (Ansari and Golabi, 2019). MLP methodology is a form of the Artificial Neural Network (ANN) approach. According to Saputra and Lee (2019), these techniques are among the most popular and widely used methodologies for modeling complex behaviours and structures. The advantages of using MLP, a nonparametric method, include modeling the intricate real-world relationships between different forms of land use and cover. The MLP-MCA technique primarily takes into account past changes in land use/land covers (LULC) that serve as a spatial catalyst for LULC modifications. Included in the model development processes are the following: (i) a spatial change analysis of the historical LULC data (from 2000 and 2012); (ii) the selection of driver variables that may have a significant impact on triggering changes; (iii) the creation of a transition sub-model; (iv) the sub-model's validation; and (v) future projections. For the historical LULC data, the CORINE land cover maps from 2000 and 2012 have been used, while the map from 2018 has been used for validation (Figure 3.3). Some of the CORINE land cover classes have been thematically combined into more general classes to simplify the transition processes (Table 3.1).

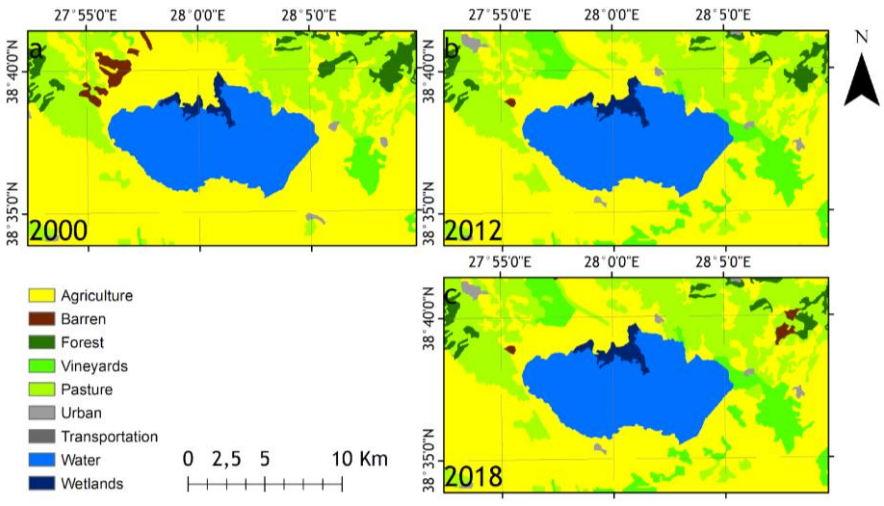

Figure 3.4 CORINE land cover maps for the years (a) 2000, (b) 2012 and (c) 2018

Table 3.1 Reclassified CORINE land cover classes

CORINE Code	CORINE Land Cover description	Reclassified Land Cover description	CORINE Code	CORINE Land Cover description	Reclassified Land Cover description
111	Continuous urban fabric	Urban	231	Pastures	Pastures
112	Discontinuous urban fabric		321	Natural grassland	
121	Industrial or commercial units		323	Sclerophyllous vegetation	
133	Construction sites		324	Transitional woodland/shrub	
141	Green urban areas		331	Beaches, dunes, sands	Barren land
142	Sport and leisure facilities		332	Bare rock	
122	Road and rail networks and associated land	Transportation	333	Sparsely vegetated areas	
123	Port areas		334	Burnt areas	
124	Airports		131	Mineral extraction sites	
211	Non-irrigated arable land	Agriculture	132	Dump sites	
212	Permanently irrigated land		411	Inland marshes	Wetlands
242	Complex cultivation patterns		421	Salt marshes	
243	Land principally occupied by agriculture, with significant areas of natural vegetation		422	Salines	
221	Vineyards	Vineyards, etc.	511	Water courses	Water
222	Fruit trees and berry plantations		512	Water bodies	
223	Olive groves		521	Coastal lagoons	
311	Broad-leaved forest	Forest	523	Sea and ocean	
312	Coniferous forest				
313	Mixed forest				

The following have been selected as driver variables (Figure 3.4): (a) DEM, (b) slope, (c) distance to water bodies, (d) distance to stream network, and (e) distance to

urban areas. These driver variables are the primary factors impacting the land cover transitions addressed in the LUC model for LULC transitions. The aforementioned driving variables were chosen because, according to Kim et al. (2014) and Araya and Cabral (2010), they are thought to be relevant to the biophysical, agricultural, and environmental change processes and likely trends.

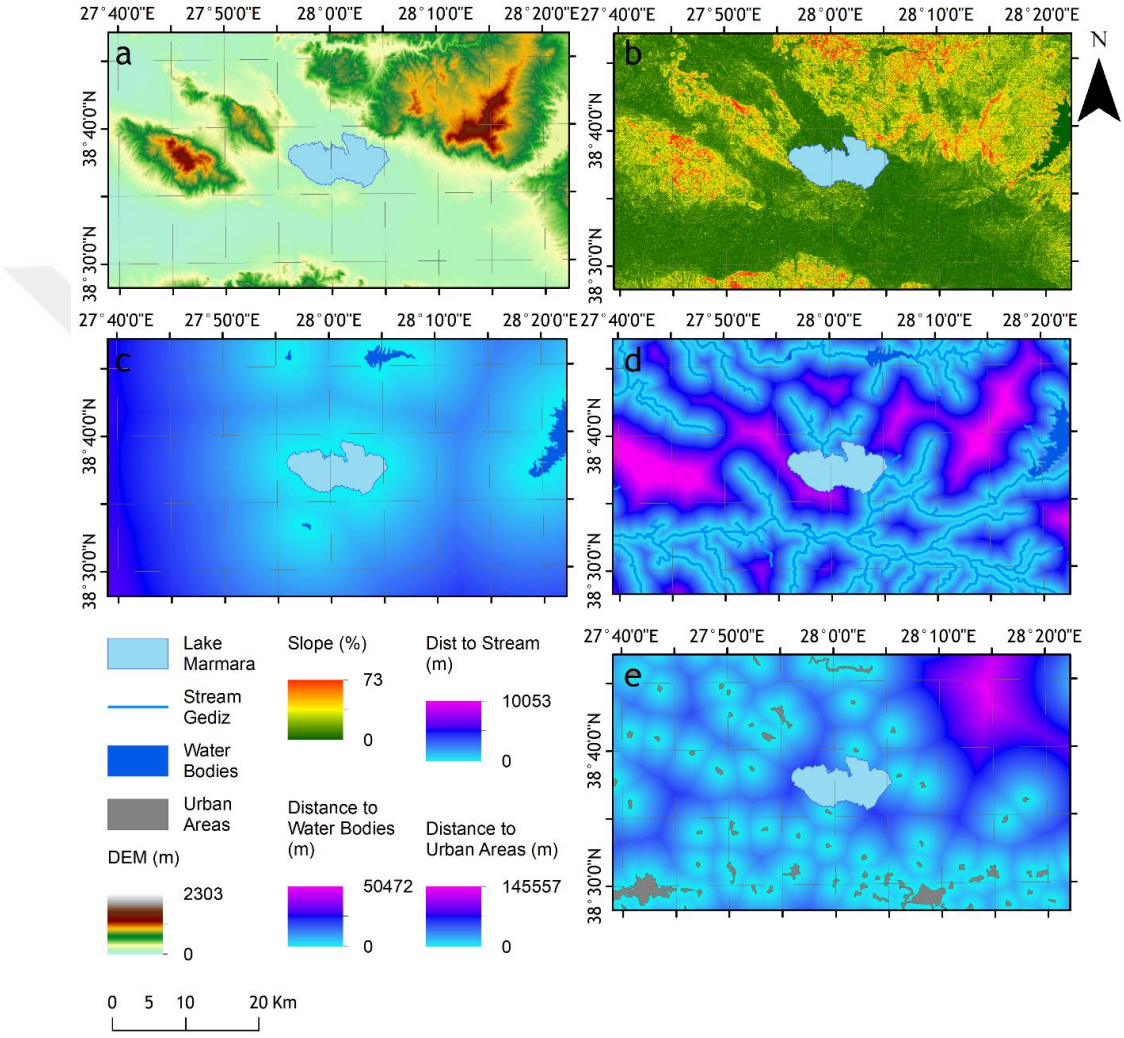

Figure 3.5 Driver variables of LUC model: (a) DEM, (b) slope, (c) distance to water bodies, (d) distance to stream network, and, (e) distance to urban areas

In the validation process of the LUC model, the Relative Operating Characteristic (ROC) curve (a graphical representation of the negative and positive error rates for each possible value) has been used for evaluation (Yariyan et al. 2020; Nguyen et al. 2020). The vertical and horizontal components of the ROC curve have been calculated

from Eqs. (3.1) and (3.2), while the threshold limits have been set as 0 and 1 (Yousefi et al. 2020). The Area Under the ROC Curve (AUC) represents the accuracy of the predicted LULC map. The values of the percentages of True Negatives (TN) and True Positives (TP) have been used to calculate the values for the “x” and “y” axes of the graph of the curve.

$$X = 1 - \left[\frac{TN}{TN-FP}\right] \tag{3.1}$$

$$Y = \left[\frac{TN}{TN+FP}\right] \tag{3.2}$$

3.2.2 HEC-HMS Hydrologic Modelling

The hydrologic processes in the Lake Marmara watershed have been simulated using the Hydrologic Modelling System software (HEC-HMS). For calibration reasons, the observed runoff records covering the years 1980–2012 have been divided into two succeeding periods: 1980–1996 and 1997–2012. The "SCS Curve Number Loss Method" has essentially been used to reflect the consequences of LULCC on the hydrologic simulations (Gao et al. 2020). Curve Numbers (CNs), as required by the approach, have been calculated for each land segment in the drainage basin based on the hydrologic soil group combinations and LULC type, as shown in Table 3.2 (NRCS (Natural Resources Conservation Service, USDA) 2007). To further boost the hydrologic model's geographical representative capacity, the Lake Marmara basin has been separated into six sub-basins, and CNs have been computed for each of them rather than using a single lumped estimate for CN (Figure 3.5).

Table 3.2 Cover types and related CNs (NRCS, 2007)

LULC Type	Description	A	B	C	D
Agriculture	Row Crops	67	78	85	89
Barren	Wasteland	71	80	85	88
Forest	Oak-aspen-Mountain brush mix. Of brushes	26	40	58	61
Vineyards	Woods-grass combination (orchard)	43	65	76	82
Pasture	Pasture, grassland or range	39	61	74	80
Urban	Developing Urban Areas	77	86	91	94
Water	Reservoir	100	100	100	100
Wetlands	Reservoir	100	100	100	100

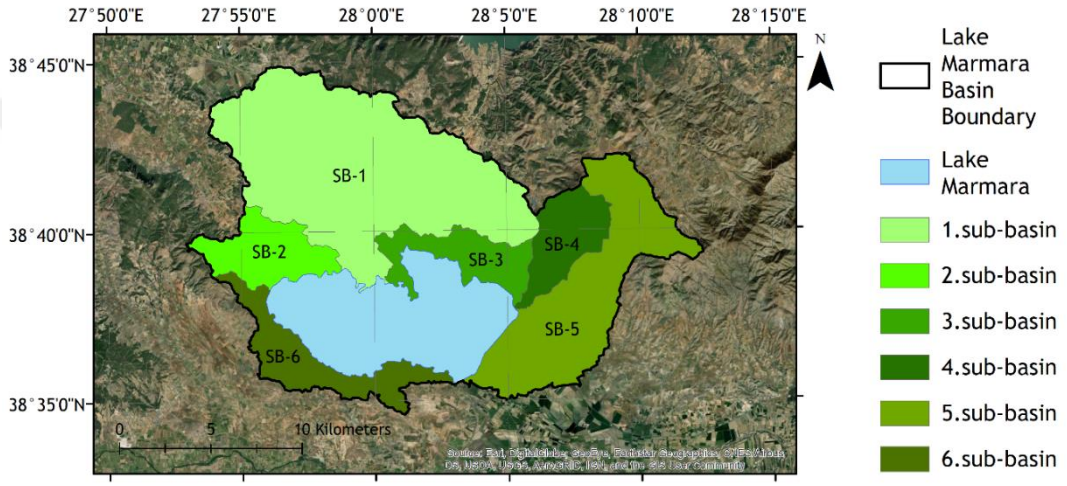

Figure 3.6 Lake Marmara Sub-basins

Using the delta change technique, the obtained climate change data (mean temperature and mean precipitation) for the year 2050 under the RCP 8.5 scenario have been applied to the hydrometeorological data for the year 2012. The rainfall-runoff model has been used to simulate the expected runoff levels in and around the year 2050 using the computed sets of input.

While the predicted precipitation was determined by the hydrologic model's outputs, the evaporation rates were estimated using Meyer's formula. The following is the empirical approach for calculating evaporation using Meyer's formula:

$$E = \left(1 + \frac{U_9}{16}\right) \times 0.50(e_w - e_a \times H)/100 \quad (3.3)$$

where, U_9 is the wind speed at a height of 9 meters (km/h) and H represents humidity. This may be calculated using the equation,

$$U_{h_i} = U_2 \left(\frac{h_i}{h}\right)^{\frac{1}{7}} \tag{3.4}$$

where, h_i is the studied height in meters; h is the standard height of the measurement; and U_{hi} is the wind speed at the examined height in kilometers per hour. The Arden Buck equation, which is shown below, may be used to calculate the e_s.

$$e_s = 611 e^{\frac{17.27T}{237.3+T}} \tag{3.5}$$

where, e_s is the saturation vapour pressure in N/m^2, and T is the temperature in ^oC.

3.2.3 SPI/SPEI Calculations

The derived products of drought indicators such as SPI and SPEI has been included in the SDI since they directly represent the drought status of the examined area, and the historical data attached to it. The SPI is calculated by fitting the accumulation periods, or cumulative precipitation over k months, to a parametric statistical distribution. The probabilities derived from this distribution are then converted to the standard normal distribution. The cumulative climatic water balance, which is the difference between precipitation and potential ET (PET), is calculated in the same way as SPEI but with a little modification. The final values of the drought index are then produced by converting the determined probabilities to the standard normal distribution. Below are the SPI and SPEI equations,

$$SPI = \frac{P_i - P_m}{\sigma_x} \tag{3.6}$$

$$SPEI = \frac{D_i - D_m}{\sigma_d} \quad (3.7)$$

where, P_m is the mean precipitation, σ_x is the standard deviation of the precipitation series under analysis, and P_i is the total precipitation at the station for the i-th month.

Equation 8 provides the difference (D_i) between precipitation (P) and PET for the month (i) needed to calculate SPEI.

$$D_i = P_i - PET_i \quad (3.8)$$

The calculated D values are accumulated at different time scales as follows:

$$D_n^k = \sum_{i-0}^{k-1} P_{n-1} - (PET)_{n-1} \quad (3.9)$$

where, k is the timescale (months) of the aggregation and n is the calculation month.

The probability density function has been selected as Log-logistic distribution according to the previous studies (Vincente-Serrano et al., 2010; Stagge et al., 2015) given as:

$$f(x) = \frac{\beta}{\alpha}\left(\frac{x-\gamma}{\alpha}\right)^{\beta-1}\left(1 + \left(\frac{x-\gamma}{\alpha}\right)^{\beta}\right)^{-2} \quad (3.10)$$

where α, β, and γ are scales, shape, and origin parameters respectively for $\gamma > D < \infty$. The probability distribution function for the D series is then given as:

$$f(x) = \left[1 + \left(\frac{\alpha}{x} - y\right)^{\beta}\right]^{-1} \quad (3.11)$$

Using f(x), the Abramowitz et al. (1965) approach may be used to derive the SPEI as the standardised values of F(x):

$$SPEI = W - \frac{C_0 + C_1 W + C_2 W^2}{1 + d_1 W + d_2 W^2 + d_3 W^3} \quad (3.12)$$

$$W = \sqrt{-2 \ln (P)} \quad for\ P \leq 0.5 \quad (3.13)$$

P=1-f(x) represents the probability of exceeding a predetermined D_i value, and the constants are:

$$C_0 = 2.515517, C_1 = 0.802853, C_2 = 0.010328,$$

$$d_1 = 1.432788, d_2 = 0.189269\ , d_3 = 0.001308$$

The "SPEI package" of the R project program was utilized to calculate the SPI and SPEI values for the selected stations throughout the 3-, 6-, and 12-month accumulation periods. Longer timeframes are often used as markers for decreased streamflow and reservoir storage, whereas shorter timescales - 3, 6, and 12 months - are typically utilized as indicators for decreased soil moisture and flow in local reaches. They can be used as markers for many kinds of droughts.

3.2.4 Adaptation of Kaplan-Meier Estimator for Drought Risk Assessment

Wet and dry conditions are categorized based on the determined SPI and SPEI values (Table 3.3). Drought occurrence or the change from a wet to a dry condition are indicators of the "events" that Kaplan-Meier (1958) outlined. The data upon which the study is based refers to the drought incidences as "events." The product limit or survival probability of the wet periods (in this example, months) would thus be produced by applying the Kaplan-Meier or "Product-Limit" estimator.

$$\hat{S}(t) = \prod_{i:\, t_i \le t} \left(1 - \frac{d_i}{n_i}\right) \tag{3.14}$$

where, n_i is the total number of wet states at time t_i, d_i is the number of dry states that happened at time t_i, and t_i is the moment at which a dry state occurs.

Table 3.3 SPI/SPEI classification scale

SPI/SPEI values	Description of state
SPI/SPEI < -2	Extreme drought
-2 < SPI/SPEI < -1.5	Severe drought
-1.5 < SPI/SPEI < -1	Moderate drought
-1 < SPI/SPEI < 1	Near normal
1 < SPI/SPEI < 1.5	Moderately wet
1.5 < SPI/SPEI < 2	Severely wet
SPI/SPEI > 2	Extremely wet

The following dry-state occurrences in the same wet period are also included in the adapted technique since dry states might occur one after the other. This gives further information regarding the chances of the subsequent dry states occurring in addition to the first one. For example, Ahmetli station records 44 dry states out of 32 wet periods. Updating the description of n_i to read "number of dry states hasn't happened yet at the time t_i" or "number of unrealized dry states" is necessary in order to incorporate all dry states into the calculation.

The result $S(t_i)$ shows the probability of a wet period extending longer than t_i or the "event" not taking place at the time t_i. From the standpoint of drought risk, 1-S(t) would characterize the likelihood of the "event" occurring or the risk of drought occurrence, DR(t). (Table 3.4).

$$DR(t) = 1 - \hat{S}(t) = 1 - (\prod_{i:\, t_i \le t} \left(1 - \frac{d_i}{n_i}\right)) \tag{3.15}$$

Table 3.4 Recorded dry states in Ahmetli station between 1966-1988

Time (month)	**No. Unrealized dry states r_i**	**No. Dry states realized d_i**	**Kaplan-Meier $\hat{S}$(t)**	**Drought Risk (DR(t))**
1	44	5	0.886	0.114
2	39	5	0.773	0.227
3	34	6	0.636	0.364
4	28	6	0.500	0.500
5	22	3	0.432	0.568
6	19	2	0.386	0.614
7	17	2	0.341	0.659
8	15	4	0.250	0.750
9	11	2	0.205	0.796
10	9	2	0.159	0.841
14	7	1	0.136	0.847
15	6	1	0.114	0.852
17	5	1	0.091	0.864
18	4	1	0.068	0.886
24	3	1	0.046	0.909
25	2	1	0.023	0.932
27	1	1	0	0.955

3.2.5 Scenario Development

Lake Marmara water budget scenarios have been built in a superposed way to assess the consequences of projected land use and climate change (Table 3.5). Since the agricultural sector uses the majority of the lake basin's water resources, three agricultural irrigation demand management scenarios—"irrigated," "%50 irrigated,"

and "no irrigation"—have been developed. These scenarios indicate that, respectively, the entire irrigation demand, half of the irrigation demand, and no irrigation demand are met. Furthermore, the lake's original storage volume has also been taken into account as a scenario component.

Table 3.5 Developed scenario descriptions

Demand management	**CC**	**LUC**	**CC+LUC**
	Description	**Description**	**Description**
	LU data: year 2012	**LU data: year 2050**	**LU data: year 2050**
	Meteo data: year 2050	**Meteo data: year 2012**	**Meteo data: year 2050**
Initial Storage Volume: Baseline Scenario (72.85 hm^3)			
Irrigation	M1.1	M1.2	M1.3
%50 Irrigation	M1.4	M1.5	M1.6
No Irrigation	M1.7	M1.8	M1.9
Initial Storage Volume: Future Wet Year Scenario (31.48 hm^3)			
Irrigation	M2.1	M2.2	M2.3
%50 Irrigation	M2.4	M2.5	M2.6
No Irrigation	M2.7	M2.8	M2.9
Initial Storage Volume: Future Dry Year Scenario (23.47 hm^3)			
Irrigation	M3.1	M3.2	M3.3
%50 Irrigation	M3.4	M3.5	M3.6
No Irrigation	M3.7	M3.8	M3.9

The SMART and OPTIMA projects, which used the Waterware water budget simulation modeling software, produced the yearly water budget simulations for the Gediz River Basin. As per the Waterware model results, the minimum storage volume for environmental needs was determined as 23.47 hm^3 in the OPTIMA project (OPTIMA, 2005). According to this constraint and the baseline/future simulation results of OPTIMA project report, storage volumes were used for water budget computations. In this way, a total of 27 scenarios have been created, utilizing both current research and previous scientific findings to assist evaluate the hydrologic conditions of Lake Marmara.

3.2.5 Selection of the Indicators

The Survivability from Drought Index is heavily dependent on the indicators that represent the complex Nexus that defines the drought. Thus, the selection of the

indicators is a crucial step in the assessment of the SDI. Although there is an abundance of indicators defined in the literature, expert opinions of the UNIMED project consortium, and the data availability have played an important role determining the final list of indicators (Figure 3.7). In the following sub-sections, the definition each sub-index and indicator and their relation to the SDI have been presented.

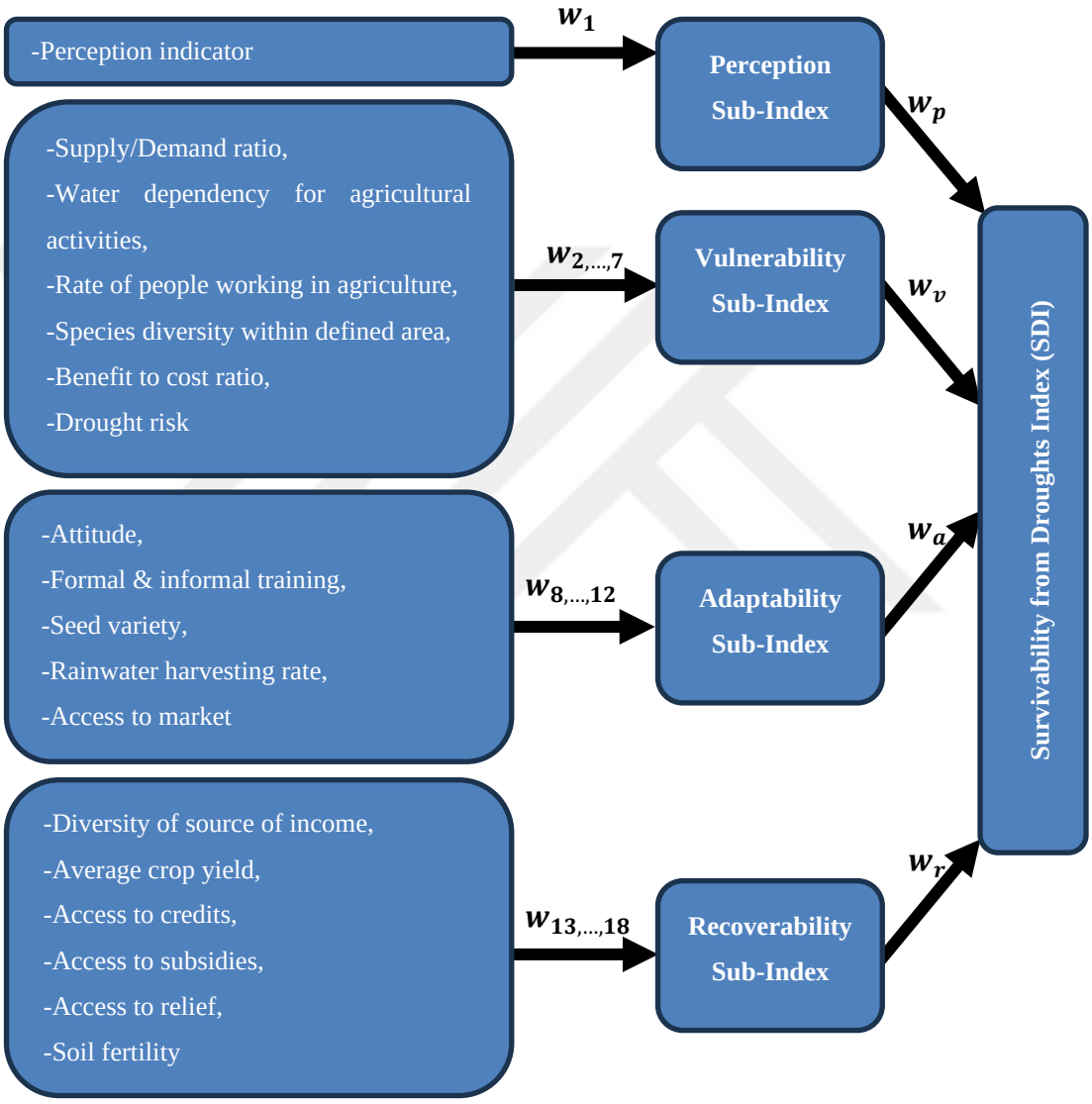

Figure 3.7 Flowchart of indicators and sub-indices of SDI

3.2.5.1 Perception

The perception sub-index was determined according to the VAP survey feedback, which included questions to measure the farmers' perception towards the drought

(Appendix 3). The attendees rate the questions according to their agreement on the given statement between 1 to 5, 1, indicating high agreement and 5, high disagreement. The average value of the feedback is normalized according to the min-max transformation. It is an essential qualitative indicator representing the awareness of the agricultural community towards the drought, how they evaluate themselves in knowledge-, preparedness-, and resilience-wise. Being aware of the problem is an important step to overcome it. This defines how one avoids, defends, or receives the oncoming threats. The perception indicator integrates social parameters to the SDI. It informs about the priority of challenges that the community faces and how they cope with drought.

3.2.5.2 Vulnerability

The vulnerability to drought is expressed by various definitions as also stated in the Chapter Two, and it can be summarized as the measured degree of susceptibility to a specific hazard. Thus, the vulnerability can be measured by various indicators. In the case of Gediz River Basin, listed indicators below have been selected according to the data availability other than their strong relevance to the concept of vulnerability. A total of six indicators have been selected to represent the vulnerability sub-index as given below:

3.2.5.2.1 The supply/demand ratio. It is a commonly used indicator that takes into account of all agricultural abstractions. This indicator is calculated as the total water supply allocated to agricultural demand sites in the analyzed extent divided by the agricultural demand for freshwater and/or groundwater resources. The calculated value is expressed as a percentage between 0-100, hence no normalization process was needed.

3.2.5.2.2 The water dependency for food production indicator. This indicator is selected for the further representation of the agricultural sector needs. Calculated as the abstracted water for agriculture over the long-term maximum value of available water for agriculture sector, the water dependency for food production represents the water and the food aspects of the WEF Nexus. The calculated value is expressed as a percentage between 0-100, hence no normalization process was needed.

3.2.5.2.3 The rate of people working in agriculture. The social aspect of the three pillars of sustainability is represented by this indicator. The value for this indicator is collected from the national statistical institution for the pilot area as a percentage, therefore the value was not normalized. A higher rate of people working in agriculture indicates its profitability and its influence on society and policies.

3.2.5.2.4 Species diversity within the defined area. This indicator is an ecosystem (WEFE) and an environment indicator which is determined by the Shannon Diversity Index (H) (Shannon, 1948).

$$H = -\sum_s p_s \times \log(p_s) \tag{3.16}$$

where, "p_s" is the population of species "s" in the sample. The calculated value of H is then normalized to the "H_{max}" value, which is defined as the logarithm of the total number of species in the sample. The index represents the diversity of species by combining two quantitative measures: the species richness (number of species within the community) and the equitability of species (how even are the numbers of individual species). The indicator also informs about the habitat quality such as effects of pollution effluents.

3.2.5.2.5 Benefit to cost ratio. It is a very essential indicator that represents the economic aspect of the system. The value for this indicator calculated as the total benefits over the total costs for agriculture sector. The calculated value is then normalized according to the min-max values observed in the long-term. A higher value of benefit to cost ratio indicates the financial resources of the community to overcome the adverse effects of drought.

3.2.5.2.6 Drought risk. This indicator is calculated according to the adapted Kaplan-Meier Estimator method as presented in "section 3.2.4" and is a direct measure indicating the vulnerability of the agricultural community. As the drought risk increases, the community becomes more vulnerable to oncoming droughts.

3.2.5.3 Adaptability

The preparedness efforts against the effects of drought and available alternative options to current practices capsulates the adaptability sub-index. Adapting to the oncoming drought demands that the members of agricultural community to adopt the mindset that drought is a reality and the measures to mitigate its effects are essential. According to the data availability, the following indicators are selected in the case of Gediz River Basin to represent its adaptability sub-index. A total of five indicators have been selected for this sub-indicator as presented below:

3.2.5.3.1 The Attitude. This indicator summarizes and measures the extent of agricultural community's mindset against the adverse impacts of oncoming droughts and the social aspect of sustainability. The indicator is measured through the "Attitude" section questions of VAP survey (Appendix 3) feedback. The calculated average value of the survey feedback is then normalized according to the min-max transformation.

3.2.5.3.2 Formal and informal trainings. The number of events organized by the governmental/institutional/NGO bodies to raise awareness (less water consumption, biodiversity, environmental needs, etc.), build capacity of/educate (new irrigation system technologies, drought resistant seed varieties, Nature Based Solution applications, etc.) the agricultural community and the social aspect of sustainability is represented by this indicator. The total number of events is then normalized according to the maximum value of 12 representing an event each month of the year.

3.2.5.3.3 The seed variety. This indicator informs about the availability of drought resistant seed varieties known to the agricultural community and food domain of WEFE. The farmers responding to the first data survey expressed their knowledge of such options. The average value of the feedback to this question (Yes:1, No:0) ranges between 0-1, hence no normalization process was needed.

3.2.5.3.4 The rainwater harvesting rate. The alternative source of water and the water domain of WEFE is represented by this indicator. Since other forms of alternative water sources are much more unpopular in the Gediz River Basin, the rainwater harvest rate was measured. This indicator can be replaced by other alternative water sources in other case studies. The value for this indicator was collected in the data survey and since it represents a percentage, normalization step was not needed.

3.2.5.3.5 Access to market. The available economic platform alternatives that the agricultural community have is represented by this indicator. It also represents the economy, social and food domains. The indicator is measured by the data survey as a Yes/No question. Since the calculated value ranges between 0-1, normalization process was not needed.

3.2.5.4 Recoverability

The recoverability sub-index expresses the sources that agricultural community has to minimize the effects of drought in its aftermath. While the income from agriculture might be hindered after a drought, the alternative sources of income would help the community to persevere through this hardship. Postponing the economic losses by credits, supplying relief funds or subsidies are also alternatives to increase the recoverability of the agricultural community. The following six indicators are selected in the case of Gediz River Basin to represent its recoverability sub-index.

3.2.5.4.1 The diversity of source of income. This indicator represents the number of income sources independent of the agricultural activities, which increases the recoverability of the community in times of drought where the livelihood acquired from this source might be decreased. This indicator has been measured by the first data survey and VAP survey as a Yes/No question. No normalization process was needed since the calculated average response ranges between 0-1.

3.2.5.4.2 The average crop yield. This indicator shows the average crop yield that the agricultural community acquires, represents a magnitude of the drought, and an indicator of recoverability where a high value informs that even through the economic losses, financial survivability might be achieved after all. Since an average value for all the cultivated crops would be an erroneous representation, the dominant crop (grape in the case of Gediz River Basin) cultivated in the analyzed extent has been selected to represent for this indicator. The average yield has been normalized according to the long-term min-max values observed.

3.2.5.4.3 Access to credits. It is determined according to the data survey feedback where the farmers asked if they taken credit in the last two years, or not. This indicator represents the economic source availability of the analyzed extent to supply the agricultural community. The calculated average response ranges between 0-1 and needs no normalization process.

3.2.5.4.4 Access to subsidies. This indicator represents the local/central governmental policies to support and guide the agricultural community to lower their economic stress and to encourage good agricultural practices. The indicator is calculated according to the data survey responses of the farmers (Yes/No). The results range between 0-1 and needs no normalization process.

3.2.5.4.5 Access to relief. This indicator considers the relief funds or insurances that governmental or private sector bodies supply to the agricultural community in a case of economic losses due to a drought event. The indicator is calculated according to the data survey responses of the farmers if they benefited from relief funds or not (Yes/No). The results range between 0-1 and needs no normalization process.

3.2.5.4.6 The soil fertility. This indicator is represented by Soil Organic Carbon (SoC) content in the study area for the 2-meter depth profile. The soil fertility promotes ecosystem services, lower irrigation dependence and higher food production. The value for this indicator is determined according to soilgrids database outputs for the extent of Gediz River Basin. The calculated value represents SoC percentage, hence no normalization process is applied.

3.2.6 Normalization and Weighting of the Indicators

A portion of the defined indicators that make up the SDI are the quantitative and qualitative data that have been collected from the farmers such as their perception to drought, their benefit/cost ratio, etc. In order to normalize the data, min–max normalization (range transformation) has been applied according to the equation below,

$$X_i' = \frac{X_i - X_{min}}{X_{max} - X_{min}} \tag{3.17}$$

Where X_i represents the i-th value of the respective time series, X_{min} is the minimum value of the timeseries, X_{max} is the maximum value of the timeseries and the X_i' is the normalized value of X_i.

Also, the defined indicators must be weighted in order to calculate the SDI. A survey among the CoP members has been conducted to collect their expert opinions.

The budget point allocation method has been chosen as the weighting method. The process of budget point allocation, also known as fixed point allocation, demands the decision-maker to assign relative weights to various criteria by weighing their relative relevance (Gendreau et al., 2019). According to Doyle et al. (1997), the user must

allocate a certain budget of points - *typically 100 points because this number is the most easily normalized* - among a set of criteria; thus, the decision-maker can only increase the weight of one criterion by decreasing the weight of another in this way. Since it might be challenging to immediately link one's choices to a numerical number, assigning points can be a cognitively taxing exercise for the decision-maker, where the decision-maker is forced to decide through a holistic way instead of bilateral comparisons (Collewet and Koster, 2023).

In the case of the weighting survey that was conducted in the second CoP meeting, the total points to allocate have been altered in order to: (i) force the survey attendees to avoid allocating equal weights to each indicator/sub-index, (ii) simplify the total points allocated. Usually, the survey attendees tend to give equal weight to the concepts. Each survey section has been designed to have 2 times the amount of concepts plus two points to overcome an equal-weighted result. Hence the sub-index weighting section which has 4 sub-indices has 10 points to allocate, while the sections where indicators of adaptability, vulnerability, and recoverability have 12, 14, and 14 points respectively (Appendix 4). Since the perception sub-index has only one indicator, no weight assignment was required.

CHAPTER FOUR
RESULTS

4.1 Water Resources Modelling

Within the scope of evaluation of the water resources of Lake Marmara, which was highly prone to adverse effects of drought, firstly the LUC model of the total Gediz River Basin was developed by the LCM tool of TerrSet software. According to the LCM analyses that were conducted with respect to the historical LULC data in the period 2000–2012, a total of 23 transitions have been addressed (Table 4.1).

Table 4.1 Land use transitions between 2000 and 2012 for the extent of Gediz River Basin

Transition No	Transition Name	Area (km²)	Transition No	Transition Name	Area (km²)
1	Agriculture to Barren	1.10	13	Vineyards to Forest	0.24
2	Agriculture to Pasture	0.41	14	Vineyards to Urban	0.57
3	Agriculture to Urban	12.60	15	Pasture to Agriculture	0.95
4	Agriculture to Water	0.60	16	Pasture to Barren	6.44
5	Barren to Agriculture	0.63	17	Pasture to Forest	1.93
6	Barren to Pasture	0.48	18	Pasture to Vineyards	0.22
7	Barren to Urban	1.63	19	Pasture to Urban	2.52
8	Forest to Agriculture	1.20	20	Pasture to Transportation	0.93
9	Forest to Barren	0.41	21	Pasture to Water	0.56
10	Forest to Vineyards	0.32	22	Urban to Agriculture	0.18
11	Forest to Pasture	58.53	23	Water to Agriculture	2.06
12	Forest to Urban	0.38	-	-	-

The primary water industry in the basin, agriculture, has been investigated as the focus of the study is concentrated on the survival of this sector. Agricultural disruptions are relevant on several levels since agricultural operations primarily affect the financial, social, and environmental sectors. The cessation of agricultural areas may result in social and economic pressures, even while the spread of agriculture may signal any decline in the quantity and quality of water sources. Therefore, three of the twenty-three transitions that were taken into consideration have been selected for the sub-model's development: (1) agricultural land to urban, (2) vineyards/orchards or other areas to urban, and (3) agriculture to barren land, where the amount of agricultural land is decreasing.

As part of the validation procedure, the MLP approach was used to identify the transition potentials between the historical LULC maps. This was followed by the future forecast for 2018. Relative Operating Characteristic (ROC) analysis has been used as the LUC model validation method (Figure 4.1). In terms of modeling goodness-of-fit statistics, the calculated area under the curve (AUC) of the complete ROC curve produced a value of 72%, which is representative of a decent success rate (Gorunescu, 2011).

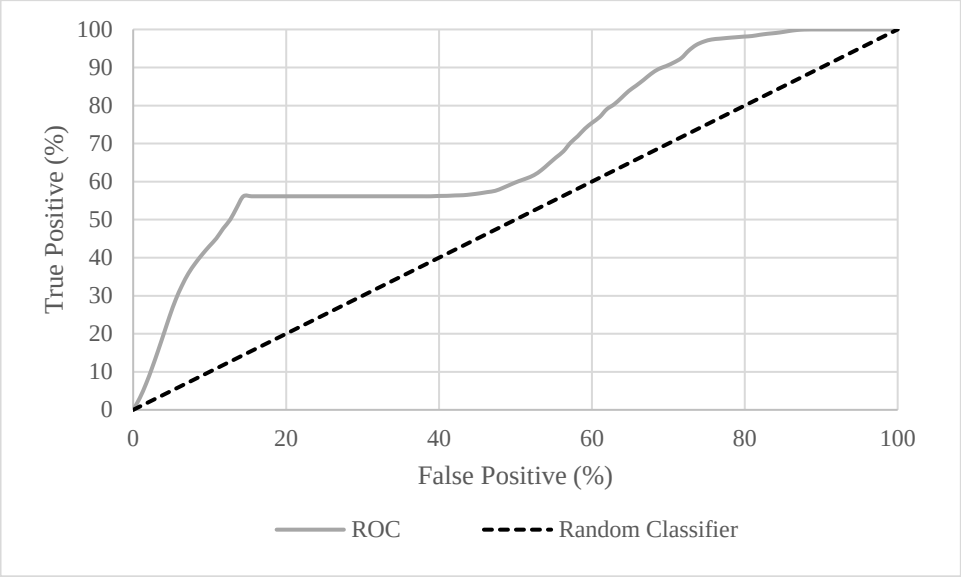

Figure 4.1 ROC curve of the modelled changes to validate the LULCC model

Following the validation procedure, a future projection for 2050 was created (Figure 4.2). The findings of the LUC analysis indicate a notable rise in both the pace of agricultural withdrawal and urban development within the Lake Marmara region (Table 4.2). Table 4.2 indicates that until 2050, urban development and the withdrawal of barren land are predicted in the Lake Marmara watershed.

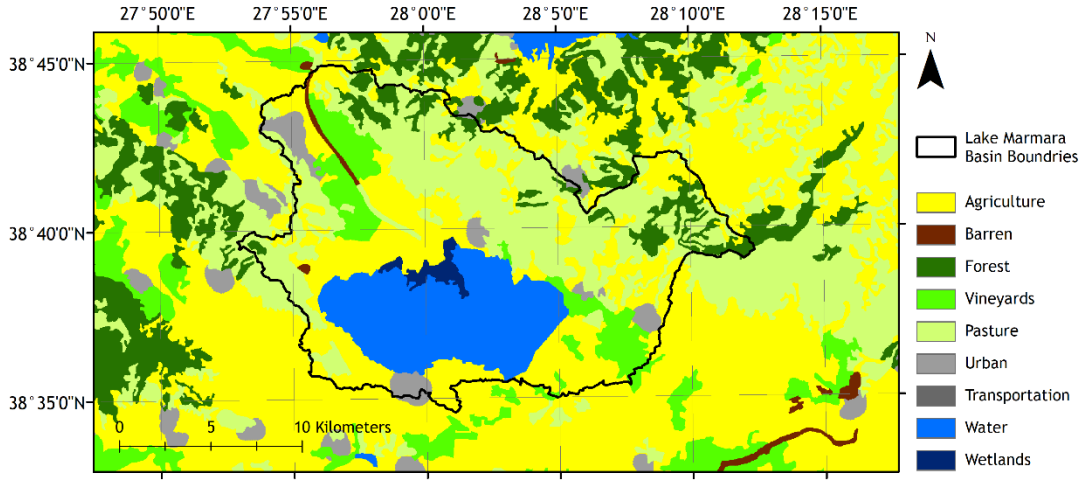

Figure 4.2 Estimated land cover map of 2050

Table 4.2 Land cover type totals and differences through 2000 and 2050

Cover Type	Area (km^2)						
	2000	**Difference (%)**	**2012**	**Difference (%)**	**2018**	**Difference (%)**	**2050**
Agriculture	119,72	-18,09	98,06	-0,06	98,00	-7,81	90,35
Barren	5,99	-69,76	1,81	76,43	3,19	-43,32	1,81
Forest	23,20	-23,94	17,65	-13,14	15,33	15,13	17,65
Vineyards	7,41	258,40	26,54	0,00	26,55	0,01	26,55
Pasture	87,11	12,41	97,92	0,41	98,32	-0,41	97,92
Urban	2,25	47,32	3,32	17,68	3,90	182,22	11,01
Water	60,98	-0,19	60,86	0,00	60,86	0,00	60,86
Wetlands	3,89	12,48	4,38	0,00	4,38	0,00	4,38

On the hydrologic modelling section, the model was originally run over the 1980–1996 calibration period to simulate the stream runoff after gathering all the meteorological and watershed-related data needed for the HEC–HMS model. The simulated and observed hydrographs are displayed in Figure 4.3a, and Table 4.3 provides the model diagnostics. The statistical data in this table illustrate how well the model configuration simulated: the coefficient of determination (R2), Nash Sutcliffe Efficiency (NSE), Root Mean Square Error to Standard Deviation Ratio (RSR), and Percent Bias (PBIAS). These model-fit statistics showed that the model's performance produced enough signals for a decent fit, which correlate to reasonably high-performance indications (Moriasi et al., 2007). Once a sufficient degree of fit was

obtained, the calibrated model was used to run the model again for the years 1997–2012. Figure 4.3b displays the validation outcomes, and Table 4.3 displays the simulated performances for the validation procedure once more.

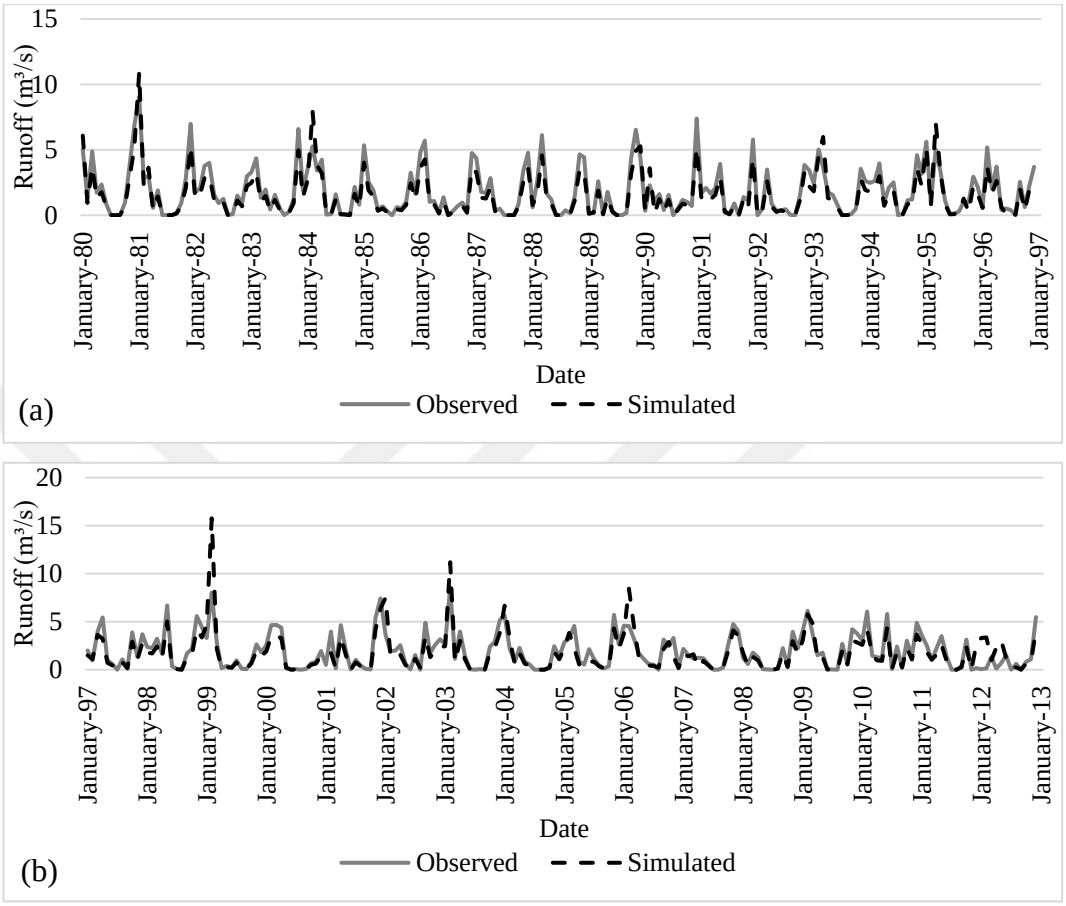

Figure 4.3 Observed and simulated runoff values of Lake Marmara for (a) the calibration period; (b) the validation period.

Table 4.3 Simulation performance statistics of the HEC-HMS model based on the basin runoff outputs.

Statistics	**Value for calibration period**	**Value for validation period**
R^2	0.90	0.73
NSE	0.87	0.68
RSR	0.36	0.57
PBIAS (%)	-18.20	-10.40

The area-weighted average CN values of the sub-basins for the years 2012 and 2050 have been determined based on the LUCs and used as input in the HEC-HMS

hydrologic model (Table 4.4). The area-weighted averages of the CNs also varied somewhat during the period of 2012–2050, due to the relatively moderate changes in the cover types within the lake watershed.

Table 4.4 Area percentages of the cover types and area weighted average CN values of the sub-basins through 2012 – 2050

Year	**2012**					
Subbasin	**SB1**	**SB2**	**SB3**	**SB4**	**SB5**	**SB6**
Agriculture	33,18	10,39	5,18	3,21	27,94	17,55
Barren	1,53	0,28	0,00	0,00	0,00	0,00
Forest	8,07	0,47	0,00	2,43	6,65	0,00
Vineyards	14,24	0,91	1,24	0,46	9,65	0,00
Pasture	52,83	7,52	8,69	11,45	12,14	5,01
Urban	2,29	0,00	0,13	0,13	0,48	0,28
Water	0,01	0,01	0,06	0,00	0,01	0,11
Wetlands	1,77	0,28	2,24	0,00	0,00	0,00
CN	**66,33**	**70,41**	**71,59**	**61,48**	**67,79**	**74,50**
Year	**2050**					
Subbasin	**SB1**	**SB2**	**SB3**	**SB4**	**SB5**	**SB6**
Agriculture	30,25	10,39	4,52	2,93	26,38	15,35
Barren	1,53	0,28	0,00	0,00	0,00	0,00
Forest	8,07	0,47	0,00	2,43	6,65	0,00
Vineyards	14,24	0,91	1,24	0,46	9,66	0,00
Pasture	52,83	7,52	8,69	11,45	12,14	5,01
Urban	5,21	0,00	0,79	0,41	2,04	2,49
Water	0,01	0,01	0,06	0,00	0,01	0,11
Wetlands	1,77	0,28	2,24	0,00	0,00	0,00
CN	**66,53**	**70,41**	**71,90**	**61,61**	**68,01**	**75,26**

According to the RCP 8.5 scenario, the runoff rate for 2050 has been determined from the hydrological perspective of the expected values for LUCs (Figure 4.4). The findings show that until 2050, runoff values are expected to rise by approximately 6%, with substantially more pronounced variations between the maximum and minimum monthly averages that are calculated periodically.

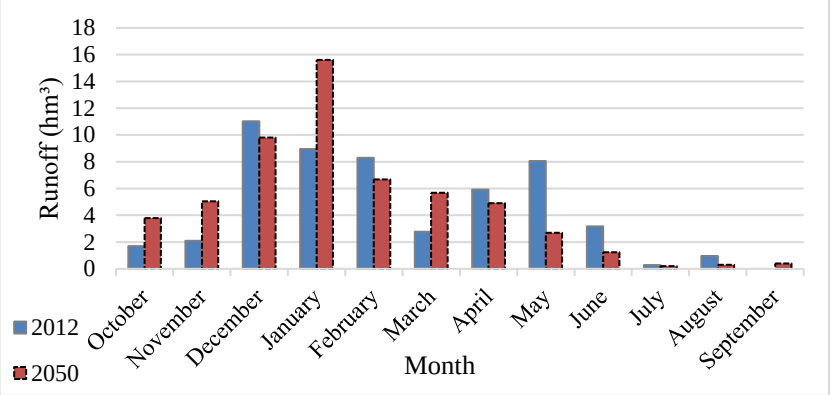

Figure 4.4 Observed and projected runoff values of 2012 and 2050 respectively

This finding raises the possibility that the lake ecosystem and the social and economic resources nearby may be more vulnerable to threats as a result of larger variations in monthly flows over the course of the year. This emphasizes the need for much-improved water supply control operations and more thorough planning of water allocation schemes among the lake ecosystem's water-dependent sectors.

The measured needs simulated and observed precipitations, and evaporation rates computed using the Meyer evaporation method have all been taken into account for the water balance simulations. Since the lake area is mostly situated on saturated soils due to its location below the river basin's average groundwater level, infiltration losses have been deemed insignificant, particularly inside the lake watershed. Since 2011, when the Gördes Dam began to impound, no inflows from the Gediz River have been accounted for in hydrologic models of the lake, and diversion from the Çömlekçi Weir, which once fed flows to the Lake Marmara, is allowed.

The primary focus of generated water balance simulations is the fulfilment of the minimum volume requirement, which is assumed to be in the amount of 23.47 hm^3, to address the environmental needs of the lake ecosystem. This requirement is linked to the minimum volume storage amount that the WaterWare software determines for these environmental requirements for the future dry year scenario. In the developed simulations, as shown in Appendix 8, the time to fail and monthly water deficit quantities to meet the environmental requirements have been computed appropriately.

The results of the water balance simulations clearly show two things: first, no scenario model has been able to provide the volume needed to meet the lake's environmental needs; second, in the case of Lake Marmara, the LUC has very little effect on the rainfall-runoff process when compared to climate change. M1.7, M1.8, and M1.9, which are indicated by bold black lines in Figure 4.5, yield comparable outcomes to the other scenarios despite their comparatively superior performances. In these cases, model fails at the eighth month (August), with deficit water volume rising up to the complete quantity required by the environmental needs. On the other hand, scenarios M3.1, M3.2, and M3.3 correspond to the worst-case scenarios, in which the time to failure drops to June, the sixth month, and the volume deficit rises to nearly five times the volume needed for the environmental demand (highlighted by strong red lines in Figure 4.5).

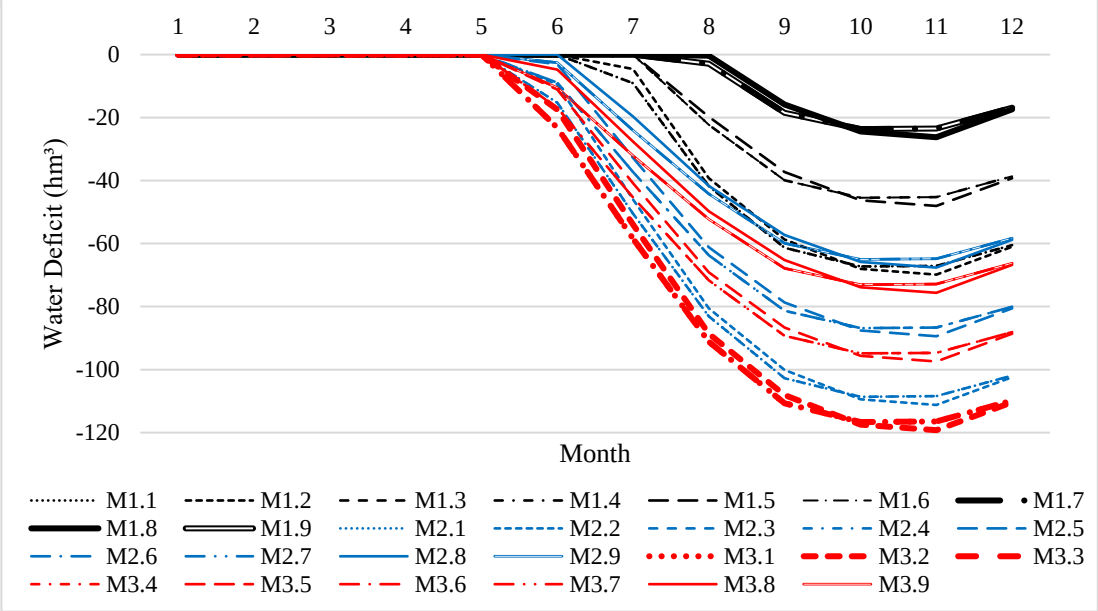

Figure 4.5 Water deficit amounts (hm^3) of calculated scenarios

4.2 Drought Risk Assessment

Based on the 3-, 6-, and 12-month SPI/SPEI values using the adapted Kaplan-Meier Estimator method, the drought risks for the 27 meteorological stations have been computed (Appendix 9). Based on the findings, ArcGIS software has merged each station's 3-, 6-, and 12-month drought risk estimates with its location. Next, using ArcGIS,

the local SPI/SPEI drought risk data were plotted to create the drought risk maps. Point values that were extrapolated using ArcGIS's "SPLINE" tool (Figure 4.6-11).

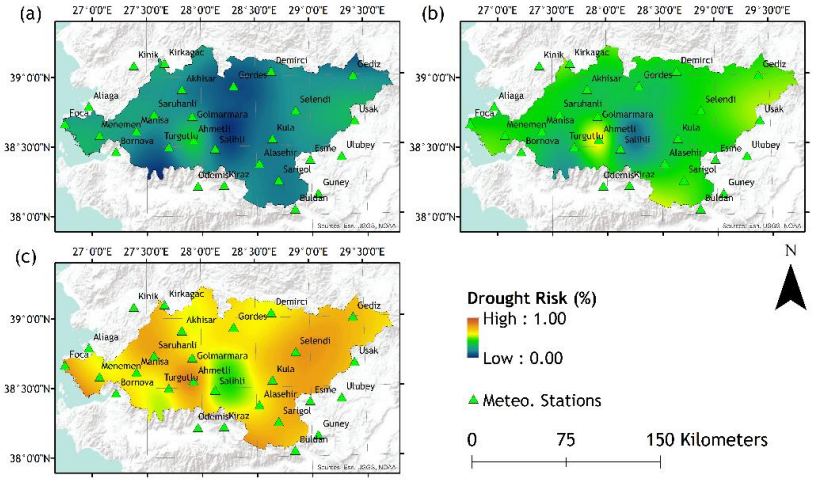

Figure 4.6 SPI-3 Drought risk maps of; (a) 3-month, (b) 6-month, and (c) 12-month periods

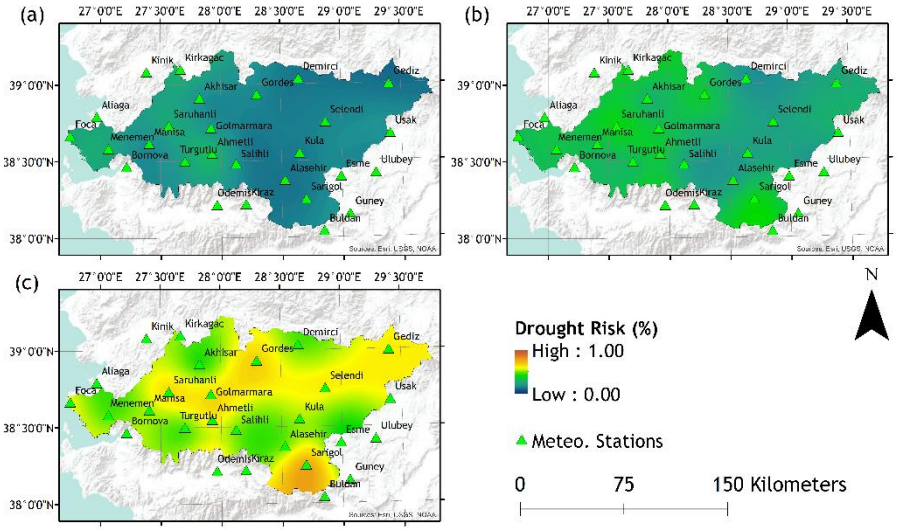

Figure 4.7 SPI-6 Drought risk maps of; (a) 3-month, (b) 6-month, and (c) 12-month periods

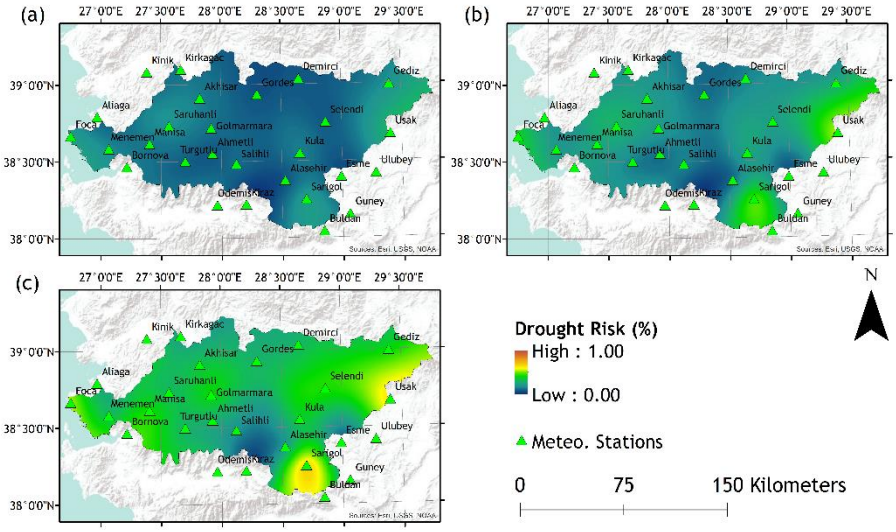

Figure 4.8 SPI-12 Drought risk maps of; (a) 3-month, (b) 6-month, and (c) 12-month periods

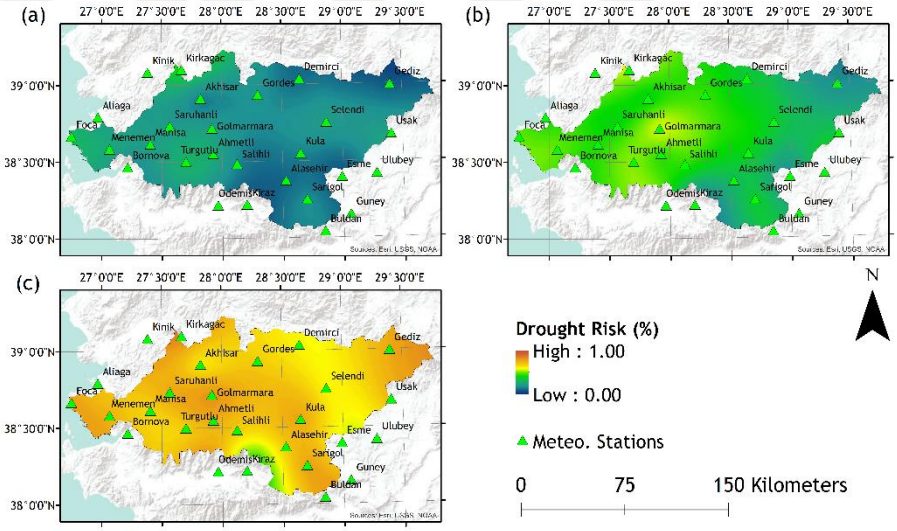

Figure 4.9 SPEI-3 Drought risk maps of; (a) 3-month, (b) 6-month, and (c) 12-month periods

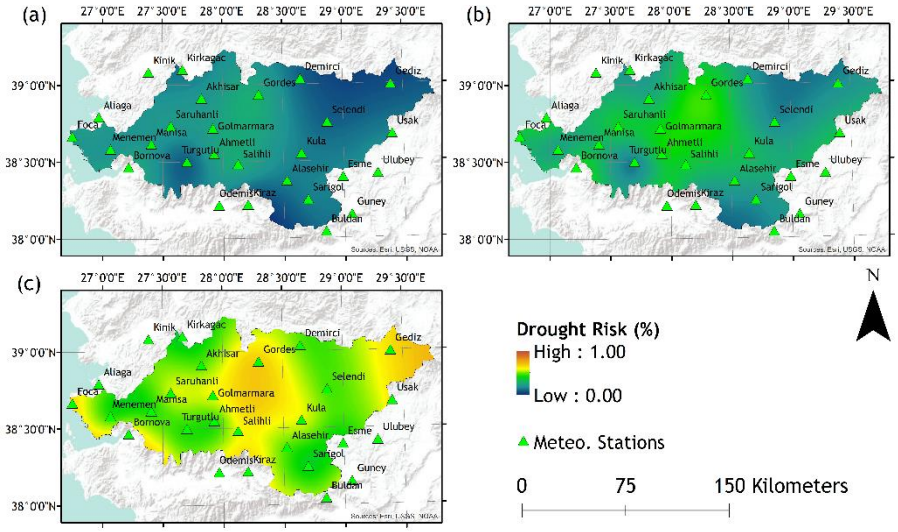

Figure 4.10 SPEI-6 Drought risk maps of; (a) 3-month, (b) 6-month, and (c) 12-month periods

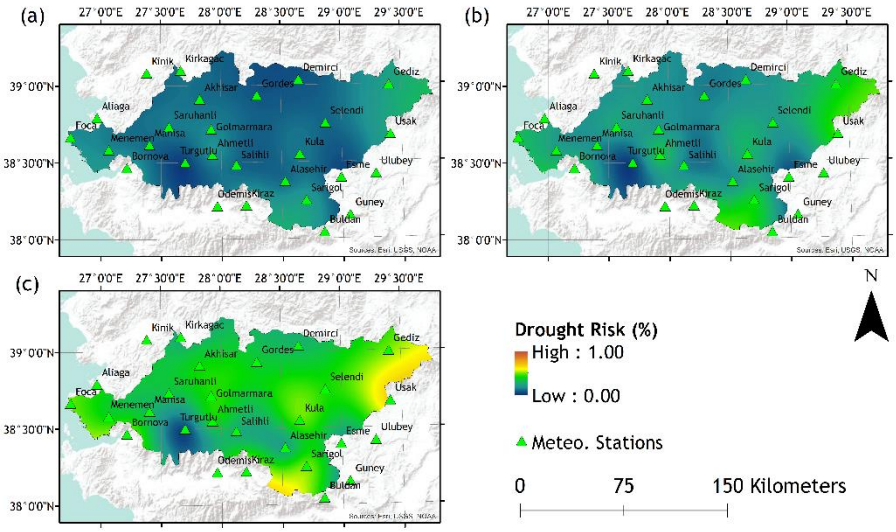

Figure 4.11 SPEI-12 Drought risk maps of; (a) 3-month, (b) 6-month, and (c) 12-month periods

According to SPI or SPEI values of 3-, 6-, or 12-month timeframes, the plotted drought risk maps show the potential of drought after a 3-, 6-, or 12-month period. Each figure between 4.6 and 4.11 shows that the drought risk rises in tandem with the length of the drought risk inquiry. This is because it becomes increasingly likely that the months deemed to be "dry" will also be factored into the computations as the investigation period lengthens. Drought hazards are also seen to diminish with increasing timeframes of the

computed SPI or SPEI values. The cumulative values of the SPI or SPEI tend to represent an average as the timeframes expand, which means that extreme occurrences like floods or droughts are likely to become less visible in the corresponding analysis.

However, a comparison of the SPI and SPEI drought risk maps shows that, with the exception of a few minor variations brought about by the SPEI's addition of PET data, the findings are seen to be consistent over most of the study region.

Drought risk maps aid in capturing the overall concept and state of the studied region, while drought risk curves can be utilized to concentrate on certain areas, as Lake Marmara in the Gediz instance. The Lake Marmara drought risk curves, which are generated using SPI (Figure 4.12a) and SPEI (Figure 4.12c) data and are shown below, corroborate historical reports of local farmers' firsthand experiences with area droughts. Located in the heart of the GRB, Lake Marmara experiences severe droughts and exponentially higher drought risks over shorter intervals. This suggests that droughts occur often in the area throughout all SPI and SPEI timeframes.

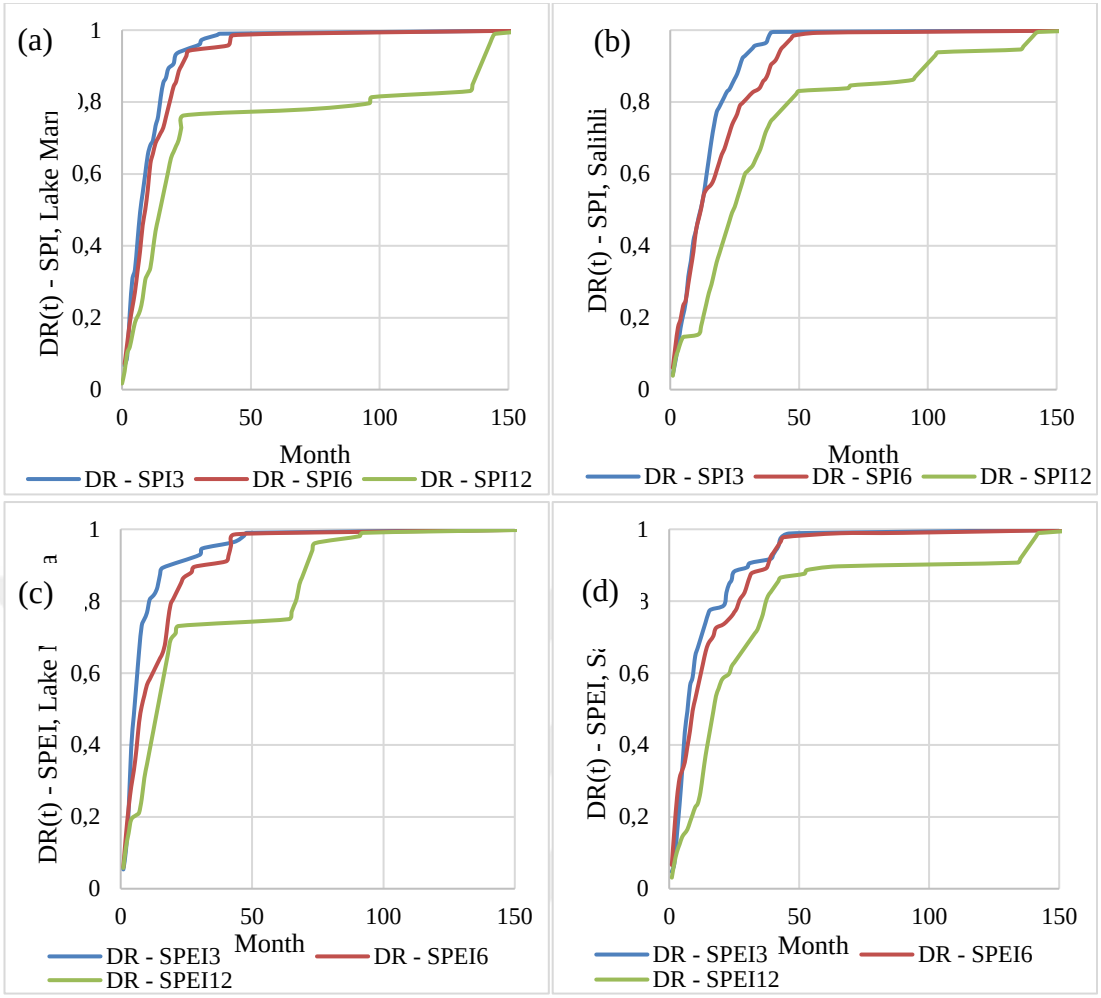

Figure 4.12 Lake Marmara (Golmarmara) and Salihli station drought risk curves according to SPI (a, b) and SPEI (c, d).

4.3 Assessment of the SDI

In the assessment of the SDI for the 2023, the data and weighting surveys and the defined official data sources have been used to determine each indicator's value for the Gediz River Basin (Table 4.5). For the Vulnerability sub-index, the following values have been calculated: Supply/demand ratio has been calculated as 45.00%, the total water supply over the total demand in agriculture sector, according to the data provided by the Water Associations Unions (WUA) of the Gediz River Basin. The water dependency for agricultural activities has been determined as 66.67%, the analyzed year value over the long-year average of the total agricultural demand. In the context of the study, this value has been inverted as the increase of water dependency

is not a factor that would foster the survivability of a system. Hence the inverted value results as 33.33%. The rate of people working in agriculture value for the year 2023 has been collected from the Turkish Statistical Institute (TUIK) as 14.80%. The species diversity within the defined area has been determined according to the normalized Shannon Diversity Index as 86.45% based on the Gediz River Basin bird species records of Izmir Natural Life Park. The benefit-cost ratio has been calculated according to the long-year average value of the farmers' feedback and normalized to the value of 51.37% with this timeseries. The drought risk has been determined according to the adapted Kaplan-Meier method, and the 12-month drought risk value according to the SPI-12 has been selected to represent the annual drought risk as 34.06%.

In the case of the Adaptability sub-index, the attitude indicator has been calculated according to the feedback of the VAP Survey. The questions on the attitude section of the survey were graded between 1-5. The average of the total feedback was then normalized between this range and yielded 55.97%. As for the formal & informal training indicator, the training and capacity-building events that the local chamber of agriculture and International Agricultural Research and Training Center (UTAEM) have organized have been counted and normalized to the maximum number of 12, considering one event a month as an optimal number resulting as 16.67%. The seed variety indicator represents if the farmers have alternative seed varieties as an option to their current crop pattern, determined as 100%. The rainwater harvest rate indicates an important sustainable source of water, representing the percentage of farmers using harvested rainwater, identified as 0.00% for the farmers of the Gediz River Basin. Access to market represents the rate of farmers having access either to any or no markets, resulting as 100%.

The recoverability sub-index has a total of 6 indicators. Diversity of source of income represents the number of income sources that farmers have other than agriculture and normalized to the maximum number observed, calculated as 34.29%. The average crop yield is calculated according to the dominant crop of the case study, grape in the case of Gediz River Basin, normalized according to the maximum and the minimum values observed, resulting as 51.39%. Access to credits, subsidies and relief

indicators have been determined according to the data survey conducted among farmers, representing the percentage of farmers who benefited each service in the last two years, calculated as 82.86%, 85.71%, and 0.00%, respectively. The soil fertility indicator has been represented by the Soil Organic Carbon (SOC) parameter. The SOC average values for the soil layers of 0-5 cm, 5-15 cm, 15-30 cm, 30-60 cm, 60-100 cm, and 100-200 cm for the Gediz River Basin have been accumulated from the Soilgrids database (Poggio et al., 2021) source as the SOC percentage of soil, resulting as 0.0157%.

The perception indicator has been calculated according to the feedback to the questions of the "perception" section. The questions were graded between 1-5 and the average of the total feedback was then normalized between this range and yielded 52.68%.

According to the weight survey, the weights of each indicator and sub-index was determined, normalized to the max votes available for each weighting exercise such as 10 votes for the 4 sub-indices, 12 for adaptability, 14 for vulnerability and recoverability. Since perception consists of just one indicator, no such normalization was necessary. The SDI has been eventually calculated as 49.15% according to the calculated data and defined weights, representing a fairly low-moderate percentage considering the max value of 100% (Table 4.5).

Table 4.5 Calculated values of indicators, sub-indices, and the SDI for the year 2023

	Indicator Name	Definition	Value	Indicator Weights	Weighted Values of Indicators	Sub-index Weights	Weighted Values of Sub-indices	SDI
Perception	**Perception**	Represents how droughts (in terms of severity) are perceived among the agricultural community	0.527	1.000	0.527	0.255	0.1341	0.4915
Vulnerability	**Supply/Demand Ratio**	Annual total supply allocated to agriculture over total demand of agricultural sector.	0.836	0.187	0.031	0.232	0.101	
	Water dependency for agricultural activities	Total amount of water allocated to food production over long-term average of water available for agricultural irrigation (resulting value inverted for the purpose of the study)	0.333	0.235	0.157			
	Rate of people working in Agriculture	Number of people working in agriculture over total population	0.148	0.018	0.004			
	Species diversity within defined area	Shannon Diversity Index of the pilot study area to measure the diversity of species	0.865	0.133	0.115			
	Benefit to cost ratio	Average agricultural land benefit to cost ratio of the case study farmers	0.514	0.143	0.073			
	Drought Risk	Average 12-month drought risk of the study area according to SPI12 calculated by adapted Kaplan-Meier method	0.341	0.194	0.066			

Table 4.5 *cont'd*

	Indicator Name	Definition	Value	Indicator Weights	Weighted Values of Indicators	Sub-index Weights	Weighted Values of Sub-indices	SDI
Adaptability	**Attitude**	Extent to which the farming community has adopted measures to mitigate the impact of drought	0.560	0.258	0.144	0.277	0.1537	0.4915
	Formal & informal training	Number of events dedicated to training and practical learning on how to adapt to droughts in the agricultural sector	0.167	0.214	0.036			
	Seed variety	Total number of seed variety cultivated (Cultivating various seeds promotes the biodiversity and ecosystem resilience)	1.000	0.224	0.224			
	Rainwater harvesting rate	Rate of irrigation water sourced by rainwater harvesting to total amount of water allocated to irrigation	0.000	0.187	0.000			
	Access to market	Rate of farmers conducting business in local/national/international markets	1.000	0.151	0.151			
Recoverability	**Diversity of source of income**	Number of income sources independent of agricultural activity	0.343	0.168	0.058	0.236	0.1031	
	Average crop yield	Total yield divided by the surface area dedicated to crop production, normalized to long-term observed min-max values	0.514	0.143	0.073			
	Access to credits	Percentage of agricultural community benefiting from credits	0.829	0.136	0.112			
	Access to subsidies	Percentage of agricultural community benefiting from subsidies	0.857	0.221	0.190			
	Access to relief	Percentage of agricultural community benefiting from relief funds after a drought	0.000	0.154	0.000			
	Soil fertility	The average of Soil Organic Carbon rate in the first 2 meters of soil in the case study extent	0.016	0.201	0.003			

Moreover, to compare the calculated results of the current year with a severely dry period like 1991-1992 and a relatively wet period as 1982, the supply/demand ratio, water dependency for agricultural activities, benefit to cost ratio, and drought risk of the 1991-1992 and 1982 period have been determined. According to the 1991-1992 and 1982 periods SPI-12 values of Lake Marmara station, the average month that drought occurs is the 18th and the 102nd month after a wet period respectively (Table 4.6, 4.7). Using the drought curve of Lake Marmara station derived from SPI-12, it is determined that the drought risk corresponding to the 18th month is 61.02%, which is almost the double of the value for the Gediz River Basin average for the historical long-term value (34.06%) and for the 102th month it is 81.60%. This result indicates that the drought risk increases as the wet period extends, yet the resulting SDIs are not linearly correlated, emphasizing the weight and importance of other indicators determining the SDI. Since most of the other indicators cannot be determined for the 1991-1992 period such as the attitude or perception indicators directly, they have been revised according to expert opinion. The formal and informal training and seed variety indicators has been revised as 0.00% for 1991-1992 and 1982 periods. The diversity of source of income and the access to subsidies have been revised as 10.00% for 1991-1992 and 1982 period. The access to credits has been revised as 50.00% for 1991-1992 and 1982 period. The perception indicator has been revised as 30.00% for 1991-1992 and1982 period. Hence, the drought risk value for the $SDI_{1991\text{-}1992}$ resulted as 31.32%, which is almost 18% lower than the SDI_{2023}, while the SDI_{1982} calculated as 38.16%, almost 11% lower than the SDI_{2023}. This result emphasizes that even though the drought risk is an essential indicator, it is not the only component in the goal of survivability from the droughts.

Table 4.6 Calculated SPI-12 values and drought occurrence months of Lake Marmara station for the 1991-1992 period

Date	SPI-12	Dry	Time
January-91	-0,28275	0	1
February-91	-0,53734	0	2
March-91	-0,70421	0	3
April-91	-0,62881	0	4
May-91	-0,13614	0	5
June-91	-0,229	0	6
July-91	-0,19906	0	7
August-91	-0,28425	0	8
September-91	-0,38121	0	9
October-91	-0,34945	0	10
November-91	-0,16037	0	11
December-91	-1,39406	1	12
January-92	-1,78187	1	13
February-92	-2,02025	1	14
March-92	-1,61495	1	15
April-92	-1,76142	1	16
May-92	-2,76907	1	17
June-92	-2,81378	1	18
July-92	-2,8086	1	19
August-92	-3,04924	1	20
September-92	-3,00186	1	21
October-92	-2,5505	1	22
November-92	-2,06526	1	23
December-92	-1,96521	1	24

Table 4.7 Calculated SPI-12 values and drought occurrence months of Lake Marmara station for the 1982 period

Date	SPI	Dry	Time
January-82	0,542037	0	97
February-82	0,453597	0	98
March-82	0,566063	0	99
April-82	0,898357	0	100
May-82	0,909225	0	101
June-82	0,929248	0	102
July-82	1,051478	0	103
August-82	1,040461	0	104
September-82	1,015933	0	105
October-82	1,279048	0	106
November-82	0,956654	0	107
December-82	-0,17333	0	108

Furthermore, the weighted values of indicators and sub-indices according to the current period and simulated periods have been presented as radar charts showcasing the influence of each element that determines the final SDI value (Figure 4.13, 4.14, 4.15, 4.16). In the case of vulnerability sub-index, the water dependency for agricultural activities is observed to be the least sensitive indicator as it doesn't change much throughout the periods, as the water dependency exceeds the available water amount in most cases.

While rainwater harvest rate, formal & informal training and access to market measured to be the least sensitive indicators of Adaptability sub-index, it is the access to relief and soil fertility in the case of Recoverability. An overall observation of SDI sub-indices reveals that the perception is the least sensitive sub-index among the rest as the relative change in perception is lesser.

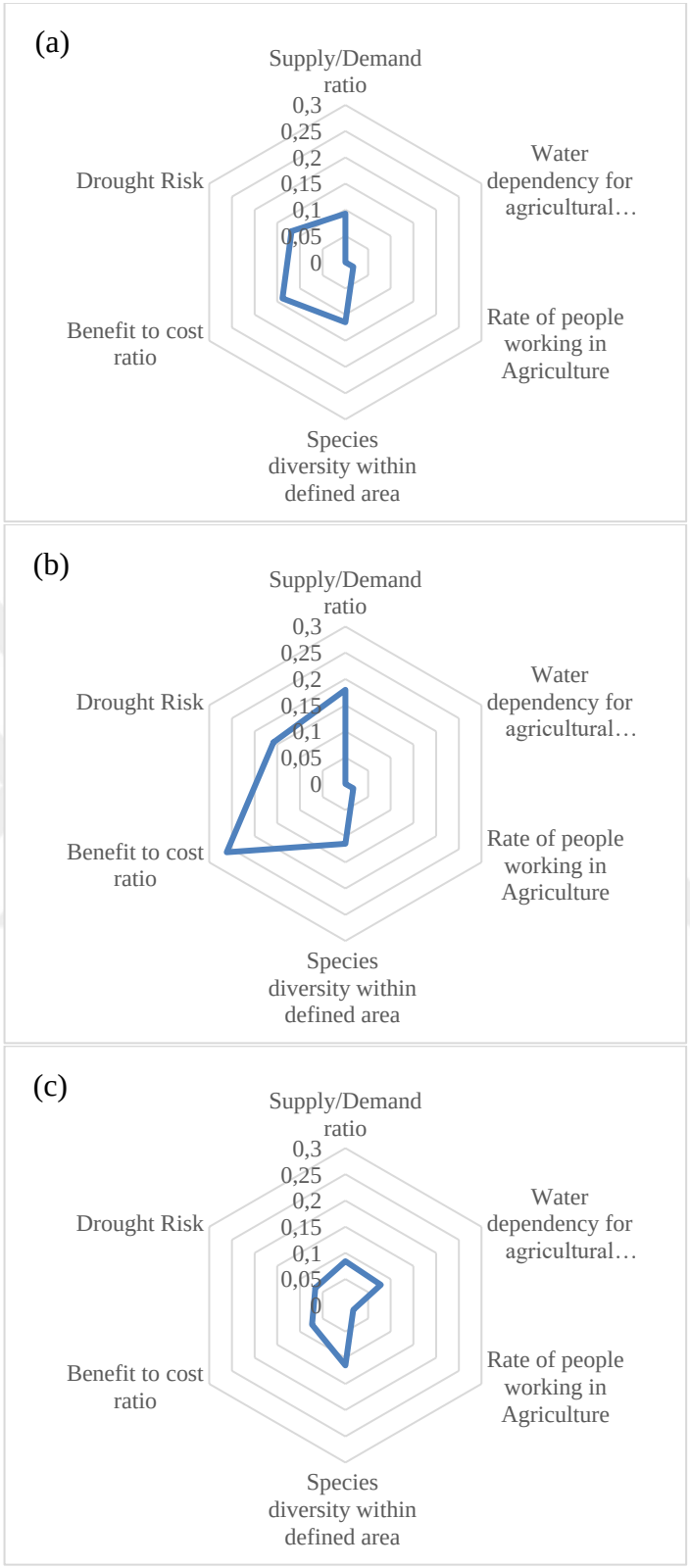

Figure 4.13 Calculated weighted values of Vulnerability sub-index indicators for the periods: (a) 1991-1992, (b) 1982, (c) 2023 respectively.

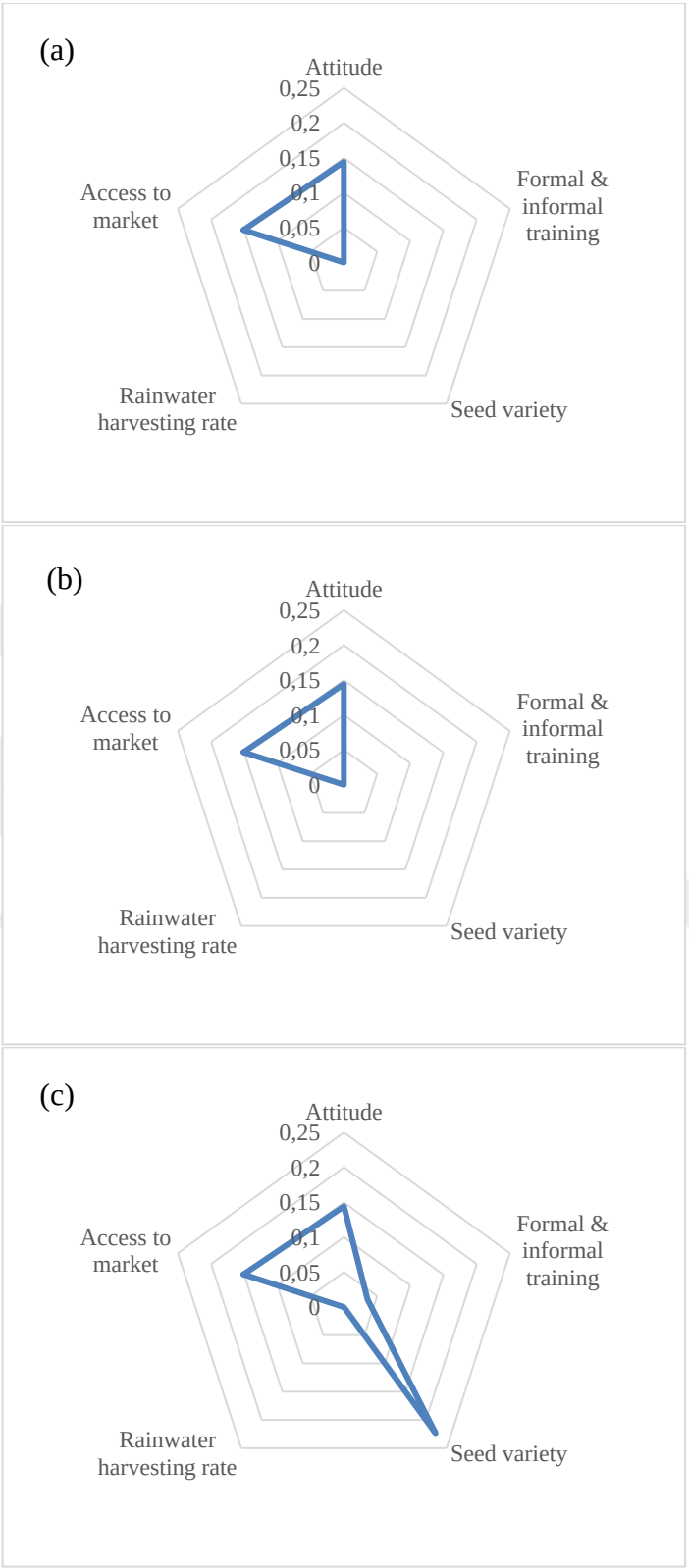

Figure 4.14 Calculated weighted values of Adaptability sub-index indicators for the periods: (a) 1991-1992, (b) 1982, (c) 2023 respectively.

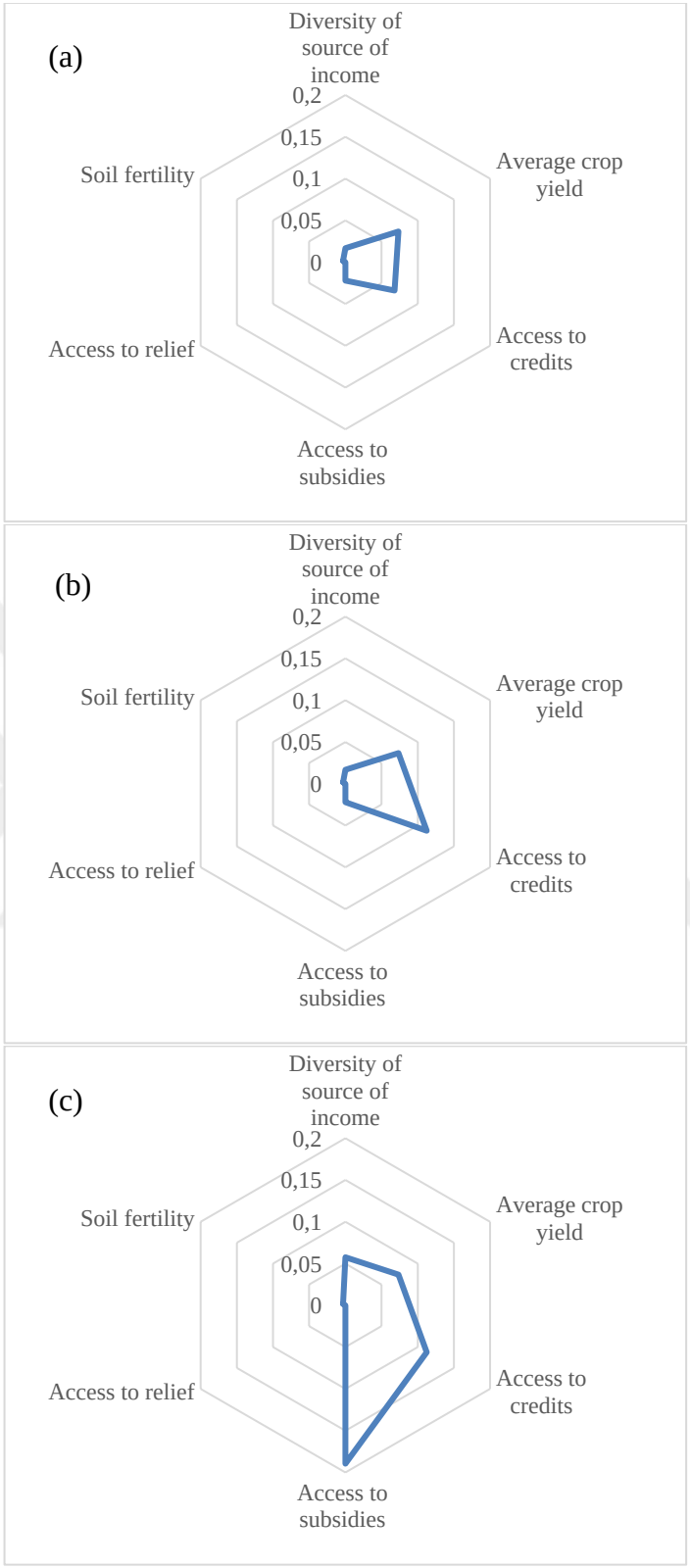

Figure 4.15 Calculated weighted values of Recoverability sub-index indicators for the periods: (a) 1991-1992, (b) 1982, (c) 2023 respectively.

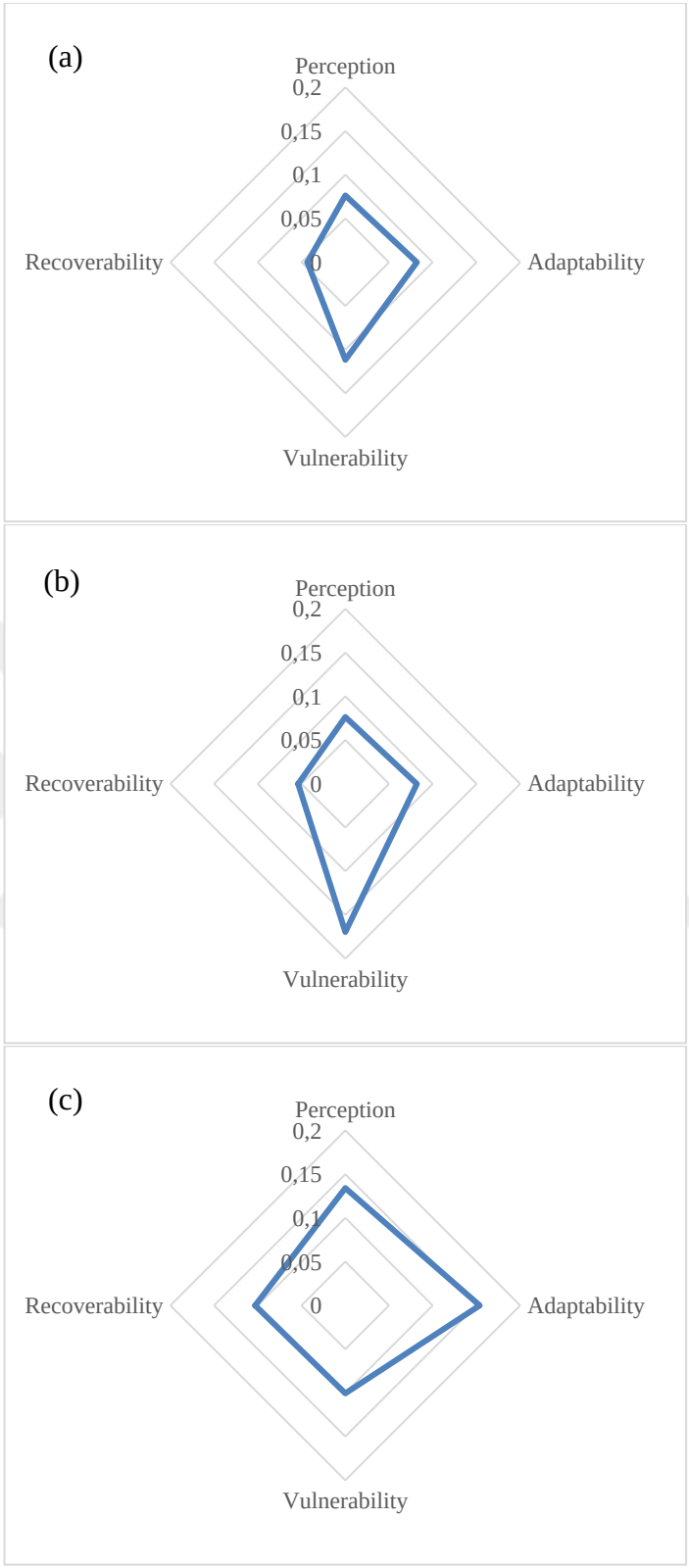

Figure 4.16 Calculated weighted values of SDI sub-indices for the periods: (a) 1991-1992, (b) 1982, (c) 2023 respectively.

CHAPTER FIVE
CONCLUSIONS

The assessment of the proposed Survivability from Droughts Index has initially examined its focus location, Lake Marmara hydrologic system, and its water resources in the baseline and future climate change and demand management scenarios. This was an essential part of the study since Lake Marmara represents a significant water resource of the Gediz River Basin. Along with its depleting water resources, the Lake became a hotspot of soil and water degradation, affecting the water balance of the whole basin, causing other demand points such as Menemen Plain to suffer from droughts much severely. Hence, understanding both the hydrologic system and their inhabitants- the stakeholders was a milestone in the development of the SDI.

According to the carried-out analysis regarding the modelling of Lake Marmara, due to the relatively low lateral flows and the inability to maintain the necessary minimum environmental water storage without any supply from the Çömlekçi Weir, the Lake is expected to dry out more quickly than it does currently. This also clarifies why the LUCs have such little effect, as the calculated lateral flows account for a very small portion of the water inflow into the lake hydrologic system.

According to the scenario analysis, absence of any water allocation from the Gördes Dam to the lake, does not ensure the sustainable management of the lake ecology and the riparian area, which is rich in flora and fauna. Thus, irrigated agricultural operations to downstream areas such Menemen Plain should also be considered. Nevertheless, current operational policies of responsible institutions, Lake Marmara steadily dries out and its volume falls below the volume of 23.47 hm^3, which is a threshold volume to satisfy environmental requirements considering the adverse effects of climate change. It is a given that, in contrast to the methods already in use, the lake appears to be experiencing an increase in water allocation demands. The relevant governmental and non-governmental stakeholders, including the legal governors of the lake system and the primary beneficiaries, farmers, and fishermen, should look into and debate options for mitigation measures and rehabilitation plans.

The lake will be more vulnerable if it is only dependent on lateral flow contributions, which are predicted to decrease by roughly 9–15% as a result of the primary effects of climate change. Therefore, the operational water allocation rules for the Gördes Dam should be restructured to supply the lake with a certain amount of water. Moreover, it is imperative to reestablish an appropriate and functional plan for adapting to climate change, together with policies that support it, with a greater sense of urgency. The Gördes Dam water allocation rules should be thoroughly examined and updated for further research, particularly with regard to the distribution of water priority and amounts to meet residential needs, irrigation requirements, and ecological and environmental requirements.

The evaluation of drought risk, an apparent threat not just for the Lake but for every hydrologic system is semi-arid and arid regions is an essential effort. In this context the thesis, regional drought risks of the case study have been estimated by the adapted the Kaplan-Meier Survivability Estimator method. As a benefit, the suggested technique enables calculating the drought risk probabilities through the use of a diverse range of drought indices. As such, it has the potential to be a versatile instrument that may be used in diverse studies. The produced drought risk maps are also highlighted because of their significant usefulness to stakeholders. Because the maps are easily interpretable and comprehensive, stakeholders with and without technical expertise may assess and analyze them. This issue is important, as non-technical stakeholders' understanding of the spatial and temporal dimensions of drought may cause various disagreements among all stakeholders, so by graphical and visual representations of scientific and technical results, a more participatory and comprehensive collaboration among the actors can be obtained.

Decision-makers can benefit from the use of drought risk maps as they facilitate the identification of high-risk locations within the studied region. When presented in terms of temporal and spatial factors, this information helps formulate targeted preventative and evasive actions, such as crop pattern modifications, local irrigation rotations, and irrigation infrastructure expenditures. Such comparative assessments are applicable not just within the examined region but also to adjacent regions that span national and international borders and river basins.

The study also emphasizes how important drought curves are for comprehending localized patterns in drought risk. Compared to drought risk maps, these curves

provide a more thorough view, especially for hotspots and focus locations of relevance such damaged wetlands.

The study's specific results are listed as follows: first, as the inquiry period was extended, there was an observed increase in drought risk, which was explained by the inclusion of more months during normally dry periods; second, as the SPI or SPEI calculation timescale increased, there was a decrease in drought risk because of the cumulative effect, which tends to average out extremes; third, there were consistent results in the plotted SPI and SPEI drought risk maps over the majority of the study area, with minor variations explained by the inclusion of potential evapotranspiration (PET) by SPEI; and last, high drought risk areas were identified by drought curves with steeper initial slopes.

To sum up, the incorporation of the Kaplan-Meier Estimator technique into the evaluation of drought risk is producing useful and visual resources for a wide range of stakeholders and decision makers, including individual farmers, larger-scale farming businesses, governmental organizations, and municipalities.

However, it should be noted that the accuracy of the fictitious values that were extrapolated across stations and the availability of data are the main sources of constraint for the suggested technique. Future research can focus on a particular goal supported by in-situ measurements or records of past droughts, such as detecting short-term extreme droughts that may be lost due to accumulation of indicator values on longer timescales, by optimizing the SPI/SPEI timescales (3-, 6-, and 12-month) used while enquiring about the drought risks. For detecting longer-lasting, lower-magnitude droughts, the same concept may be applied with longer periods.

After these initial steps, where the water resources of the main focus of the study and the drought risk of the whole case study have been evaluated, the stakeholder and CoP workshops have been realized. Through the first CoP workshops, the initial list of indicators has been transformed to its final version, considering the expert opinions of the UNIMED project consortium, data availability and of course the feedback of the stakeholders. The second CoP workshop has made it possible to weight each indicator and sub-index defined in the final version of the indicator list. On the other hand, the

indicator data has been collected on the stakeholder workshops through the surveys. According to the weighting survey results for the defined 18 indicators, net migration rate has been found to be the least important indicator with the value of 0.119, while the attitude decided to be the most important one with a value of 0.258. In the case of sub-indices, the result is much more homogenous, with the lowest and highest weights being 0.232 and 0.277, respectively. The standard deviations for each weighting exercise being 0.04 and 0.02 for indicators and sub-indices show that there were no significantly obvious choices regarding the given options. According to the defined weights and calculated indicator values, the SDI_{2023} value for the Gediz River Basin has been determined as 49.15%, while the $SDI_{1991\text{-}1992}$ and SDI_{1982} have been calculated as 31.32%, and 38.16%, respectively. The calculated SDI values for the 1991-1992 and 1982 periods validate the severely experienced drought and relatively wet period, as stated by the farmers and the expert opinions.

The evaluation of the weighted values of indicators and sub-indices reveal that the water dependency, rainwater harvest rate, formal & informal training, access to market, access to relief, soil fertility and perception sub-index have been found to be least sensitive in the case of Gediz River Basin.

The calculated values of SDI emphasize that the survivability of an agricultural community is not strictly tied to the risk drought and can be further improved by the various alternatives defined in the presented framework. It is observed that even though 1982 was a relatively wet period, its calculated SDI value falls short compared to the recent period of 2023, mostly due to qualitative and socio-economic indicators that are lacking in the 1982 period. The indicators of perception, access to credits, access to subsidies, formal & informal trainings, seed variety, and the diversity of source of income are relatively low in the 1991-1992 and 1982 periods.

Moreover, as stated in “section 3.2.5” the calculated indicators are selected not only for their strong connection with the SDI, but also according to the data availability in the analyzed case study, in this case, Gediz River Basin. As data availability is a common constraint in research, the process of indicator selection should be conducted accordingly. The feedback of the agricultural community and the expert opinions of the CoP are the main guides for process in each unique case study.

Hence, the calculation of SDI is a very interactive process that requires stakeholder engagement. Its framework is established on hard concepts of sub-indices, but the number and exact definitions of the indicators are soft concepts depending on the case study. Although this framework makes SDI hard to compare different case studies with each other, it represents each unique case study on a much more detailed level to compare it internally. As each river basin is a system on its own, it is not a weakness of the proposed framework, but a strong feature.

As demonstrated, calculated values can be extended spatially and/or temporally to highlight the drought prone areas or monitor the improvement throughout the years. The framework of SDI is most suited for extensive planning efforts such as drought management plans, irrigation planning to provide a valuable tool for the decision-makers, stakeholders, and governmental bodies.

The framework of SDI presents a framework to measure, update and indexed from time to time with the help of affected parties such farmers from the diverse effects of agricultural drought. Moreover, such kind of index enables to understand how the complex mechanisms to cope and mitigate of the outcomes of frequent droughts influence the socio-economic situation of farming communities. The SDI also helps to maintain food production under severe conditions and so on it also serves to sustain food security in nexus systems. As the SDI considers historical data and evidences to estimate and plan for future improvements to increase the economic survivability of the agricultural community, updating its indicators and data with the changing demands of stakeholders and natural resources, the index also proves that it is a dynamic tool to be adapted to dynamic nature of droughts and community.

Regarding the issues above, the SDI allows the stakeholders and decision-makers to examine their system on a broader perspective. The development of the system is monitored and understood through the dynamic setup of indicators and sub-indices. Thus, an environment of integrated government and governance is promoted where the stakeholders who are affected by the developed policies may participate. So, one should keep in mind that "*Ipsa sola mutatio non mutat."* (Only the change itself does not change).

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APPENDICES

APPENDIX-1: DATA AVAILABILITY CHART

Table A.1 Data availability of the selected 27 meteorological stations

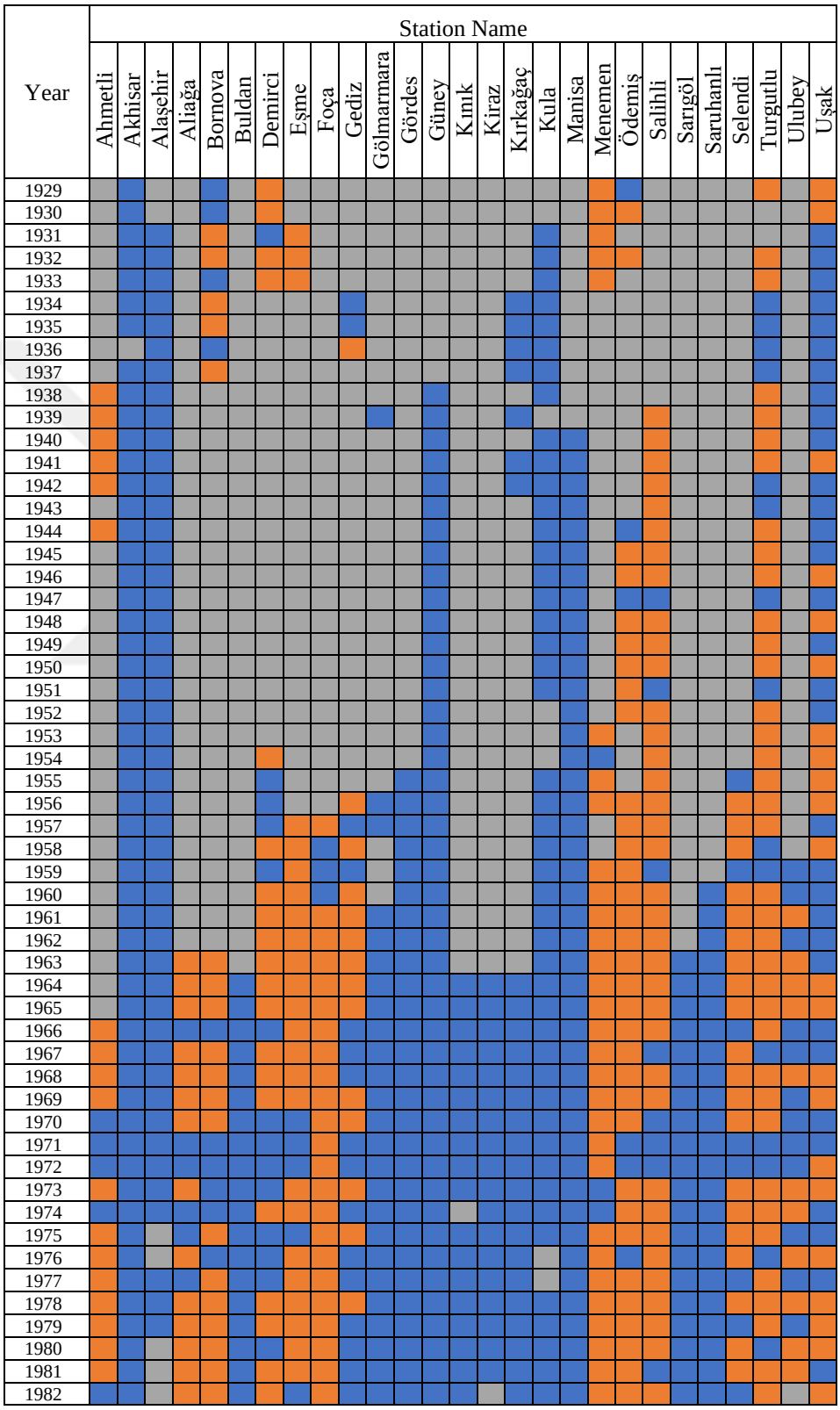
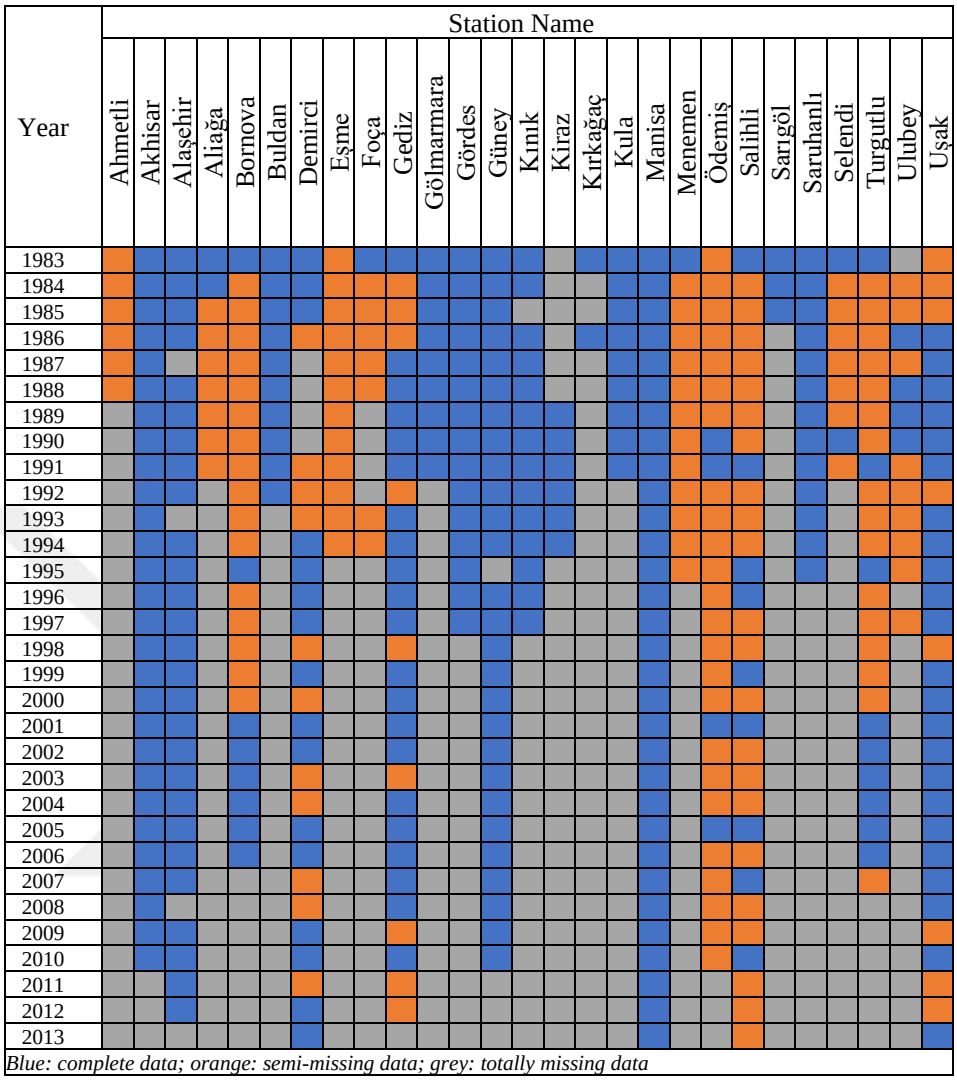


Table A.1 *Cont'd*



Blue: complete data; orange: semi-missing data; grey: totally missing data

APPENDIX-2: DATA SURVEY



UNIMED PROJECT

DATA SURVEY

PARTICIPANT INFORMATION

1. **How many acres of land do you cultivate? _____**
2. **In which town/village is your land located? _____**
3. **What are the main crops you are cultivating? _____**
4. **Are you a part-time or full-time farmer?**
   ◯ Part-time farmer ◯ Full-time farmer ◯ Other, please specify: _____
5. **Is farming your only source of income?**
   ◯ Yes ◯ No
6. **How would you rate your income from farming**
   ◯ Very low ◯ Low ◯ Medium ◯ Medium to High ◯ High
7. **To which markets do you have access?**
   ◯ Government operated market ◯ Local customers/local markets
   ◯ Export abroad ◯ Other, please specify: _____
8. **To which sources of water do you have access?**
   ◯ Surface water, if yes please specify: _____
   ◯ Groundwater, if yes please specify how water is pumped to the surface: _____
   ◯ Water reservoir/water storage on farm
   ◯ Treated effluent
9. **Which sources of energy are available on your farm?**
   ◯ Public energy supply network ◯ Generator ◯ Wind energy ◯ Solar panels
   ◯ Other? If yes, please specify _____
10. **Do you practice organic farming?**
    ◯ Yes ◯ No
11. **Do you plant according to a given practice (e.g., according to the lunar calendar)?**
    ◯ Yes ◯ No
    If yes, please specify which practice: _____
12. **Which is the most recent year a drought affected the yield of your farm? _____**
13. **During which year(s) would you consider to have experienced the most severe drought(s)?_____**
14. **To which age group do you belong?**
    ◯ Less than 25 ◯ 25-50 ◯ 51-65 ◯ 65+
15. **What is your level of education?**
    ◯ Primary ◯ Secondary ◯ Higher Secondary ◯ Tertiary
    ◯ Other? If yes, please specify _____
16. **Gender of respondent**
    ◯ Male ◯ Female



UNIMED PROJECT

DATA SURVEY

1. **Please indicate how your Profit/Loss ratio changes in the situations in the table below, either by percentage or by profit-cost amounts**

	Total Profit (TL)	Total Costs (TL)	Benefit to Cost Ratio (%)
Long-term average			
On a dry year			
On a wet year			
Monthly average			

2. **Do you harvest rainwater? If yes, what percentage of your irrigation is done with harvested rainwater?**
   %_____
3. **How many other sources of income do you have besides farming? _____**
4. **Indicate how the yield of the 3 existing products in your fields changes in the situations in the table below.**

	Product-1 (name): _____ Yield collected (kg/decare)	Product-2 (name): _____ Yield collected (kg/decare)	Product-3 (name): _____ Yield collected (kg/decare)
Long-term average			
On a dry year			
On a wet year			
Monthly average			

5. **Have you received a loan for your agricultural activities in the last 2 years?**
   ◯ Yes ◯ No
6. **Have you received any incentives/subsidies for your agricultural activities in the last 2 years?**
   ◯ Yes ◯ No
7. **Have you received financial assistance from any fund due to the financial losses you experienced in your agricultural activities due to drought?**
   ◯ Yes ◯ No

APPENDIX-3: VAP SURVEY



UNIMED PROJECT

VALUE-ATTITUDE-PERCEPTION (VAP) SURVEY

Value Questions:

1) The protection of the environment and of natural resources (soil and water) in farming practices is important:

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

2) My reputation in the community for being a responsible water user is important to me.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

Attitude Questions:

3) I am concerned about drought and its potential impact on my farm.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

4) Your fellow farmers are confident in your ability to cope with drought.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

5) My usage of water on my farm affects neighbouring farmers.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

6) Your fellow farmers are willing to adopt water conservation practices on their farms

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

7) How would you define a drought on your farm? _____

Perception Questions:

8) Droughts occur frequently in my region.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

9) The impact of drought on my farm and the surrounding community is severe.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

10) How would you rate your access to water on your farm.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

11) How would you rate your access to energy on your farm.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

12) Rate the given challenges that you face in dealing with drought below from 1 to 4, 1 being the most significant challenge:

☐ Water Scarcity
☐ Economic and Financial Hardships
☐ Other: _____
☐ Reduced crop productivity
☐ Increased energy costs

Behavioral Questions:

13) Please check from the below options, how have you addressed these challenges in the past?

☐ I adopted a new water management practice (If yes, please specify this practice)
☐ I made infrastructural changes (If yes, please specify its nature)
☐ I received financial support from government (If yes, please specify reason(s))
☐ I started employing diversification of seed varieties (If yes, please specify how many seed varieties and of which crops)
☐ I started employing agricultural practices which help to alleviate the impact of droughts (If yes, please specify which practices)
☐ Other: _____

14) What measures have you taken to conserve water on your farm?

☐ Increasing irrigation efficiency
☐ Water recycling and harvesting
☐ Crop selection and management
☐ Other: _____

15) Have you changed your farming practices in response to past droughts?

◯ Yes ◯ No

16) How likely are you to take action to prepare for or mitigate the impact of future droughts on your farm?

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

17) Farmers participate regularly in programs or initiatives aimed at promoting water conservation or drought preparedness on their farms.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

18) Farmers are willing to collaborate with neighbouring farms or community organizations in implementing water conservation measures during a drought.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

19) Farms are well prepared for a drought.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

20) Water availability is important for the farm's production and profitability.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

21) Farmers are supportive of government policies and regulations that aim to manage and conserve water resources.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

22) Farmers in my area are satisfied with the current drought response measures.

◯ Highly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Highly Disagree

APPENDIX-4: WEIGHTING SURVEY



UNIMED PROJECT

“Survivability from Droughts Index”

Sub-Indices Weighting Survey

Information:

The "Survivability from Droughts Index" will be defined with the joint contribution of the 4 sub-indices listed below.

In this definition, the weights of the sub-indices will be determined within the scope of this survey by your answers.

When determining weights, you have a total of 10 votes to be distributed among the 4 sub-indices listed below. Distribute these 10 votes in order of importance according to your opinion, by placing a cross "X" in the boxes below.

Perception: Represents how droughts are perceived among the agricultural community	
Adaptability: Measures that can prevent/reduce the effects of drought	
Vulnerability: The extent of being affected by the damages of drought	
Recoverability: The extent of recovery from the damages of drought	



UNIMED PROJECT

"Adaptability"

Sub-Indices Weighting Survey

Information:

You have a total of 12 votes to be distributed among the 5 sub-indices listed below.

Adaptability: Measures that can prevent/reduce the effects of drought

Attitude: Extent to which the farming community has adopted measures to mitigate the impact of drought

Formal & informal training: Number of events dedicated to training and practical learning on how to adapt to droughts in the agricultural sector

Seed variety: Whether the cultivated crop varieties have more drought-durable alternatives

Rainwater harvesting rate: Rate of irrigation water sourced by rainwater harvesting to total amount of water allocated to irrigation

Access to market: Percentage of farmers that have access to local/ national/ international markets



UNIMED PROJECT

"Vulnerability"

Sub-Indices Weighting Survey

Information:

You have a total of 14 votes to be distributed among the 6 sub-indices listed below.

Vulnerability: The extent of being affected by the damages of drought

Supply/Demand Ratio: The total water supply allocated to demand sites in the analyzed extent divided by the demand for freshwater and/or groundwater resources

Water dependency for food production: Total monthly amount of water allocated to food producing agricultural irrigation

Rate of people working in agriculture: Total population of people working in agriculture sector over the total population in the case study area

Species diversity within defined area: Shannon Diversity Index of the pilot study area to measure the diversity of species

Benefit to cost ratio: Average agricultural land benefit to cost ratio

Drought Risk: Average drought risk of the study area according to Standard Precipitation Index



UNIMED PROJECT

"Recoverability"

Sub-Indices Weighting Survey

Information:

You have a total of 14 votes to be distributed among the 6 sub-indices listed below.

Recoverability: The extent of recovery from the damages of drought

Diversity of source of income: Percentage of income sources independent of agricultural activity

Average crop yield: Total yield divided by the surface area dedicated to crop production

Access to credits: Percentage of the agricultural community benefiting from credits

Access to subsidies: Percentage of the agricultural community benefiting from subsidies

Access to relief: Percentage of the agricultural community benefiting from relief funds after a drought

Soil fertility: Soil fertility promotes ecosystem services, lower irrigation dependence, and higher food production (Soil Organic Carbon Content (SOC) will be observed)

APPENDIX-5: INITIAL LIST OF INDICATORS

Table A.2 Initial Indicator List of Perception Index

No.	Indicator Name	Nexus Aspect	Definition	Methodology	Unit
P-1	***Perception***	Social	Represents how droughts (in terms of severity) are perceived among the agricultural community	Survey data	-

Table A.3 Initial Indicator List of Vulnerability Index

No.	Indicator Name	Nexus Aspect	Definition	Methodology	Unit
V-1	Water Exploitation Index	Economic, Social, Environment	Mean annual total demand for surface/ground water divided by the long-term average surface/ground water resources in the pilot study area	Index (Total freshwater withdrawal in pilot study area / Total available freshwater resource in pilot study area)	-
V-2	Water dependency for food production	Economic, Social, Environment	Total amount of water allocated to food production in agriculture	Observed data	m^3/ha
V-3	Total population density	Economic, Social, Environment	Total population residing in the pilot study area	Observed data	Cap/km^2
V-4	Shannon diversity Index	Environment	Measurement of the diversity of species	Observed data	No.
V-	Benefit to cost ratio	Economic, Social	Average agricultural land benefit to cost ratio	Observed data	%
V-6	Drought Risk	Economic, Social, Environment	Average drought risk of the study area according to Standard Precipitation Index (SPI)	Analysis of observed monthly rainfall data	%

Table A.4 Initial Indicator List of Adaptability Index

No.	Indicator Name	Nexus Domain	Definition	Methodology	Unit
A-1	***Attitude***	Social	Extent to which the farming community has adopted measures to mitigate the impact of drought	Survey data	-
A-2	Formal & informal training	Social	Number of events dedicated to training and practical learning on how to adapt to droughts in the agricultural sector	Observed Data, (Survey Data in UNIMED)	-
A-3	Seed variety	Environment	Total number of seed variety cultivated (Cultivating various seeds promotes the biodiversity and ecosystem resilience)	Observed Data	No.
A-4	Rainwater harvesting rate	Economy, Environment	Rate of irrigation water sourced by rainwater harvesting to total amount of water allocated to irrigation	Observed Data	%
A-5	Access to market	Economy, Social	Share of farmers conducting business in local/national/international markets	Observed Data	%

Table A.5 Initial Indicator List of Recoverability Index

No.	Indicator Name	Nexus Domain	Definition	Methodology	Unit
R-1	Diversity of source of income	Economy	Number of income sources independent of agricultural activity (termed as ***Value*** in Survey)	Observed Data, (Survey Data in UNIMED)	No.
R-2	Average crop yield	Economy, Environment	Total yield divided by the surface area dedicated to crop production	Observed Data	kg/ha
R-3	Access to credits	Economy, Social	Percentage of agricultural community benefiting from credits	Observed Data	%
R-4	Access to subsidies	Economy, Social	Percentage of agricultural community benefiting from subsidies	Observed Data	%
R-5	Access to relief	Economy, Social	Percentage of agricultural community benefiting from relief funds after a drought	Observed Data	%
R-6	Soil fertility	Environment	Soil fertility promotes ecosystem services, lower irrigation dependence and higher food production	Observed Data: Soil organic matter, soil organic carbon and macronutrients, e.g. (N, P, K)	mg/kg

APPENDIX-6: ENLARGED LIST OF INDICATORS

Table A.6 Enlarged Indicator List of Perception Index

	Indicator Name	Data Requirements	Spatial Extent	Temporal Extent	Source
Perception	**Perception**	Survey Data	Pilot Area	Start/End of project	Local data

Table A.7 Enlarged Indicator List of Vulnerability Index

	Indicator Name	Data Requirements	Spatial Extent	Temporal Extent	Source
Vulnerability	**Supply/Demand Ratio**	The total water supply allocated to demand sites in the analyzed extent divided by the demand for freshwater and/or groundwater resources	Pilot Area	Long-year, dry-year, wet-year, annual average values	Local data
	Water dependency for food production	Amount of water allocated for food production	Pilot Area	Long-year, dry-year, wet-year, monthly average values	Local data
	Total population	Total population of the pilot area	Pilot Area	Annual	Local data
	Species diversity within defined area	Population of each species within the pilot area	Pilot Area	Annual	Local data
	Benefit to cost ratio	Total Benefits/Total Costs	Plot	Long-year, dry-year, wet-year, average values	Local data
	Drought Risk	SPI timeseries calculated for the pilot area	Pilot Area	Long-year, dry-year, wet-year, average values	Local data

Table A.8 Enlarged Indicator List of Adaptability Index

Adaptability	**Attitude**	Survey Data	Pilot Area	-	Local data
	Formal & informal training	Number of Events	Pilot Area	Annual	Local data
	Seed variety	Survey Data	Pilot Area	Annual	Local data
	Rainwater harvesting rate	Total Amount of harvested rainwater/Total amount of irrigation	Pilot Area	Annual	Local data
	Access to market	Survey Data	Pilot Area	Annual	Local data

Table A.9 Enlarged Indicator List of Recoverability Index

	Indicator Name	**Data Requirements**	**Spatial Extent**	**Temporal Extent**	**Source**
Recoverability	**Diversity of source of income**	Number of income sources independent of agricultural activity	Pilot Area	Annual	Local data
	Average crop yield	Total yield divided by the surface area dedicated to crop production	Pilot Area	Long-year, dry-year, wet-year, annual average values	Local data
	Access to credits	Number of members in agricultural community benefiting from credits/Total population of agricultural community	Pilot Area	Annual	Local data
	Access to subsidies	Number of members in agricultural community benefiting from subsidies/Total population of agricultural community	Pilot Area	Annual	Local data
	Access to relief	Number of members in agricultural community benefiting from relief funds/Total population of agricultural community	Pilot Area	Annual	Local data
	Soil fertility	Soil Organic Carbon content of the pilot area	Pilot Area	Annual	Soilgrids

APPENDIX-7: FINAL LIST OF INDICATORS

Table A.10 Final Indicator List of Perception Index

	Indicator Name	Definition	Methodology	Unit	Source
Perception	**Perception**	Represents how droughts (in terms of severity) are perceived among the agricultural community	Calculated Data	%	VAP Survey

Table A.11 Final Indicator List of Vulnerability Index

	Indicator Name	Definition	Methodology	Unit	Source
Vulnerability	**Supply/Demand Ratio**	The total water supply allocated to demand sites in the analyzed extent divided by the demand for freshwater and/or groundwater resources	Calculated Data	%	Farmers, Water Users Association database
	Water dependency for food production	Total monthly amount of water allocated to food producing agricultural irrigation	Observed Data	m^3/month	Farmers
	Rate of people working in agriculture	Total population of people working in agriculture sector over the total population in the case study area	Observed Data	%	Municipality database
	Species diversity within defined area	Shannon Diversity Index of the pilot study area to measure the diversity of species	Observed Data	Number	Municipality database
	Benefit to cost ratio	Average agricultural land benefit to cost ratio	Calculated Data	%	Farmers
	Drought Risk	Average drought risk of the study area according to Standard Precipitation Index	Calculated Data	%	Meteorological station data

Table A.12 Final Indicator List of Adaptability Index

	Indicator Name	Definition	Methodology	Unit	Source
Adaptability	**Attitude**	Extent to which the farming community has adopted measures to mitigate the impact of drought	Calculated	%	VAP Survey
	Formal & informal training	Number of events dedicated to training and practical learning on how to adapt to droughts in the agricultural sector	Observed Data	Number	VAP Survey
	Seed variety	Whether the cultivated crop varieties have more drought-durable alternatives	Observed Data	Yes/No	VAP Survey
	Rainwater harvesting rate	Rate of irrigation water sourced by rainwater harvesting to total amount of water allocated to irrigation	Calculated Data	%	VAP Survey
	Access to market	Percentage of farmers that have access to local/ national/ international markets	Calculated Data	%	Farmers

Table A.13 Final Indicator List of Recoverability Index

	Indicator Name	Definition	Methodology	Unit	Source
Recoverability	**Diversity of source of income**	Percentage of income sources independent of agricultural activity (termed as ***Value*** in Survey)	Calculated Data	%	Farmers
	Average crop yield	Total yield divided by the surface area dedicated to crop production	Calculated Data	%	Farmers
	Access to credits	Percentage of the agricultural community benefiting from credits	Calculated Data	%	Farmers
	Access to subsidies	Percentage of the agricultural community benefiting from subsidies	Calculated Data	%	Farmers
	Access to relief	Percentage of the agricultural community benefiting from relief funds after a drought	Calculated Data	%	Farmers
	Soil fertility	Soil fertility promotes ecosystem services, lower irrigation dependence, and higher food production (Soil Organic Carbon Content (SOC) will be observed)	Observed Data	Mg/ha	UTAEM[1]

APPENDIX-8: WATER BUDGET SIMULATION RESULTS

Table A.14 Simulation results showing monthly water deficit volumes (hm^3) to satisfy the environmental needs of the Lake Marmara

Month	M1.1	M1.2	M1.3	M1.4	M1.5	M1.6	M1.7	M1.8	M1.9
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0
7	**-9.1**	**-4.6**	**-9.1**	0	0	0	0	0	0
8	-41.8	-39.2	-41.8	**-22.3**	**-19.8**	**-22.3**	**-2.9**	**-0.3**	**-2.9**
9	-61.3	-58.7	-61.3	-39.9	-37.3	-39.9	-18.5	-15.9	-18.5
10	-67.3	-68.1	-67.3	-45.5	-46.2	-45.5	-23.6	-24.4	-23.6
11	-67.1	-69.8	-67.1	-45.3	-48.0	-45.3	-23.5	-26.2	-23.5
12	-60.5	-61.0	-60.5	-38.7	-39.2	-38.7	-16.9	-17.4	-16.9
Month	M2.1	M2.2	M2.3	M2.4	M2.5	M2.6	M2.7	M2.8	M2.9
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	**-15.2**	**-9.4**	**-15.2**	**-8.9**	**-3.1**	**-8.9**	**-2.5**	0	**-2.5**
7	-50.5	-46.0	-50.5	-37.3	-32.8	-37.3	-24.1	**-19.6**	-24.1
8	-83.1	-80.6	-83.1	-63.7	-61.1	-63.7	-44.2	-41.7	-44.2
9	-102.7	-100.1	-102.7	-81.3	-78.7	-81.3	-59.9	-57.2	-59.9
10	-108.6	-109.4	-108.6	-86.8	-87.6	-86.8	-65.0	-65.8	-65.0
11	-108.4	-111.2	-108.4	-86.6	-89.4	-86.6	-64.8	-67.6	-64.8
12	-101.8	-102.4	-101.8	-80.0	-80.6	-80.0	-58.2	-58.8	-58.2
Month	M3.1	M3.2	M3.3	M3.4	M3.5	M3.6	M3.7	M3.8	M3.9
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	**-23.2**	**-17.4**	**-23.2**	**-16.9**	**-11.1**	**-16.9**	**-10.5**	**-4.7**	**-10.5**
7	-58.5	-54.0	-58.5	-45.3	-40.8	-45.3	-32.1	-27.6	-32.1
8	-91.1	-88.6	-91.1	-71.7	-69.1	-71.7	-52.3	-49.7	-52.3
9	-110.7	-108.1	-110.7	-89.3	-86.7	-89.3	-67.9	-65.3	-67.9
10	-116.6	-117.4	-116.6	-94.8	-95.6	-94.8	-73.0	-73.8	-73.0
11	-116.5	-119.2	-116.5	-94.7	-97.4	-94.7	-72.9	-75.6	-72.9
12	-109.9	-110.4	-109.9	-88.1	-88.6	-88.1	-66.3	-66.8	-66.3

APPENDIX-9: CALCULATIONS OF KAPLAN-MEIER SURVIVAL ESTIMATES AND DROUGHT RISKS

Table A.15 Ahmetli station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		44	44	4.5	4	8
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	44	5	0.8864	0.0478	0.79738	0.985
2	39	5	0.7727	0.0632	0.65831	0.907
3	34	6	0.6364	0.0725	0.50898	0.796
4	28	6	0.5	0.0754	0.37209	0.672
5	22	3	0.4318	0.0747	0.30768	0.606
6	19	2	0.3864	0.0734	0.26624	0.561
7	17	2	0.3409	0.0715	0.22605	0.514
8	15	4	0.25	0.0653	0.14986	0.417
9	11	2	0.2045	0.0608	0.11422	0.366
10	9	2	0.1591	0.0551	0.08065	0.314
14	7	1	0.1364	0.0517	0.06483	0.287
15	6	1	0.1136	0.0478	0.04979	0.259
17	5	1	0.0909	0.0433	0.03571	0.231
18	4	1	0.0682	0.038	0.02287	0.203
24	3	1	0.0455	0.0314	0.01174	0.176
25	2	1	0.0227	0.0225	0.00327	0.158
27	1	1	0	NaN	NA	NA

Table A.16 Ahmetli station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		40	40	8.5	7	23
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	40	3	0.925	0.0416	0.84687	1
2	37	6	0.775	0.066	0.65582	0.916
3	31	3	0.7	0.0725	0.57147	0.857
6	28	2	0.65	0.0754	0.51779	0.816
7	26	3	0.575	0.0782	0.44051	0.751
8	23	3	0.5	0.0791	0.36676	0.682
9	20	3	0.425	0.0782	0.29638	0.609
10	17	1	0.4	0.0775	0.27367	0.585
11	16	1	0.375	0.0765	0.25135	0.559
19	15	1	0.35	0.0754	0.22943	0.534
23	14	2	0.3	0.0725	0.18687	0.482
24	12	1	0.275	0.0706	0.16627	0.455
25	11	1	0.25	0.0685	0.14616	0.428
28	10	1	0.225	0.066	0.12659	0.4
30	9	1	0.2	0.0632	0.10761	0.372
36	8	1	0.175	0.0601	0.08929	0.343
37	7	1	0.15	0.0565	0.07173	0.314
38	6	1	0.125	0.0523	0.05506	0.284
39	5	1	0.1	0.0474	0.03947	0.253
40	4	1	0.075	0.0416	0.02526	0.223
41	3	1	0.05	0.0345	0.01295	0.193
42	2	1	0.025	0.0247	0.00361	0.173
43	1	1	0	NaN	NA	NA

Table A.17 Ahmetli station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		26	26	64.5	14	70
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
2	26	1	0.9615	0.0377	0.89039	1
3	25	1	0.9231	0.0523	0.82613	1
9	24	2	0.8462	0.0708	0.71824	0.997
10	22	1	0.8077	0.0773	0.66956	0.974
11	21	1	0.7692	0.0826	0.62319	0.949
12	20	1	0.7308	0.087	0.5787	0.923
13	19	1	0.6923	0.0905	0.53581	0.895
14	18	1	0.6538	0.0933	0.49433	0.865
15	17	1	0.6154	0.0954	0.45412	0.834
16	16	1	0.5769	0.0969	0.41511	0.802
63	15	1	0.5385	0.0978	0.37723	0.769
64	14	1	0.5	0.0981	0.34044	0.734
65	13	1	0.4615	0.0978	0.30472	0.699
66	12	1	0.4231	0.0969	0.27007	0.663
67	11	1	0.3846	0.0954	0.23652	0.625
68	10	1	0.3462	0.0933	0.2041	0.587
69	9	1	0.3077	0.0905	0.17287	0.548
70	8	2	0.2308	0.0826	0.11439	0.466
71	6	1	0.1923	0.0773	0.08747	0.423
72	5	1	0.1538	0.0708	0.06246	0.379
73	4	1	0.1154	0.0627	0.0398	0.334
74	3	1	0.0769	0.0523	0.02031	0.291
82	2	1	0.0385	0.0377	0.00563	0.263
83	1	1	0	NaN	NA	NA

Table A.18 Ahmetli station Kaplan-Meier drought risk estimates according to SPI-3. 6. and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.1136	1	0.075	2	0.0385
2	0.2273	2	0.225	3	0.0769
3	0.3636	3	0.3	6	0.11535
4	0.5	6	0.35	9	0.1538
5	0.5682	7	0.425	10	0.1923
6	0.6136	8	0.5	11	0.2308
7	0.6591	9	0.575	12	0.2692
8	0.75	10	0.6	13	0.3077
9	0.7955	11	0.625	14	0.3462
10	0.8409	12	0.628125	15	0.3846
11	0.846575	19	0.65	16	0.4231
12	0.85225	23	0.7	63	0.4615
14	0.8636	24	0.725	64	0.5
15	0.8864	25	0.75	65	0.5385
17	0.9091	28	0.775	66	0.5769
18	0.9318	30	0.8	67	0.6154
24	0.9545	36	0.825	68	0.6538
25	0.9773	37	0.85	69	0.6923
27	1	38	0.875	70	0.7692
		39	0.9	71	0.8077
		40	0.925	72	0.8462
		41	0.95	73	0.8846
		42	0.975	74	0.9231
		43	1	82	0.9615
				83	1

Table A.19 Ahmetli station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		47	47	8	5	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	47	5	0.8936	0.045	0.80968	0.986
2	42	3	0.8298	0.0548	0.72901	0.944
3	39	4	0.7447	0.0636	0.6299	0.88
4	35	5	0.6383	0.0701	0.51471	0.792
5	30	3	0.5745	0.0721	0.44916	0.735
6	27	1	0.5532	0.0725	0.42785	0.715
7	26	2	0.5106	0.0729	0.38598	0.676
8	24	3	0.4468	0.0725	0.32506	0.614
9	21	3	0.383	0.0709	0.26643	0.551
10	18	4	0.2979	0.0667	0.19205	0.462
11	14	1	0.2766	0.0652	0.1742	0.439
12	13	2	0.234	0.0618	0.13953	0.393
13	11	1	0.2128	0.0597	0.12277	0.369
14	10	1	0.1915	0.0574	0.10642	0.345
15	9	1	0.1702	0.0548	0.09054	0.32
16	8	1	0.1489	0.0519	0.0752	0.295
17	7	2	0.1064	0.045	0.04645	0.244
18	5	1	0.0851	0.0407	0.03333	0.217
25	4	2	0.0426	0.0294	0.01096	0.165
26	2	1	0.0213	0.021	0.00306	0.148
27	1	1	0	NaN	NA	NA

Table A.20 Ahmetli station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		45	45	18	6	26
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	45	4	0.9111	0.0424	0.8316	0.998
2	41	4	0.8222	0.057	0.7178	0.942
3	37	2	0.7778	0.062	0.6653	0.909
4	35	1	0.7556	0.0641	0.6399	0.892
5	34	2	0.7111	0.0676	0.5903	0.857
6	32	4	0.6222	0.0723	0.4955	0.781
7	28	1	0.6	0.073	0.4727	0.762
9	27	1	0.5778	0.0736	0.4501	0.742
14	26	1	0.5556	0.0741	0.4278	0.721
17	25	1	0.5333	0.0744	0.4058	0.701
18	24	2	0.4889	0.0745	0.3626	0.659
19	22	1	0.4667	0.0744	0.3415	0.638
20	21	1	0.4444	0.0741	0.3206	0.616
21	20	1	0.4222	0.0736	0.3	0.594
22	19	1	0.4	0.073	0.2797	0.572
23	18	1	0.3778	0.0723	0.2597	0.55
24	17	1	0.3556	0.0714	0.2399	0.527
25	16	1	0.3333	0.0703	0.2205	0.504
26	15	1	0.3111	0.069	0.2014	0.481
27	14	1	0.2889	0.0676	0.1827	0.457
28	13	1	0.2667	0.0659	0.1643	0.433
29	12	2	0.2222	0.062	0.1286	0.384
30	10	1	0.2	0.0596	0.1115	0.359
31	9	1	0.1778	0.057	0.0948	0.333
32	8	1	0.1556	0.054	0.0787	0.307
38	7	1	0.1333	0.0507	0.0633	0.281
39	6	1	0.1111	0.0468	0.0486	0.254
40	5	1	0.0889	0.0424	0.0349	0.227
41	4	1	0.0667	0.0372	0.0223	0.199
42	3	1	0.0444	0.0307	0.0115	0.172
43	2	1	0.0222	0.022	0.0032	0.154
62	1	1	0	NaN	NA	NA

Table A.21 Ahmetli station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		42	42	34.5	8	64
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
2	42	3	0.9286	0.0397	0.85386	1.000
3	39	4	0.8333	0.0575	0.72791	0.954
4	35	2	0.7857	0.0633	0.67092	0.92
5	33	2	0.7381	0.0678	0.61642	0.884
6	31	3	0.6667	0.0727	0.53831	0.826
7	28	1	0.6429	0.0739	0.51312	0.805
8	27	1	0.619	0.0749	0.4883	0.785
24	26	1	0.5952	0.0757	0.46386	0.764
25	25	1	0.5714	0.0764	0.43976	0.743
26	24	1	0.5476	0.0768	0.41601	0.721
27	23	1	0.5238	0.0771	0.39259	0.699
28	22	1	0.5	0.0772	0.36951	0.677
41	21	1	0.4762	0.0771	0.34676	0.654
42	20	1	0.4524	0.0768	0.32434	0.631
43	19	1	0.4286	0.0764	0.30225	0.608
60	18	1	0.4048	0.0757	0.28049	0.584
61	17	1	0.381	0.0749	0.25908	0.56
62	16	1	0.3571	0.0739	0.23803	0.536
63	15	1	0.3333	0.0727	0.21734	0.511
64	14	1	0.3095	0.0713	0.19703	0.486
65	13	1	0.2857	0.0697	0.17712	0.461
66	12	1	0.2619	0.0678	0.15763	0.435
67	11	1	0.2381	0.0657	0.13861	0.409
68	10	1	0.2143	0.0633	0.12009	0.382
69	9	1	0.1905	0.0606	0.10211	0.355
70	8	1	0.1667	0.0575	0.08475	0.328
71	7	1	0.1429	0.054	0.0681	0.3
72	6	2	0.0952	0.0453	0.0375	0.242
73	4	1	0.0714	0.0397	0.02401	0.213
74	3	1	0.0476	0.0329	0.01231	0.184
75	2	1	0.0238	0.0235	0.00343	0.165
76	1	1	0	NaN	NA	NA

Table A.22 Ahmetli station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.1064	1	0.0889	2	0.0714
2	0.1702	2	0.1778	3	0.1667
3	0.2553	3	0.2222	4	0.2143
4	0.3617	4	0.2444	5	0.2619
5	0.4255	5	0.2889	6	0.3333
6	0.4468	6	0.3778	7	0.3571
7	0.4894	7	0.4	8	0.381
8	0.5532	9	0.4222	12	0.38695
9	0.617	12	0.43552	24	0.4048
10	0.7021	14	0.4444	25	0.4286
11	0.7234	17	0.4667	26	0.4524
12	0.766	18	0.5111	27	0.4762
13	0.7872	19	0.5333	28	0.5
14	0.8085	20	0.5556	41	0.5238
15	0.8298	21	0.5778	42	0.5476
16	0.8511	22	0.6	43	0.5714
17	0.8936	23	0.6222	60	0.5952
18	0.9149	24	0.6444	61	0.619
25	0.9574	25	0.6667	62	0.6429
26	0.9787	26	0.6889	63	0.6667
27	1	27	0.7111	64	0.6905
		28	0.7333	65	0.7143
		29	0.7778	66	0.7381
		30	0.8	67	0.7619
		31	0.8222	68	0.7857
		32	0.8444	69	0.8095
		38	0.8667	70	0.8333
		39	0.8889	71	0.8571
		40	0.9111	72	0.9048
		41	0.9333	73	0.9286
		42	0.9556	74	0.9524
		43	0.9778	75	0.9762
		62	1	76	1

Table A.23 Akhisar station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		143	143	10	8	12
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	143	6	0.95804	0.01677	0.925738	0.9915
2	137	6	0.91608	0.02319	0.871749	0.9627
3	131	10	0.84615	0.03017	0.789037	0.9074
4	121	12	0.76224	0.0356	0.695562	0.8353
5	109	9	0.6993	0.03835	0.62804	0.7786
6	100	5	0.66434	0.03949	0.591277	0.7464
7	95	12	0.58042	0.04127	0.504919	0.6672
8	83	5	0.54545	0.04164	0.469656	0.6335
9	78	6	0.5035	0.04181	0.42787	0.5925
10	72	8	0.44755	0.04158	0.373044	0.5369
11	64	5	0.41259	0.04117	0.339299	0.5017
12	59	6	0.37063	0.04039	0.299352	0.4589
13	53	5	0.33566	0.03949	0.266542	0.4227
14	48	1	0.32867	0.03928	0.260035	0.4154
15	47	5	0.29371	0.03809	0.227788	0.3787
16	42	5	0.25874	0.03662	0.196058	0.3415
17	37	6	0.21678	0.03446	0.158755	0.296
18	31	6	0.17483	0.03176	0.12245	0.2496
19	25	1	0.16783	0.03125	0.116513	0.2418
20	24	1	0.16084	0.03072	0.110612	0.2339
21	23	2	0.14685	0.0296	0.098927	0.218
22	21	2	0.13287	0.02838	0.087413	0.202
23	19	2	0.11888	0.02706	0.07609	0.1857
24	17	3	0.0979	0.02485	0.059528	0.161
25	14	2	0.08392	0.02319	0.048827	0.1442
26	12	3	0.06294	0.02031	0.033438	0.1185
27	9	2	0.04895	0.01804	0.023769	0.1008
33	7	1	0.04196	0.01677	0.019173	0.0918
34	6	1	0.03497	0.01536	0.01478	0.0827
35	5	1	0.02797	0.01379	0.010644	0.0735
43	4	1	0.02098	0.01198	0.006847	0.0643
44	3	1	0.01399	0.00982	0.003532	0.0554
45	2	1	0.00699	0.00697	0.000992	0.0493
46	1	1	0	NaN	NA	NA

Table A.24 Akhisar station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		145	145	15	12	17
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	145	12	0.9172	0.02288	0.873475	0.9632
2	133	9	0.8552	0.02923	0.799767	0.9144
3	124	5	0.8207	0.03186	0.760567	0.8856
4	119	7	0.7724	0.03482	0.707098	0.8438
5	112	4	0.7448	0.0362	0.677144	0.8193
6	108	4	0.7172	0.0374	0.647562	0.7944
7	104	3	0.6966	0.03818	0.6256	0.7756
8	101	4	0.669	0.03908	0.596592	0.7501
9	97	4	0.6414	0.03983	0.567881	0.7244
10	93	4	0.6138	0.04043	0.539448	0.6984
11	89	3	0.5931	0.0408	0.518299	0.6787
12	86	4	0.5655	0.04116	0.490327	0.6522
13	82	5	0.531	0.04144	0.455715	0.6188
14	77	4	0.5034	0.04152	0.428304	0.5918
15	73	5	0.469	0.04144	0.394385	0.5577
16	68	4	0.4414	0.04124	0.367525	0.5301
17	64	6	0.4	0.04068	0.327706	0.4882
18	58	6	0.3586	0.03983	0.28847	0.4458
19	52	3	0.3379	0.03928	0.269082	0.4244
20	49	3	0.3172	0.03865	0.249855	0.4028
21	46	2	0.3034	0.03818	0.23713	0.3883
22	44	2	0.2897	0.03767	0.224483	0.3737
23	42	3	0.269	0.03682	0.205664	0.3518
24	39	2	0.2552	0.0362	0.193225	0.337
25	37	2	0.2414	0.03554	0.180877	0.3221
26	35	3	0.2207	0.03444	0.162535	0.2997
27	32	2	0.2069	0.03364	0.150436	0.2845
28	30	2	0.1931	0.03278	0.13845	0.2693
29	28	3	0.1724	0.03137	0.120698	0.2463
30	25	2	0.1586	0.03034	0.109033	0.2308
31	23	2	0.1448	0.02923	0.097517	0.2151
32	21	1	0.1379	0.02864	0.091821	0.2072
33	20	1	0.131	0.02802	0.086169	0.1993
34	19	1	0.1241	0.02738	0.080564	0.1913
35	18	2	0.1103	0.02602	0.069508	0.1752
36	16	2	0.0966	0.02453	0.058685	0.1589
37	14	2	0.0828	0.02288	0.048137	0.1423

Table A.24 *Cont'd*

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		145	145	15	12	17
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
38	12	3	0.0621	0.02004	0.032968	0.1169
39	9	1	0.0552	0.01896	0.028132	0.1082
40	8	2	0.0414	0.01654	0.018904	0.0906
44	6	1	0.0345	0.01515	0.014573	0.0816
45	5	1	0.0276	0.0136	0.010495	0.0725
46	4	1	0.0207	0.01182	0.006752	0.0634
47	3	1	0.0138	0.00969	0.003483	0.0546
48	2	1	0.0069	0.00687	0.000978	0.0486
77	1	1	0	NaN	NA	NA

Table A.25 Akhisar station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		156	156	22	18	25
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	156	7	0.95513	0.01658	0.923188	0.9882
2	149	9	0.89744	0.02429	0.851068	0.9463
3	140	6	0.85897	0.02787	0.806058	0.9154
4	134	5	0.82692	0.03029	0.769638	0.8885
5	129	4	0.80128	0.03195	0.741049	0.8664
6	125	3	0.78205	0.03305	0.719876	0.8496
7	122	3	0.76282	0.03406	0.69891	0.8326
8	119	5	0.73077	0.03551	0.664377	0.8038
9	114	4	0.70513	0.03651	0.637085	0.7804
10	110	1	0.69872	0.03673	0.630305	0.7746
11	109	2	0.6859	0.03716	0.616795	0.7627
12	107	2	0.67308	0.03756	0.603349	0.7509
13	105	3	0.65385	0.03809	0.583296	0.7329
14	102	2	0.64103	0.03841	0.570002	0.7209
15	100	4	0.61538	0.03895	0.543587	0.6967
16	96	3	0.59615	0.03928	0.523922	0.6783
17	93	3	0.57692	0.03956	0.504379	0.6599
18	90	3	0.55769	0.03976	0.484956	0.6413
19	87	3	0.53846	0.03991	0.46565	0.6227
20	84	2	0.52564	0.03998	0.452844	0.6101
21	82	2	0.51282	0.04002	0.440089	0.5976
22	80	4	0.48718	0.04002	0.414732	0.5723
23	76	4	0.46154	0.03991	0.38958	0.5468

Table A.25 *Cont'd*

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		156	156	22	18	25
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
24	72	4	0.4359	0.0397	0.364634	0.5211
25	68	5	0.40385	0.03928	0.333744	0.4887
26	63	1	0.39744	0.03918	0.327606	0.4821
27	62	3	0.37821	0.03883	0.309274	0.4625
28	59	1	0.37179	0.03869	0.303191	0.4559
29	58	1	0.36538	0.03855	0.297122	0.4493
30	57	1	0.35897	0.03841	0.291067	0.4427
31	56	1	0.35256	0.03825	0.285027	0.4361
32	55	1	0.34615	0.03809	0.279001	0.4295
33	54	1	0.33974	0.03792	0.272989	0.4228
34	53	1	0.33333	0.03774	0.266993	0.4162
35	52	2	0.32051	0.03736	0.255045	0.4028
36	50	2	0.30769	0.03695	0.243159	0.3894
37	48	2	0.29487	0.03651	0.231338	0.3759
38	46	3	0.27564	0.03578	0.21373	0.3555
39	43	2	0.26282	0.03524	0.202079	0.3418
40	41	2	0.25	0.03467	0.190502	0.3281
41	39	2	0.23718	0.03406	0.179002	0.3143
42	37	2	0.22436	0.0334	0.167582	0.3004
43	35	2	0.21154	0.0327	0.156249	0.2864
44	33	2	0.19872	0.03195	0.145006	0.2723
45	31	2	0.1859	0.03115	0.133862	0.2582
46	29	2	0.17308	0.03029	0.122822	0.2439
47	27	1	0.16667	0.02984	0.117344	0.2367
71	26	1	0.16026	0.02937	0.111895	0.2295
72	25	2	0.14744	0.02839	0.101093	0.215
73	23	2	0.13462	0.02733	0.090428	0.2004
74	21	2	0.12179	0.02618	0.079915	0.1856
75	19	2	0.10897	0.02495	0.069575	0.1707
76	17	2	0.09615	0.0236	0.059432	0.1556
77	15	2	0.08333	0.02213	0.049521	0.1402
78	13	2	0.07051	0.0205	0.039887	0.1247
79	11	2	0.05769	0.01867	0.030598	0.1088
80	9	2	0.04487	0.01658	0.021755	0.0926
81	7	2	0.03205	0.0141	0.013531	0.0759
82	5	1	0.02564	0.01266	0.009746	0.0675
83	4	1	0.01923	0.011	0.006271	0.059
84	3	1	0.01282	0.00901	0.003235	0.0508
98	2	1	0.00641	0.00639	0.000909	0.0452
118	1	1	0	NaN	NA	NA

Table A.26 Akhisar station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.04196	1	0.0828	1	0.04487
2	0.08392	2	0.1448	2	0.10256
3	0.15385	3	0.1793	3	0.14103
4	0.23776	4	0.2276	4	0.17308
5	0.3007	5	0.2552	5	0.19872
6	0.33566	6	0.2828	6	0.21795
7	0.41958	7	0.3034	7	0.23718
8	0.45455	8	0.331	8	0.26923
9	0.4965	9	0.3586	9	0.29487
10	0.55245	10	0.3862	10	0.30128
11	0.58741	11	0.4069	11	0.3141
12	0.62937	12	0.4345	12	0.32692
13	0.66434	13	0.469	13	0.34615
14	0.67133	14	0.4966	14	0.35897
15	0.70629	15	0.531	15	0.38462
16	0.74126	16	0.5586	16	0.40385
17	0.78322	17	0.6	17	0.42308
18	0.82517	18	0.6414	18	0.44231
19	0.83217	19	0.6621	19	0.46154
20	0.83916	20	0.6828	20	0.47436
21	0.85315	21	0.6966	21	0.48718
22	0.86713	22	0.7103	22	0.51282
23	0.88112	23	0.731	23	0.53846
24	0.9021	24	0.7448	24	0.5641
25	0.91608	25	0.7586	25	0.59615
26	0.93706	26	0.7793	26	0.60256
27	0.95105	27	0.7931	27	0.62179
33	0.95804	28	0.8069	28	0.62821
34	0.96503	29	0.8276	29	0.63462
35	0.97203	30	0.8414	30	0.64103
43	0.97902	31	0.8552	31	0.64744
44	0.98601	32	0.8621	32	0.65385
45	0.99301	33	0.869	33	0.66026
46	1	34	0.8759	34	0.66667
		35	0.8897	35	0.67949
		36	0.9034	36	0.69231
		37	0.9172	37	0.70513
		38	0.9379	38	0.72436
		39	0.9448	39	0.73718

Table A.26 *Cont'd*

Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk
40	0.9586	40	0.75
44	0.9655	41	0.76282
45	0.9724	42	0.77564
46	0.9793	43	0.78846
47	0.9862	44	0.80128
48	0.9931	45	0.8141
77	1	46	0.82692
		47	0.83333
		71	0.83974
		72	0.85256
		73	0.86538
		74	0.87821
		75	0.89103
		76	0.90385
		77	0.91667
		78	0.92949
		79	0.94231
		80	0.95513
		81	0.96795
		82	0.97436
		83	0.98077
		84	0.98718
		98	0.99359
		118	1

Table A.27 Akhisar station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		151	151	8	7	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
0	151	1	0.99338	0.0066	0.980525	10.000
1	150	9	0.93377	0.0202	0.894942	0.9743
2	141	5	0.90066	0.0243	0.854195	0.9497
3	136	7	0.8543	0.0287	0.799846	0.9125
4	129	14	0.76159	0.0347	0.696569	0.8327
5	115	10	0.69536	0.0375	0.625696	0.7728
6	105	13	0.60927	0.0397	0.536215	0.6923
7	92	10	0.54305	0.0405	0.469132	0.6286
8	82	11	0.4702	0.0406	0.396965	0.5569
9	71	4	0.44371	0.0404	0.371139	0.5305
10	67	7	0.39735	0.0398	0.326487	0.4836
11	60	4	0.37086	0.0393	0.301293	0.4565
12	56	3	0.35099	0.0388	0.282557	0.436
13	53	5	0.31788	0.0379	0.251648	0.4015
14	48	5	0.28477	0.0367	0.221163	0.3667
15	43	4	0.25828	0.0356	0.197106	0.3384
16	39	6	0.21854	0.0336	0.16164	0.2955
17	33	4	0.19205	0.0321	0.138466	0.2664
18	29	5	0.15894	0.0298	0.110126	0.2294
19	24	3	0.13907	0.0282	0.093518	0.2068
20	21	2	0.12583	0.027	0.082641	0.1916
21	19	1	0.11921	0.0264	0.077269	0.1839
22	18	2	0.10596	0.025	0.06667	0.1684
23	16	1	0.09934	0.0243	0.061452	0.1606
24	15	1	0.09272	0.0236	0.056294	0.1527
25	14	1	0.08609	0.0228	0.051201	0.1448
26	13	2	0.07285	0.0211	0.041238	0.1287
27	11	1	0.06623	0.0202	0.036384	0.1205
28	10	1	0.0596	0.0193	0.031631	0.1123
29	9	1	0.05298	0.0182	0.026993	0.104
32	8	1	0.04636	0.0171	0.022488	0.0956
40	7	1	0.03974	0.0159	0.01814	0.087
41	6	1	0.03311	0.0146	0.013986	0.0784
42	5	1	0.02649	0.0131	0.010073	0.0697
49	4	1	0.01987	0.0114	0.006481	0.0609
50	3	1	0.01325	0.0093	0.003343	0.0525
51	2	1	0.00662	0.0066	0.000939	0.0467
52	1	1	0	NaN	NA	NA

Table A.28 Akhisar station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		150	150	13	11	16
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
0	150	1	0.99333	0.00664	0.980396	10.000
1	149	9	0.93333	0.02037	0.894256	0.9741
2	140	12	0.85333	0.02889	0.798556	0.9119
3	128	7	0.80667	0.03224	0.745881	0.8724
4	121	5	0.77333	0.03418	0.709153	0.8433
5	116	2	0.76	0.03487	0.694637	0.8315
6	114	3	0.74	0.03581	0.673032	0.8136
7	111	5	0.70667	0.03717	0.637437	0.7834
8	106	5	0.67333	0.03829	0.602312	0.7527
9	101	6	0.63333	0.03935	0.560726	0.7153
10	95	6	0.59333	0.04011	0.519709	0.6774
11	89	5	0.56	0.04053	0.48594	0.6453
12	84	6	0.52	0.04079	0.445892	0.6064
13	78	5	0.48667	0.04081	0.412907	0.5736
14	73	6	0.44667	0.04059	0.373791	0.5338
15	67	4	0.42	0.0403	0.347998	0.5069
16	63	4	0.39333	0.03989	0.322438	0.4798
17	59	5	0.36	0.03919	0.290827	0.4456
18	54	5	0.32667	0.03829	0.259611	0.411
19	49	3	0.30667	0.03765	0.241082	0.3901
20	46	1	0.3	0.03742	0.23494	0.3831
21	45	2	0.28667	0.03692	0.222712	0.369
22	43	3	0.26667	0.03611	0.20451	0.3477
23	40	1	0.26	0.03581	0.198483	0.3406
24	39	3	0.24	0.03487	0.180524	0.3191
25	36	1	0.23333	0.03453	0.174581	0.3119
26	35	1	0.22667	0.03418	0.168661	0.3046
27	34	2	0.21333	0.03345	0.156891	0.2901
28	32	2	0.2	0.03266	0.145221	0.2754
29	30	1	0.19333	0.03224	0.139425	0.2681
30	29	2	0.18	0.03137	0.127918	0.2533
31	27	2	0.16667	0.03043	0.116531	0.2384
32	25	1	0.16	0.02993	0.110885	0.2309
33	24	1	0.15333	0.02942	0.105274	0.2233
34	23	1	0.14667	0.02889	0.099699	0.2158
41	22	1	0.14	0.02833	0.094161	0.2082
42	21	2	0.12667	0.02716	0.083209	0.1928

Table A.28 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		150	150	13	11	16
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
43	19	1	0.12	0.02653	0.077799	0.1851
44	18	1	0.11333	0.02588	0.072437	0.1773
45	17	1	0.10667	0.0252	0.067127	0.1695
46	16	1	0.1	0.02449	0.061873	0.1616
47	15	1	0.09333	0.02375	0.056679	0.1537
48	14	1	0.08667	0.02297	0.051551	0.1457
64	13	1	0.08	0.02215	0.046495	0.1377
65	12	1	0.07333	0.02128	0.041519	0.1295
66	11	1	0.06667	0.02037	0.036632	0.1213
75	10	1	0.06	0.01939	0.031846	0.113
76	9	1	0.05333	0.01835	0.027176	0.1047
77	8	1	0.04667	0.01722	0.02264	0.0962
78	7	1	0.04	0.016	0.018263	0.0876
79	6	1	0.03333	0.01466	0.01408	0.0789
80	5	1	0.02667	0.01315	0.010141	0.0701
81	4	1	0.02	0.01143	0.006524	0.0613
82	3	1	0.01333	0.00937	0.003366	0.0528
83	2	1	0.00667	0.00664	0.000945	0.047
84	1	1	0	NaN	NA	NA

Table A.29 Akhisar station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		148	148	16	13	20
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	148	8	0.94595	0.01859	0.910208	0.9831
2	140	5	0.91216	0.02327	0.86768	0.9589
3	135	4	0.88514	0.02621	0.835227	0.938
4	131	3	0.86486	0.0281	0.811504	0.9217
5	128	5	0.83108	0.0308	0.772857	0.8937
6	123	4	0.80405	0.03263	0.742583	0.8706
7	119	4	0.77703	0.03421	0.71278	0.8471
8	115	4	0.75	0.03559	0.683384	0.8231
9	111	5	0.71622	0.03706	0.647145	0.7927
10	106	5	0.68243	0.03827	0.611406	0.7617
11	101	6	0.64189	0.03941	0.569116	0.724
12	95	6	0.60135	0.04025	0.527424	0.6856
13	89	4	0.57432	0.04064	0.499943	0.6598
14	85	4	0.5473	0.04092	0.472703	0.6337
15	81	4	0.52027	0.04107	0.445699	0.6073
16	77	4	0.49324	0.0411	0.418929	0.5807
17	73	4	0.46622	0.04101	0.392392	0.5539
18	69	4	0.43919	0.04079	0.366089	0.5269
19	65	2	0.42568	0.04064	0.353026	0.5133
20	63	2	0.41216	0.04046	0.340023	0.4996
21	61	1	0.40541	0.04036	0.333544	0.4927
22	60	1	0.39865	0.04025	0.327081	0.4859
23	59	1	0.39189	0.04013	0.320633	0.479
24	58	2	0.37838	0.03987	0.307783	0.4652
25	56	1	0.37162	0.03972	0.301382	0.4582
26	55	1	0.36486	0.03957	0.294997	0.4513
27	54	1	0.35811	0.03941	0.288628	0.4443
28	53	1	0.35135	0.03924	0.282276	0.4373
29	52	1	0.34459	0.03906	0.27594	0.4303
30	51	1	0.33784	0.03888	0.26962	0.4233
31	50	1	0.33108	0.03868	0.263318	0.4163
32	49	1	0.32432	0.03848	0.257033	0.4092
33	48	1	0.31757	0.03827	0.250766	0.4022
34	47	1	0.31081	0.03804	0.244516	0.3951
35	46	1	0.30405	0.03781	0.238284	0.388
36	45	1	0.2973	0.03757	0.232071	0.3809
37	44	1	0.29054	0.03732	0.225876	0.3737

Table A.29 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		148	148	16	13	20
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
38	43	2	0.27703	0.03679	0.213545	0.3594
39	41	1	0.27027	0.0365	0.207409	0.3522
40	40	1	0.26351	0.03621	0.201294	0.345
41	39	1	0.25676	0.03591	0.195199	0.3377
42	38	1	0.25	0.03559	0.189126	0.3305
43	37	1	0.24324	0.03527	0.183075	0.3232
44	36	1	0.23649	0.03493	0.177046	0.3159
45	35	1	0.22973	0.03458	0.17104	0.3086
46	34	2	0.21622	0.03384	0.159101	0.2938
47	32	1	0.20946	0.03345	0.153169	0.2864
48	31	1	0.2027	0.03305	0.147263	0.279
60	30	1	0.19595	0.03263	0.141384	0.2716
64	29	1	0.18919	0.03219	0.135534	0.2641
65	28	1	0.18243	0.03175	0.129713	0.2566
74	27	1	0.17568	0.03128	0.123922	0.249
75	26	1	0.16892	0.0308	0.118163	0.2415
76	25	1	0.16216	0.0303	0.112437	0.2339
77	24	1	0.15541	0.02978	0.106746	0.2262
78	23	1	0.14865	0.02924	0.101092	0.2186
79	22	1	0.14189	0.02868	0.095476	0.2109
80	21	1	0.13514	0.0281	0.0899	0.2031
81	20	1	0.12838	0.0275	0.084368	0.1953
82	19	1	0.12162	0.02687	0.078882	0.1875
83	18	1	0.11486	0.02621	0.073444	0.1796
84	17	1	0.10811	0.02552	0.06806	0.1717
85	16	2	0.09459	0.02406	0.057465	0.1557
86	14	2	0.08108	0.02244	0.047138	0.1395
87	12	1	0.07432	0.02156	0.042093	0.1312
88	11	1	0.06757	0.02063	0.037138	0.1229
89	10	1	0.06081	0.01964	0.032286	0.1145
90	9	1	0.05405	0.01859	0.027551	0.1061
91	8	1	0.0473	0.01745	0.022952	0.0975
92	7	1	0.04054	0.01621	0.018514	0.0888
93	6	1	0.03378	0.01485	0.014273	0.08
94	5	1	0.02703	0.01333	0.01028	0.0711
95	4	1	0.02027	0.01158	0.006613	0.0621
96	3	2	0.00676	0.00673	0.000958	0.0476
97	1	1	0	NaN	NA	NA

Table A.30 Akhisar station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
0	0.00662	0	0.00667	1	0.05405
1	0.06623	1	0.06667	2	0.08784
2	0.09934	2	0.14667	3	0.11486
3	0.1457	3	0.19333	4	0.13514
4	0.23841	4	0.22667	5	0.16892
5	0.30464	5	0.24	6	0.19595
6	0.39073	6	0.26	7	0.22297
7	0.45695	7	0.29333	8	0.25
8	0.5298	8	0.32667	9	0.28378
9	0.55629	9	0.36667	10	0.31757
10	0.60265	10	0.40667	11	0.35811
11	0.62914	11	0.44	12	0.39865
12	0.64901	12	0.48	13	0.42568
13	0.68212	13	0.51333	14	0.4527
14	0.71523	14	0.55333	15	0.47973
15	0.74172	15	0.58	16	0.50676
16	0.78146	16	0.60667	17	0.53378
17	0.80795	17	0.64	18	0.56081
18	0.84106	18	0.67333	19	0.57432
19	0.86093	19	0.69333	20	0.58784
20	0.87417	20	0.7	21	0.59459
21	0.88079	21	0.71333	22	0.60135
22	0.89404	22	0.73333	23	0.60811
23	0.90066	23	0.74	24	0.62162
24	0.90728	24	0.76	25	0.62838
25	0.91391	25	0.76667	26	0.63514
26	0.92715	26	0.77333	27	0.64189
27	0.93377	27	0.78667	28	0.64865
28	0.9404	28	0.8	29	0.65541
29	0.94702	29	0.80667	30	0.66216
32	0.95364	30	0.82	31	0.66892
40	0.96026	31	0.83333	32	0.67568
41	0.96689	32	0.84	33	0.68243
42	0.97351	33	0.84667	34	0.68919
49	0.98013	34	0.85333	35	0.69595
50	0.98675	41	0.86	36	0.7027
51	0.99338	42	0.87333	37	0.70946
52	1	43	0.88	38	0.72297
		44	0.88667	39	0.72973

Table A.30 *Cont'd*

Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk
45	0.89333	40	0.73649
46	0.9	41	0.74324
47	0.90667	42	0.75
48	0.91333	43	0.75676
64	0.92	44	0.76351
65	0.92667	45	0.77027
66	0.93333	46	0.78378
75	0.94	47	0.79054
76	0.94667	48	0.7973
77	0.95333	60	0.80405
78	0.96	64	0.81081
79	0.96667	65	0.81757
80	0.97333	74	0.82432
81	0.98	75	0.83108
82	0.98667	76	0.83784
83	0.99333	77	0.84459
84	1	78	0.85135
		79	0.85811
		80	0.86486
		81	0.87162
		82	0.87838
		83	0.88514
		84	0.89189
		85	0.90541
		86	0.91892
		87	0.92568
		88	0.93243
		89	0.93919
		90	0.94595
		91	0.9527
		92	0.95946
		93	0.96622
		94	0.97297
		95	0.97973
		96	0.99324
		97	1

Table A.31 Alasehir station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		162	162	9	8	11
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	162	11	0.9321	0.01977	0.894153	0.9717
2	151	3	0.91358	0.02208	0.871321	0.9579
3	148	9	0.85802	0.02742	0.805927	0.9135
4	139	9	0.80247	0.03128	0.743444	0.8662
5	130	13	0.72222	0.03519	0.656441	0.7946
6	117	11	0.65432	0.03737	0.585035	0.7318
7	106	13	0.57407	0.03885	0.502763	0.6555
8	93	10	0.51235	0.03927	0.440877	0.5954
9	83	6	0.47531	0.03924	0.404306	0.5588
10	77	5	0.44444	0.03904	0.374151	0.5279
11	72	6	0.40741	0.0386	0.338355	0.4906
12	66	5	0.37654	0.03807	0.308859	0.4591
13	61	3	0.35802	0.03767	0.291313	0.44
14	58	1	0.35185	0.03752	0.285491	0.4336
15	57	4	0.32716	0.03686	0.262334	0.408
16	53	4	0.30247	0.03609	0.239399	0.3822
17	49	3	0.28395	0.03543	0.222353	0.3626
18	46	6	0.24691	0.03388	0.18869	0.3231
19	40	4	0.22222	0.03266	0.166599	0.2964
20	36	4	0.19753	0.03128	0.144824	0.2694
21	32	4	0.17284	0.02971	0.123408	0.2421
22	28	3	0.15432	0.02838	0.107614	0.2213
23	25	2	0.14198	0.02742	0.097231	0.2073
24	23	4	0.11728	0.02528	0.076872	0.1789
25	19	3	0.09877	0.02344	0.062028	0.1573
26	16	2	0.08642	0.02208	0.052381	0.1426
27	14	2	0.07407	0.02058	0.042976	0.1277
28	12	2	0.06173	0.01891	0.033865	0.1125
34	10	1	0.05556	0.018	0.029443	0.1048
35	9	1	0.04938	0.01702	0.025128	0.097
36	8	2	0.03704	0.01484	0.01689	0.0812
37	6	3	0.01852	0.01059	0.006036	0.0568
38	3	2	0.00617	0.00615	0.000875	0.0436
39	1	1	0	NaN	NA	NA

Table A.32 Alasehir station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		143	143	13	10	16
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	143	7	0.95105	0.01804	0.916334	0.9871
2	136	7	0.9021	0.02485	0.854681	0.9521
3	129	4	0.87413	0.02774	0.821415	0.9302
4	125	5	0.83916	0.03072	0.781056	0.9016
5	120	4	0.81119	0.03273	0.749515	0.8779
6	116	5	0.77622	0.03485	0.710834	0.8476
7	111	9	0.71329	0.03782	0.642888	0.7914
8	102	6	0.67133	0.03928	0.59859	0.7529
9	96	7	0.62238	0.04054	0.547783	0.7071
10	89	8	0.56643	0.04144	0.490765	0.6538
11	81	5	0.53147	0.04173	0.455663	0.6199
12	76	4	0.5035	0.04181	0.42787	0.5925
13	72	3	0.48252	0.04179	0.407191	0.5718
14	69	3	0.46154	0.04169	0.386655	0.5509
15	66	6	0.41958	0.04127	0.346015	0.5088
16	60	5	0.38462	0.04068	0.3126	0.4732
17	55	2	0.37063	0.04039	0.299352	0.4589
18	53	2	0.35664	0.04006	0.286174	0.4445
19	51	2	0.34266	0.03969	0.273068	0.43
20	49	2	0.32867	0.03928	0.260035	0.4154
21	47	2	0.31469	0.03883	0.247077	0.4008
22	45	3	0.29371	0.03809	0.227788	0.3787
23	42	3	0.27273	0.03724	0.208685	0.3564
24	39	4	0.24476	0.03595	0.183524	0.3264
25	35	5	0.20979	0.03405	0.152629	0.2884
26	30	2	0.1958	0.03318	0.140464	0.2729
27	28	2	0.18182	0.03225	0.128422	0.2574
28	26	2	0.16783	0.03125	0.116513	0.2418
29	24	3	0.14685	0.0296	0.098927	0.218
30	21	1	0.13986	0.029	0.093147	0.21
31	20	1	0.13287	0.02838	0.087413	0.202
33	19	2	0.11888	0.02706	0.07609	0.1857
34	17	2	0.1049	0.02562	0.064986	0.1693
35	15	2	0.09091	0.02404	0.054139	0.1527
36	13	3	0.06993	0.02133	0.038466	0.1271
37	10	3	0.04895	0.01804	0.023769	0.1008
38	7	2	0.03497	0.01536	0.01478	0.0827

Table A.32 *Cont'd*

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		143	143	13	10	16
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
39	5	1	0.02797	0.01379	0.010644	0.0735
40	4	1	0.02098	0.01198	0.006847	0.0643
49	3	1	0.01399	0.00982	0.003532	0.0554
50	2	1	0.00699	0.00697	0.000992	0.0493
70	1	1	0	NaN	NA	NA

Table A.33 Alasehir station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		134	134	29	25	34
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	134	3	0.97761	0.01278	0.95288	1
2	131	3	0.95522	0.01787	0.92084	0.9909
3	128	3	0.93284	0.02162	0.8914	0.9762
4	125	2	0.91791	0.02371	0.87259	0.9656
5	123	3	0.89552	0.02642	0.8452	0.9488
6	120	1	0.88806	0.02724	0.83625	0.9431
7	119	1	0.8806	0.02801	0.82737	0.9372
8	118	3	0.85821	0.03013	0.80113	0.9194
9	115	3	0.83582	0.032	0.7754	0.901
10	112	2	0.8209	0.03312	0.75847	0.8885
11	110	1	0.81343	0.03365	0.75008	0.8821
12	109	3	0.79104	0.03512	0.72512	0.863
13	106	4	0.76119	0.03683	0.69232	0.8369
14	102	3	0.73881	0.03795	0.66805	0.8171
15	99	3	0.71642	0.03894	0.64403	0.7969
16	96	3	0.69403	0.03981	0.62023	0.7766
17	93	3	0.67164	0.04057	0.59665	0.7561
18	90	2	0.65672	0.04102	0.58105	0.7422
19	88	2	0.64179	0.04142	0.56553	0.7283
20	86	2	0.62687	0.04178	0.5501	0.7143
21	84	1	0.6194	0.04194	0.54242	0.7073
22	83	1	0.61194	0.0421	0.53475	0.7003
23	82	1	0.60448	0.04224	0.52711	0.6932
24	81	3	0.58209	0.04261	0.50429	0.6719
25	78	3	0.5597	0.04288	0.48166	0.6504
26	75	2	0.54478	0.04302	0.46666	0.636
27	73	2	0.52985	0.04312	0.45174	0.6215
28	71	2	0.51493	0.04317	0.43689	0.6069
29	69	3	0.49254	0.04319	0.41476	0.5849
30	66	3	0.47015	0.04312	0.3928	0.5627
31	63	3	0.44776	0.04296	0.37101	0.5404
32	60	2	0.43284	0.0428	0.35657	0.5254
33	58	3	0.41045	0.04249	0.33507	0.5028
34	55	2	0.39552	0.04224	0.32082	0.4876
35	53	1	0.38806	0.0421	0.31373	0.48
36	52	1	0.3806	0.04194	0.30666	0.4724
37	51	1	0.37313	0.04178	0.29961	0.4647
38	50	1	0.36567	0.04161	0.29258	0.457
39	49	1	0.35821	0.04142	0.28557	0.4493
40	48	1	0.35075	0.04122	0.27858	0.4416
41	47	1	0.34328	0.04102	0.27161	0.4339

Table A.33 *Cont'd*

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		134	134	29	25	34
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
42	46	1	0.33582	0.0408	0.26466	0.4261
43	45	1	0.32836	0.04057	0.25774	0.4183
44	44	1	0.3209	0.04033	0.25084	0.4105
45	43	1	0.31343	0.04007	0.24396	0.4027
46	42	2	0.29851	0.03953	0.23027	0.387
47	40	1	0.29104	0.03924	0.22346	0.3791
48	39	1	0.28358	0.03894	0.21667	0.3712
49	38	2	0.26866	0.03829	0.20318	0.3552
50	36	1	0.26119	0.03795	0.19647	0.3472
51	35	1	0.25373	0.03759	0.18979	0.3392
52	34	1	0.24627	0.03722	0.18313	0.3312
53	33	1	0.23881	0.03683	0.17651	0.3231
54	32	1	0.23134	0.03643	0.16991	0.315
55	31	1	0.22388	0.03601	0.16335	0.3069
56	30	1	0.21642	0.03557	0.15681	0.2987
57	29	1	0.20896	0.03512	0.15031	0.2905
58	28	1	0.20149	0.03465	0.14384	0.2823
82	27	1	0.19403	0.03416	0.1374	0.274
83	26	1	0.18657	0.03365	0.13101	0.2657
84	25	1	0.1791	0.03312	0.12465	0.2574
85	24	1	0.17164	0.03257	0.11833	0.249
86	23	1	0.16418	0.032	0.11205	0.2406
87	22	1	0.15672	0.0314	0.10581	0.2321
88	21	1	0.14925	0.03078	0.09963	0.2236
89	20	1	0.14179	0.03013	0.09349	0.2151
90	19	1	0.13433	0.02946	0.0874	0.2065
97	18	1	0.12687	0.02875	0.08136	0.1978
98	17	1	0.1194	0.02801	0.07539	0.1891
99	16	1	0.11194	0.02724	0.06948	0.1803
100	15	2	0.09701	0.02557	0.05788	0.1626
101	13	2	0.08209	0.02371	0.0466	0.1446
102	11	2	0.06716	0.02162	0.03574	0.1262
103	9	1	0.0597	0.02047	0.03049	0.1169
104	8	1	0.05224	0.01922	0.0254	0.1074
105	7	1	0.04478	0.01787	0.02048	0.0979
107	6	1	0.03731	0.01637	0.01579	0.0882
108	5	1	0.02985	0.0147	0.01137	0.0784
152	4	1	0.02239	0.01278	0.00731	0.0685
153	3	1	0.01493	0.01047	0.00377	0.0591
154	2	1	0.00746	0.00743	0.00106	0.0526
155	1	1	0	NaN	NA	NA

Table A.34 Alasehir station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0679	1	0.04895	1	0.02239
2	0.08642	2	0.0979	2	0.04478
3	0.14198	3	0.12587	3	0.06716
4	0.19753	4	0.16084	4	0.08209
5	0.27778	5	0.18881	5	0.10448
6	0.34568	6	0.22378	6	0.11194
7	0.42593	7	0.28671	7	0.1194
8	0.48765	8	0.32867	8	0.14179
9	0.52469	9	0.37762	9	0.16418
10	0.55556	10	0.43357	10	0.1791
11	0.59259	11	0.46853	11	0.18657
12	0.62346	12	0.4965	12	0.20896
13	0.64198	13	0.51748	13	0.23881
14	0.64815	14	0.53846	14	0.26119
15	0.67284	15	0.58042	15	0.28358
16	0.69753	16	0.61538	16	0.30597
17	0.71605	17	0.62937	17	0.32836
18	0.75309	18	0.64336	18	0.34328
19	0.77778	19	0.65734	19	0.35821
20	0.80247	20	0.67133	20	0.37313
21	0.82716	21	0.68531	21	0.3806
22	0.84568	22	0.70629	22	0.38806
23	0.85802	23	0.72727	23	0.39552
24	0.88272	24	0.75524	24	0.41791
25	0.90123	25	0.79021	25	0.4403
26	0.91358	26	0.8042	26	0.45522
27	0.92593	27	0.81818	27	0.47015
28	0.93827	28	0.83217	28	0.48507
34	0.94444	29	0.85315	29	0.50746
35	0.95062	30	0.86014	30	0.52985
36	0.96296	31	0.86713	31	0.55224
37	0.98148	33	0.88112	32	0.56716
38	0.99383	34	0.8951	33	0.58955
39	1	35	0.90909	34	0.60448
		36	0.93007	35	0.61194
		37	0.95105	36	0.6194
		38	0.96503	37	0.62687
		39	0.97203	38	0.63433
		40	0.97902	39	0.64179
		49	0.98601	40	0.64925

Table A.34 *Cont'd*

Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk
50	0.99301	41	0.65672
70	1	42	0.66418
		43	0.67164
		44	0.6791
		45	0.68657
		46	0.70149
		47	0.70896
		48	0.71642
		49	0.73134
		50	0.73881
		51	0.74627
		52	0.75373
		53	0.76119
		54	0.76866
		55	0.77612
		56	0.78358
		57	0.79104
		58	0.79851
		82	0.80597
		83	0.81343
		84	0.8209
		85	0.82836
		86	0.83582
		87	0.84328
		88	0.85075
		89	0.85821
		90	0.86567
		97	0.87313
		98	0.8806
		99	0.88806
		100	0.90299
		101	0.91791
		102	0.93284
		103	0.9403
		104	0.94776
		105	0.95522
		107	0.96269
		108	0.97015
		152	0.97761
		153	0.98507
		154	0.99254
		155	1

Table A.35 Alasehir station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		99	99	9	8	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	99	3	0.9697	0.0172	0.93651	10.000
2	96	1	0.9596	0.0198	0.92158	0.9992
3	95	6	0.899	0.0303	0.84155	0.9604
4	89	5	0.8485	0.036	0.78072	0.9221
5	84	7	0.7778	0.0418	0.70005	0.8641
6	77	8	0.697	0.0462	0.61207	0.7936
7	69	10	0.596	0.0493	0.50673	0.7009
8	59	8	0.5152	0.0502	0.42554	0.6236
9	51	7	0.4444	0.0499	0.35659	0.5539
10	44	6	0.3838	0.0489	0.29906	0.4926
11	38	4	0.3434	0.0477	0.26155	0.451
12	34	4	0.303	0.0462	0.22477	0.4085
13	30	2	0.2828	0.0453	0.20668	0.387
14	28	2	0.2626	0.0442	0.1888	0.3653
15	26	1	0.2525	0.0437	0.17994	0.3544
18	25	2	0.2323	0.0424	0.1624	0.3324
19	23	1	0.2222	0.0418	0.15372	0.3212
20	22	1	0.2121	0.0411	0.14511	0.3101
24	21	2	0.1919	0.0396	0.12811	0.2875
25	19	2	0.1717	0.0379	0.11141	0.2647
26	17	2	0.1515	0.036	0.09506	0.2415
27	15	2	0.1313	0.0339	0.07912	0.2179
28	13	2	0.1111	0.0316	0.06365	0.194
29	11	1	0.101	0.0303	0.05612	0.1818
30	10	2	0.0808	0.0274	0.04158	0.157
31	8	1	0.0707	0.0258	0.03462	0.1444
32	7	1	0.0606	0.024	0.02791	0.1316
33	6	1	0.0505	0.022	0.0215	0.1186
34	5	1	0.0404	0.0198	0.01547	0.1055
43	4	1	0.0303	0.0172	0.00994	0.0923
62	3	1	0.0202	0.0141	0.00512	0.0796
63	2	1	0.0101	0.01	0.00144	0.071
67	1	1	0	NaN	NA	NA

Table A.36 Alasehir station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		89	89	15	10	23
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	89	3	0.9663	0.0191	0.92952	10.000
2	86	5	0.9101	0.0303	0.85259	0.9715
3	81	4	0.8652	0.0362	0.79704	0.9391
4	77	3	0.8315	0.0397	0.75721	0.913
5	74	2	0.809	0.0417	0.73131	0.8949
6	72	5	0.7528	0.0457	0.66832	0.848
7	67	3	0.7191	0.0476	0.63154	0.8188
8	64	4	0.6742	0.0497	0.58349	0.7789
9	60	3	0.6404	0.0509	0.54813	0.7483
10	57	6	0.573	0.0524	0.47896	0.6856
11	51	2	0.5506	0.0527	0.45634	0.6642
12	49	2	0.5281	0.0529	0.43393	0.6427
13	47	1	0.5169	0.053	0.4228	0.6318
14	46	1	0.5056	0.053	0.41172	0.6209
15	45	1	0.4944	0.053	0.4007	0.61
16	44	1	0.4831	0.053	0.38972	0.599
17	43	2	0.4607	0.0528	0.36793	0.5768
18	41	2	0.4382	0.0526	0.34635	0.5544
19	39	1	0.427	0.0524	0.33563	0.5432
20	38	1	0.4157	0.0522	0.32497	0.5318
21	37	2	0.3933	0.0518	0.30381	0.509
23	35	1	0.382	0.0515	0.29331	0.4976
24	34	1	0.3708	0.0512	0.28287	0.486
25	33	1	0.3596	0.0509	0.27248	0.4744
26	32	1	0.3483	0.0505	0.26215	0.4628
27	31	1	0.3371	0.0501	0.25188	0.4511
28	30	1	0.3258	0.0497	0.24167	0.4393
29	29	1	0.3146	0.0492	0.23152	0.4275
30	28	2	0.2921	0.0482	0.21141	0.4037
31	26	2	0.2697	0.047	0.19157	0.3796
32	24	1	0.2584	0.0464	0.18176	0.3674
33	23	1	0.2472	0.0457	0.17202	0.3552
34	22	1	0.236	0.045	0.16236	0.3429
35	21	1	0.2247	0.0442	0.15277	0.3305
36	20	1	0.2135	0.0434	0.14328	0.3181
37	19	1	0.2022	0.0426	0.13387	0.3055
38	18	1	0.191	0.0417	0.12456	0.2929

Table A.36 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		89	89	15	10	23
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
39	17	1	0.1798	0.0407	0.11535	0.2802
40	16	1	0.1685	0.0397	0.10624	0.2674
41	15	1	0.1573	0.0386	0.09725	0.2544
42	14	1	0.1461	0.0374	0.08839	0.2414
43	13	1	0.1348	0.0362	0.07966	0.2282
46	12	1	0.1236	0.0349	0.07108	0.2149
47	11	1	0.1124	0.0335	0.06266	0.2015
48	10	1	0.1011	0.032	0.05443	0.1879
49	9	1	0.0899	0.0303	0.04641	0.1741
50	8	1	0.0787	0.0285	0.03863	0.1601
51	7	1	0.0674	0.0266	0.03113	0.146
52	6	1	0.0562	0.0244	0.02397	0.1316
62	5	1	0.0449	0.022	0.01725	0.1171
63	4	1	0.0337	0.0191	0.01108	0.1025
69	3	1	0.0225	0.0157	0.00571	0.0885
70	2	1	0.0112	0.0112	0.0016	0.0789
94	1	1	0	NaN	NA	NA

Table A.37 Alasehir station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		91	91	39	35	44
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	91	3	0.967	0.0187	0.93104	10.000
2	88	4	0.9231	0.0279	0.86992	0.9795
3	84	3	0.8901	0.0328	0.82812	0.9567
4	81	3	0.8571	0.0367	0.78818	0.9321
5	78	2	0.8352	0.0389	0.76231	0.915
6	76	1	0.8242	0.0399	0.74956	0.9062
10	75	1	0.8132	0.0409	0.73692	0.8973
11	74	1	0.8022	0.0418	0.72439	0.8884
12	73	3	0.7692	0.0442	0.68736	0.8609
13	70	2	0.7473	0.0456	0.66309	0.8421
14	68	2	0.7253	0.0468	0.63912	0.823
15	66	2	0.7033	0.0479	0.61543	0.8037
16	64	1	0.6923	0.0484	0.60369	0.7939
17	63	1	0.6813	0.0488	0.592	0.7841
28	62	1	0.6703	0.0493	0.58038	0.7742
29	61	1	0.6593	0.0497	0.56882	0.7643
30	60	1	0.6484	0.0501	0.55731	0.7543
31	59	1	0.6374	0.0504	0.54586	0.7442
32	58	1	0.6264	0.0507	0.53446	0.7341
33	57	1	0.6154	0.051	0.52312	0.7239
34	56	2	0.5934	0.0515	0.5006	0.7034
35	54	2	0.5714	0.0519	0.47828	0.6827
36	52	2	0.5495	0.0522	0.45617	0.6618
37	50	2	0.5275	0.0523	0.43426	0.6407
38	48	2	0.5055	0.0524	0.41254	0.6194
39	46	2	0.4835	0.0524	0.39101	0.5979
40	44	2	0.4615	0.0523	0.36968	0.5762
41	42	2	0.4396	0.052	0.34855	0.5543
42	40	2	0.4176	0.0517	0.32761	0.5323
43	38	1	0.4066	0.0515	0.31722	0.5211
44	37	2	0.3846	0.051	0.29659	0.4988
45	35	2	0.3626	0.0504	0.27617	0.4762
46	33	2	0.3407	0.0497	0.25597	0.4534
47	31	2	0.3187	0.0488	0.23599	0.4304
48	29	2	0.2967	0.0479	0.21624	0.4071
49	27	1	0.2857	0.0474	0.20647	0.3954
50	26	1	0.2747	0.0468	0.19675	0.3836

Table A.37 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		91	91	39	35	44
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
51	25	1	0.2637	0.0462	0.1871	0.3718
52	24	1	0.2527	0.0456	0.17752	0.3598
53	23	1	0.2418	0.0449	0.16802	0.3479
54	22	1	0.2308	0.0442	0.15859	0.3358
55	21	1	0.2198	0.0434	0.14923	0.3237
56	20	1	0.2088	0.0426	0.13996	0.3115
57	19	1	0.1978	0.0418	0.13078	0.2992
58	18	1	0.1868	0.0409	0.12169	0.2868
76	17	1	0.1758	0.0399	0.11269	0.2743
77	16	1	0.1648	0.0389	0.1038	0.2618
78	15	1	0.1538	0.0378	0.09502	0.2491
79	14	1	0.1429	0.0367	0.08636	0.2363
80	13	1	0.1319	0.0355	0.07784	0.2234
81	12	1	0.1209	0.0342	0.06946	0.2104
82	11	1	0.1099	0.0328	0.06124	0.1972
83	10	1	0.0989	0.0313	0.05319	0.1839
84	9	1	0.0879	0.0297	0.04536	0.1704
85	8	1	0.0769	0.0279	0.03775	0.1567
86	7	1	0.0659	0.026	0.03043	0.1429
87	6	1	0.0549	0.0239	0.02344	0.1288
88	5	1	0.044	0.0215	0.01686	0.1146
89	4	1	0.033	0.0187	0.01083	0.1003
94	3	1	0.022	0.0154	0.00558	0.0865
95	2	1	0.011	0.0109	0.00156	0.0772
98	1	1	0	NaN	NA	NA

Table A.38 Alasehir station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0303	1	0.0337	1	0.033
2	0.0404	2	0.0899	2	0.0769
3	0.101	3	0.1348	3	0.1099
4	0.1515	4	0.1685	4	0.1429
5	0.2222	5	0.191	5	0.1648
6	0.303	6	0.2472	6	0.1758
7	0.404	7	0.2809	10	0.1868
8	0.4848	8	0.3258	11	0.1978
9	0.5556	9	0.3596	12	0.2308
10	0.6162	10	0.427	13	0.2527
11	0.6566	11	0.4494	14	0.2747
12	0.697	12	0.4719	15	0.2967
13	0.7172	13	0.4831	16	0.3077
14	0.7374	14	0.4944	17	0.3187
15	0.7475	15	0.5056	28	0.3297
18	0.7677	16	0.5169	29	0.3407
19	0.7778	17	0.5393	30	0.3516
20	0.7879	18	0.5618	31	0.3626
24	0.8081	19	0.573	32	0.3736
25	0.8283	20	0.5843	33	0.3846
26	0.8485	21	0.6067	34	0.4066
27	0.8687	23	0.618	35	0.4286
28	0.8889	24	0.6292	36	0.4505
29	0.899	25	0.6404	37	0.4725
30	0.9192	26	0.6517	38	0.4945
31	0.9293	27	0.6629	39	0.5165
32	0.9394	28	0.6742	40	0.5385
33	0.9495	29	0.6854	41	0.5604
34	0.9596	30	0.7079	42	0.5824
43	0.9697	31	0.7303	43	0.5934
62	0.9798	32	0.7416	44	0.6154
63	0.9899	33	0.7528	45	0.6374
67	1	34	0.764	46	0.6593
		35	0.7753	47	0.6813
		36	0.7865	48	0.7033
		37	0.7978	49	0.7143
		38	0.809	50	0.7253
		39	0.8202	51	0.7363
		40	0.8315	52	0.7473

Table A.38 *Cont'd*

Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk
41	0.8427	53	0.7582
42	0.8539	54	0.7692
43	0.8652	55	0.7802
46	0.8764	56	0.7912
47	0.8876	57	0.8022
48	0.8989	58	0.8132
49	0.9101	76	0.8242
50	0.9213	77	0.8352
51	0.9326	78	0.8462
52	0.9438	79	0.8571
62	0.9551	80	0.8681
63	0.9663	81	0.8791
69	0.9775	82	0.8901
70	0.9888	83	0.9011
94	1	84	0.9121
		85	0.9231
		86	0.9341
		87	0.9451
		88	0.956
		89	0.967
		94	0.978
		95	0.989
		98	1

Table A.39 Aliaga station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		50	50	10.5	8	14
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	50	4	0.92	0.0384	0.84779	0.998
2	46	2	0.88	0.046	0.79438	0.975
3	44	3	0.82	0.0543	0.72014	0.934
4	41	5	0.72	0.0635	0.60571	0.856
5	36	1	0.7	0.0648	0.58384	0.839
7	35	3	0.64	0.0679	0.51987	0.788
8	32	1	0.62	0.0686	0.49906	0.77
9	31	3	0.56	0.0702	0.43801	0.716
10	28	3	0.5	0.0707	0.37896	0.66
11	25	3	0.44	0.0702	0.32185	0.602
12	22	2	0.4	0.0693	0.28486	0.562
13	20	2	0.36	0.0679	0.24877	0.521
14	18	4	0.28	0.0635	0.17952	0.437
15	14	2	0.24	0.0604	0.14655	0.393
16	12	2	0.2	0.0566	0.11489	0.348
17	10	1	0.18	0.0543	0.09962	0.325
18	9	2	0.14	0.0491	0.07043	0.278
19	7	1	0.12	0.046	0.05665	0.254
20	6	1	0.1	0.0424	0.04354	0.23
23	5	1	0.08	0.0384	0.03125	0.205
25	4	1	0.06	0.0336	0.02003	0.18
26	3	1	0.04	0.0277	0.01029	0.156
27	2	1	0.02	0.0198	0.00287	0.139
37	1	1	0	NaN	NA	NA

Table A.40 Aliaga station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		51	51	14	10	19
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	51	5	0.902	0.0416	0.82393	0.987
2	46	3	0.8431	0.0509	0.74901	0.949
3	43	4	0.7647	0.0594	0.65672	0.89
4	39	3	0.7059	0.0638	0.59128	0.843
5	36	1	0.6863	0.065	0.57005	0.826
6	35	1	0.6667	0.066	0.54907	0.809
7	34	1	0.6471	0.0669	0.52834	0.792
8	33	1	0.6275	0.0677	0.50785	0.775
10	32	1	0.6078	0.0684	0.48759	0.758
11	31	2	0.5686	0.0694	0.44773	0.722
12	29	1	0.549	0.0697	0.42812	0.704
13	28	1	0.5294	0.0699	0.40871	0.686
14	27	2	0.4902	0.07	0.37052	0.649
15	25	1	0.4706	0.0699	0.35174	0.63
16	24	2	0.4314	0.0694	0.31478	0.591
17	22	2	0.3922	0.0684	0.27866	0.552
18	20	2	0.3529	0.0669	0.2434	0.512
19	18	3	0.2941	0.0638	0.19225	0.45
20	15	2	0.2549	0.061	0.15944	0.408
21	13	2	0.2157	0.0576	0.1278	0.364
22	11	2	0.1765	0.0534	0.09754	0.319
25	9	1	0.1569	0.0509	0.08302	0.296
26	8	1	0.1373	0.0482	0.06898	0.273
27	7	1	0.1176	0.0451	0.05548	0.249
28	6	1	0.098	0.0416	0.04265	0.225
29	5	1	0.0784	0.0376	0.03061	0.201
30	4	1	0.0588	0.0329	0.01962	0.176
37	3	1	0.0392	0.0272	0.01008	0.153
40	2	1	0.0196	0.0194	0.00282	0.137
41	1	1	0	NaN	NA	NA

Table A.41 Aliaga station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		55	55	20	16	50
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	55	1	0.9818	0.018	0.94714	1
2	54	2	0.9455	0.0306	0.8873	1
3	52	2	0.9091	0.0388	0.8362	0.988
4	50	3	0.8545	0.0475	0.76627	0.953
5	47	1	0.8364	0.0499	0.74409	0.94
6	46	2	0.8	0.0539	0.70097	0.913
7	44	2	0.7636	0.0573	0.65922	0.885
8	42	1	0.7455	0.0587	0.63878	0.87
12	41	1	0.7273	0.0601	0.6186	0.855
13	40	1	0.7091	0.0612	0.59867	0.84
14	39	1	0.6909	0.0623	0.57896	0.824
15	38	3	0.6364	0.0649	0.52113	0.777
16	35	2	0.6	0.0661	0.48355	0.745
17	33	2	0.5636	0.0669	0.44669	0.711
18	31	1	0.5455	0.0671	0.42853	0.694
19	30	2	0.5091	0.0674	0.39272	0.66
20	28	2	0.4727	0.0673	0.3576	0.625
21	26	1	0.4545	0.0671	0.34029	0.607
22	25	1	0.4364	0.0669	0.32315	0.589
23	24	1	0.4182	0.0665	0.30618	0.571
24	23	1	0.4	0.0661	0.28939	0.553
25	22	1	0.3818	0.0655	0.27278	0.534
39	21	1	0.3636	0.0649	0.25635	0.516
50	20	1	0.3455	0.0641	0.24011	0.497
51	19	1	0.3273	0.0633	0.22405	0.478
52	18	1	0.3091	0.0623	0.2082	0.459
53	17	1	0.2909	0.0612	0.19256	0.439
54	16	1	0.2727	0.0601	0.17713	0.42
55	15	1	0.2545	0.0587	0.16194	0.4
56	14	1	0.2364	0.0573	0.14699	0.38
57	13	1	0.2182	0.0557	0.1323	0.36
58	12	1	0.2	0.0539	0.11789	0.339
59	11	1	0.1818	0.052	0.10379	0.319
60	10	1	0.1636	0.0499	0.09003	0.297
85	9	1	0.1455	0.0475	0.07665	0.276
86	8	1	0.1273	0.0449	0.06371	0.254
87	7	1	0.1091	0.042	0.05126	0.232

Table A.41*Cont'd*

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		55	55	20	16	50
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
88	6	1	0.0909	0.0388	0.03941	0.21
89	5	1	0.0727	0.035	0.02831	0.187
90	4	1	0.0545	0.0306	0.01815	0.164
91	3	1	0.0364	0.0252	0.00933	0.142
92	2	1	0.0182	0.018	0.00261	0.127
93	1	1	0	NaN	NA	NA

Table A.42 Aliaga station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.08	1	0.098	1	0.0182
2	0.12	2	0.1569	2	0.0545
3	0.18	3	0.2353	3	0.0909
4	0.28	4	0.2941	4	0.1455
5	0.3	5	0.3137	5	0.1636
6	0.3414	6	0.3333	6	0.2
7	0.36	7	0.3529	7	0.2364
8	0.38	8	0.3725	8	0.2545
9	0.44	10	0.3922	12	0.2727
10	0.5	11	0.4314	13	0.2909
11	0.56	12	0.451	14	0.3091
12	0.6	13	0.4706	15	0.3636
13	0.64	14	0.5098	16	0.4
14	0.72	15	0.5294	17	0.4364
15	0.76	16	0.5686	18	0.4545
16	0.8	17	0.6078	19	0.4909
17	0.82	18	0.6471	20	0.5273
18	0.86	19	0.7059	21	0.5455
19	0.88	20	0.7451	22	0.5636
20	0.9	21	0.7843	23	0.5818
23	0.92	22	0.8235	24	0.6
25	0.94	25	0.8431	25	0.6182
26	0.96	26	0.8627	39	0.6364
27	0.98	27	0.8824	50	0.6545
37	1	28	0.902	51	0.6727

Table A.42 *Cont'd*

Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk
29	0.9216	52	0.6909
30	0.9412	53	0.7091
37	0.9608	54	0.7273
40	0.9804	55	0.7455
41	1	56	0.7636
		57	0.7818
		58	0.8
		59	0.8182
		60	0.8364
		85	0.8545
		86	0.8727
		87	0.8909
		88	0.9091
		89	0.9273
		90	0.9455
		91	0.9636
		92	0.9818
		93	1

Table A.43 Aliaga station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		58	58	8	6	11
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	58	4	0.931	0.0333	0.86805	0.999
2	54	2	0.8966	0.04	0.8215	0.978
3	52	7	0.7759	0.0548	0.67563	0.891
4	45	4	0.7069	0.0598	0.59894	0.834
5	41	4	0.6379	0.0631	0.5255	0.774
6	37	3	0.5862	0.0647	0.47222	0.728
7	34	4	0.5172	0.0656	0.40338	0.663
8	30	3	0.4655	0.0655	0.35332	0.613
9	27	3	0.4138	0.0647	0.30462	0.562
10	24	3	0.3621	0.0631	0.2573	0.51
11	21	3	0.3103	0.0607	0.21146	0.455
12	18	1	0.2931	0.0598	0.19654	0.437
13	17	3	0.2414	0.0562	0.15295	0.381
14	14	2	0.2069	0.0532	0.125	0.342
15	12	1	0.1897	0.0515	0.11141	0.323
16	11	2	0.1552	0.0475	0.08512	0.283
17	9	1	0.1379	0.0453	0.07248	0.262
18	8	3	0.0862	0.0369	0.0373	0.199
19	5	1	0.069	0.0333	0.02679	0.178
24	4	1	0.0517	0.0291	0.01718	0.156
25	3	1	0.0345	0.024	0.00883	0.135
26	2	1	0.0172	0.0171	0.00247	0.12
27	1	1	0	NaN	NA	NA

Table A.44 Aliaga station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		63	63	12	6	16
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	63	6	0.9048	0.037	0.8351	0.98
2	57	5	0.8254	0.0478	0.73678	0.925
3	52	4	0.7619	0.0537	0.66367	0.875
4	48	5	0.6825	0.0586	0.57675	0.808
5	43	2	0.6508	0.0601	0.54311	0.78
6	41	3	0.6032	0.0616	0.4937	0.737
7	38	2	0.5714	0.0623	0.46141	0.708
8	36	1	0.5556	0.0626	0.44546	0.693
10	35	1	0.5397	0.0628	0.42963	0.678
11	34	1	0.5238	0.0629	0.41393	0.663
12	33	2	0.4921	0.063	0.38288	0.632
13	31	2	0.4603	0.0628	0.35232	0.601
14	29	3	0.4127	0.062	0.3074	0.554
15	26	2	0.381	0.0612	0.27808	0.522
16	24	3	0.3333	0.0594	0.23508	0.473
17	21	2	0.3016	0.0578	0.20712	0.439
18	19	2	0.2698	0.0559	0.17976	0.405
19	17	2	0.2381	0.0537	0.15308	0.37
20	15	1	0.2222	0.0524	0.14001	0.353
21	14	1	0.2063	0.051	0.12714	0.335
22	13	1	0.1905	0.0495	0.11449	0.317
23	12	1	0.1746	0.0478	0.10207	0.299
24	11	1	0.1587	0.046	0.0899	0.28
25	10	1	0.1429	0.0441	0.07802	0.262
26	9	1	0.127	0.0419	0.06646	0.243
27	8	1	0.1111	0.0396	0.05526	0.223
28	7	1	0.0952	0.037	0.04449	0.204
29	6	1	0.0794	0.0341	0.03423	0.184
30	5	1	0.0635	0.0307	0.0246	0.164
31	4	1	0.0476	0.0268	0.01578	0.144
64	3	1	0.0317	0.0221	0.00812	0.124
65	2	1	0.0159	0.0157	0.00227	0.111
66	1	1	0	NaN	NA	NA

Table A.45 Aliaga station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		61	61	15	12	21
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	61	3	0.9508	0.0277	0.89807	1.000
2	58	3	0.9016	0.0381	0.82992	0.98
3	55	3	0.8525	0.0454	0.76795	0.946
4	52	1	0.8361	0.0474	0.74814	0.934
5	51	3	0.7869	0.0524	0.69055	0.897
6	48	3	0.7377	0.0563	0.63518	0.857
7	45	2	0.7049	0.0584	0.59927	0.829
8	43	2	0.6721	0.0601	0.56407	0.801
9	41	1	0.6557	0.0608	0.54672	0.786
10	40	1	0.6393	0.0615	0.52952	0.772
11	39	1	0.623	0.0621	0.51247	0.757
12	38	3	0.5738	0.0633	0.46217	0.712
13	35	1	0.5574	0.0636	0.44569	0.697
14	34	2	0.5246	0.0639	0.41311	0.666
15	32	2	0.4918	0.064	0.38107	0.635
16	30	2	0.459	0.0638	0.34955	0.603
17	28	2	0.4262	0.0633	0.31856	0.57
18	26	1	0.4098	0.063	0.30327	0.554
19	25	1	0.3934	0.0625	0.28811	0.537
20	24	2	0.3607	0.0615	0.25822	0.504
21	22	3	0.3115	0.0593	0.21448	0.452
63	19	1	0.2951	0.0584	0.20021	0.435
64	18	1	0.2787	0.0574	0.18612	0.417
65	17	1	0.2623	0.0563	0.17219	0.4
66	16	1	0.2459	0.0551	0.15846	0.382
67	15	1	0.2295	0.0538	0.14491	0.363
68	14	1	0.2131	0.0524	0.13158	0.345
69	13	1	0.1967	0.0509	0.11847	0.327
70	12	1	0.1803	0.0492	0.10561	0.308
71	11	1	0.1639	0.0474	0.09301	0.289
72	10	1	0.1475	0.0454	0.08071	0.27
73	9	1	0.1311	0.0432	0.06875	0.25
74	8	1	0.1148	0.0408	0.05716	0.23
90	7	1	0.0984	0.0381	0.04601	0.21
91	6	1	0.082	0.0351	0.03539	0.19
92	5	1	0.0656	0.0317	0.02543	0.169
93	4	1	0.0492	0.0277	0.01631	0.148
94	3	1	0.0328	0.0228	0.00839	0.128
95	2	1	0.0164	0.0163	0.00235	0.115
96	1	1	0	NaN	NA	NA

Table A.46 Aliaga station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.069	1	0.0952	1	0.0492
2	0.1034	2	0.1746	2	0.0984
3	0.2241	3	0.2381	3	0.1475
4	0.2931	4	0.3175	4	0.1639
5	0.3621	5	0.3492	5	0.2131
6	0.4138	6	0.3968	6	0.2623
7	0.4828	7	0.4286	7	0.2951
8	0.5345	8	0.4444	8	0.3279
9	0.5862	10	0.4603	9	0.3443
10	0.6379	11	0.4762	10	0.3607
11	0.6897	12	0.5079	11	0.377
12	0.7069	13	0.5397	12	0.4262
13	0.7586	14	0.5873	13	0.4426
14	0.7931	15	0.619	14	0.4754
15	0.8103	16	0.6667	15	0.5082
16	0.8448	17	0.6984	16	0.541
17	0.8621	18	0.7302	17	0.5738
18	0.9138	19	0.7619	18	0.5902
19	0.931	20	0.7778	19	0.6066
24	0.9483	21	0.7937	20	0.6393
25	0.9655	22	0.8095	21	0.6885
26	0.9828	23	0.8254	63	0.7049
27	1	24	0.8413	64	0.7213
		25	0.8571	65	0.7377
		26	0.873	66	0.7541
		27	0.8889	67	0.7705
		28	0.9048	68	0.7869
		29	0.9206	69	0.8033
		30	0.9365	70	0.8197
		31	0.9524	71	0.8361
		64	0.9683	72	0.8525
		65	0.9841	73	0.8689
		66	1	74	0.8852
				90	0.9016
				91	0.918
				92	0.9344
				93	0.9508
				94	0.9672
				95	0.9836
				96	1

Table A.47 Bornova station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		74	74	8	6	10
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	74	5	0.9324	0.0292	0.87696	0.9914
2	69	5	0.8649	0.0397	0.79038	0.9464
3	64	5	0.7973	0.0467	0.71077	0.8944
4	59	5	0.7297	0.0516	0.63525	0.8383
5	54	5	0.6622	0.055	0.56271	0.7792
6	49	5	0.5946	0.0571	0.49262	0.7177
7	44	6	0.5135	0.0581	0.41138	0.641
8	38	6	0.4324	0.0576	0.33309	0.5614
9	32	3	0.3919	0.0567	0.29506	0.5205
10	29	2	0.3649	0.056	0.27013	0.4928
11	27	3	0.3243	0.0544	0.23343	0.4506
12	24	2	0.2973	0.0531	0.20944	0.422
13	22	2	0.2703	0.0516	0.18587	0.393
14	20	1	0.2568	0.0508	0.17425	0.3783
15	19	3	0.2162	0.0479	0.14012	0.3336
16	16	2	0.1892	0.0455	0.11805	0.3032
17	14	2	0.1622	0.0428	0.09661	0.2722
18	12	2	0.1351	0.0397	0.07593	0.2405
20	10	1	0.1216	0.038	0.06593	0.2244
21	9	2	0.0946	0.034	0.04675	0.1914
22	7	1	0.0811	0.0317	0.03765	0.1746
23	6	1	0.0676	0.0292	0.02898	0.1575
26	5	1	0.0541	0.0263	0.02084	0.1402
27	4	1	0.0405	0.0229	0.01338	0.1228
28	3	1	0.027	0.0189	0.00689	0.106
37	2	1	0.0135	0.0134	0.00193	0.0947
38	1	1	0	NaN	NA	NA

Table A.48 Bornova station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		85	85	11	8	14
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	85	6	0.9294	0.0278	0.87652	0.9855
2	79	8	0.8353	0.0402	0.76005	0.918
3	71	2	0.8118	0.0424	0.73278	0.8993
4	69	2	0.7882	0.0443	0.70599	0.8801
5	67	4	0.7412	0.0475	0.65368	0.8404
6	63	5	0.6824	0.0505	0.59022	0.7889
7	58	5	0.6235	0.0526	0.52859	0.7355
8	53	4	0.5765	0.0536	0.48044	0.6917
9	49	2	0.5529	0.0539	0.45673	0.6694
10	47	4	0.5059	0.0542	0.41002	0.6242
11	43	3	0.4706	0.0541	0.37559	0.5896
12	40	2	0.4471	0.0539	0.35293	0.5663
13	38	3	0.4118	0.0534	0.31937	0.5309
14	35	3	0.3765	0.0526	0.28636	0.4949
15	32	2	0.3529	0.0518	0.26466	0.4707
16	30	3	0.3176	0.0505	0.23261	0.4338
17	27	2	0.2941	0.0494	0.21159	0.4088
18	25	3	0.2588	0.0475	0.18062	0.3709
19	22	2	0.2353	0.046	0.16039	0.3452
20	20	2	0.2118	0.0443	0.14052	0.3191
21	18	1	0.2	0.0434	0.13073	0.306
27	17	1	0.1882	0.0424	0.12105	0.2927
36	16	1	0.1765	0.0413	0.11149	0.2793
37	15	1	0.1647	0.0402	0.10205	0.2658
38	14	2	0.1412	0.0378	0.08357	0.2385
39	12	1	0.1294	0.0364	0.07456	0.2246
40	11	1	0.1176	0.0349	0.06573	0.2106
41	10	2	0.0941	0.0317	0.04867	0.182
42	8	2	0.0706	0.0278	0.03264	0.1527
43	6	1	0.0588	0.0255	0.02513	0.1377
44	5	1	0.0471	0.023	0.01808	0.1225
45	4	2	0.0235	0.0164	0.00598	0.0926
46	2	1	0.0118	0.0117	0.00168	0.0826
47	1	1	0	NaN	NA	NA

Table A.49 Bornova station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		79	79	15	11	21
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	79	4	0.9494	0.0247	0.90223	0.999
2	75	5	0.8861	0.0357	0.81871	0.959
3	70	3	0.8481	0.0404	0.77253	0.9311
4	67	3	0.8101	0.0441	0.7281	0.9014
5	64	2	0.7848	0.0462	0.69923	0.8809
6	62	1	0.7722	0.0472	0.68498	0.8704
7	61	2	0.7468	0.0489	0.65685	0.8491
8	59	4	0.6962	0.0517	0.60183	0.8054
9	55	4	0.6456	0.0538	0.54826	0.7602
10	51	2	0.6203	0.0546	0.52196	0.7371
11	49	3	0.5823	0.0555	0.48308	0.7019
12	46	2	0.557	0.0559	0.45752	0.678
13	44	2	0.5316	0.0561	0.43225	0.6539
14	42	2	0.5063	0.0562	0.40726	0.6295
15	40	1	0.4937	0.0562	0.39487	0.6172
16	39	1	0.481	0.0562	0.38254	0.6048
17	38	2	0.4557	0.056	0.3581	0.5799
18	36	2	0.4304	0.0557	0.33395	0.5547
19	34	2	0.4051	0.0552	0.31007	0.5292
20	32	2	0.3797	0.0546	0.28648	0.5034
21	30	1	0.3671	0.0542	0.2748	0.4904
22	29	1	0.3544	0.0538	0.2632	0.4773
36	28	2	0.3291	0.0529	0.24022	0.4509
37	26	2	0.3038	0.0517	0.21757	0.4242
38	24	1	0.2911	0.0511	0.20638	0.4107
39	23	1	0.2785	0.0504	0.19527	0.3971
40	22	2	0.2532	0.0489	0.17335	0.3697
41	20	3	0.2152	0.0462	0.14123	0.3279
42	17	3	0.1772	0.043	0.11019	0.285
43	14	2	0.1519	0.0404	0.09021	0.2558
44	12	2	0.1266	0.0374	0.07093	0.2259
45	10	2	0.1013	0.0339	0.0525	0.1953
46	8	1	0.0886	0.032	0.04368	0.1797
47	7	1	0.0759	0.0298	0.03519	0.1639
48	6	1	0.0633	0.0274	0.0271	0.1478
49	5	1	0.0506	0.0247	0.01949	0.1316
50	4	2	0.0253	0.0177	0.00644	0.0995
51	2	1	0.0127	0.0126	0.00181	0.0888
118	1	1	0	NaN	NA	NA

Table A.50 Bornova station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0676	1	0.0706	1	0.0506
2	0.1351	2	0.1647	2	0.1139
3	0.2027	3	0.1882	3	0.1519
4	0.2703	4	0.2118	4	0.1899
5	0.3378	5	0.2588	5	0.2152
6	0.4054	6	0.3176	6	0.2278
7	0.4865	7	0.3765	7	0.2532
8	0.5676	8	0.4235	8	0.3038
9	0.6081	9	0.4471	9	0.3544
10	0.6351	10	0.4941	10	0.3797
11	0.6757	11	0.5294	11	0.4177
12	0.7027	12	0.5529	12	0.443
13	0.7297	13	0.5882	13	0.4684
14	0.7432	14	0.6235	14	0.4937
15	0.7838	15	0.6471	15	0.5063
16	0.8108	16	0.6824	16	0.519
17	0.8378	17	0.7059	17	0.5443
18	0.8649	18	0.7412	18	0.5696
20	0.8784	19	0.7647	19	0.5949
21	0.9054	20	0.7882	20	0.6203
22	0.9189	21	0.8	21	0.6329
23	0.9324	27	0.8118	22	0.6456
26	0.9459	36	0.8235	36	0.6709
27	0.9595	37	0.8353	37	0.6962
28	0.973	38	0.8588	38	0.7089
37	0.9865	39	0.8706	39	0.7215
38	1	40	0.8824	40	0.7468
		41	0.9059	41	0.7848
		42	0.9294	42	0.8228
		43	0.9412	43	0.8481
		44	0.9529	44	0.8734
		45	0.9765	45	0.8987
		46	0.9882	46	0.9114
		47	1	47	0.9241
				48	0.9367
				49	0.9494
				50	0.9747
				51	0.9873
				118	1

Table A.51 Bornova station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		94	94	8	6	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	94	7	0.9255	0.0271	0.87395	0.9802
2	87	3	0.8936	0.0318	0.83341	0.9582
3	84	6	0.8298	0.0388	0.75719	0.9093
4	78	8	0.7447	0.045	0.66155	0.8383
5	70	9	0.6489	0.0492	0.55928	0.753
6	61	6	0.5851	0.0508	0.49352	0.6937
7	55	7	0.5106	0.0516	0.41895	0.6224
8	48	6	0.4468	0.0513	0.35681	0.5595
9	42	4	0.4043	0.0506	0.31628	0.5167
10	38	5	0.3511	0.0492	0.2667	0.4621
11	33	6	0.2872	0.0467	0.2089	0.3949
12	27	2	0.266	0.0456	0.19009	0.3721
13	25	4	0.2234	0.043	0.15325	0.3257
14	21	2	0.2021	0.0414	0.13527	0.302
15	19	3	0.1702	0.0388	0.10893	0.266
16	16	3	0.1383	0.0356	0.0835	0.2291
17	13	1	0.1277	0.0344	0.07526	0.2165
18	12	2	0.1064	0.0318	0.05921	0.1911
19	10	1	0.0957	0.0303	0.05144	0.1782
21	9	1	0.0851	0.0288	0.04386	0.1651
25	8	1	0.0745	0.0271	0.03651	0.1519
26	7	2	0.0532	0.0231	0.02267	0.1248
27	5	1	0.0426	0.0208	0.01631	0.111
30	4	1	0.0319	0.0181	0.01048	0.0972
31	3	1	0.0213	0.0149	0.0054	0.0838
36	2	1	0.0106	0.0106	0.00151	0.0747
37	1	1	0	NaN	NA	NA

Table A.52 Bornova station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		97	97	8	7	11
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	97	8	0.9175	0.0279	0.86438	0.9739
2	89	9	0.8247	0.0386	0.75245	0.904
3	80	9	0.732	0.045	0.64891	0.8256
4	71	4	0.6907	0.0469	0.6046	0.7891
5	67	3	0.6598	0.0481	0.57194	0.7611
6	64	6	0.5979	0.0498	0.50791	0.7039
7	58	5	0.5464	0.0505	0.45578	0.655
8	53	5	0.4948	0.0508	0.40471	0.6051
9	48	4	0.4536	0.0505	0.36461	0.5643
10	44	4	0.4124	0.05	0.32518	0.5229
11	40	5	0.3608	0.0488	0.27686	0.4702
12	35	2	0.3402	0.0481	0.25786	0.4489
13	33	2	0.3196	0.0473	0.23905	0.4273
14	31	2	0.299	0.0465	0.22044	0.4055
15	29	3	0.268	0.045	0.19292	0.3724
16	26	3	0.2371	0.0432	0.16593	0.3388
17	23	2	0.2165	0.0418	0.14826	0.3161
18	21	2	0.1959	0.0403	0.13088	0.2932
19	19	1	0.1856	0.0395	0.1223	0.2816
20	18	2	0.1649	0.0377	0.10541	0.2581
21	16	2	0.1443	0.0357	0.0889	0.2343
22	14	2	0.1237	0.0334	0.07284	0.2101
26	12	1	0.1134	0.0322	0.06501	0.1978
27	11	1	0.1031	0.0309	0.05732	0.1854
30	10	1	0.0928	0.0295	0.0498	0.1729
39	9	1	0.0825	0.0279	0.04247	0.1602
57	8	1	0.0722	0.0263	0.03535	0.1473
58	7	1	0.0619	0.0245	0.0285	0.1343
59	6	1	0.0515	0.0225	0.02195	0.121
60	5	1	0.0412	0.0202	0.0158	0.1077
61	4	1	0.0309	0.0176	0.01015	0.0942
62	3	1	0.0206	0.0144	0.00523	0.0813
64	2	1	0.0103	0.0103	0.00147	0.0724
65	1	1	0	NaN	NA	NA

Table A.53 Bornova station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		99	99	12	9	16
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	99	9	0.9091	0.0289	0.85419	0.9675
2	90	7	0.8384	0.037	0.76892	0.9141
3	83	5	0.7879	0.0411	0.71133	0.8727
4	78	5	0.7374	0.0442	0.65559	0.8294
5	73	5	0.6869	0.0466	0.60133	0.7846
6	68	2	0.6667	0.0474	0.57998	0.7663
7	66	3	0.6364	0.0483	0.54832	0.7385
8	63	3	0.6061	0.0491	0.51706	0.7104
9	60	4	0.5657	0.0498	0.47598	0.6722
10	56	4	0.5253	0.0502	0.43555	0.6334
11	52	2	0.5051	0.0502	0.41557	0.6138
12	50	4	0.4646	0.0501	0.37609	0.5741
13	46	3	0.4343	0.0498	0.3469	0.5438
14	43	2	0.4141	0.0495	0.32764	0.5235
15	41	2	0.3939	0.0491	0.30855	0.503
16	39	2	0.3737	0.0486	0.28962	0.4823
17	37	2	0.3535	0.048	0.27086	0.4614
18	35	3	0.3232	0.047	0.24307	0.4298
19	32	3	0.2929	0.0457	0.2157	0.3978
20	29	1	0.2828	0.0453	0.20668	0.387
24	28	1	0.2727	0.0448	0.19771	0.3762
27	27	1	0.2626	0.0442	0.1888	0.3653
28	26	1	0.2525	0.0437	0.17994	0.3544
29	25	1	0.2424	0.0431	0.17114	0.3434
30	24	1	0.2323	0.0424	0.1624	0.3324
31	23	1	0.2222	0.0418	0.15372	0.3212
32	22	1	0.2121	0.0411	0.14511	0.3101
33	21	1	0.202	0.0404	0.13657	0.2988
34	20	1	0.1919	0.0396	0.12811	0.2875
35	19	1	0.1818	0.0388	0.11972	0.2761
36	18	1	0.1717	0.0379	0.11141	0.2647
37	17	1	0.1616	0.037	0.10319	0.2531
38	16	1	0.1515	0.036	0.09506	0.2415
39	15	1	0.1414	0.035	0.08704	0.2298
41	14	1	0.1313	0.0339	0.07912	0.2179
42	13	1	0.1212	0.0328	0.07132	0.206
46	12	1	0.1111	0.0316	0.06365	0.194

Table A.53 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		99	99	12	9	16
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
47	11	1	0.101	0.0303	0.05612	0.1818
48	10	1	0.0909	0.0289	0.04876	0.1695
86	9	1	0.0808	0.0274	0.04158	0.157
87	8	1	0.0707	0.0258	0.03462	0.1444
88	7	1	0.0606	0.024	0.02791	0.1316
89	6	1	0.0505	0.022	0.0215	0.1186
90	5	1	0.0404	0.0198	0.01547	0.1055
91	4	1	0.0303	0.0172	0.00994	0.0923
92	3	1	0.0202	0.0141	0.00512	0.0796
93	2	1	0.0101	0.01	0.00144	0.071
96	1	1	0	NaN	NA	NA

Table A.54 Bornova station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0745	1	0.0825	1	0.0909
2	0.1064	2	0.1753	2	0.1616
3	0.1702	3	0.268	3	0.2121
4	0.2553	4	0.3093	4	0.2626
5	0.3511	5	0.3402	5	0.3131
6	0.4149	6	0.4021	6	0.3333
7	0.4894	7	0.4536	7	0.3636
8	0.5532	8	0.5052	8	0.3939
9	0.5957	9	0.5464	9	0.4343
10	0.6489	10	0.5876	10	0.4747
11	0.7128	11	0.6392	11	0.4949
12	0.734	12	0.6598	12	0.5354
13	0.7766	13	0.6804	13	0.5657
14	0.7979	14	0.701	14	0.5859
15	0.8298	15	0.732	15	0.6061
16	0.8617	16	0.7629	16	0.6263
17	0.8723	17	0.7835	17	0.6465
18	0.8936	18	0.8041	18	0.6768
19	0.9043	19	0.8144	19	0.7071
21	0.9149	20	0.8351	20	0.7172
25	0.9255	21	0.8557	24	0.7273
26	0.9468	22	0.8763	27	0.7374
27	0.9574	26	0.8866	28	0.7475
30	0.9681	27	0.8969	29	0.7576
31	0.9787	30	0.9072	30	0.7677
36	0.9894	39	0.9175	31	0.7778
37	1	57	0.9278	32	0.7879
		58	0.9381	33	0.798
		59	0.9485	34	0.8081
		60	0.9588	35	0.8182
		61	0.9691	36	0.8283
		62	0.9794	37	0.8384
		64	0.9897	38	0.8485
		65	1	39	0.8586
				41	0.8687
				42	0.8788
				46	0.8889
				47	0.899
				48	0.9091

Table A.54 *Cont'd*

Drought Risk (SPEI12)	
Time	Drought Risk
86	0.9192
87	0.9293
88	0.9394
89	0.9495
90	0.9596
91	0.9697
92	0.9798
93	0.9899
96	1

Table A.55 Buldan station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		52	52	8.5	7	11
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	52	3	0.9423	0.0323	0.88102	1
2	49	2	0.9038	0.0409	0.82717	0.988
3	47	5	0.8077	0.0547	0.70737	0.922
4	42	4	0.7308	0.0615	0.61963	0.862
5	38	2	0.6923	0.064	0.57757	0.83
6	36	3	0.6346	0.0668	0.51635	0.78
7	33	4	0.5577	0.0689	0.4378	0.71
8	29	3	0.5	0.0693	0.381	0.656
9	26	3	0.4423	0.0689	0.32597	0.6
10	23	3	0.3846	0.0675	0.27272	0.542
11	20	5	0.2885	0.0628	0.18823	0.442
12	15	3	0.2308	0.0584	0.1405	0.379
13	12	3	0.1731	0.0525	0.09555	0.314
14	9	2	0.1346	0.0473	0.06758	0.268
15	7	1	0.1154	0.0443	0.05436	0.245
18	6	2	0.0769	0.037	0.03	0.197
22	4	1	0.0577	0.0323	0.01923	0.173
23	3	1	0.0385	0.0267	0.00988	0.15
25	2	1	0.0192	0.019	0.00276	0.134
37	1	1	0	NaN	NA	NA

Table A.56 Buldan station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		50	50	8.5	6	13
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
0	50	1	0.98	0.0198	0.942	1
1	49	3	0.92	0.0384	0.8478	0.998
2	46	6	0.8	0.0566	0.6965	0.919
3	40	5	0.7	0.0648	0.5838	0.839
4	35	2	0.66	0.067	0.5409	0.805
5	33	1	0.64	0.0679	0.5199	0.788
6	32	1	0.62	0.0686	0.4991	0.77
7	31	4	0.54	0.0705	0.4181	0.697
8	27	2	0.5	0.0707	0.379	0.66
9	25	2	0.46	0.0705	0.3407	0.621
10	23	2	0.42	0.0698	0.3032	0.582
11	21	2	0.38	0.0686	0.2667	0.541
12	19	1	0.36	0.0679	0.2488	0.521
13	18	2	0.32	0.066	0.2136	0.479
14	16	2	0.28	0.0635	0.1795	0.437
15	14	1	0.26	0.062	0.1629	0.415
16	13	2	0.22	0.0586	0.1305	0.371
17	11	2	0.18	0.0543	0.0996	0.325
18	9	2	0.14	0.0491	0.0704	0.278
19	7	1	0.12	0.046	0.0566	0.254
33	6	1	0.1	0.0424	0.0435	0.23
34	5	1	0.08	0.0384	0.0313	0.205
35	4	1	0.06	0.0336	0.02	0.18
39	3	1	0.04	0.0277	0.0103	0.156
40	2	2	0	NaN	NA	NA

Table A.57 Buldan station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		63	63	11	9	14
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	63	3	0.9524	0.0268	0.90122	1
2	60	2	0.9206	0.0341	0.85625	0.99
3	58	4	0.8571	0.0441	0.77495	0.948
4	54	4	0.7937	0.051	0.69976	0.9
5	50	2	0.7619	0.0537	0.66367	0.875
6	48	2	0.7302	0.0559	0.62838	0.848
7	46	3	0.6825	0.0586	0.57675	0.808
8	43	4	0.619	0.0612	0.51003	0.751
9	39	3	0.5714	0.0623	0.46141	0.708
10	36	3	0.5238	0.0629	0.41393	0.663
11	33	3	0.4762	0.0629	0.36754	0.617
12	30	3	0.4286	0.0623	0.32225	0.57
13	27	3	0.381	0.0612	0.27808	0.522
14	24	3	0.3333	0.0594	0.23508	0.473
15	21	1	0.3175	0.0586	0.22103	0.456
16	20	1	0.3016	0.0578	0.20712	0.439
17	19	1	0.2857	0.0569	0.19336	0.422
18	18	1	0.2698	0.0559	0.17976	0.405
19	17	1	0.254	0.0548	0.16633	0.388
30	16	1	0.2381	0.0537	0.15308	0.37
31	15	1	0.2222	0.0524	0.14001	0.353
32	14	1	0.2063	0.051	0.12714	0.335
33	13	1	0.1905	0.0495	0.11449	0.317
34	12	1	0.1746	0.0478	0.10207	0.299
35	11	1	0.1587	0.046	0.0899	0.28
36	10	1	0.1429	0.0441	0.07802	0.262
37	9	1	0.127	0.0419	0.06646	0.243
38	8	1	0.1111	0.0396	0.05526	0.223
39	7	1	0.0952	0.037	0.04449	0.204
40	6	1	0.0794	0.0341	0.03423	0.184
47	5	1	0.0635	0.0307	0.0246	0.164
64	4	1	0.0476	0.0268	0.01578	0.144
65	3	1	0.0317	0.0221	0.00812	0.124
87	2	1	0.0159	0.0157	0.00227	0.111
88	1	1	0	NaN	NA	NA

Table A.58 Buldan station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0577	0	0.02	1	0.0476
2	0.0962	1	0.08	2	0.0794
3	0.1923	2	0.2	3	0.1429
4	0.2692	3	0.3	4	0.2063
5	0.3077	4	0.34	5	0.2381
6	0.3654	5	0.36	6	0.2698
7	0.4423	6	0.38	7	0.3175
8	0.5	7	0.46	8	0.381
9	0.5577	8	0.5	9	0.4286
10	0.6154	9	0.54	10	0.4762
11	0.7115	10	0.58	11	0.5238
12	0.7692	11	0.62	12	0.5714
13	0.8269	12	0.64	13	0.619
14	0.8654	13	0.68	14	0.6667
15	0.8846	14	0.72	15	0.6825
18	0.9231	15	0.74	16	0.6984
22	0.9423	16	0.78	17	0.7143
23	0.9615	17	0.82	18	0.7302
25	0.9808	18	0.86	19	0.746
37	1	19	0.88	30	0.7619
		33	0.9	31	0.7778
		34	0.92	32	0.7937
		35	0.94	33	0.8095
		39	0.96	34	0.8254
		40	1	35	0.8413
				36	0.8571
				37	0.873
				38	0.8889
				39	0.9048
				40	0.9206
				47	0.9365
				64	0.9524
				65	0.9683
				87	0.9841
				88	1

Table A.59 Buldan station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		61	61	8	7	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	61	4	0.9344	0.0317	0.87433	0.999
2	57	4	0.8689	0.0432	0.78814	0.958
3	53	5	0.7869	0.0524	0.69055	0.897
4	48	3	0.7377	0.0563	0.63518	0.857
5	45	3	0.6885	0.0593	0.58159	0.815
6	42	4	0.623	0.0621	0.51247	0.757
7	38	6	0.5246	0.0639	0.41311	0.666
8	32	6	0.4262	0.0633	0.31856	0.57
9	26	4	0.3607	0.0615	0.25822	0.504
10	22	4	0.2951	0.0584	0.20021	0.435
11	18	3	0.2459	0.0551	0.15846	0.382
12	15	2	0.2131	0.0524	0.13158	0.345
13	13	3	0.1639	0.0474	0.09301	0.289
14	10	3	0.1148	0.0408	0.05716	0.23
15	7	2	0.082	0.0351	0.03539	0.19
16	5	1	0.0656	0.0317	0.02543	0.169
17	4	1	0.0492	0.0277	0.01631	0.148
19	3	1	0.0328	0.0228	0.00839	0.128
22	2	1	0.0164	0.0163	0.00235	0.115
31	1	1	0	NaN	NA	NA

Table A.60 Buldan station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		65	65	11	8	14
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	65	6	0.9077	0.0359	0.83998	0.981
2	59	6	0.8154	0.0481	0.72631	0.915
3	53	5	0.7385	0.0545	0.63899	0.853
4	48	3	0.6923	0.0572	0.58873	0.814
5	45	1	0.6769	0.058	0.57227	0.801
6	44	1	0.6615	0.0587	0.55595	0.787
7	43	2	0.6308	0.0599	0.52371	0.76
8	41	2	0.6	0.0608	0.49198	0.732
9	39	3	0.5538	0.0617	0.44528	0.689
10	36	3	0.5077	0.062	0.39961	0.645
11	33	4	0.4462	0.0617	0.34029	0.585
12	29	3	0.4	0.0608	0.297	0.539
13	26	2	0.3692	0.0599	0.26872	0.507
14	24	1	0.3538	0.0593	0.25477	0.491
15	23	2	0.3231	0.058	0.22724	0.459
16	21	3	0.2769	0.0555	0.18696	0.41
17	18	5	0.2	0.0496	0.12299	0.325
18	13	2	0.1692	0.0465	0.09875	0.29
19	11	1	0.1538	0.0448	0.08699	0.272
30	10	1	0.1385	0.0428	0.0755	0.254
37	9	1	0.1231	0.0407	0.06432	0.236
38	8	1	0.1077	0.0384	0.05349	0.217
39	7	1	0.0923	0.0359	0.04307	0.198
40	6	1	0.0769	0.0331	0.03314	0.179
41	5	1	0.0615	0.0298	0.02381	0.159
42	4	1	0.0462	0.026	0.01528	0.139
43	3	1	0.0308	0.0214	0.00786	0.12
44	2	1	0.0154	0.0153	0.0022	0.108
64	1	1	0	NaN	NA	NA

Table A.61 Buldan station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		69	69	8	7	11
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	69	5	0.9275	0.0312	0.86834	0.991
2	64	5	0.8551	0.0424	0.77592	0.942
3	59	5	0.7826	0.0497	0.69109	0.886
4	54	4	0.7246	0.0538	0.62655	0.838
5	50	4	0.6667	0.0568	0.56422	0.788
6	46	4	0.6087	0.0588	0.50378	0.735
7	42	4	0.5507	0.0599	0.44502	0.682
8	38	4	0.4928	0.0602	0.38785	0.626
9	34	3	0.4493	0.0599	0.34599	0.583
10	31	3	0.4058	0.0591	0.30501	0.54
11	28	3	0.3623	0.0579	0.26494	0.495
12	25	3	0.3188	0.0561	0.22584	0.45
13	22	4	0.2609	0.0529	0.17536	0.388
14	18	4	0.2029	0.0484	0.12711	0.324
15	14	1	0.1884	0.0471	0.11545	0.307
16	13	1	0.1739	0.0456	0.10399	0.291
17	12	1	0.1594	0.0441	0.09273	0.274
31	11	1	0.1449	0.0424	0.0817	0.257
38	10	1	0.1304	0.0405	0.07093	0.24
39	9	1	0.1159	0.0385	0.06043	0.222
40	8	1	0.1014	0.0363	0.05027	0.205
41	7	1	0.087	0.0339	0.04048	0.187
42	6	1	0.0725	0.0312	0.03115	0.169
43	5	1	0.058	0.0281	0.02239	0.15
44	4	1	0.0435	0.0246	0.01438	0.131
45	3	1	0.029	0.0202	0.0074	0.114
64	2	1	0.0145	0.0144	0.00207	0.101
87	1	1	0	NaN	NA	NA

Table A.62 Buldan station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0656	1	0.0923	1	0.0725
2	0.1311	2	0.1846	2	0.1449
3	0.2131	3	0.2615	3	0.2174
4	0.2623	4	0.3077	4	0.2754
5	0.3115	5	0.3231	5	0.3333
6	0.377	6	0.3385	6	0.3913
7	0.4754	7	0.3692	7	0.4493
8	0.5738	8	0.4	8	0.5072
9	0.6393	9	0.4462	9	0.5507
10	0.7049	10	0.4923	10	0.5942
11	0.7541	11	0.5538	11	0.6377
12	0.7869	12	0.6	12	0.6812
13	0.8361	13	0.6308	13	0.7391
14	0.8852	14	0.6462	14	0.7971
15	0.918	15	0.6769	15	0.8116
16	0.9344	16	0.7231	16	0.8261
17	0.9508	17	0.8	17	0.8406
19	0.9672	18	0.8308	31	0.8551
22	0.9836	19	0.8462	38	0.8696
31	1	30	0.8615	39	0.8841
		37	0.8769	40	0.8986
		38	0.8923	41	0.913
		39	0.9077	42	0.9275
		40	0.9231	43	0.942
		41	0.9385	44	0.9565
		42	0.9538	45	0.971
		43	0.9692	64	0.9855
		44	0.9846	87	1
		64	1		

Table A.63 Demirci station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		118	118	9.5	8	12
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	118	3	0.97458	0.01449	0.94659	1
2	115	4	0.94068	0.02175	0.89901	0.9843
3	111	10	0.85593	0.03233	0.79486	0.9217
4	101	12	0.75424	0.03963	0.68042	0.8361
5	89	9	0.67797	0.04301	0.59869	0.7677
6	80	6	0.62712	0.04452	0.54567	0.7207
7	74	4	0.59322	0.04522	0.51089	0.6888
8	70	7	0.5339	0.04592	0.45107	0.6319
9	63	4	0.5	0.04603	0.41746	0.5989
10	59	4	0.4661	0.04592	0.38425	0.5654
11	55	4	0.4322	0.0456	0.35146	0.5315
12	51	5	0.38983	0.0449	0.31106	0.4886
13	46	4	0.35593	0.04408	0.27923	0.4537
14	42	4	0.32203	0.04301	0.24786	0.4184
15	38	5	0.27966	0.04132	0.20935	0.3736
16	33	3	0.25424	0.04008	0.18665	0.3463
17	30	4	0.22034	0.03816	0.15692	0.3094
18	26	4	0.18644	0.03585	0.12789	0.2718
19	22	3	0.16102	0.03384	0.10666	0.2431
20	19	4	0.12712	0.03066	0.07923	0.204
21	15	2	0.11017	0.02882	0.06597	0.184
23	13	1	0.10169	0.02782	0.05949	0.1739
24	12	2	0.08475	0.02564	0.04684	0.1533
25	10	1	0.07627	0.02443	0.04071	0.1429
26	9	1	0.0678	0.02314	0.03473	0.1324
27	8	2	0.05085	0.02022	0.02332	0.1109
28	6	1	0.04237	0.01854	0.01797	0.0999
32	5	2	0.02542	0.01449	0.00832	0.0777
33	3	1	0.01695	0.01188	0.00429	0.067
34	2	1	0.00847	0.00844	0.0012	0.0597
36	1	1	0	NaN	NA	NA

Table A.64 Demirci station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		107	107	13	11	16
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	107	3	0.97196	0.016	0.94118	1
2	104	6	0.91589	0.0268	0.86478	0.97
3	98	5	0.86916	0.0326	0.80755	0.9355
4	93	4	0.83178	0.0362	0.76383	0.9058
6	89	2	0.81308	0.0377	0.74247	0.8904
7	87	7	0.74766	0.042	0.66973	0.8347
8	80	5	0.70093	0.0443	0.61934	0.7933
9	75	7	0.63551	0.0465	0.55056	0.7336
10	68	4	0.59813	0.0474	0.51209	0.6986
11	64	4	0.56075	0.048	0.47417	0.6631
12	60	4	0.52336	0.0483	0.43679	0.6271
13	56	4	0.48598	0.0483	0.39994	0.5905
14	52	3	0.45794	0.0482	0.37264	0.5628
15	49	4	0.42056	0.0477	0.3367	0.5253
16	45	3	0.39252	0.0472	0.3101	0.4969
17	42	4	0.35514	0.0463	0.27512	0.4584
18	38	5	0.30841	0.0446	0.23222	0.4096
19	33	4	0.27103	0.043	0.19864	0.3698
20	29	2	0.25234	0.042	0.18211	0.3496
21	27	1	0.24299	0.0415	0.17392	0.3395
23	26	3	0.21495	0.0397	0.14965	0.3087
24	23	2	0.19626	0.0384	0.13376	0.288
25	21	3	0.16822	0.0362	0.11039	0.2564
26	18	2	0.14953	0.0345	0.09517	0.235
27	16	2	0.13084	0.0326	0.08029	0.2132
28	14	3	0.1028	0.0294	0.05874	0.1799
29	11	3	0.07477	0.0254	0.03839	0.1456
30	8	2	0.05607	0.0222	0.02577	0.122
31	6	1	0.04673	0.0204	0.01986	0.11
36	5	1	0.03738	0.0183	0.01429	0.0978
37	4	1	0.02804	0.016	0.00919	0.0856
42	3	1	0.01869	0.0131	0.00474	0.0738
44	2	1	0.00935	0.0093	0.00133	0.0657
94	1	1	0	NaN	NA	NA

Table A.65 Demirci station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		107	107	18	16	22
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	107	2	0.98131	0.0131	0.95598	1
2	105	3	0.95327	0.0204	0.91411	0.9941
3	102	3	0.92523	0.0254	0.87672	0.9764
4	99	4	0.88785	0.0305	0.83003	0.9497
5	95	2	0.86916	0.0326	0.80755	0.9355
6	93	2	0.85047	0.0345	0.78551	0.9208
7	91	2	0.83178	0.0362	0.76383	0.9058
8	89	4	0.79439	0.0391	0.72139	0.8748
9	85	3	0.76636	0.0409	0.69023	0.8509
10	82	2	0.74766	0.042	0.66973	0.8347
11	80	1	0.73832	0.0425	0.65956	0.8265
12	79	3	0.71028	0.0439	0.62932	0.8017
13	76	4	0.6729	0.0454	0.58962	0.7679
14	72	5	0.62617	0.0468	0.54089	0.7249
15	67	4	0.58879	0.0476	0.50256	0.6898
16	63	4	0.5514	0.0481	0.46478	0.6542
17	59	5	0.50467	0.0483	0.4183	0.6089
18	54	4	0.46729	0.0482	0.3817	0.5721
19	50	3	0.43925	0.048	0.3546	0.5441
20	47	2	0.42056	0.0477	0.3367	0.5253
21	45	2	0.40187	0.0474	0.31893	0.5064
22	43	2	0.38318	0.047	0.3013	0.4873
23	41	2	0.36449	0.0465	0.28381	0.4681
24	39	2	0.34579	0.046	0.26646	0.4487
25	37	2	0.3271	0.0454	0.24926	0.4292
26	35	1	0.31776	0.045	0.24072	0.4194
27	34	1	0.30841	0.0446	0.23222	0.4096
28	33	1	0.29907	0.0443	0.22376	0.3997
29	32	1	0.28972	0.0439	0.21534	0.3898
30	31	2	0.27103	0.043	0.19864	0.3698
31	29	1	0.26168	0.0425	0.19035	0.3597
32	28	1	0.25234	0.042	0.18211	0.3496
33	27	1	0.24299	0.0415	0.17392	0.3395
34	26	2	0.2243	0.0403	0.15769	0.319
35	24	3	0.19626	0.0384	0.13376	0.288
36	21	1	0.18692	0.0377	0.1259	0.2775
37	20	1	0.17757	0.0369	0.11811	0.267

Table A.65 *Cont'd*

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		107	107	18	16	22
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
38	19	1	0.16822	0.0362	0.11039	0.2564
39	18	1	0.15888	0.0353	0.10274	0.2457
40	17	1	0.14953	0.0345	0.09517	0.235
41	16	1	0.14019	0.0336	0.08768	0.2241
42	15	1	0.13084	0.0326	0.08029	0.2132
43	14	1	0.1215	0.0316	0.07299	0.2022
44	13	1	0.11215	0.0305	0.06581	0.1911
45	12	1	0.1028	0.0294	0.05874	0.1799
46	11	1	0.09346	0.0281	0.0518	0.1686
47	10	1	0.08411	0.0268	0.04501	0.1572
48	9	1	0.07477	0.0254	0.03839	0.1456
49	8	2	0.05607	0.0222	0.02577	0.122
50	6	1	0.04673	0.0204	0.01986	0.11
97	5	1	0.03738	0.0183	0.01429	0.0978
98	4	1	0.02804	0.016	0.00919	0.0856
99	3	1	0.01869	0.0131	0.00474	0.0738
130	2	1	0.00935	0.0093	0.00133	0.0657
131	1	1	0	NaN	NA	NA

Table A.66 Demirci station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.02542	1	0.02804	1	0.01869
2	0.05932	2	0.08411	2	0.04673
3	0.14407	3	0.13084	3	0.07477
4	0.24576	4	0.16822	4	0.11215
5	0.32203	6	0.18692	5	0.13084
6	0.37288	7	0.25234	6	0.14953
7	0.40678	8	0.29907	7	0.16822
8	0.4661	9	0.36449	8	0.20561
9	0.5	10	0.40187	9	0.23364
10	0.5339	11	0.43925	10	0.25234
11	0.5678	12	0.47664	11	0.26168
12	0.61017	13	0.51402	12	0.28972
13	0.64407	14	0.54206	13	0.3271
14	0.67797	15	0.57944	14	0.37383
15	0.72034	16	0.60748	15	0.41121
16	0.74576	17	0.64486	16	0.4486
17	0.77966	18	0.69159	17	0.49533
18	0.81356	19	0.72897	18	0.53271
19	0.83898	20	0.74766	19	0.56075
20	0.87288	21	0.75701	20	0.57944
21	0.88983	23	0.78505	21	0.59813
23	0.89831	24	0.80374	22	0.61682
24	0.91525	25	0.83178	23	0.63551
25	0.92373	26	0.85047	24	0.65421
26	0.9322	27	0.86916	25	0.6729
27	0.94915	28	0.8972	26	0.68224
28	0.95763	29	0.92523	27	0.69159
32	0.97458	30	0.94393	28	0.70093
33	0.98305	31	0.95327	29	0.71028
34	0.99153	36	0.96262	30	0.72897
36	1	37	0.97196	31	0.73832
		42	0.98131	32	0.74766
		44	0.99065	33	0.75701
		94	1	34	0.7757
				35	0.80374
				36	0.81308
				37	0.82243
				38	0.83178
				39	0.84112

Table A.66 *Cont'd*

Drought Risk (SPI12)	
Time	Time
40	0.85047
41	0.85981
42	0.86916
43	0.8785
44	0.88785
45	0.8972
46	0.90654
47	0.91589
48	0.92523
49	0.94393
50	0.95327
97	0.96262
98	0.97196
99	0.98131
130	0.99065
131	1

Table A.67 Demirci station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		133	133	9	8	11
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	133	4	0.96992	0.01481	0.94133	0.9994
2	129	2	0.95489	0.018	0.92026	0.9908
3	127	9	0.88722	0.02743	0.83505	0.9426
4	118	13	0.78947	0.03535	0.72314	0.8619
5	105	9	0.7218	0.03886	0.64953	0.8021
6	96	10	0.64662	0.04145	0.57027	0.7332
7	86	8	0.58647	0.0427	0.50847	0.6764
8	78	8	0.52632	0.0433	0.44795	0.6184
9	70	6	0.4812	0.04332	0.40336	0.5741
10	64	5	0.44361	0.04308	0.36672	0.5366
11	59	5	0.40602	0.04258	0.33057	0.4987
12	54	3	0.38346	0.04216	0.30912	0.4757
13	51	4	0.35338	0.04145	0.28081	0.4447
14	47	4	0.32331	0.04056	0.25283	0.4134
15	43	5	0.28571	0.03917	0.21839	0.3738
16	38	3	0.26316	0.03818	0.19802	0.3497
17	35	3	0.2406	0.03706	0.1779	0.3254
18	32	2	0.22556	0.03624	0.16463	0.3091
19	30	4	0.19549	0.03439	0.13848	0.276
20	26	3	0.17293	0.03279	0.11925	0.2508
21	23	2	0.15789	0.03162	0.10664	0.2338
22	21	1	0.15038	0.03099	0.1004	0.2252
23	20	1	0.14286	0.03034	0.09421	0.2166
24	19	2	0.12782	0.02895	0.082	0.1993
25	17	3	0.10526	0.02661	0.06413	0.1728
26	14	3	0.08271	0.02388	0.04696	0.1457
27	11	3	0.06015	0.02062	0.03072	0.1178
28	8	2	0.04511	0.018	0.02064	0.0986
29	6	1	0.03759	0.01649	0.01591	0.0888
30	5	1	0.03008	0.01481	0.01146	0.079
31	4	2	0.01504	0.01055	0.0038	0.0595
32	2	1	0.00752	0.00749	0.00107	0.053
76	1	1	0	NaN	NA	NA

Table A.68 Demirci station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		116	116	13	11	16
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	116	3	0.97414	0.01474	0.94568	1
2	113	5	0.93103	0.02353	0.88605	0.9783
3	108	3	0.90517	0.0272	0.8534	0.9601
4	105	3	0.87931	0.03025	0.82198	0.9406
5	102	3	0.85345	0.03284	0.79146	0.9203
6	99	7	0.7931	0.03761	0.72271	0.8704
7	92	8	0.72414	0.0415	0.6472	0.8102
8	84	6	0.67241	0.04358	0.59221	0.7635
9	78	4	0.63793	0.04462	0.5562	0.7317
10	74	6	0.58621	0.04573	0.5031	0.683
11	68	4	0.55172	0.04617	0.46826	0.6501
12	64	4	0.51724	0.0464	0.43385	0.6167
13	60	4	0.48276	0.0464	0.39987	0.5828
14	56	3	0.4569	0.04625	0.37467	0.5572
15	53	4	0.42241	0.04586	0.34145	0.5226
16	49	6	0.37069	0.04484	0.29244	0.4699
17	43	6	0.31897	0.04327	0.24449	0.4161
18	37	4	0.28448	0.04189	0.21317	0.3797
19	33	3	0.25862	0.04066	0.19004	0.3519
20	30	3	0.23276	0.03924	0.16727	0.3239
21	27	3	0.2069	0.03761	0.14488	0.2955
22	24	2	0.18966	0.0364	0.1302	0.2763
23	22	1	0.18103	0.03575	0.12293	0.2666
24	21	2	0.16379	0.03436	0.10857	0.2471
25	19	1	0.15517	0.03362	0.10149	0.2373
26	18	1	0.14655	0.03284	0.09446	0.2274
27	17	1	0.13793	0.03202	0.08751	0.2174
28	16	2	0.12069	0.03025	0.07385	0.1972
29	14	3	0.09483	0.0272	0.05405	0.1664
30	11	2	0.07759	0.02484	0.04143	0.1453
31	9	1	0.06897	0.02353	0.03534	0.1346
32	8	1	0.06034	0.02211	0.02943	0.1237
37	7	1	0.05172	0.02056	0.02373	0.1127
38	6	1	0.0431	0.01886	0.01829	0.1016
42	5	1	0.03448	0.01694	0.01316	0.0903
43	4	1	0.02586	0.01474	0.00846	0.079
44	3	1	0.01724	0.01209	0.00436	0.0681
45	2	1	0.00862	0.00858	0.00122	0.0607
103	1	1	0	NaN	NA	NA

Table A.69 Demirci station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		119	119	24	18	28
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	119	2	0.9832	0.01178	0.96037	1
2	117	3	0.958	0.01839	0.92261	0.9947
3	114	3	0.9328	0.02296	0.88885	0.9789
4	111	4	0.8992	0.0276	0.84665	0.9549
5	107	3	0.8739	0.03043	0.81631	0.9357
6	104	5	0.8319	0.03428	0.76739	0.9019
7	99	4	0.7983	0.03678	0.72939	0.8738
8	95	4	0.7647	0.03888	0.69217	0.8448
9	91	2	0.7479	0.0398	0.67381	0.8301
10	89	2	0.7311	0.04065	0.65562	0.8153
11	87	1	0.7227	0.04104	0.64657	0.8078
12	86	2	0.7059	0.04177	0.62859	0.7927
13	84	3	0.6807	0.04274	0.60186	0.7698
14	81	3	0.6555	0.04356	0.57541	0.7467
15	78	4	0.6218	0.04445	0.54055	0.7154
16	74	2	0.605	0.04481	0.52329	0.6996
17	72	2	0.5882	0.04512	0.50614	0.6837
18	70	2	0.5714	0.04536	0.48909	0.6676
19	68	1	0.563	0.04547	0.4806	0.6596
20	67	1	0.5546	0.04556	0.47214	0.6515
21	66	2	0.5378	0.0457	0.4553	0.6353
22	64	1	0.5294	0.04576	0.44692	0.6271
23	63	2	0.5126	0.04582	0.43023	0.6108
24	61	3	0.4874	0.04582	0.40538	0.586
25	58	3	0.4622	0.0457	0.38075	0.561
26	55	3	0.437	0.04547	0.35636	0.5358
27	52	2	0.4202	0.04525	0.34022	0.5189
28	50	4	0.3866	0.04464	0.30826	0.4847
29	46	3	0.3613	0.04404	0.28457	0.4588
30	43	2	0.3445	0.04356	0.26891	0.4414
31	41	2	0.3277	0.04303	0.25337	0.4239
32	39	2	0.3109	0.04243	0.23795	0.4063
33	37	1	0.3025	0.04211	0.23029	0.3974
34	36	2	0.2857	0.04141	0.21506	0.3796
35	34	3	0.2605	0.04023	0.19246	0.3526
36	31	3	0.2353	0.03888	0.17019	0.3253
37	28	2	0.2185	0.03788	0.15554	0.3069

Table A.69 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		119	119	24	18	28
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
38	26	2	0.2017	0.03678	0.14107	0.2883
39	24	2	0.1849	0.03559	0.12677	0.2696
40	22	2	0.1681	0.03428	0.11269	0.2507
41	20	2	0.1513	0.03285	0.09883	0.2315
42	18	2	0.1345	0.03127	0.08523	0.2121
43	16	2	0.1176	0.02954	0.07193	0.1924
44	14	2	0.1008	0.0276	0.05897	0.1724
45	12	2	0.084	0.02543	0.04643	0.1521
46	10	2	0.0672	0.02296	0.03443	0.1313
47	8	1	0.0588	0.02157	0.02867	0.1207
48	7	1	0.0504	0.02006	0.02312	0.11
49	6	1	0.042	0.01839	0.01782	0.0991
97	5	1	0.0336	0.01652	0.01283	0.0881
98	4	1	0.0252	0.01437	0.00825	0.0771
100	3	1	0.0168	0.01178	0.00425	0.0664
101	2	1	0.0084	0.00837	0.00119	0.0592
102	1	1	0	NaN	NA	NA

Table A.70 Demirci station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.03008	1	0.02586	1	0.0168
2	0.04511	2	0.06897	2	0.042
3	0.11278	3	0.09483	3	0.0672
4	0.21053	4	0.12069	4	0.1008
5	0.2782	5	0.14655	5	0.1261
6	0.35338	6	0.2069	6	0.1681
7	0.41353	7	0.27586	7	0.2017
8	0.47368	8	0.32759	8	0.2353
9	0.5188	9	0.36207	9	0.2521
10	0.55639	10	0.41379	10	0.2689
11	0.59398	11	0.44828	11	0.2773
12	0.61654	12	0.48276	12	0.2941
13	0.64662	13	0.51724	13	0.3193
14	0.67669	14	0.5431	14	0.3445
15	0.71429	15	0.57759	15	0.3782
16	0.73684	16	0.62931	16	0.395
17	0.7594	17	0.68103	17	0.4118
18	0.77444	18	0.71552	18	0.4286
19	0.80451	19	0.74138	19	0.437
20	0.82707	20	0.76724	20	0.4454
21	0.84211	21	0.7931	21	0.4622
22	0.84962	22	0.81034	22	0.4706
23	0.85714	23	0.81897	23	0.4874
24	0.87218	24	0.83621	24	0.5126
25	0.89474	25	0.84483	25	0.5378
26	0.91729	26	0.85345	26	0.563
27	0.93985	27	0.86207	27	0.5798
28	0.95489	28	0.87931	28	0.6134
29	0.96241	29	0.90517	29	0.6387
30	0.96992	30	0.92241	30	0.6555
31	0.98496	31	0.93103	31	0.6723
32	0.99248	32	0.93966	32	0.6891
76	1	37	0.94828	33	0.6975
		38	0.9569	34	0.7143
		42	0.96552	35	0.7395
		43	0.97414	36	0.7647
		44	0.98276	37	0.7815
		45	0.99138	38	0.7983
		103	1	39	0.8151

Table A.70 *Cont'd*

Drought Risk (SPEI12)	
Time	Time
40	0.8319
41	0.8487
42	0.8655
43	0.8824
44	0.8992
45	0.916
46	0.9328
47	0.9412
48	0.9496
49	0.958
97	0.9664
98	0.9748
100	0.9832
101	0.9916
102	1

Table A.71 Esme station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		61	61	8	7	10
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	61	3	0.9508	0.0277	0.89807	1
2	58	3	0.9016	0.0381	0.82992	0.98
3	55	4	0.8361	0.0474	0.74814	0.934
4	51	6	0.7377	0.0563	0.63518	0.857
5	45	4	0.6721	0.0601	0.56407	0.801
6	41	3	0.623	0.0621	0.51247	0.757
7	38	5	0.541	0.0638	0.42933	0.682
8	33	5	0.459	0.0638	0.34955	0.603
9	28	5	0.377	0.0621	0.27309	0.521
10	23	4	0.3115	0.0593	0.21448	0.452
11	19	3	0.2623	0.0563	0.17219	0.4
12	16	3	0.2131	0.0524	0.13158	0.345
13	13	2	0.1803	0.0492	0.10561	0.308
16	11	1	0.1639	0.0474	0.09301	0.289
17	10	2	0.1311	0.0432	0.06875	0.25
18	8	1	0.1148	0.0408	0.05716	0.23
21	7	2	0.082	0.0351	0.03539	0.19
22	5	1	0.0656	0.0317	0.02543	0.169
23	4	1	0.0492	0.0277	0.01631	0.148
29	3	1	0.0328	0.0228	0.00839	0.128
53	2	1	0.0164	0.0163	0.00235	0.115
64	1	1	0	NaN	NA	NA

Table A.72 Esme station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		73	73	15	13	18
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	73	3	0.9589	0.0232	0.91443	1
2	70	5	0.8904	0.0366	0.82156	0.965
3	65	4	0.8356	0.0434	0.75478	0.9251
4	61	2	0.8082	0.0461	0.72277	0.9038
5	59	2	0.7808	0.0484	0.69146	0.8817
6	57	2	0.7534	0.0504	0.66076	0.8591
7	55	1	0.7397	0.0514	0.64562	0.8476
9	54	2	0.7123	0.053	0.6157	0.8241
10	52	1	0.6986	0.0537	0.60092	0.8122
11	51	2	0.6712	0.055	0.57168	0.7881
12	49	4	0.6164	0.0569	0.5144	0.7387
13	45	2	0.589	0.0576	0.48633	0.7134
14	43	4	0.5342	0.0584	0.43124	0.6619
15	39	3	0.4932	0.0585	0.39082	0.6223
16	36	4	0.4384	0.0581	0.33811	0.5683
17	32	3	0.3973	0.0573	0.29947	0.527
18	29	5	0.3288	0.055	0.23688	0.4563
19	24	3	0.2877	0.053	0.20051	0.4127
20	21	1	0.274	0.0522	0.18859	0.398
21	20	1	0.2603	0.0514	0.1768	0.3832
22	19	2	0.2329	0.0495	0.15357	0.3531
23	17	1	0.2192	0.0484	0.14215	0.3379
24	16	1	0.2055	0.0473	0.13088	0.3226
25	15	1	0.1918	0.0461	0.11975	0.3071
26	14	1	0.1781	0.0448	0.10879	0.2915
27	13	1	0.1644	0.0434	0.098	0.2757
28	12	2	0.137	0.0402	0.07702	0.2436
29	10	1	0.1233	0.0385	0.06687	0.2273
74	9	1	0.1096	0.0366	0.05699	0.2107
75	8	1	0.0959	0.0345	0.04741	0.1939
76	7	1	0.0822	0.0321	0.03819	0.1769
77	6	1	0.0685	0.0296	0.02939	0.1596
78	5	1	0.0548	0.0266	0.02113	0.1421
89	4	1	0.0411	0.0232	0.01357	0.1245
90	3	1	0.0274	0.0191	0.00698	0.1075
91	2	1	0.0137	0.0136	0.00196	0.0959
92	1	1	0	NaN	NA	NA

Table A.73 Esme station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		61	61	22	17	31
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
0	61	1	0.9836	0.0163	0.95225	1
2	60	1	0.9672	0.0228	0.92354	1
3	59	1	0.9508	0.0277	0.89807	1
11	58	1	0.9344	0.0317	0.87433	0.999
12	57	2	0.9016	0.0381	0.82992	0.98
13	55	3	0.8525	0.0454	0.76795	0.946
14	52	4	0.7869	0.0524	0.69055	0.897
15	48	4	0.7213	0.0574	0.61713	0.843
16	44	4	0.6557	0.0608	0.54672	0.786
17	40	3	0.6066	0.0625	0.49556	0.742
18	37	2	0.5738	0.0633	0.46217	0.712
19	35	2	0.541	0.0638	0.42933	0.682
20	33	1	0.5246	0.0639	0.41311	0.666
21	32	1	0.5082	0.064	0.39703	0.65
22	31	1	0.4918	0.064	0.38107	0.635
23	30	1	0.4754	0.0639	0.36525	0.619
24	29	1	0.459	0.0638	0.34955	0.603
25	28	1	0.4426	0.0636	0.33399	0.587
26	27	1	0.4262	0.0633	0.31856	0.57
27	26	1	0.4098	0.063	0.30327	0.554
28	25	1	0.3934	0.0625	0.28811	0.537
29	24	1	0.377	0.0621	0.27309	0.521
30	23	1	0.3607	0.0615	0.25822	0.504
31	22	1	0.3443	0.0608	0.24349	0.487
32	21	1	0.3279	0.0601	0.22891	0.47
36	20	1	0.3115	0.0593	0.21448	0.452
37	19	1	0.2951	0.0584	0.20021	0.435
54	18	1	0.2787	0.0574	0.18612	0.417
55	17	1	0.2623	0.0563	0.17219	0.4
56	16	1	0.2459	0.0551	0.15846	0.382
57	15	1	0.2295	0.0538	0.14491	0.363
58	14	1	0.2131	0.0524	0.13158	0.345
59	13	1	0.1967	0.0509	0.11847	0.327
60	12	1	0.1803	0.0492	0.10561	0.308
61	11	1	0.1639	0.0474	0.09301	0.289
72	10	1	0.1475	0.0454	0.08071	0.27
73	9	1	0.1311	0.0432	0.06875	0.25

Table A.74 *Cont'd*

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		61	61	22	17	31
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
74	8	1	0.1148	0.0408	0.05716	0.23
113	7	1	0.0984	0.0381	0.04601	0.21
114	6	1	0.082	0.0351	0.03539	0.19
115	5	1	0.0656	0.0317	0.02543	0.169
116	4	1	0.0492	0.0277	0.01631	0.148
117	3	1	0.0328	0.0228	0.00839	0.128
118	2	1	0.0164	0.0163	0.00235	0.115
119	1	1	0	NaN	NA	NA

Table A.75 Esme station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0492	1	0.0411	0	0.0164
2	0.0984	2	0.1096	2	0.0328
3	0.1639	3	0.1644	3	0.0492
4	0.2623	4	0.1918	6	0.05535
5	0.3279	5	0.2192	11	0.0656
6	0.377	6	0.2466	12	0.0984
7	0.459	7	0.2603	13	0.1475
8	0.541	9	0.2877	14	0.2131
9	0.623	10	0.3014	15	0.2787
10	0.6885	11	0.3288	16	0.3443
11	0.7377	12	0.3836	17	0.3934
12	0.7869	13	0.411	18	0.4262
13	0.8197	14	0.4658	19	0.459
16	0.8361	15	0.5068	20	0.4754
17	0.8689	16	0.5616	21	0.4918
18	0.8852	17	0.6027	22	0.5082
21	0.918	18	0.6712	23	0.5246
22	0.9344	19	0.7123	24	0.541
23	0.9508	20	0.726	25	0.5574
29	0.9672	21	0.7397	26	0.5738
53	0.9836	22	0.7671	27	0.5902
64	1	23	0.7808	28	0.6066
		24	0.7945	29	0.623
		25	0.8082	30	0.6393
		26	0.8219	31	0.6557
		27	0.8356	32	0.6721
		28	0.863	36	0.6885
		29	0.8767	37	0.7049
		74	0.8904	54	0.7213
		75	0.9041	55	0.7377
		76	0.9178	56	0.7541
		77	0.9315	57	0.7705
		78	0.9452	58	0.7869
		89	0.9589	59	0.8033
		90	0.9726	60	0.8197
		91	0.9863	61	0.8361
		92	1	72	0.8525
				73	0.8689
				74	0.8852

Table A.75 *Cont'd*

Drought Risk (SPI12)	
Time	Time
113	0.9016
114	0.918
115	0.9344
116	0.9508
117	0.9672
118	0.9836
119	1

Table A.76 Esme station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		75	75	11	9	13
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	75	2	0.9733	0.0186	0.93755	10.000
2	73	2	0.9467	0.0259	0.89716	0.9989
3	71	1	0.9333	0.0288	0.87855	0.9915
4	70	3	0.8933	0.0356	0.82613	0.966
5	67	3	0.8533	0.0409	0.77691	0.9373
6	64	3	0.8133	0.045	0.72976	0.9065
7	61	6	0.7333	0.0511	0.63978	0.8406
8	55	6	0.6533	0.055	0.55404	0.7704
9	49	5	0.5867	0.0569	0.48517	0.7094
10	44	6	0.5067	0.0577	0.40526	0.6334
11	38	4	0.4533	0.0575	0.35358	0.5812
12	34	3	0.4133	0.0569	0.31565	0.5412
13	31	4	0.36	0.0554	0.26623	0.4868
14	27	3	0.32	0.0539	0.23008	0.4451
15	24	3	0.28	0.0518	0.19478	0.4025
16	21	3	0.24	0.0493	0.16044	0.359
17	18	3	0.2	0.0462	0.12719	0.3145
18	15	3	0.16	0.0423	0.09526	0.2687
19	12	4	0.1067	0.0356	0.05541	0.2053
20	8	1	0.0933	0.0336	0.0461	0.189
22	7	2	0.0667	0.0288	0.02859	0.1555
23	5	2	0.04	0.0226	0.0132	0.1212
35	3	1	0.0267	0.0186	0.00679	0.1047
47	2	1	0.0133	0.0132	0.0019	0.0934
48	1	1	0	NaN	NA	NA

Table A.77 Esme station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		77	77	15	13	17
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	77	4	0.9481	0.0253	0.89976	0.999
2	73	5	0.8831	0.0366	0.81419	0.958
3	68	3	0.8442	0.0413	0.76691	0.929
4	65	3	0.8052	0.0451	0.72142	0.899
5	62	2	0.7792	0.0473	0.69187	0.878
6	60	3	0.7403	0.05	0.64852	0.845
7	57	1	0.7273	0.0508	0.6343	0.834
8	56	2	0.7013	0.0522	0.60617	0.811
9	54	1	0.6883	0.0528	0.59226	0.8
10	53	1	0.6753	0.0534	0.57843	0.788
11	52	3	0.6364	0.0548	0.5375	0.753
12	49	2	0.6104	0.0556	0.51063	0.73
13	47	2	0.5844	0.0562	0.48408	0.706
14	45	3	0.5455	0.0567	0.44484	0.669
15	42	4	0.4935	0.057	0.39357	0.619
16	38	5	0.4286	0.0564	0.33114	0.555
17	33	6	0.3506	0.0544	0.25874	0.475
18	27	7	0.2597	0.05	0.17815	0.379
19	20	5	0.1948	0.0451	0.1237	0.307
20	15	4	0.1429	0.0399	0.08266	0.247
21	11	2	0.1169	0.0366	0.06326	0.216
22	9	1	0.1039	0.0348	0.05392	0.2
23	8	1	0.0909	0.0328	0.04486	0.184
28	7	1	0.0779	0.0305	0.03614	0.168
29	6	1	0.0649	0.0281	0.02782	0.152
34	5	1	0.0519	0.0253	0.02001	0.135
37	4	1	0.039	0.0221	0.01285	0.118
74	3	1	0.026	0.0181	0.00661	0.102
75	2	1	0.013	0.0129	0.00185	0.091
76	1	1	0	NaN	NA	NA

Table A.78 Esme station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		82	82	18.5	16	21
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	82	3	0.9634	0.0207	0.92362	10.000
6	79	1	0.9512	0.0238	0.90572	0.999
7	78	1	0.939	0.0264	0.88864	0.9923
8	77	1	0.9268	0.0288	0.87214	0.9849
9	76	1	0.9146	0.0309	0.85611	0.9772
10	75	2	0.8902	0.0345	0.82509	0.9605
11	73	3	0.8537	0.039	0.78049	0.9337
12	70	5	0.7927	0.0448	0.70962	0.8855
13	65	4	0.7439	0.0482	0.65518	0.8446
14	61	4	0.6951	0.0508	0.60229	0.8023
15	57	4	0.6463	0.0528	0.55072	0.7586
16	53	5	0.5854	0.0544	0.48788	0.7023
17	48	4	0.5366	0.0551	0.43882	0.6561
18	44	3	0.5	0.0552	0.40269	0.6208
19	41	4	0.4512	0.055	0.3554	0.5729
20	37	3	0.4146	0.0544	0.32061	0.5362
21	34	3	0.378	0.0535	0.2864	0.499
22	31	2	0.3537	0.0528	0.26394	0.4739
23	29	2	0.3293	0.0519	0.24176	0.4484
24	27	3	0.2927	0.0502	0.20906	0.4098
25	24	2	0.2683	0.0489	0.18766	0.3836
26	22	1	0.2561	0.0482	0.17709	0.3703
27	21	1	0.2439	0.0474	0.16661	0.357
28	20	1	0.2317	0.0466	0.15623	0.3436
29	19	1	0.2195	0.0457	0.14595	0.3301
30	18	1	0.2073	0.0448	0.13578	0.3165
31	17	1	0.1951	0.0438	0.12572	0.3028
32	16	1	0.1829	0.0427	0.11577	0.289
33	15	1	0.1707	0.0416	0.10596	0.2751
34	14	1	0.1585	0.0403	0.09629	0.261
35	13	1	0.1463	0.039	0.08676	0.2468
36	12	1	0.1341	0.0376	0.0774	0.2325
37	11	1	0.122	0.0361	0.06823	0.218
41	10	1	0.1098	0.0345	0.05925	0.2033
64	9	1	0.0976	0.0328	0.05051	0.1884
65	8	1	0.0854	0.0309	0.04203	0.1734
66	7	1	0.0732	0.0288	0.03387	0.1581

Table A.78 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		82	82	18.5	16	21
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
67	6	1	0.061	0.0264	0.02608	0.1426
68	5	1	0.0488	0.0238	0.01876	0.1269
69	4	1	0.0366	0.0207	0.01205	0.1111
72	3	1	0.0244	0.017	0.0062	0.0959
73	2	1	0.0122	0.0121	0.00174	0.0855
74	1	1	0	NaN	NA	NA

Table A.79 Esme station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0267	1	0.0519	1	0.0366
2	0.0533	2	0.1169	3	0.04148
3	0.0667	3	0.1558	6	0.0488
4	0.1067	4	0.1948	7	0.061
5	0.1467	5	0.2208	8	0.0732
6	0.1867	6	0.2597	9	0.0854
7	0.2667	7	0.2727	10	0.1098
8	0.3467	8	0.2987	11	0.1463
9	0.4133	9	0.3117	12	0.2073
10	0.4933	10	0.3247	13	0.2561
11	0.5467	11	0.3636	14	0.3049
12	0.5867	12	0.3896	15	0.3537
13	0.64	13	0.4156	16	0.4146
14	0.68	14	0.4545	17	0.4634
15	0.72	15	0.5065	18	0.5
16	0.76	16	0.5714	19	0.5488
17	0.8	17	0.6494	20	0.5854
18	0.84	18	0.7403	21	0.622
19	0.8933	19	0.8052	22	0.6463
20	0.9067	20	0.8571	23	0.6707
22	0.9333	21	0.8831	24	0.7073
23	0.96	22	0.8961	25	0.7317
35	0.9733	23	0.9091	26	0.7439
47	0.9867	28	0.9221	27	0.7561
48	1	29	0.9351	28	0.7683
		34	0.9481	29	0.7805
		37	0.961	30	0.7927
		74	0.974	31	0.8049
		75	0.987	32	0.8171
		76	1	33	0.8293
				34	0.8415
				35	0.8537
				36	0.8659
				37	0.878
				41	0.8902
				64	0.9024
				65	0.9146
				66	0.9268
				67	0.939
				68	0.9512
				69	0.9634
				72	0.9756
				73	0.9878
				74	1

Table A.80 Foca station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		66	66	8.5	6	10
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
0	66	1	0.9848	0.015	0.95581	1
1	65	5	0.9091	0.0354	0.84231	0.981
2	60	4	0.8485	0.0441	0.76625	0.94
3	56	6	0.7576	0.0528	0.66093	0.868
4	50	5	0.6818	0.0573	0.57822	0.804
5	45	4	0.6212	0.0597	0.51455	0.75
6	41	2	0.5909	0.0605	0.48344	0.722
7	39	1	0.5758	0.0608	0.46806	0.708
8	38	5	0.5	0.0615	0.39282	0.636
9	33	8	0.3788	0.0597	0.27811	0.516
10	25	6	0.2879	0.0557	0.19698	0.421
11	19	5	0.2121	0.0503	0.13325	0.338
12	14	2	0.1818	0.0475	0.10899	0.303
13	12	2	0.1515	0.0441	0.08561	0.268
14	10	2	0.1212	0.0402	0.0633	0.232
15	8	3	0.0758	0.0326	0.03262	0.176
16	5	1	0.0606	0.0294	0.02344	0.157
23	4	1	0.0455	0.0256	0.01505	0.137
26	3	1	0.0303	0.0211	0.00774	0.119
27	2	1	0.0152	0.015	0.00217	0.106
38	1	1	0	NaN	NA	NA

Table A.81 Foca station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		70	70	11	9	13
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	70	7	0.9	0.0359	0.8324	0.973
2	63	5	0.8286	0.045	0.74482	0.922
3	58	5	0.7571	0.0513	0.66307	0.865
4	53	1	0.7429	0.0522	0.64721	0.853
6	52	3	0.7	0.0548	0.60047	0.816
7	49	2	0.6714	0.0561	0.56994	0.791
8	47	4	0.6143	0.0582	0.51021	0.74
9	43	3	0.5714	0.0591	0.4665	0.7
10	40	4	0.5143	0.0597	0.40957	0.646
11	36	3	0.4714	0.0597	0.36786	0.604
12	33	5	0.4	0.0586	0.30023	0.533
13	28	7	0.3	0.0548	0.20976	0.429
14	21	4	0.2429	0.0513	0.16059	0.367
15	17	3	0.2	0.0478	0.12519	0.32
16	14	1	0.1857	0.0465	0.11371	0.303
17	13	1	0.1714	0.045	0.10243	0.287
19	12	2	0.1429	0.0418	0.08048	0.254
20	10	2	0.1143	0.038	0.05953	0.219
23	8	1	0.1	0.0359	0.04952	0.202
26	7	1	0.0857	0.0335	0.03988	0.184
27	6	1	0.0714	0.0308	0.03069	0.166
28	5	1	0.0571	0.0277	0.02206	0.148
29	4	1	0.0429	0.0242	0.01417	0.13
39	3	1	0.0286	0.0199	0.00729	0.112
41	2	1	0.0143	0.0142	0.00204	0.1
42	1	1	0	NaN	NA	NA

Table A.82 Foca station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		64	64	10.5	7	19
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
0	64	1	0.9844	0.0155	0.95445	1
1	63	4	0.9219	0.0335	0.85842	0.99
2	59	4	0.8594	0.0435	0.77829	0.949
3	55	5	0.7812	0.0517	0.68626	0.889
4	50	4	0.7188	0.0562	0.61662	0.838
5	46	4	0.6562	0.0594	0.54962	0.784
6	42	2	0.625	0.0605	0.51697	0.756
7	40	2	0.5938	0.0614	0.48483	0.727
8	38	2	0.5625	0.062	0.4532	0.698
9	36	1	0.5469	0.0622	0.43756	0.684
10	35	3	0.5	0.0625	0.39135	0.639
11	32	2	0.4688	0.0624	0.36114	0.608
13	30	1	0.4531	0.0622	0.3462	0.593
16	29	1	0.4375	0.062	0.33138	0.578
17	28	1	0.4219	0.0617	0.31669	0.562
18	27	2	0.3906	0.061	0.28765	0.53
19	25	2	0.3594	0.06	0.25911	0.498
20	23	3	0.3125	0.0579	0.21729	0.449
21	20	2	0.2812	0.0562	0.19011	0.416
22	18	1	0.2656	0.0552	0.17675	0.399
23	17	1	0.25	0.0541	0.16355	0.382
24	16	1	0.2344	0.053	0.15052	0.365
25	15	2	0.2031	0.0503	0.12503	0.33
27	13	1	0.1875	0.0488	0.11259	0.312
28	12	1	0.1719	0.0472	0.10038	0.294
29	11	1	0.1562	0.0454	0.08842	0.276
36	10	1	0.1406	0.0435	0.07674	0.258
43	9	1	0.125	0.0413	0.06537	0.239
44	8	1	0.1094	0.039	0.05436	0.22
45	7	1	0.0938	0.0364	0.04377	0.201
46	6	1	0.0781	0.0335	0.03367	0.181
47	5	1	0.0625	0.0303	0.0242	0.161
48	4	1	0.0469	0.0264	0.01553	0.141
70	3	1	0.0312	0.0217	0.00799	0.122
71	2	1	0.0156	0.0155	0.00224	0.109
72	1	1	0	NaN	NA	NA

Table A.83 Foca station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
0	0.0152	1	0.1	0	0.0156
1	0.0909	2	0.1714	1	0.0781
2	0.1515	3	0.2429	2	0.1406
3	0.2424	4	0.2571	3	0.2188
4	0.3182	6	0.3	4	0.2812
5	0.3788	7	0.3286	5	0.3438
6	0.4091	8	0.3857	6	0.375
7	0.4242	9	0.4286	7	0.4062
8	0.5	10	0.4857	8	0.4375
9	0.6212	11	0.5286	9	0.4531
10	0.7121	12	0.6	10	0.5
11	0.7879	13	0.7	11	0.5312
12	0.8182	14	0.7571	12	0.53905
13	0.8485	15	0.8	13	0.5469
14	0.8788	16	0.8143	16	0.5625
15	0.9242	17	0.8286	17	0.5781
16	0.9394	19	0.8571	18	0.6094
23	0.9545	20	0.8857	19	0.6406
26	0.9697	23	0.9	20	0.6875
27	0.9848	26	0.9143	21	0.7188
38	1	27	0.9286	22	0.7344
		28	0.9429	23	0.75
		29	0.9571	24	0.7656
		39	0.9714	25	0.7969
		41	0.9857	27	0.8125
		42	1	28	0.8281
				29	0.8438
				36	0.8594
				43	0.875
				44	0.8906
				45	0.9062
				46	0.9219
				47	0.9375
				48	0.9531
				70	0.9688
				71	0.9844
				72	1

Table A.84 Foca station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		81	81	7	5	9
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
0	81	1	0.9877	0.0123	0.9639	10.000
1	80	9	0.8765	0.0366	0.80775	0.9512
2	71	5	0.8148	0.0432	0.73446	0.904
3	66	9	0.7037	0.0507	0.61097	0.8105
4	57	4	0.6543	0.0528	0.55853	0.7665
5	53	6	0.5802	0.0548	0.48214	0.6983
6	47	5	0.5185	0.0555	0.42037	0.6396
7	42	7	0.4321	0.055	0.33663	0.5546
8	35	3	0.3951	0.0543	0.30174	0.5172
9	32	4	0.3457	0.0528	0.25618	0.4664
10	28	5	0.284	0.0501	0.20093	0.4013
11	23	4	0.2346	0.0471	0.15828	0.3476
12	19	3	0.1975	0.0442	0.12735	0.3064
14	16	1	0.1852	0.0432	0.11728	0.2924
15	15	2	0.1605	0.0408	0.09753	0.2641
16	13	2	0.1358	0.0381	0.0784	0.2352
17	11	4	0.0864	0.0312	0.04257	0.1754
18	7	1	0.0741	0.0291	0.0343	0.16
20	6	1	0.0617	0.0267	0.02641	0.1443
21	5	1	0.0494	0.0241	0.01899	0.1284
38	4	1	0.037	0.021	0.0122	0.1124
39	3	1	0.0247	0.0172	0.00628	0.097
40	2	1	0.0123	0.0123	0.00176	0.0866
41	1	1	0	NaN	NA	NA

Table A.85 Foca station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		85	85	10	8	12
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
0	85	1	0.9882	0.0117	0.96558	10.000
1	84	8	0.8941	0.0334	0.83104	0.962
2	76	5	0.8353	0.0402	0.76005	0.918
3	71	3	0.8	0.0434	0.71933	0.8897
4	68	2	0.7765	0.0452	0.69277	0.8703
5	66	2	0.7529	0.0468	0.66661	0.8504
6	64	6	0.6824	0.0505	0.59022	0.7889
7	58	7	0.6	0.0531	0.50439	0.7137
8	51	3	0.5647	0.0538	0.46856	0.6806
9	48	5	0.5059	0.0542	0.41002	0.6242
10	43	5	0.4471	0.0539	0.35293	0.5663
11	38	5	0.3882	0.0529	0.2973	0.507
12	33	5	0.3294	0.051	0.24323	0.4461
13	28	4	0.2824	0.0488	0.20119	0.3963
14	24	2	0.2588	0.0475	0.18062	0.3709
18	22	1	0.2471	0.0468	0.17046	0.3581
19	21	2	0.2235	0.0452	0.1504	0.3322
20	19	1	0.2118	0.0443	0.14052	0.3191
22	18	1	0.2	0.0434	0.13073	0.306
23	17	2	0.1765	0.0413	0.11149	0.2793
24	15	2	0.1529	0.039	0.09274	0.2522
26	13	1	0.1412	0.0378	0.08357	0.2385
27	12	1	0.1294	0.0364	0.07456	0.2246
28	11	1	0.1176	0.0349	0.06573	0.2106
29	10	1	0.1059	0.0334	0.05709	0.1964
38	9	1	0.0941	0.0317	0.04867	0.182
39	8	1	0.0824	0.0298	0.0405	0.1674
40	7	1	0.0706	0.0278	0.03264	0.1527
41	6	1	0.0588	0.0255	0.02513	0.1377
42	5	1	0.0471	0.023	0.01808	0.1225
63	4	1	0.0353	0.02	0.01161	0.1072
64	3	1	0.0235	0.0164	0.00598	0.0926
65	2	1	0.0118	0.0117	0.00168	0.0826
66	1	1	0	NaN	NA	NA

Table A.86 Foca station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		72	72	13.5	9	18
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
0	72	1	0.9861	0.0138	0.95945	10.000
1	71	5	0.9167	0.0326	0.855	0.9828
2	66	3	0.875	0.039	0.80185	0.9548
3	63	3	0.8333	0.0439	0.75155	0.924
4	60	4	0.7778	0.049	0.68744	0.88
5	56	3	0.7361	0.0519	0.64103	0.8453
6	53	3	0.6944	0.0543	0.59579	0.8094
7	50	4	0.6389	0.0566	0.53704	0.7601
8	46	2	0.6111	0.0575	0.50827	0.7348
9	44	1	0.5972	0.0578	0.49403	0.722
10	43	2	0.5694	0.0584	0.46583	0.6961
11	41	1	0.5556	0.0586	0.45186	0.683
12	40	3	0.5139	0.0589	0.41049	0.6433
13	37	1	0.5	0.0589	0.39688	0.6299
14	36	1	0.4861	0.0589	0.38335	0.6164
15	35	2	0.4583	0.0587	0.35656	0.5892
16	33	3	0.4167	0.0581	0.31703	0.5476
17	30	3	0.375	0.0571	0.27831	0.5053
18	27	3	0.3333	0.0556	0.24044	0.4621
19	24	3	0.2917	0.0536	0.2035	0.418
20	21	4	0.2361	0.0501	0.15584	0.3577
21	17	2	0.2083	0.0479	0.1328	0.3268
22	15	1	0.1944	0.0466	0.12151	0.3112
23	14	1	0.1806	0.0453	0.11038	0.2953
24	13	1	0.1667	0.0439	0.09943	0.2794
25	12	1	0.1528	0.0424	0.08868	0.2632
26	11	1	0.1389	0.0408	0.07814	0.2469
27	10	2	0.1111	0.037	0.05781	0.2135
28	8	1	0.0972	0.0349	0.04809	0.1965
32	7	1	0.0833	0.0326	0.03874	0.1793
33	6	1	0.0694	0.03	0.02981	0.1618
34	5	1	0.0556	0.027	0.02143	0.144
63	4	1	0.0417	0.0235	0.01376	0.1261
65	3	1	0.0278	0.0194	0.00708	0.1089
66	2	1	0.0139	0.0138	0.00198	0.0973
67	1	1	0	NaN	NA	NA

Table A.87 Foca station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
0	0.0123	0	0.0118	0	0.0139
1	0.1235	1	0.1059	1	0.0833
2	0.1852	2	0.1647	2	0.125
3	0.2963	3	0.2	3	0.1667
4	0.3457	4	0.2235	4	0.2222
5	0.4198	5	0.2471	5	0.2639
6	0.4815	6	0.3176	6	0.3056
7	0.5679	7	0.4	7	0.3611
8	0.6049	8	0.4353	8	0.3889
9	0.6543	9	0.4941	9	0.4028
10	0.716	10	0.5529	10	0.4306
11	0.7654	11	0.6118	11	0.4444
12	0.8025	12	0.6706	12	0.4861
14	0.8148	13	0.7176	13	0.5
15	0.8395	14	0.7412	14	0.5139
16	0.8642	18	0.7529	15	0.5417
17	0.9136	19	0.7765	16	0.5833
18	0.9259	20	0.7882	17	0.625
20	0.9383	22	0.8	18	0.6667
21	0.9506	23	0.8235	19	0.7083
38	0.963	24	0.8471	20	0.7639
39	0.9753	26	0.8588	21	0.7917
40	0.9877	27	0.8706	22	0.8056
41	1	28	0.8824	23	0.8194
		29	0.8941	24	0.8333
		38	0.9059	25	0.8472
		39	0.9176	26	0.8611
		40	0.9294	27	0.8889
		41	0.9412	28	0.9028
		42	0.9529	32	0.9167
		63	0.9647	33	0.9306
		64	0.9765	34	0.9444
		65	0.9882	63	0.9583
		66	1	65	0.9722
				66	0.9861
				67	1

Table A.88 Gediz station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		106	106	7	6	9
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	106	6	0.9434	0.02244	0.90042	0.9884
2	100	5	0.89623	0.02962	0.84001	0.9562
3	95	6	0.83962	0.03564	0.77259	0.9125
4	89	11	0.73585	0.04282	0.65653	0.8248
5	78	11	0.63208	0.04684	0.54663	0.7309
6	67	10	0.53774	0.04843	0.45073	0.6415
7	57	5	0.49057	0.04856	0.40406	0.5956
8	52	7	0.42453	0.04801	0.34013	0.5299
9	45	8	0.34906	0.0463	0.26915	0.4527
10	37	7	0.28302	0.04375	0.20904	0.3832
11	30	5	0.23585	0.04123	0.16742	0.3322
13	25	3	0.20755	0.03939	0.14308	0.3011
16	22	1	0.19811	0.03871	0.13508	0.2906
17	21	2	0.17925	0.03725	0.11927	0.2694
18	19	2	0.16038	0.03564	0.10375	0.2479
20	17	2	0.14151	0.03385	0.08854	0.2262
21	15	2	0.12264	0.03186	0.07371	0.2041
22	13	2	0.10377	0.02962	0.05931	0.1816
23	11	2	0.08491	0.02707	0.04545	0.1586
24	9	1	0.07547	0.02566	0.03876	0.1469
25	8	1	0.06604	0.02412	0.03228	0.1351
26	7	3	0.03774	0.01851	0.01443	0.0987
29	4	2	0.01887	0.01322	0.00478	0.0745
31	2	1	0.00943	0.00939	0.00134	0.0664
32	1	1	0	NaN	NA	NA

Table A.89 Gediz station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		95	95	10	8	12
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	95	1	0.9895	0.0105	0.96916	1
2	94	6	0.9263	0.0268	0.87524	0.9804
3	88	4	0.8842	0.0328	0.82215	0.951
4	84	4	0.8421	0.0374	0.77188	0.9187
5	80	4	0.8	0.041	0.72348	0.8846
6	76	5	0.7474	0.0446	0.66491	0.8401
7	71	8	0.6632	0.0485	0.57461	0.7653
8	63	8	0.5789	0.0507	0.48771	0.6873
9	55	6	0.5158	0.0513	0.42448	0.6267
10	49	5	0.4632	0.0512	0.373	0.5751
11	44	4	0.4211	0.0507	0.33261	0.533
12	40	4	0.3789	0.0498	0.29294	0.4902
13	36	3	0.3474	0.0489	0.26369	0.4576
14	33	4	0.3053	0.0472	0.22539	0.4134
15	29	2	0.2842	0.0463	0.20656	0.3911
16	27	3	0.2526	0.0446	0.17876	0.357
17	24	2	0.2316	0.0433	0.16055	0.334
18	22	4	0.1895	0.0402	0.125	0.2872
19	18	2	0.1684	0.0384	0.10773	0.2633
20	16	1	0.1579	0.0374	0.09924	0.2512
21	15	1	0.1474	0.0364	0.09085	0.239
22	14	1	0.1368	0.0353	0.08258	0.2268
23	13	2	0.1158	0.0328	0.06643	0.2018
24	11	2	0.0947	0.03	0.05088	0.1764
25	9	1	0.0842	0.0285	0.04339	0.1634
30	8	1	0.0737	0.0268	0.03612	0.1503
32	7	1	0.0632	0.025	0.02911	0.137
33	6	1	0.0526	0.0229	0.02242	0.1235
39	5	1	0.0421	0.0206	0.01614	0.1099
43	4	1	0.0316	0.0179	0.01037	0.0962
55	3	1	0.0211	0.0147	0.00534	0.083
80	2	1	0.0105	0.0105	0.0015	0.074
89	1	1	0	NaN	NA	NA

Table A.90 Gediz station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		94	94	16	13	19
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
0	94	1	0.9894	0.0106	0.96884	1
1	93	5	0.9362	0.0252	0.88804	0.9869
2	88	6	0.8723	0.0344	0.80742	0.9425
3	82	5	0.8191	0.0397	0.74492	0.9008
4	77	2	0.7979	0.0414	0.72068	0.8833
5	75	3	0.766	0.0437	0.68497	0.8565
6	72	2	0.7447	0.045	0.66155	0.8383
7	70	2	0.7234	0.0461	0.6384	0.8197
8	68	2	0.7021	0.0472	0.61551	0.8009
9	66	3	0.6702	0.0485	0.5816	0.7723
10	63	3	0.6383	0.0496	0.54819	0.7432
11	60	1	0.6277	0.0499	0.53716	0.7334
12	59	2	0.6064	0.0504	0.51524	0.7136
13	57	3	0.5745	0.051	0.48273	0.6836
14	54	3	0.5426	0.0514	0.45064	0.6532
15	51	3	0.5106	0.0516	0.41895	0.6224
16	48	3	0.4787	0.0515	0.38768	0.5912
17	45	3	0.4468	0.0513	0.35681	0.5595
18	42	3	0.4149	0.0508	0.32634	0.5275
19	39	3	0.383	0.0501	0.2963	0.495
20	36	2	0.3617	0.0496	0.27652	0.4731
21	34	2	0.3404	0.0489	0.25693	0.4511
22	32	3	0.3085	0.0476	0.22795	0.4176
23	29	3	0.2766	0.0461	0.19946	0.3836
24	26	3	0.2447	0.0443	0.17153	0.349
25	23	2	0.2234	0.043	0.15325	0.3257
26	21	2	0.2021	0.0414	0.13527	0.302
27	19	2	0.1809	0.0397	0.11762	0.2781
28	17	1	0.1702	0.0388	0.10893	0.266
29	16	1	0.1596	0.0378	0.10034	0.2538
30	15	1	0.1489	0.0367	0.09186	0.2415
31	14	1	0.1383	0.0356	0.0835	0.2291
32	13	1	0.1277	0.0344	0.07526	0.2165
35	12	1	0.117	0.0332	0.06716	0.2039
56	11	1	0.1064	0.0318	0.05921	0.1911
87	10	1	0.0957	0.0303	0.05144	0.1782
88	9	1	0.0851	0.0288	0.04386	0.1651

Table A.90 *Cont'd*

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		94	94	16	13	19
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
89	8	1	0.0745	0.0271	0.03651	0.1519
90	7	1	0.0638	0.0252	0.02943	0.1384
91	6	1	0.0532	0.0231	0.02267	0.1248
92	5	1	0.0426	0.0208	0.01631	0.111
93	4	1	0.0319	0.0181	0.01048	0.0972
94	3	1	0.0213	0.0149	0.0054	0.0838
301	2	1	0.0106	0.0106	0.00151	0.0747
302	1	1	0	NaN	NA	NA

Table A.91 Gediz station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0566	1	0.0105	0	0.0106
2	0.10377	2	0.0737	1	0.0638
3	0.16038	3	0.1158	2	0.1277
4	0.26415	4	0.1579	3	0.1809
5	0.36792	5	0.2	4	0.2021
6	0.46226	6	0.2526	5	0.234
7	0.50943	7	0.3368	6	0.2553
8	0.57547	8	0.4211	7	0.2766
9	0.65094	9	0.4842	8	0.2979
10	0.71698	10	0.5368	9	0.3298
11	0.76415	11	0.5789	10	0.3617
12	0.73666	12	0.6211	11	0.3723
13	0.79245	13	0.6526	12	0.3936
16	0.80189	14	0.6947	13	0.4255
17	0.82075	15	0.7158	14	0.4574
18	0.83962	16	0.7474	15	0.4894
20	0.85849	17	0.7684	16	0.5213
21	0.87736	18	0.8105	17	0.5532
22	0.89623	19	0.8316	18	0.5851
23	0.91509	20	0.8421	19	0.617
24	0.92453	21	0.8526	20	0.6383
25	0.93396	22	0.8632	21	0.6596
26	0.96226	23	0.8842	22	0.6915

Table A.91 *Cont'd*

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
29	0.98113	24	0.9053	23	0.7234
31	0.99057	25	0.9158	24	0.7553
32	1	30	0.9263	25	0.7766
		32	0.9368	26	0.7979
		33	0.9474	27	0.8191
		39	0.9579	28	0.8298
		43	0.9684	29	0.8404
		55	0.9789	30	0.8511
		80	0.9895	31	0.8617
		89	1	32	0.8723
				35	0.883
				56	0.8936
				87	0.9043
				88	0.9149
				89	0.9255
				90	0.9362
				91	0.9468
				92	0.9574
				93	0.9681
				94	0.9787
				301	0.9894
				302	1

Table A.92 Gediz station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		115	115	9	9	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	115	3	0.9739	0.01486	0.94521	10.000
2	112	4	0.9391	0.0223	0.89643	0.9839
3	108	2	0.9217	0.02505	0.87394	0.9722
4	106	2	0.9043	0.02743	0.85216	0.9597
5	104	4	0.8696	0.03141	0.81014	0.9333
6	100	5	0.8261	0.03535	0.75964	0.8983
7	95	10	0.7391	0.04095	0.66308	0.8239
8	85	14	0.6174	0.04532	0.53466	0.7129
9	71	15	0.487	0.04661	0.40366	0.5874
10	56	12	0.3826	0.04532	0.30334	0.4826
11	44	12	0.2783	0.04179	0.20731	0.3735
12	32	6	0.2261	0.03901	0.16122	0.3171
13	26	2	0.2087	0.03789	0.1462	0.2979
14	24	3	0.1826	0.03603	0.12405	0.2688
15	21	4	0.1478	0.0331	0.09532	0.2293
16	17	3	0.1217	0.03049	0.07451	0.1989
17	14	2	0.1043	0.02851	0.06109	0.1783
20	12	1	0.0957	0.02743	0.05453	0.1678
21	11	2	0.0783	0.02505	0.0418	0.1465
22	9	1	0.0696	0.02372	0.03565	0.1357
23	8	1	0.0609	0.0223	0.02969	0.1248
24	7	1	0.0522	0.02074	0.02394	0.1137
25	6	1	0.0435	0.01902	0.01845	0.1025
32	5	1	0.0348	0.01709	0.01328	0.0911
36	4	1	0.0261	0.01486	0.00854	0.0797
37	3	1	0.0174	0.01219	0.0044	0.0687
42	2	1	0.0087	0.00866	0.00124	0.0612
67	1	1	0	NaN	NA	NA

Table A.93 Gediz station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		104	104	10.5	9	12
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	104	1	0.99038	0.00957	0.97181	10.000
2	103	2	0.97115	0.01641	0.93951	10.000
3	101	3	0.94231	0.02286	0.89855	0.9882
4	98	2	0.92308	0.02613	0.87326	0.9757
5	96	4	0.88462	0.03133	0.8253	0.9482
6	92	5	0.83654	0.03626	0.7684	0.9107
7	87	10	0.74038	0.04299	0.66074	0.8296
8	77	9	0.65385	0.04665	0.56852	0.752
9	68	8	0.57692	0.04845	0.48937	0.6801
10	60	8	0.5	0.04903	0.41257	0.606
11	52	10	0.40385	0.04811	0.31975	0.5101
12	42	6	0.34615	0.04665	0.2658	0.4508
13	36	3	0.31731	0.04564	0.23936	0.4206
14	33	1	0.30769	0.04526	0.23063	0.4105
15	32	1	0.29808	0.04485	0.22194	0.4003
16	31	2	0.27885	0.04397	0.20471	0.3798
17	29	1	0.26923	0.04349	0.19616	0.3695
18	28	2	0.25	0.04246	0.17921	0.3487
19	26	3	0.22115	0.0407	0.15419	0.3172
20	23	2	0.20192	0.03936	0.1378	0.2959
21	21	2	0.18269	0.03789	0.12167	0.2743
22	19	3	0.15385	0.03538	0.09803	0.2415
23	16	1	0.14423	0.03445	0.09031	0.2303
24	15	2	0.125	0.03243	0.07518	0.2078
25	13	1	0.11538	0.03133	0.06777	0.1965
36	12	1	0.10577	0.03016	0.06049	0.185
37	11	1	0.09615	0.02891	0.05334	0.1733
38	10	1	0.08654	0.02757	0.04635	0.1616
39	9	1	0.07692	0.02613	0.03953	0.1497
40	8	1	0.06731	0.02457	0.03291	0.1376
44	7	1	0.05769	0.02286	0.02653	0.1254
45	6	1	0.04808	0.02098	0.02044	0.1131
46	5	1	0.03846	0.01886	0.01471	0.1005
47	4	1	0.02885	0.01641	0.00946	0.088
48	3	1	0.01923	0.01347	0.00487	0.0759
118	2	1	0.00962	0.00957	0.00137	0.0676
119	1	1	0	NaN	NA	NA

Table A.94 Gediz station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		103	103	12	8	18
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
0	103	1	0.99029	0.00966	0.97153	10.000
1	102	8	0.91262	0.02782	0.85968	0.9688
2	94	7	0.84466	0.03569	0.77752	0.9176
3	87	8	0.76699	0.04165	0.68954	0.8531
4	79	7	0.69903	0.0452	0.61583	0.7935
5	72	3	0.6699	0.04633	0.58497	0.7672
6	69	3	0.64078	0.04727	0.55451	0.7405
7	66	3	0.61165	0.04802	0.52441	0.7134
8	63	3	0.58252	0.04859	0.49467	0.686
9	60	3	0.5534	0.04898	0.46526	0.6582
10	57	3	0.52427	0.04921	0.43618	0.6302
11	54	2	0.50485	0.04926	0.41697	0.6113
12	52	1	0.49515	0.04926	0.40742	0.6018
13	51	2	0.47573	0.04921	0.38843	0.5826
14	49	2	0.45631	0.04908	0.36958	0.5634
15	47	2	0.43689	0.04887	0.35088	0.544
16	45	2	0.41748	0.04859	0.33232	0.5245
17	43	2	0.39806	0.04823	0.31391	0.5048
18	41	1	0.38835	0.04802	0.30476	0.4949
19	40	1	0.37864	0.04779	0.29566	0.4849
20	39	1	0.36893	0.04754	0.28658	0.4749
21	38	3	0.33981	0.04667	0.25961	0.4448
22	35	3	0.31068	0.0456	0.23301	0.4142
23	32	2	0.29126	0.04477	0.2155	0.3937
24	30	3	0.26214	0.04333	0.18959	0.3624
25	27	3	0.23301	0.04165	0.16414	0.3308
26	24	2	0.21359	0.04038	0.14745	0.3094
27	22	2	0.19417	0.03898	0.13102	0.2878
28	20	2	0.17476	0.03742	0.11486	0.2659
29	18	1	0.16505	0.03658	0.1069	0.2548
30	17	1	0.15534	0.03569	0.09902	0.2437
31	16	2	0.13592	0.03377	0.08353	0.2212
32	14	2	0.1165	0.03161	0.06845	0.1983
33	12	1	0.1068	0.03043	0.06109	0.1867
35	11	1	0.09709	0.02917	0.05388	0.175
81	10	1	0.08738	0.02782	0.04681	0.1631
82	9	1	0.07767	0.02637	0.03992	0.1511

Table A.94 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		103	103	12	8	18
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
83	8	1	0.06796	0.0248	0.03324	0.139
84	7	1	0.05825	0.02308	0.0268	0.1266
85	6	1	0.04854	0.02118	0.02065	0.1141
86	5	1	0.03883	0.01904	0.01486	0.1015
87	4	1	0.02913	0.01657	0.00955	0.0888
88	3	1	0.01942	0.0136	0.00492	0.0766
133	2	1	0.00971	0.00966	0.00138	0.0683
187	1	1	0	NaN	NA	NA

Table A.95 Gediz station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0261	1	0.00962	0	0.00971
2	0.0609	2	0.02885	1	0.08738
3	0.0783	3	0.05769	2	0.15534
4	0.0957	4	0.07692	3	0.23301
5	0.1304	5	0.11538	4	0.30097
6	0.1739	6	0.16346	5	0.3301
7	0.2609	7	0.25962	6	0.35922
8	0.3826	8	0.34615	7	0.38835
9	0.513	9	0.42308	8	0.41748
10	0.6174	10	0.5	9	0.4466
11	0.7217	11	0.59615	10	0.47573
12	0.7739	12	0.65385	11	0.49515
13	0.7913	13	0.68269	12	0.50485
14	0.8174	14	0.69231	13	0.52427
15	0.8522	15	0.70192	14	0.54369
16	0.8783	16	0.72115	15	0.56311
17	0.8957	17	0.73077	16	0.58252
20	0.9043	18	0.75	17	0.60194
21	0.9217	19	0.77885	18	0.61165
22	0.9304	20	0.79808	19	0.62136
23	0.9391	21	0.81731	20	0.63107
24	0.9478	22	0.84615	21	0.66019
25	0.9565	23	0.85577	22	0.68932
32	0.9652	24	0.875	23	0.70874
36	0.9739	25	0.88462	24	0.73786
37	0.9826	36	0.89423	25	0.76699
42	0.9913	37	0.90385	26	0.78641
67	1	38	0.91346	27	0.80583
		39	0.92308	28	0.82524
		40	0.93269	29	0.83495
		44	0.94231	30	0.84466
		45	0.95192	31	0.86408
		46	0.96154	32	0.8835
		47	0.97115	33	0.8932
		48	0.98077	35	0.90291
		118	0.99038	81	0.91262
		119	1	82	0.92233
				83	0.93204
				84	0.94175

Table A.95 *Cont'd*

Drought Risk (SPEI12)	
Time	Time
85	0.95146
86	0.96117
87	0.97087
88	0.98058
133	0.99029
187	1

Table A.96 Golmarmara station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		75	75	8	6	10
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	75	5	0.9333	0.0288	0.87855	0.9915
2	70	2	0.9067	0.0336	0.84316	0.975
3	68	9	0.7867	0.0473	0.69921	0.8851
4	59	7	0.6933	0.0532	0.59645	0.806
5	52	2	0.6667	0.0544	0.56808	0.7824
6	50	6	0.5867	0.0569	0.48517	0.7094
7	44	6	0.5067	0.0577	0.40526	0.6334
8	38	4	0.4533	0.0575	0.35358	0.5812
9	34	4	0.4	0.0566	0.30317	0.5278
10	30	4	0.3467	0.055	0.25409	0.473
11	26	2	0.32	0.0539	0.23008	0.4451
12	24	1	0.3067	0.0532	0.21821	0.431
13	23	3	0.2667	0.0511	0.18322	0.3881
14	20	2	0.24	0.0493	0.16044	0.359
15	18	4	0.1867	0.045	0.11639	0.2994
16	14	3	0.1467	0.0409	0.08497	0.2532
17	11	1	0.1333	0.0393	0.07488	0.2374
18	10	2	0.1067	0.0356	0.05541	0.2053
20	8	1	0.0933	0.0336	0.0461	0.189
21	7	2	0.0667	0.0288	0.02859	0.1555
25	5	1	0.0533	0.0259	0.02055	0.1384
30	4	1	0.04	0.0226	0.0132	0.1212
31	3	1	0.0267	0.0186	0.00679	0.1047
37	2	1	0.0133	0.0132	0.0019	0.0934
38	1	1	0	NaN	NA	NA

Table A.97 Golmarmara station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		70	70	9.5	8	12
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	70	5	0.9286	0.0308	0.87016	0.991
2	65	4	0.8714	0.04	0.79644	0.953
3	61	4	0.8143	0.0465	0.7281	0.911
4	57	3	0.7714	0.0502	0.67907	0.876
5	54	3	0.7286	0.0532	0.6315	0.841
6	51	4	0.6714	0.0561	0.56994	0.791
7	47	4	0.6143	0.0582	0.51021	0.74
8	43	5	0.5429	0.0595	0.43785	0.673
9	38	3	0.5	0.0598	0.39558	0.632
10	35	4	0.4429	0.0594	0.34053	0.576
11	31	5	0.3714	0.0578	0.27386	0.504
12	26	2	0.3429	0.0567	0.24789	0.474
13	24	2	0.3143	0.0555	0.22236	0.444
14	22	1	0.3	0.0548	0.20976	0.429
15	21	1	0.2857	0.054	0.19727	0.414
16	20	1	0.2714	0.0532	0.18492	0.398
17	19	2	0.2429	0.0513	0.16059	0.367
18	17	2	0.2143	0.049	0.13683	0.336
19	15	2	0.1857	0.0465	0.11371	0.303
20	13	2	0.1571	0.0435	0.09134	0.27
21	11	1	0.1429	0.0418	0.08048	0.254
22	10	2	0.1143	0.038	0.05953	0.219
23	8	1	0.1	0.0359	0.04952	0.202
24	7	1	0.0857	0.0335	0.03988	0.184
25	6	1	0.0714	0.0308	0.03069	0.166
26	5	1	0.0571	0.0277	0.02206	0.148
41	4	1	0.0429	0.0242	0.01417	0.13
42	3	1	0.0286	0.0199	0.00729	0.112
43	2	1	0.0143	0.0142	0.00204	0.1
61	1	1	0	NaN	NA	NA

Table A.98 Golmarmara station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		59	59	15	12	20
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
0	59	1	0.9831	0.0168	0.95066	1
1	58	2	0.9492	0.0286	0.89472	1
2	56	3	0.8983	0.0393	0.8244	0.979
3	53	1	0.8814	0.0421	0.80259	0.968
4	52	2	0.8475	0.0468	0.76051	0.944
5	50	2	0.8136	0.0507	0.72001	0.919
6	48	1	0.7966	0.0524	0.70025	0.906
7	47	1	0.7797	0.054	0.68076	0.893
8	46	2	0.7458	0.0567	0.64254	0.866
9	44	3	0.6949	0.0599	0.58682	0.823
10	41	1	0.678	0.0608	0.56863	0.808
11	40	1	0.661	0.0616	0.55062	0.794
12	39	3	0.6102	0.0635	0.49759	0.748
13	36	3	0.5593	0.0646	0.44596	0.701
14	33	2	0.5254	0.065	0.41228	0.67
15	31	2	0.4915	0.0651	0.37917	0.637
16	29	2	0.4576	0.0649	0.34663	0.604
17	27	2	0.4237	0.0643	0.31467	0.571
18	25	2	0.3898	0.0635	0.28329	0.536
19	23	2	0.3559	0.0623	0.25252	0.502
20	21	1	0.339	0.0616	0.23737	0.484
21	20	1	0.322	0.0608	0.22239	0.466
22	19	1	0.3051	0.0599	0.20757	0.448
23	18	2	0.2712	0.0579	0.17848	0.412
24	16	2	0.2373	0.0554	0.15018	0.375
72	14	1	0.2203	0.054	0.13634	0.356
96	13	1	0.2034	0.0524	0.12275	0.337
97	12	1	0.1864	0.0507	0.10941	0.318
135	11	1	0.1695	0.0488	0.09635	0.298
136	10	1	0.1525	0.0468	0.0836	0.278
137	9	1	0.1356	0.0446	0.07119	0.258
138	8	1	0.1186	0.0421	0.05918	0.238
139	7	1	0.1017	0.0393	0.04764	0.217
140	6	1	0.0847	0.0363	0.03664	0.196
141	5	1	0.0678	0.0327	0.02632	0.175
142	4	1	0.0508	0.0286	0.01688	0.153
143	3	1	0.0339	0.0236	0.00868	0.132
144	2	1	0.0169	0.0168	0.00243	0.118
145	1	1	0	NaN	NA	NA

Table A.99 Golmarmara station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0667	1	0.0714	0	0.0169
2	0.0933	2	0.1286	1	0.0508
3	0.2133	3	0.1857	2	0.1017
4	0.3067	4	0.2286	3	0.1186
5	0.3333	5	0.2714	4	0.1525
6	0.4133	6	0.3286	5	0.1864
7	0.4933	7	0.3857	6	0.2034
8	0.5467	8	0.4571	7	0.2203
9	0.6	9	0.5	8	0.2542
10	0.6533	10	0.5571	9	0.3051
11	0.68	11	0.6286	10	0.322
12	0.6933	12	0.6571	11	0.339
13	0.7333	13	0.6857	12	0.3898
14	0.76	14	0.7	13	0.4407
15	0.8133	15	0.7143	14	0.4746
16	0.8533	16	0.7286	15	0.5085
17	0.8667	17	0.7571	16	0.5424
18	0.8933	18	0.7857	17	0.5763
20	0.9067	19	0.8143	18	0.6102
21	0.9333	20	0.8429	19	0.6441
25	0.9467	21	0.8571	20	0.661
30	0.96	22	0.8857	21	0.678
31	0.9733	23	0.9	22	0.6949
37	0.9867	24	0.9143	23	0.7288
38	1	25	0.9286	24	0.7627
		26	0.9429	72	0.7797
		41	0.9571	96	0.7966
		42	0.9714	97	0.8136
		43	0.9857	135	0.8305
		61	1	136	0.8475
				137	0.8644
				138	0.8814
				139	0.8983
				140	0.9153
				141	0.9322
				142	0.9492
				143	0.9661
				144	0.9831
				145	1

Table A.100 Golmarmara station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		56	56	6	4	7
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	56	3	0.9464	0.0301	0.88925	1.000
2	53	3	0.8929	0.0413	0.81542	0.978
3	50	6	0.7857	0.0548	0.68527	0.901
4	44	10	0.6071	0.0653	0.49181	0.75
5	34	5	0.5179	0.0668	0.40221	0.667
6	29	5	0.4286	0.0661	0.31672	0.58
7	24	5	0.3393	0.0633	0.23542	0.489
8	19	4	0.2679	0.0592	0.17372	0.413
9	15	1	0.25	0.0579	0.15883	0.394
10	14	1	0.2321	0.0564	0.14417	0.374
11	13	2	0.1964	0.0531	0.11565	0.334
13	11	1	0.1786	0.0512	0.10182	0.313
14	10	1	0.1607	0.0491	0.08833	0.292
15	9	2	0.125	0.0442	0.06251	0.25
16	7	1	0.1071	0.0413	0.0503	0.228
30	6	2	0.0714	0.0344	0.02778	0.184
31	4	1	0.0536	0.0301	0.01782	0.161
43	3	1	0.0357	0.0248	0.00916	0.139
47	2	1	0.0179	0.0177	0.00256	0.125
48	1	1	0	NaN	NA	NA

Table A.101 Golmarmara station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		67	67	8	7	15
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	67	4	0.9403	0.0289	0.88524	0.999
2	63	6	0.8507	0.0435	0.76956	0.94
3	57	5	0.7761	0.0509	0.68246	0.883
4	52	4	0.7164	0.0551	0.61623	0.833
5	48	3	0.6716	0.0574	0.5681	0.794
6	45	4	0.6119	0.0595	0.50571	0.74
7	41	5	0.5373	0.0609	0.43026	0.671
8	36	3	0.4925	0.0611	0.38626	0.628
9	33	2	0.4627	0.0609	0.35746	0.599
10	31	2	0.4328	0.0605	0.32907	0.569
11	29	1	0.4179	0.0603	0.31503	0.554
12	28	1	0.403	0.0599	0.3011	0.539
13	27	1	0.3881	0.0595	0.28728	0.524
14	26	1	0.3731	0.0591	0.27358	0.509
15	25	1	0.3582	0.0586	0.25998	0.494
16	24	1	0.3433	0.058	0.2465	0.478
17	23	2	0.3134	0.0567	0.21991	0.447
18	21	4	0.2537	0.0532	0.16828	0.383
19	17	3	0.209	0.0497	0.13114	0.333
20	14	1	0.194	0.0483	0.1191	0.316
21	13	1	0.1791	0.0468	0.10727	0.299
22	12	1	0.1642	0.0453	0.09565	0.282
23	11	1	0.1493	0.0435	0.08427	0.264
24	10	1	0.1343	0.0417	0.07314	0.247
27	9	1	0.1194	0.0396	0.06232	0.229
28	8	1	0.1045	0.0374	0.05183	0.211
40	7	1	0.0896	0.0349	0.04173	0.192
41	6	1	0.0746	0.0321	0.03211	0.173
42	5	2	0.0448	0.0253	0.01482	0.135
43	3	2	0.0149	0.0148	0.00213	0.104
63	1	1	0	NaN	NA	NA

Table A.102 Golmarmara station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		52	52	14.5	11	19
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	52	3	0.9423	0.0323	0.88102	1.000
2	49	3	0.8846	0.0443	0.80191	0.976
3	46	2	0.8462	0.05	0.75356	0.95
4	44	2	0.8077	0.0547	0.70737	0.922
7	42	1	0.7885	0.0566	0.68492	0.908
8	41	2	0.75	0.06	0.64108	0.877
9	39	3	0.6923	0.064	0.57757	0.83
10	36	2	0.6538	0.066	0.53652	0.797
11	34	2	0.6154	0.0675	0.4964	0.763
12	32	2	0.5769	0.0685	0.45712	0.728
13	30	2	0.5385	0.0691	0.41867	0.693
14	28	2	0.5	0.0693	0.381	0.656
15	26	2	0.4615	0.0691	0.34412	0.619
16	24	2	0.4231	0.0685	0.30802	0.581
17	22	2	0.3846	0.0675	0.27272	0.542
18	20	2	0.3462	0.066	0.23825	0.503
19	18	2	0.3077	0.064	0.20467	0.463
21	16	1	0.2885	0.0628	0.18823	0.442
22	15	1	0.2692	0.0615	0.17205	0.421
64	14	1	0.25	0.06	0.15613	0.4
65	13	1	0.2308	0.0584	0.1405	0.379
66	12	1	0.2115	0.0566	0.12517	0.358
67	11	1	0.1923	0.0547	0.11018	0.336
68	10	2	0.1538	0.05	0.08133	0.291
69	8	1	0.1346	0.0473	0.06758	0.268
70	7	1	0.1154	0.0443	0.05436	0.245
71	6	1	0.0962	0.0409	0.04179	0.221
72	5	1	0.0769	0.037	0.03	0.197
73	4	1	0.0577	0.0323	0.01923	0.173
74	3	1	0.0385	0.0267	0.00988	0.15
91	2	1	0.0192	0.019	0.00276	0.134
92	1	1	0	NaN	NA	NA

Table A.103 Golmarmara station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0536	1	0.0597	1	0.0577
2	0.1071	2	0.1493	2	0.1154
3	0.2143	3	0.2239	3	0.1538
4	0.3929	4	0.2836	4	0.1923
5	0.4821	5	0.3284	6	0.2051
6	0.5714	6	0.3881	7	0.2115
7	0.6607	7	0.4627	8	0.25
8	0.7321	8	0.5075	9	0.3077
9	0.75	9	0.5373	10	0.3462
10	0.7679	10	0.5672	11	0.3846
11	0.8036	11	0.5821	12	0.4231
12	0.8125	12	0.597	13	0.4615
13	0.8214	13	0.6119	14	0.5
14	0.8393	14	0.6269	15	0.5385
15	0.875	15	0.6418	16	0.5769
16	0.8929	16	0.6567	17	0.6154
30	0.9286	17	0.6866	18	0.6538
31	0.9464	18	0.7463	19	0.6923
43	0.9643	19	0.791	21	0.7115
47	0.9821	20	0.806	22	0.7308
48	1	21	0.8209	64	0.75
		22	0.8358	65	0.7692
		23	0.8507	66	0.7885
		24	0.8657	67	0.8077
		27	0.8806	68	0.8462
		28	0.8955	69	0.8654
		40	0.9104	70	0.8846
		41	0.9254	71	0.9038
		42	0.9552	72	0.9231
		43	0.9851	73	0.9423
		63	1	74	0.9615
				91	0.9808
				92	1

Table A.104 Gordes station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		76	76	10	8	12
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	76	3	0.9605	0.0223	0.91773	1
3	73	1	0.9474	0.0256	0.89847	0.9989
4	72	7	0.8553	0.0404	0.77971	0.9381
5	65	9	0.7368	0.0505	0.6442	0.8428
6	56	5	0.6711	0.0539	0.57332	0.7854
7	51	5	0.6053	0.0561	0.50477	0.7258
8	46	5	0.5395	0.0572	0.43829	0.664
9	41	2	0.5132	0.0573	0.41224	0.6388
10	39	4	0.4605	0.0572	0.36106	0.5874
11	35	3	0.4211	0.0566	0.32348	0.5481
12	32	5	0.3553	0.0549	0.26243	0.4809
13	27	2	0.3289	0.0539	0.2386	0.4535
14	25	2	0.3026	0.0527	0.21513	0.4257
15	23	2	0.2763	0.0513	0.19204	0.3976
16	21	3	0.2368	0.0488	0.15819	0.3546
17	18	6	0.1579	0.0418	0.09395	0.2654
18	12	4	0.1053	0.0352	0.05465	0.2027
19	8	2	0.0789	0.0309	0.03663	0.1702
23	6	1	0.0658	0.0284	0.0282	0.1535
25	5	3	0.0263	0.0184	0.0067	0.1033
27	2	1	0.0132	0.0131	0.00188	0.0922
29	1	1	0	NaN	NA	NA

Table A.105 Gordes station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		64	64	8	7	10
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	64	4	0.9375	0.0303	0.88003	0.999
2	60	3	0.8906	0.039	0.81735	0.97
3	57	3	0.8438	0.0454	0.75932	0.938
4	54	3	0.7969	0.0503	0.70416	0.902
5	51	3	0.75	0.0541	0.65108	0.864
6	48	6	0.6562	0.0594	0.54962	0.784
7	42	7	0.5469	0.0622	0.43756	0.684
8	35	4	0.4844	0.0625	0.37619	0.624
9	31	5	0.4062	0.0614	0.30211	0.546
10	26	3	0.3594	0.06	0.25911	0.498
11	23	2	0.3281	0.0587	0.23109	0.466
14	21	2	0.2969	0.0571	0.20362	0.433
15	19	2	0.2656	0.0552	0.17675	0.399
16	17	1	0.25	0.0541	0.16355	0.382
17	16	1	0.2344	0.053	0.15052	0.365
18	15	1	0.2188	0.0517	0.13768	0.348
19	14	1	0.2031	0.0503	0.12503	0.33
20	13	1	0.1875	0.0488	0.11259	0.312
21	12	1	0.1719	0.0472	0.10038	0.294
22	11	1	0.1562	0.0454	0.08842	0.276
26	10	1	0.1406	0.0435	0.07674	0.258
37	9	1	0.125	0.0413	0.06537	0.239
38	8	1	0.1094	0.039	0.05436	0.22
39	7	2	0.0781	0.0335	0.03367	0.181
43	5	1	0.0625	0.0303	0.0242	0.161
44	4	1	0.0469	0.0264	0.01553	0.141
45	3	1	0.0312	0.0217	0.00799	0.122
46	2	1	0.0156	0.0155	0.00224	0.109
65	1	1	0	NaN	NA	NA

Table A.106 Gordes station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		63	63	18	15	22
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	63	1	0.9841	0.0157	0.95374	1
2	62	2	0.9524	0.0268	0.90122	1
3	60	1	0.9365	0.0307	0.87819	0.999
4	59	1	0.9206	0.0341	0.85625	0.99
5	58	1	0.9048	0.037	0.8351	0.98
6	57	1	0.8889	0.0396	0.81458	0.97
7	56	1	0.873	0.0419	0.79455	0.959
8	55	3	0.8254	0.0478	0.73678	0.925
9	52	2	0.7937	0.051	0.69976	0.9
10	50	2	0.7619	0.0537	0.66367	0.875
12	48	3	0.7143	0.0569	0.61101	0.835
13	45	3	0.6667	0.0594	0.55986	0.794
14	42	3	0.619	0.0612	0.51003	0.751
15	39	3	0.5714	0.0623	0.46141	0.708
16	36	2	0.5397	0.0628	0.42963	0.678
17	34	2	0.5079	0.063	0.39834	0.648
18	32	2	0.4762	0.0629	0.36754	0.617
19	30	2	0.4444	0.0626	0.33722	0.586
20	28	2	0.4127	0.062	0.3074	0.554
21	26	2	0.381	0.0612	0.27808	0.522
22	24	2	0.3492	0.0601	0.24928	0.489
23	22	2	0.3175	0.0586	0.22103	0.456
24	20	2	0.2857	0.0569	0.19336	0.422
25	18	3	0.2381	0.0537	0.15308	0.37
26	15	2	0.2063	0.051	0.12714	0.335
27	13	1	0.1905	0.0495	0.11449	0.317
28	12	1	0.1746	0.0478	0.10207	0.299
29	11	1	0.1587	0.046	0.0899	0.28
48	10	1	0.1429	0.0441	0.07802	0.262
49	9	1	0.127	0.0419	0.06646	0.243
112	8	1	0.1111	0.0396	0.05526	0.223
113	7	1	0.0952	0.037	0.04449	0.204
114	6	1	0.0794	0.0341	0.03423	0.184
115	5	1	0.0635	0.0307	0.0246	0.164
116	4	1	0.0476	0.0268	0.01578	0.144
117	3	1	0.0317	0.0221	0.00812	0.124
118	2	1	0.0159	0.0157	0.00227	0.111
179	1	1	0	NaN	NA	NA

Table A.107 Gordes station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0395	1	0.0625	1	0.0159
3	0.0526	2	0.1094	2	0.0476
4	0.1447	3	0.1562	3	0.0635
5	0.2632	4	0.2031	4	0.0794
6	0.3289	5	0.25	5	0.0952
7	0.3947	6	0.3438	6	0.1111
8	0.4605	7	0.4531	7	0.127
9	0.4868	8	0.5156	8	0.1746
10	0.5395	9	0.5938	9	0.2063
11	0.5789	10	0.6406	10	0.2381
12	0.6447	11	0.6719	12	0.2857
13	0.6711	12	0.6823	13	0.3333
14	0.6974	14	0.7031	14	0.381
15	0.7237	15	0.7344	15	0.4286
16	0.7632	16	0.75	16	0.4603
17	0.8421	17	0.7656	17	0.4921
18	0.8947	18	0.7812	18	0.5238
19	0.9211	19	0.7969	19	0.5556
23	0.9342	20	0.8125	20	0.5873
25	0.9737	21	0.8281	21	0.619
27	0.9868	22	0.8438	22	0.6508
29	1	26	0.8594	23	0.6825
		37	0.875	24	0.7143
		38	0.8906	25	0.7619
		39	0.9219	26	0.7937
		43	0.9375	27	0.8095
		44	0.9531	28	0.8254
		45	0.9688	29	0.8413
		46	0.9844	48	0.8571
		65	1	49	0.873
				112	0.8889
				113	0.9048
				114	0.9206
				115	0.9365
				116	0.9524
				117	0.9683
				118	0.9841
				179	1

Table A.108 Gordes station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		88	88	7	6	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	88	5	0.9432	0.0247	0.896	0.993
2	83	4	0.8977	0.0323	0.8366	0.963
3	79	7	0.8182	0.0411	0.7414	0.903
4	72	8	0.7273	0.0475	0.6399	0.827
5	64	7	0.6477	0.0509	0.5552	0.756
6	57	8	0.5568	0.053	0.4621	0.671
7	49	6	0.4886	0.0533	0.3946	0.605
8	43	5	0.4318	0.0528	0.3398	0.549
9	38	4	0.3864	0.0519	0.2969	0.503
10	34	4	0.3409	0.0505	0.255	0.456
11	30	2	0.3182	0.0497	0.2343	0.432
12	28	1	0.3068	0.0492	0.2241	0.42
13	27	2	0.2841	0.0481	0.2039	0.396
16	25	1	0.2727	0.0475	0.1939	0.384
17	24	3	0.2386	0.0454	0.1643	0.347
18	21	4	0.1932	0.0421	0.126	0.296
19	17	2	0.1705	0.0401	0.1075	0.27
20	15	2	0.1477	0.0378	0.0894	0.244
21	13	2	0.125	0.0353	0.0719	0.217
22	11	2	0.1023	0.0323	0.0551	0.19
23	9	1	0.0909	0.0306	0.047	0.176
25	8	1	0.0795	0.0288	0.0391	0.162
26	7	1	0.0682	0.0269	0.0315	0.148
41	6	1	0.0568	0.0247	0.0243	0.133
42	5	2	0.0341	0.0193	0.0112	0.104
43	3	3	0	NaN	NA	NA

Table A.109 Gordes station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		91	91	7	6	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	91	6	0.9341	0.026	0.88444	0.9865
2	85	9	0.8352	0.0389	0.76231	0.915
3	76	8	0.7473	0.0456	0.66309	0.8421
4	68	6	0.6813	0.0488	0.592	0.7841
5	62	5	0.6264	0.0507	0.53446	0.7341
6	57	6	0.5604	0.052	0.4672	0.6723
7	51	6	0.4945	0.0524	0.40175	0.6087
8	45	5	0.4396	0.052	0.34855	0.5543
9	40	4	0.3956	0.0513	0.30688	0.51
10	36	4	0.3516	0.0501	0.26604	0.4648
11	32	2	0.3297	0.0493	0.24595	0.4419
12	30	2	0.3077	0.0484	0.22608	0.4188
13	28	1	0.2967	0.0479	0.21624	0.4071
14	27	2	0.2747	0.0468	0.19675	0.3836
15	25	2	0.2527	0.0456	0.17752	0.3598
16	23	2	0.2308	0.0442	0.15859	0.3358
17	21	3	0.1978	0.0418	0.13078	0.2992
18	18	1	0.1868	0.0409	0.12169	0.2868
19	17	2	0.1648	0.0389	0.1038	0.2618
20	15	1	0.1538	0.0378	0.09502	0.2491
22	14	1	0.1429	0.0367	0.08636	0.2363
23	13	2	0.1209	0.0342	0.06946	0.2104
24	11	1	0.1099	0.0328	0.06124	0.1972
40	10	1	0.0989	0.0313	0.05319	0.1839
41	9	1	0.0879	0.0297	0.04536	0.1704
42	8	2	0.0659	0.026	0.03043	0.1429
43	6	2	0.044	0.0215	0.01686	0.1146
44	4	2	0.022	0.0154	0.00558	0.0865
45	2	1	0.011	0.0109	0.00156	0.0772
104	1	1	0	NaN	NA	NA

Table A.110 Gordes station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		84	84	16	14	19
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	84	2	0.9762	0.0166	0.94413	10.000
2	82	2	0.9524	0.0232	0.90791	0.999
3	80	2	0.9286	0.0281	0.8751	0.9853
4	78	2	0.9048	0.032	0.84412	0.9698
5	76	2	0.881	0.0353	0.81435	0.953
6	74	2	0.8571	0.0382	0.78548	0.9353
7	72	3	0.8214	0.0418	0.74348	0.9076
8	69	3	0.7857	0.0448	0.70269	0.8785
9	66	3	0.75	0.0472	0.66289	0.8486
10	63	3	0.7143	0.0493	0.62393	0.8177
11	60	2	0.6905	0.0504	0.59837	0.7968
12	58	4	0.6429	0.0523	0.54814	0.7539
13	54	3	0.6071	0.0533	0.51119	0.7211
14	51	4	0.5595	0.0542	0.46282	0.6764
15	47	4	0.5119	0.0545	0.41543	0.6308
16	43	4	0.4643	0.0544	0.369	0.5842
17	39	3	0.4286	0.054	0.3348	0.5486
18	36	4	0.381	0.053	0.29005	0.5003
19	32	3	0.3452	0.0519	0.25717	0.4635
20	29	2	0.3214	0.051	0.23558	0.4386
21	27	2	0.2976	0.0499	0.21428	0.4134
22	25	2	0.2738	0.0487	0.19329	0.3879
23	23	4	0.2262	0.0456	0.1523	0.3359
24	19	3	0.1905	0.0428	0.12257	0.296
25	16	1	0.1786	0.0418	0.11288	0.2825
26	15	1	0.1667	0.0407	0.10332	0.2689
27	14	1	0.1548	0.0395	0.09389	0.2551
28	13	1	0.1429	0.0382	0.08461	0.2412
29	12	1	0.131	0.0368	0.07548	0.2272
30	11	1	0.119	0.0353	0.06654	0.213
31	10	1	0.1071	0.0337	0.05779	0.1986
32	9	1	0.0952	0.032	0.04927	0.1841
33	8	1	0.0833	0.0302	0.041	0.1694
34	7	1	0.0714	0.0281	0.03304	0.1544
35	6	1	0.0595	0.0258	0.02544	0.1393
36	5	1	0.0476	0.0232	0.0183	0.1239
37	4	1	0.0357	0.0202	0.01176	0.1085
112	3	1	0.0238	0.0166	0.00605	0.0936
113	2	1	0.0119	0.0118	0.0017	0.0835
181	1	1	0	NaN	NA	NA

Table A.111 Gordes station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0568	1	0.0659	1	0.0238
2	0.1023	2	0.1648	2	0.0476
3	0.1818	3	0.2527	3	0.0714
4	0.2727	4	0.3187	4	0.0952
5	0.3523	5	0.3736	5	0.119
6	0.4432	6	0.4396	6	0.1429
7	0.5114	7	0.5055	7	0.1786
8	0.5682	8	0.5604	8	0.2143
9	0.6136	9	0.6044	9	0.25
10	0.6591	10	0.6484	10	0.2857
11	0.6818	11	0.6703	11	0.3095
12	0.6932	12	0.6923	12	0.3571
13	0.7159	13	0.7033	13	0.3929
16	0.7273	14	0.7253	14	0.4405
17	0.7614	15	0.7473	15	0.4881
18	0.8068	16	0.7692	16	0.5357
19	0.8295	17	0.8022	17	0.5714
20	0.8523	18	0.8132	18	0.619
21	0.875	19	0.8352	19	0.6548
22	0.8977	20	0.8462	20	0.6786
23	0.9091	22	0.8571	21	0.7024
25	0.9205	23	0.8791	22	0.7262
26	0.9318	24	0.8901	23	0.7738
41	0.9432	40	0.9011	24	0.8095
42	0.9659	41	0.9121	25	0.8214
43	1	42	0.9341	26	0.8333
		43	0.956	27	0.8452
		44	0.978	28	0.8571
		45	0.989	29	0.869
		104	1	30	0.881
				31	0.8929
				32	0.9048
				33	0.9167
				34	0.9286
				35	0.9405
				36	0.9524
				37	0.9643
				112	0.9762
				113	0.9881
				181	1

Table A.112 Guney station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		134	134	9	8	11
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	134	6	0.95522	0.01787	0.92084	0.9909
2	128	4	0.92537	0.0227	0.88193	0.971
3	124	11	0.84328	0.0314	0.78392	0.9071
4	113	10	0.76866	0.03643	0.70047	0.8435
5	103	9	0.70149	0.03953	0.62814	0.7834
6	94	5	0.66418	0.0408	0.58884	0.7492
7	89	7	0.61194	0.0421	0.53475	0.7003
8	82	10	0.53731	0.04307	0.45919	0.6287
9	72	7	0.48507	0.04317	0.40742	0.5775
10	65	5	0.44776	0.04296	0.37101	0.5404
11	60	7	0.39552	0.04224	0.32082	0.4876
12	53	5	0.35821	0.04142	0.28557	0.4493
13	48	6	0.31343	0.04007	0.24396	0.4027
14	42	4	0.28358	0.03894	0.21667	0.3712
15	38	5	0.24627	0.03722	0.18313	0.3312
16	33	6	0.20149	0.03465	0.14384	0.2823
17	27	6	0.15672	0.0314	0.10581	0.2321
18	21	3	0.13433	0.02946	0.0874	0.2065
19	18	1	0.12687	0.02875	0.08136	0.1978
20	17	1	0.1194	0.02801	0.07539	0.1891
21	16	1	0.11194	0.02724	0.06948	0.1803
22	15	1	0.10448	0.02642	0.06364	0.1715
23	14	2	0.08955	0.02467	0.05219	0.1537
24	12	1	0.08209	0.02371	0.0466	0.1446
25	11	1	0.07463	0.0227	0.04111	0.1355
26	10	2	0.0597	0.02047	0.03049	0.1169
30	8	1	0.05224	0.01922	0.0254	0.1074
31	7	1	0.04478	0.01787	0.02048	0.0979
32	6	1	0.03731	0.01637	0.01579	0.0882
33	5	1	0.02985	0.0147	0.01137	0.0784
40	4	1	0.02239	0.01278	0.00731	0.0685
56	3	1	0.01493	0.01047	0.00377	0.0591
57	2	1	0.00746	0.00743	0.00106	0.0526
58	1	1	0	NaN	NA	NA

Table A.113 Guney station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		120	120	14	10	16
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	120	4	0.96667	0.0164	0.93508	0.9993
2	116	9	0.89167	0.0284	0.83776	0.949
3	107	10	0.80833	0.0359	0.74089	0.8819
4	97	7	0.75	0.0395	0.67639	0.8316
5	90	3	0.725	0.0408	0.64935	0.8095
6	87	3	0.7	0.0418	0.62263	0.787
7	84	3	0.675	0.0428	0.59619	0.7642
8	81	5	0.63333	0.044	0.55272	0.7257
9	76	3	0.60833	0.0446	0.52698	0.7022
10	73	4	0.575	0.0451	0.49302	0.6706
11	69	3	0.55	0.0454	0.46782	0.6466
12	66	2	0.53333	0.0455	0.45114	0.6305
13	64	3	0.50833	0.0456	0.42631	0.6061
14	61	5	0.46667	0.0455	0.38542	0.565
15	56	4	0.43333	0.0452	0.35315	0.5317
16	52	5	0.39167	0.0446	0.31338	0.4895
17	47	4	0.35833	0.0438	0.28204	0.4553
18	43	3	0.33333	0.043	0.25881	0.4293
19	40	4	0.3	0.0418	0.22826	0.3943
20	36	1	0.29167	0.0415	0.2207	0.3855
21	35	1	0.28333	0.0411	0.21317	0.3766
22	34	1	0.275	0.0408	0.20567	0.3677
23	33	3	0.25	0.0395	0.18338	0.3408
24	30	3	0.225	0.0381	0.16142	0.3136
25	27	3	0.2	0.0365	0.13984	0.286
26	24	3	0.175	0.0347	0.11867	0.2581
27	21	2	0.15833	0.0333	0.10481	0.2392
28	19	2	0.14167	0.0318	0.0912	0.2201
29	17	2	0.125	0.0302	0.07786	0.2007
33	15	1	0.11667	0.0293	0.07131	0.1909
34	14	1	0.10833	0.0284	0.06484	0.181
35	13	3	0.08333	0.0252	0.04604	0.1508
36	10	1	0.075	0.024	0.04001	0.1406
37	9	1	0.06667	0.0228	0.03413	0.1302
38	8	1	0.05833	0.0214	0.02843	0.1197
47	7	1	0.05	0.0199	0.02292	0.1091
48	6	1	0.04167	0.0182	0.01767	0.0983
49	5	1	0.03333	0.0164	0.01272	0.0874
50	4	1	0.025	0.0143	0.00818	0.0764
57	3	1	0.01667	0.0117	0.00422	0.0659
74	2	1	0.00833	0.0083	0.00118	0.0587
75	1	1	0	NaN	NA	NA

Table A.114 Guney station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		109	109	26	20	34
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	109	4	0.9633	0.01801	0.92864	0.9993
2	105	5	0.91743	0.02636	0.86719	0.9706
3	100	5	0.87156	0.03205	0.81096	0.9367
4	95	2	0.85321	0.0339	0.78929	0.9223
5	93	1	0.84404	0.03475	0.7786	0.915
11	92	1	0.83486	0.03556	0.76799	0.9076
12	91	3	0.80734	0.03778	0.73659	0.8849
13	88	5	0.76147	0.04082	0.68552	0.8458
14	83	4	0.72477	0.04278	0.64559	0.8137
15	79	3	0.69725	0.04401	0.61612	0.7891
16	76	3	0.66972	0.04505	0.58701	0.7641
17	73	2	0.65138	0.04564	0.56779	0.7473
18	71	3	0.62385	0.0464	0.53923	0.7218
19	68	3	0.59633	0.04699	0.51098	0.6959
20	65	2	0.57798	0.04731	0.49232	0.6785
21	63	1	0.56881	0.04744	0.48304	0.6698
22	62	1	0.55963	0.04755	0.47378	0.661
23	61	1	0.55046	0.04765	0.46456	0.6522
24	60	2	0.53211	0.04779	0.44622	0.6345
25	58	2	0.51376	0.04787	0.428	0.6167
26	56	2	0.49541	0.04789	0.40991	0.5988
27	54	1	0.48624	0.04787	0.40091	0.5897
28	53	2	0.46789	0.04779	0.383	0.5716
29	51	2	0.44954	0.04765	0.36522	0.5533
30	49	1	0.44037	0.04755	0.35637	0.5442
31	48	1	0.43119	0.04744	0.34756	0.5349
32	47	1	0.42202	0.04731	0.33878	0.5257
33	46	1	0.41284	0.04716	0.33003	0.5164
34	45	2	0.3945	0.04681	0.31263	0.4978
35	43	1	0.38532	0.04661	0.30398	0.4884
36	42	2	0.36697	0.04617	0.28678	0.4696
37	40	2	0.34862	0.04564	0.26972	0.4506
38	38	2	0.33028	0.04505	0.2528	0.4315
39	36	2	0.31193	0.04437	0.23603	0.4122
40	34	2	0.29358	0.04362	0.21941	0.3928
41	32	2	0.27523	0.04278	0.20295	0.3732
42	30	1	0.26606	0.04233	0.19479	0.3634

Table A.114 *Cont'd*

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		109	109	26	20	34
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
43	29	1	0.25688	0.04185	0.18666	0.3535
44	28	1	0.24771	0.04135	0.17859	0.3436
45	27	1	0.23853	0.04082	0.17056	0.3336
46	26	1	0.22936	0.04027	0.16258	0.3236
47	25	2	0.21101	0.03908	0.14677	0.3034
48	23	3	0.18349	0.03707	0.12349	0.2726
49	20	1	0.17431	0.03634	0.11585	0.2623
50	19	1	0.16514	0.03556	0.10828	0.2519
51	18	1	0.15596	0.03475	0.10078	0.2414
52	17	1	0.14679	0.0339	0.09335	0.2308
53	16	1	0.13761	0.033	0.08601	0.2202
54	15	1	0.12844	0.03205	0.07876	0.2095
55	14	1	0.11927	0.03104	0.07161	0.1986
56	13	1	0.11009	0.02998	0.06456	0.1877
57	12	1	0.10092	0.02885	0.05763	0.1767
58	11	1	0.09174	0.02765	0.05082	0.1656
59	10	1	0.08257	0.02636	0.04416	0.1544
60	9	1	0.07339	0.02498	0.03767	0.143
82	8	1	0.06422	0.02348	0.03137	0.1315
83	7	1	0.05505	0.02185	0.02529	0.1198
87	6	1	0.04587	0.02004	0.01949	0.108
91	5	1	0.0367	0.01801	0.01403	0.096
92	4	1	0.02752	0.01567	0.00902	0.084
101	3	1	0.01835	0.01285	0.00465	0.0724
102	2	1	0.00917	0.00913	0.0013	0.0645
103	1	1	0	NaN	NA	NA

Table A.115 Guney station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.04478	1	0.03333	1	0.0367
2	0.07463	2	0.10833	2	0.08257
3	0.15672	3	0.19167	3	0.12844
4	0.23134	4	0.25	4	0.14679
5	0.29851	5	0.275	5	0.15596
6	0.33582	6	0.3	6	0.15749
7	0.38806	7	0.325	11	0.16514
8	0.46269	8	0.36667	12	0.19266
9	0.51493	9	0.39167	13	0.23853
10	0.55224	10	0.425	14	0.27523
11	0.60448	11	0.45	15	0.30275
12	0.64179	12	0.46667	16	0.33028
13	0.68657	13	0.49167	17	0.34862
14	0.71642	14	0.53333	18	0.37615
15	0.75373	15	0.56667	19	0.40367
16	0.79851	16	0.60833	20	0.42202
17	0.84328	17	0.64167	21	0.43119
18	0.86567	18	0.66667	22	0.44037
19	0.87313	19	0.7	23	0.44954
20	0.8806	20	0.70833	24	0.46789
21	0.88806	21	0.71667	25	0.48624
22	0.89552	22	0.725	26	0.50459
23	0.91045	23	0.75	27	0.51376
24	0.91791	24	0.775	28	0.53211
25	0.92537	25	0.8	29	0.55046
26	0.9403	26	0.825	30	0.55963
30	0.94776	27	0.84167	31	0.56881
31	0.95522	28	0.85833	32	0.57798
32	0.96269	29	0.875	33	0.58716
33	0.97015	33	0.88333	34	0.6055
40	0.97761	34	0.89167	35	0.61468
56	0.98507	35	0.91667	36	0.63303
57	0.99254	36	0.925	37	0.65138
58	1	37	0.93333	38	0.66972
		38	0.94167	39	0.68807
		47	0.95	40	0.70642
		48	0.95833	41	0.72477
		49	0.96667	42	0.73394
		50	0.975	43	0.74312

Table A.115 *Cont'd*

Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk
57	0.98333	44	0.75229
74	0.99167	45	0.76147
75	1	46	0.77064
		47	0.78899
		48	0.81651
		49	0.82569
		50	0.83486
		51	0.84404
		52	0.85321
		53	0.86239
		54	0.87156
		55	0.88073
		56	0.88991
		57	0.89908
		58	0.90826
		59	0.91743
		60	0.92661
		82	0.93578
		83	0.94495
		87	0.95413
		91	0.9633
		92	0.97248
		101	0.98165
		102	0.99083
		103	1

Table A.116 Guney station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		88	88	8.5	7	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	88	3	0.9659	0.0193	0.92873	10.000
2	85	2	0.9432	0.0247	0.89603	0.9928
3	83	5	0.8864	0.0338	0.82247	0.9552
4	78	5	0.8295	0.0401	0.75459	0.912
5	73	6	0.7614	0.0454	0.67732	0.8558
6	67	5	0.7045	0.0486	0.61539	0.8066
7	62	10	0.5909	0.0524	0.49662	0.7031
8	52	8	0.5	0.0533	0.40572	0.6162
9	44	10	0.3864	0.0519	0.29692	0.5027
10	34	6	0.3182	0.0497	0.23434	0.432
11	28	4	0.2727	0.0475	0.19389	0.3836
12	24	2	0.25	0.0462	0.17409	0.359
13	22	4	0.2045	0.043	0.13547	0.3088
14	18	4	0.1591	0.039	0.09841	0.2572
15	14	1	0.1477	0.0378	0.08944	0.244
16	13	2	0.125	0.0353	0.07192	0.2173
18	11	1	0.1136	0.0338	0.0634	0.2037
19	10	1	0.1023	0.0323	0.05507	0.1899
20	9	2	0.0795	0.0288	0.03908	0.1619
21	7	2	0.0568	0.0247	0.02425	0.1331
22	5	3	0.0227	0.0159	0.00577	0.0894
31	2	1	0.0114	0.0113	0.00162	0.0798
48	1	1	0	NaN	NA	NA

Table A.117 Guney station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		87	87	11	10	12
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	87	5	0.9425	0.025	0.89487	0.9927
2	82	4	0.8966	0.0327	0.83479	0.9629
3	78	3	0.8621	0.037	0.79257	0.9377
4	75	3	0.8276	0.0405	0.7519	0.9109
5	72	2	0.8046	0.0425	0.72545	0.8924
6	70	3	0.7701	0.0451	0.68659	0.8638
7	67	3	0.7356	0.0473	0.64856	0.8344
8	64	6	0.6667	0.0505	0.57462	0.7735
9	58	6	0.5977	0.0526	0.50305	0.7102
10	52	8	0.5057	0.0536	0.41088	0.6225
11	44	7	0.4253	0.053	0.33312	0.543
12	37	4	0.3793	0.052	0.28991	0.4963
13	33	3	0.3448	0.051	0.25811	0.4607
14	30	2	0.3218	0.0501	0.23723	0.4366
15	28	3	0.2874	0.0485	0.2064	0.4001
16	25	2	0.2644	0.0473	0.1862	0.3754
17	23	4	0.2184	0.0443	0.14675	0.325
18	19	3	0.1839	0.0415	0.11813	0.2863
19	16	2	0.1609	0.0394	0.09959	0.26
20	14	1	0.1494	0.0382	0.09051	0.2467
21	13	2	0.1264	0.0356	0.07278	0.2197
22	11	3	0.092	0.031	0.04751	0.178
23	8	3	0.0575	0.025	0.02454	0.1346
24	5	1	0.046	0.0225	0.01765	0.1197
26	4	1	0.0345	0.0196	0.01134	0.1048
27	3	1	0.023	0.0161	0.00584	0.0905
28	2	1	0.0115	0.0114	0.00164	0.0807
75	1	1	0	NaN	NA	NA

Table A.118 Guney station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		57	57	32	25	37
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	57	2	0.9649	0.0244	0.91831	1.000
2	55	1	0.9474	0.0296	0.89114	1.000
9	54	1	0.9298	0.0338	0.86582	0.999
10	53	1	0.9123	0.0375	0.84172	0.989
11	52	1	0.8947	0.0406	0.81851	0.978
12	51	2	0.8596	0.046	0.77404	0.955
13	49	2	0.8246	0.0504	0.73151	0.929
14	47	3	0.7719	0.0556	0.67034	0.889
15	44	3	0.7193	0.0595	0.61162	0.846
16	41	2	0.6842	0.0616	0.57358	0.816
17	39	1	0.6667	0.0624	0.55486	0.801
18	38	1	0.6491	0.0632	0.53633	0.786
19	37	1	0.6316	0.0639	0.51799	0.77
25	36	1	0.614	0.0645	0.49981	0.754
26	35	1	0.5965	0.065	0.48181	0.738
27	34	1	0.5789	0.0654	0.46397	0.722
28	33	1	0.5614	0.0657	0.4463	0.706
29	32	1	0.5439	0.066	0.42878	0.69
30	31	1	0.5263	0.0661	0.41142	0.673
31	30	1	0.5088	0.0662	0.39422	0.657
32	29	1	0.4912	0.0662	0.37718	0.64
33	28	1	0.4737	0.0661	0.36028	0.623
34	27	1	0.4561	0.066	0.34355	0.606
35	26	1	0.4386	0.0657	0.32697	0.588
36	25	3	0.386	0.0645	0.27819	0.535
37	22	3	0.3333	0.0624	0.23091	0.481
38	19	3	0.2807	0.0595	0.18525	0.425
39	16	2	0.2456	0.057	0.15583	0.387
40	14	1	0.2281	0.0556	0.14146	0.368
41	13	1	0.2105	0.054	0.12734	0.348
42	12	1	0.193	0.0523	0.11349	0.328
43	11	1	0.1754	0.0504	0.09993	0.308
44	10	2	0.1404	0.046	0.07382	0.267
45	8	1	0.1228	0.0435	0.06136	0.246
46	7	1	0.1053	0.0406	0.04938	0.224
47	6	1	0.0877	0.0375	0.03798	0.203
48	5	1	0.0702	0.0338	0.02728	0.181
56	4	1	0.0526	0.0296	0.01749	0.158
106	3	1	0.0351	0.0244	0.00899	0.137
107	2	1	0.0175	0.0174	0.00251	0.122
120	1	1	0	NaN	NA	NA

Table A.119 Guney station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0341	1	0.0575	1	0.0351
2	0.0568	2	0.1034	2	0.0526
3	0.1136	3	0.1379	9	0.0702
4	0.1705	4	0.1724	10	0.0877
5	0.2386	5	0.1954	11	0.1053
6	0.2955	6	0.2299	12	0.1404
7	0.4091	7	0.2644	13	0.1754
8	0.5	8	0.3333	14	0.2281
9	0.6136	9	0.4023	15	0.2807
10	0.6818	10	0.4943	16	0.3158
11	0.7273	11	0.5747	17	0.3333
12	0.75	12	0.6207	18	0.3509
13	0.7955	13	0.6552	19	0.3684
14	0.8409	14	0.6782	25	0.386
15	0.8523	15	0.7126	26	0.4035
16	0.875	16	0.7356	27	0.4211
18	0.8864	17	0.7816	28	0.4386
19	0.8977	18	0.8161	29	0.4561
20	0.9205	19	0.8391	30	0.4737
21	0.9432	20	0.8506	31	0.4912
22	0.9773	21	0.8736	32	0.5088
31	0.9886	22	0.908	33	0.5263
48	1	23	0.9425	34	0.5439
		24	0.954	35	0.5614
		26	0.9655	36	0.614
		27	0.977	37	0.6667
		28	0.9885	38	0.7193
		75	1	39	0.7544
				40	0.7719
				41	0.7895
				42	0.807
				43	0.8246
				44	0.8596
				45	0.8772
				46	0.8947
				47	0.9123
				48	0.9298
				56	0.9474
				106	0.9649
				107	0.9825
				120	1

Table A.120 Kinik station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		62	62	6	5	9
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	62	4	0.9355	0.0312	0.87629	0.999
2	58	3	0.8871	0.0402	0.81172	0.969
3	55	7	0.7742	0.0531	0.67681	0.886
4	48	6	0.6774	0.0594	0.57051	0.804
5	42	9	0.5323	0.0634	0.42149	0.672
6	33	3	0.4839	0.0635	0.37418	0.626
7	30	3	0.4355	0.063	0.32801	0.578
8	27	4	0.371	0.0613	0.26827	0.513
9	23	3	0.3226	0.0594	0.2249	0.463
10	20	3	0.2742	0.0567	0.18288	0.411
11	17	2	0.2419	0.0544	0.15572	0.376
12	15	1	0.2258	0.0531	0.14242	0.358
13	14	3	0.1774	0.0485	0.10381	0.303
14	11	1	0.1613	0.0467	0.09143	0.285
16	10	1	0.1452	0.0447	0.07934	0.266
18	9	1	0.129	0.0426	0.06758	0.246
21	8	1	0.1129	0.0402	0.05619	0.227
22	7	1	0.0968	0.0375	0.04524	0.207
23	6	1	0.0806	0.0346	0.0348	0.187
24	5	1	0.0645	0.0312	0.025	0.166
25	4	1	0.0484	0.0273	0.01604	0.146
27	3	1	0.0323	0.0224	0.00825	0.126
34	2	1	0.0161	0.016	0.00231	0.113
35	1	1	0	NaN	NA	NA

Table A.121 Kinik station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		70	70	12	10	15
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	70	5	0.9286	0.0308	0.87016	0.991
2	65	6	0.8429	0.0435	0.76177	0.933
3	59	3	0.8	0.0478	0.71158	0.899
4	56	3	0.7571	0.0513	0.66307	0.865
5	53	1	0.7429	0.0522	0.64721	0.853
6	52	2	0.7143	0.054	0.61592	0.828
7	50	2	0.6857	0.0555	0.58515	0.804
8	48	2	0.6571	0.0567	0.55485	0.778
9	46	3	0.6143	0.0582	0.51021	0.74
10	43	3	0.5714	0.0591	0.4665	0.7
11	40	3	0.5286	0.0597	0.42366	0.659
12	37	4	0.4714	0.0597	0.36786	0.604
13	33	3	0.4286	0.0591	0.327	0.562
14	30	3	0.3857	0.0582	0.287	0.518
15	27	2	0.3571	0.0573	0.26082	0.489
16	25	1	0.3429	0.0567	0.24789	0.474
17	24	2	0.3143	0.0555	0.22236	0.444
18	22	2	0.2857	0.054	0.19727	0.414
19	20	3	0.2429	0.0513	0.16059	0.367
20	17	2	0.2143	0.049	0.13683	0.336
21	15	2	0.1857	0.0465	0.11371	0.303
22	13	2	0.1571	0.0435	0.09134	0.27
23	11	3	0.1143	0.038	0.05953	0.219
24	8	2	0.0857	0.0335	0.03988	0.184
25	6	1	0.0714	0.0308	0.03069	0.166
26	5	1	0.0571	0.0277	0.02206	0.148
27	4	1	0.0429	0.0242	0.01417	0.13
37	3	2	0.0143	0.0142	0.00204	0.1
38	1	1	0	NaN	NA	NA

Table A.122 Kinik station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		60	60	15.5	13	20
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	60	1	0.9833	0.0165	0.95147	1
2	59	2	0.95	0.0281	0.89642	1
3	57	2	0.9167	0.0357	0.84933	0.989
4	55	1	0.9	0.0387	0.8272	0.979
5	54	2	0.8667	0.0439	0.78478	0.957
6	52	1	0.85	0.0461	0.76429	0.945
7	51	2	0.8167	0.05	0.7244	0.921
8	49	2	0.7833	0.0532	0.68573	0.895
9	47	2	0.75	0.0559	0.64806	0.868
10	45	2	0.7167	0.0582	0.61125	0.84
11	43	2	0.6833	0.0601	0.57521	0.812
12	41	4	0.6167	0.0628	0.50514	0.753
13	37	3	0.5667	0.064	0.45418	0.707
14	34	2	0.5333	0.0644	0.42093	0.676
15	32	2	0.5	0.0645	0.38822	0.644
16	30	2	0.4667	0.0644	0.35607	0.612
17	28	2	0.4333	0.064	0.32446	0.579
18	26	2	0.4	0.0632	0.29341	0.545
19	24	2	0.3667	0.0622	0.26293	0.511
20	22	2	0.3333	0.0609	0.23306	0.477
21	20	1	0.3167	0.0601	0.21836	0.459
22	19	1	0.3	0.0592	0.20383	0.442
36	18	1	0.2833	0.0582	0.18946	0.424
38	17	1	0.2667	0.0571	0.17528	0.406
39	16	1	0.25	0.0559	0.16129	0.388
40	15	1	0.2333	0.0546	0.1475	0.369
41	14	1	0.2167	0.0532	0.13392	0.351
42	13	1	0.2	0.0516	0.12057	0.332
43	12	1	0.1833	0.05	0.10748	0.313
44	11	1	0.1667	0.0481	0.09465	0.293
50	10	1	0.15	0.0461	0.08213	0.274
155	9	1	0.1333	0.0439	0.06995	0.254
156	8	1	0.1167	0.0414	0.05815	0.234
157	7	1	0.1	0.0387	0.04681	0.214
158	6	1	0.0833	0.0357	0.036	0.193
159	5	1	0.0667	0.0322	0.02587	0.172
160	4	1	0.05	0.0281	0.01659	0.151
161	3	1	0.0333	0.0232	0.00853	0.13
162	2	1	0.0167	0.0165	0.00239	0.116
163	1	1	0	NaN	NA	NA

Table A.123 Kinik station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0645	1	0.0714	1	0.0167
2	0.1129	2	0.1571	2	0.05
3	0.2258	3	0.2	3	0.0833
4	0.3226	4	0.2429	4	0.1
5	0.4677	5	0.2571	5	0.1333
6	0.5161	6	0.2857	6	0.15
7	0.5645	7	0.3143	7	0.1833
8	0.629	8	0.3429	8	0.2167
9	0.6774	9	0.3857	9	0.25
10	0.7258	10	0.4286	10	0.2833
11	0.7581	11	0.4714	11	0.3167
12	0.7742	12	0.5286	12	0.3833
13	0.8226	13	0.5714	13	0.4333
14	0.8387	14	0.6143	14	0.4667
16	0.8548	15	0.6429	15	0.5
18	0.871	16	0.6571	16	0.5333
21	0.8871	17	0.6857	17	0.5667
22	0.9032	18	0.7143	18	0.6
23	0.9194	19	0.7571	19	0.6333
24	0.9355	20	0.7857	20	0.6667
25	0.9516	21	0.8143	21	0.6833
27	0.9677	22	0.8429	22	0.7
34	0.9839	23	0.8857	36	0.7167
35	1	24	0.9143	38	0.7333
		25	0.9286	39	0.75
		26	0.9429	40	0.7667
		27	0.9571	41	0.7833
		37	0.9857	42	0.8
		38	1	43	0.8167
				44	0.8333
				50	0.85
				155	0.8667
				156	0.8833
				157	0.9
				158	0.9167
				159	0.9333
				160	0.95
				161	0.9667
				162	0.9833
				163	1

Table A.124 Kinik station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		75	75	5	4	9
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	75	3	0.96	0.0226	0.91666	10.000
2	72	7	0.8667	0.0393	0.79305	0.9471
3	65	11	0.72	0.0518	0.62523	0.8291
4	54	11	0.5733	0.0571	0.47165	0.6969
5	43	8	0.4667	0.0576	0.36638	0.5944
6	35	2	0.44	0.0573	0.34085	0.568
7	33	2	0.4133	0.0569	0.31565	0.5412
8	31	3	0.3733	0.0559	0.27845	0.5005
9	28	3	0.3333	0.0544	0.24203	0.4591
10	25	5	0.2667	0.0511	0.18322	0.3881
11	20	5	0.2	0.0462	0.12719	0.3145
12	15	3	0.16	0.0423	0.09526	0.2687
14	12	1	0.1467	0.0409	0.08497	0.2532
15	11	1	0.1333	0.0393	0.07488	0.2374
16	10	1	0.12	0.0375	0.06502	0.2215
18	9	2	0.0933	0.0336	0.0461	0.189
19	7	1	0.08	0.0313	0.03713	0.1723
24	6	1	0.0667	0.0288	0.02859	0.1555
27	5	1	0.0533	0.0259	0.02055	0.1384
29	4	1	0.04	0.0226	0.0132	0.1212
37	3	1	0.0267	0.0186	0.00679	0.1047
38	2	1	0.0133	0.0132	0.0019	0.0934
39	1	1	0	NaN	NA	NA

Table A.125 Kinik station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		71	71	14	12	18
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	71	4	0.9437	0.0274	0.89153	0.9988
2	67	3	0.9014	0.0354	0.83467	0.9735
3	64	3	0.8592	0.0413	0.78193	0.944
4	61	4	0.8028	0.0472	0.71541	0.9009
6	57	1	0.7887	0.0484	0.69927	0.8896
7	56	1	0.7746	0.0496	0.68331	0.8782
8	55	1	0.7606	0.0506	0.66751	0.8666
9	54	3	0.7183	0.0534	0.62094	0.8309
10	51	4	0.662	0.0561	0.5606	0.7817
11	47	3	0.6197	0.0576	0.51649	0.7436
12	44	3	0.5775	0.0586	0.47328	0.7046
13	41	3	0.5352	0.0592	0.43091	0.6648
14	38	3	0.493	0.0593	0.38937	0.6241
15	35	3	0.4507	0.059	0.34863	0.5827
16	32	2	0.4225	0.0586	0.32193	0.5546
17	30	3	0.3803	0.0576	0.28258	0.5118
18	27	3	0.338	0.0561	0.24411	0.4681
19	24	3	0.2958	0.0542	0.20658	0.4235
20	21	3	0.2535	0.0516	0.17009	0.3779
21	18	2	0.2254	0.0496	0.14641	0.3469
22	16	1	0.2113	0.0484	0.13479	0.3311
23	15	1	0.1972	0.0472	0.12332	0.3153
24	14	1	0.1831	0.0459	0.11202	0.2993
27	13	1	0.169	0.0445	0.10091	0.2831
28	12	2	0.1408	0.0413	0.07929	0.2502
36	10	1	0.1268	0.0395	0.06884	0.2334
37	9	1	0.1127	0.0375	0.05866	0.2164
38	8	1	0.0986	0.0354	0.0488	0.1992
39	7	1	0.0845	0.033	0.0393	0.1817
40	6	1	0.0704	0.0304	0.03025	0.164
41	5	1	0.0563	0.0274	0.02175	0.146
42	4	1	0.0423	0.0239	0.01396	0.1279
43	3	1	0.0282	0.0196	0.00718	0.1104
112	2	1	0.0141	0.014	0.00201	0.0986
113	1	1	0	NaN	NA	NA

Table A.126 Kinik station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		66	66	17	13	23
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	66	1	0.9848	0.015	0.95581	1.000
2	65	2	0.9545	0.0256	0.90559	1.000
3	63	2	0.9242	0.0326	0.86256	0.99
4	61	1	0.9091	0.0354	0.84231	0.981
5	60	2	0.8788	0.0402	0.80347	0.961
6	58	1	0.8636	0.0422	0.78469	0.951
7	57	2	0.8333	0.0459	0.7481	0.928
8	55	2	0.803	0.049	0.71259	0.905
9	53	2	0.7727	0.0516	0.67796	0.881
10	51	3	0.7273	0.0548	0.62739	0.843
11	48	3	0.6818	0.0573	0.57822	0.804
12	45	3	0.6364	0.0592	0.53028	0.764
13	42	2	0.6061	0.0601	0.49893	0.736
14	40	2	0.5758	0.0608	0.46806	0.708
15	38	2	0.5455	0.0613	0.43763	0.68
16	36	2	0.5152	0.0615	0.40765	0.651
17	34	2	0.4848	0.0615	0.3781	0.622
18	32	2	0.4545	0.0613	0.34898	0.592
19	30	2	0.4242	0.0608	0.3203	0.562
20	28	2	0.3939	0.0601	0.29206	0.531
21	26	1	0.3788	0.0597	0.27811	0.516
22	25	1	0.3636	0.0592	0.26428	0.5
23	24	1	0.3485	0.0587	0.25057	0.485
24	23	1	0.3333	0.058	0.23698	0.469
37	22	1	0.3182	0.0573	0.22351	0.453
38	21	1	0.303	0.0566	0.21018	0.437
39	20	1	0.2879	0.0557	0.19698	0.421
40	19	1	0.2727	0.0548	0.18392	0.404
41	18	1	0.2576	0.0538	0.17101	0.388
42	17	1	0.2424	0.0528	0.15825	0.371
86	16	1	0.2273	0.0516	0.14566	0.355
87	15	1	0.2121	0.0503	0.13325	0.338
88	14	1	0.197	0.049	0.12102	0.321
89	13	1	0.1818	0.0475	0.10899	0.303
90	12	1	0.1667	0.0459	0.09718	0.286
91	11	1	0.1515	0.0441	0.08561	0.268
92	10	1	0.1364	0.0422	0.07431	0.25

Table A.126 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		66	66	17	13	23
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
93	9	1	0.1212	0.0402	0.0633	0.232
94	8	1	0.1061	0.0379	0.05265	0.214
95	7	1	0.0909	0.0354	0.04239	0.195
96	6	1	0.0758	0.0326	0.03262	0.176
152	5	1	0.0606	0.0294	0.02344	0.157
153	4	1	0.0455	0.0256	0.01505	0.137
154	3	1	0.0303	0.0211	0.00774	0.119
155	2	1	0.0152	0.015	0.00217	0.106
156	1	1	0	NaN	NA	NA

Table A.127 Kinik station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.04	1	0.0563	1	0.0152
2	0.1333	2	0.0986	2	0.0455
3	0.28	3	0.1408	3	0.0758
4	0.4267	4	0.1972	4	0.0909
5	0.5333	6	0.2113	5	0.1212
6	0.56	7	0.2254	6	0.1364
7	0.5867	8	0.2394	7	0.1667
8	0.6267	9	0.2817	8	0.197
9	0.6667	10	0.338	9	0.2273
10	0.7333	11	0.3803	10	0.2727
11	0.8	12	0.4225	11	0.3182
12	0.84	13	0.4648	12	0.3636
14	0.8533	14	0.507	13	0.3939
15	0.8667	15	0.5493	14	0.4242
16	0.88	16	0.5775	15	0.4545
18	0.9067	17	0.6197	16	0.4848
19	0.92	18	0.662	17	0.5152
24	0.9333	19	0.7042	18	0.5455
27	0.9467	20	0.7465	19	0.5758
29	0.96	21	0.7746	20	0.6061
37	0.9733	22	0.7887	21	0.6212
38	0.9867	23	0.8028	22	0.6364
39	1	24	0.8169	23	0.6515
		27	0.831	24	0.6667
		28	0.8592	37	0.6818
		36	0.8732	38	0.697
		37	0.8873	39	0.7121
		38	0.9014	40	0.7273
		39	0.9155	41	0.7424
		40	0.9296	42	0.7576
		41	0.9437	86	0.7727
		42	0.9577	87	0.7879
		43	0.9718	88	0.803
		112	0.9859	89	0.8182
		113	1	90	0.8333
				91	0.8485
				92	0.8636
				93	0.8788
				94	0.8939
				95	0.9091
				96	0.9242
				152	0.9394
				153	0.9545
				154	0.9697
				155	0.9848
				156	1

Table A.128 Kiraz station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		57	57	7	5	10
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	57	4	0.9298	0.0338	0.86582	0.999
2	53	2	0.8947	0.0406	0.81851	0.978
3	51	4	0.8246	0.0504	0.73151	0.929
4	47	7	0.7018	0.0606	0.5925	0.831
5	40	6	0.5965	0.065	0.48181	0.738
6	34	4	0.5263	0.0661	0.41142	0.673
7	30	3	0.4737	0.0661	0.36028	0.623
8	27	2	0.4386	0.0657	0.32697	0.588
9	25	3	0.386	0.0645	0.27819	0.535
10	22	3	0.3333	0.0624	0.23091	0.481
11	19	3	0.2807	0.0595	0.18525	0.425
12	16	2	0.2456	0.057	0.15583	0.387
13	14	1	0.2281	0.0556	0.14146	0.368
16	13	2	0.193	0.0523	0.11349	0.328
17	11	2	0.1579	0.0483	0.0867	0.288
18	9	3	0.1053	0.0406	0.04938	0.224
19	6	1	0.0877	0.0375	0.03798	0.203
28	5	1	0.0702	0.0338	0.02728	0.181
29	4	1	0.0526	0.0296	0.01749	0.158
37	3	1	0.0351	0.0244	0.00899	0.137
48	2	1	0.0175	0.0174	0.00251	0.122
49	1	1	0	NaN	NA	NA

Table A.129 Kiraz station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		49	49	12	8	26
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	49	1	0.9796	0.0202	0.94079	1
2	48	3	0.9184	0.0391	0.84482	0.998
3	45	3	0.8571	0.05	0.76456	0.961
4	42	2	0.8163	0.0553	0.7148	0.932
5	40	2	0.7755	0.0596	0.66706	0.902
6	38	2	0.7347	0.0631	0.62092	0.869
7	36	3	0.6735	0.067	0.55417	0.818
8	33	3	0.6122	0.0696	0.48995	0.765
9	30	3	0.551	0.0711	0.42796	0.709
11	27	2	0.5102	0.0714	0.38779	0.671
12	25	1	0.4898	0.0714	0.36805	0.652
13	24	1	0.4694	0.0713	0.34853	0.632
14	23	1	0.449	0.0711	0.32924	0.612
15	22	1	0.4286	0.0707	0.31018	0.592
16	21	2	0.3878	0.0696	0.27275	0.551
17	19	1	0.3673	0.0689	0.25439	0.53
23	18	1	0.3469	0.068	0.23628	0.509
26	17	1	0.3265	0.067	0.21842	0.488
27	16	2	0.2857	0.0645	0.18351	0.445
28	14	1	0.2653	0.0631	0.16649	0.423
29	13	1	0.2449	0.0614	0.14978	0.4
30	12	1	0.2245	0.0596	0.13341	0.378
31	11	1	0.2041	0.0576	0.1174	0.355
32	10	1	0.1837	0.0553	0.10179	0.331
33	9	1	0.1633	0.0528	0.08662	0.308
34	8	1	0.1429	0.05	0.07195	0.284
37	7	1	0.1224	0.0468	0.05787	0.259
44	6	1	0.102	0.0432	0.04447	0.234
45	5	1	0.0816	0.0391	0.03192	0.209
46	4	1	0.0612	0.0342	0.02045	0.183
47	3	1	0.0408	0.0283	0.0105	0.159
64	2	1	0.0204	0.0202	0.00293	0.142
65	1	1	0	NaN	NA	NA

Table A.130 Kiraz station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		50	50	32.5	29	37
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
9	50	1	0.98	0.0198	0.94195	1
11	49	1	0.96	0.0277	0.90719	1
12	48	1	0.94	0.0336	0.87643	1
13	47	1	0.92	0.0384	0.84779	0.998
14	46	1	0.9	0.0424	0.82057	0.987
15	45	1	0.88	0.046	0.79438	0.975
16	44	1	0.86	0.0491	0.769	0.962
17	43	1	0.84	0.0518	0.74429	0.948
18	42	1	0.82	0.0543	0.72014	0.934
19	41	1	0.8	0.0566	0.69647	0.919
25	40	1	0.78	0.0586	0.67323	0.904
26	39	2	0.74	0.062	0.62788	0.872
27	37	2	0.7	0.0648	0.58384	0.839
28	35	2	0.66	0.067	0.54093	0.805
29	33	2	0.62	0.0686	0.49906	0.77
30	31	2	0.58	0.0698	0.45813	0.734
31	29	2	0.54	0.0705	0.41811	0.697
32	27	2	0.5	0.0707	0.37896	0.66
33	25	2	0.46	0.0705	0.34067	0.621
34	23	2	0.42	0.0698	0.30324	0.582
35	21	2	0.38	0.0686	0.2667	0.541
36	19	2	0.34	0.067	0.23108	0.5
37	17	2	0.3	0.0648	0.19644	0.458
38	15	1	0.28	0.0635	0.17952	0.437
39	14	1	0.26	0.062	0.16289	0.415
40	13	1	0.24	0.0604	0.14655	0.393
41	12	1	0.22	0.0586	0.13054	0.371
42	11	1	0.2	0.0566	0.11489	0.348
43	10	1	0.18	0.0543	0.09962	0.325
44	9	1	0.16	0.0518	0.08478	0.302
45	8	1	0.14	0.0491	0.07043	0.278
46	7	1	0.12	0.046	0.05665	0.254
47	6	1	0.1	0.0424	0.04354	0.23
48	5	1	0.08	0.0384	0.03125	0.205
49	4	1	0.06	0.0336	0.02003	0.18
96	3	1	0.04	0.0277	0.01029	0.156
120	2	1	0.02	0.0198	0.00287	0.139
121	1	1	0	NaN	NA	NA

Table A.131 Kiraz station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0702	1	0.0204	3	0.006667
2	0.1053	2	0.0816	6	0.013333
3	0.1754	3	0.1429	9	0.02
4	0.2982	4	0.1837	11	0.04
5	0.4035	5	0.2245	12	0.06
6	0.4737	6	0.2653	13	0.08
7	0.5263	7	0.3265	14	0.1
8	0.5614	8	0.3878	15	0.12
9	0.614	9	0.449	16	0.14
10	0.6667	11	0.4898	17	0.16
11	0.7193	12	0.5102	18	0.18
12	0.7544	13	0.5306	19	0.2
13	0.7719	14	0.551	25	0.22
16	0.807	15	0.5714	26	0.26
17	0.8421	16	0.6122	27	0.3
18	0.8947	17	0.6327	28	0.34
19	0.9123	23	0.6531	29	0.38
28	0.9298	26	0.6735	30	0.42
29	0.9474	27	0.7143	31	0.46
37	0.9649	28	0.7347	32	0.5
48	0.9825	29	0.7551	33	0.54
49	1	30	0.7755	34	0.58
		31	0.7959	35	0.62
		32	0.8163	36	0.66
		33	0.8367	37	0.7
		34	0.8571	38	0.72
		37	0.8776	39	0.74
		44	0.898	40	0.76
		45	0.9184	41	0.78
		46	0.9388	42	0.8
		47	0.9592	43	0.82
		64	0.9796	44	0.84
		65	1	45	0.86
				46	0.88
				47	0.9
				48	0.92
				49	0.94
				96	0.96
				120	0.98
				121	1

Table A.132 Kiraz station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		66	66	17	13	23
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	66	1	0.9848	0.015	0.95581	1.000
2	65	2	0.9545	0.0256	0.90559	1.000
3	63	2	0.9242	0.0326	0.86256	0.99
4	61	1	0.9091	0.0354	0.84231	0.981
5	60	2	0.8788	0.0402	0.80347	0.961
6	58	1	0.8636	0.0422	0.78469	0.951
7	57	2	0.8333	0.0459	0.7481	0.928
8	55	2	0.803	0.049	0.71259	0.905
9	53	2	0.7727	0.0516	0.67796	0.881
10	51	3	0.7273	0.0548	0.62739	0.843
11	48	3	0.6818	0.0573	0.57822	0.804
12	45	3	0.6364	0.0592	0.53028	0.764
13	42	2	0.6061	0.0601	0.49893	0.736
14	40	2	0.5758	0.0608	0.46806	0.708
15	38	2	0.5455	0.0613	0.43763	0.68
16	36	2	0.5152	0.0615	0.40765	0.651
17	34	2	0.4848	0.0615	0.3781	0.622
18	32	2	0.4545	0.0613	0.34898	0.592
19	30	2	0.4242	0.0608	0.3203	0.562
20	28	2	0.3939	0.0601	0.29206	0.531
21	26	1	0.3788	0.0597	0.27811	0.516
22	25	1	0.3636	0.0592	0.26428	0.5
23	24	1	0.3485	0.0587	0.25057	0.485
24	23	1	0.3333	0.058	0.23698	0.469
37	22	1	0.3182	0.0573	0.22351	0.453
38	21	1	0.303	0.0566	0.21018	0.437
39	20	1	0.2879	0.0557	0.19698	0.421
40	19	1	0.2727	0.0548	0.18392	0.404
41	18	1	0.2576	0.0538	0.17101	0.388
42	17	1	0.2424	0.0528	0.15825	0.371
86	16	1	0.2273	0.0516	0.14566	0.355
87	15	1	0.2121	0.0503	0.13325	0.338
88	14	1	0.197	0.049	0.12102	0.321
89	13	1	0.1818	0.0475	0.10899	0.303
90	12	1	0.1667	0.0459	0.09718	0.286
91	11	1	0.1515	0.0441	0.08561	0.268
92	10	1	0.1364	0.0422	0.07431	0.25
93	9	1	0.1212	0.0402	0.0633	0.232
94	8	1	0.1061	0.0379	0.05265	0.214
95	7	1	0.0909	0.0354	0.04239	0.195
96	6	1	0.0758	0.0326	0.03262	0.176
152	5	1	0.0606	0.0294	0.02344	0.157
153	4	1	0.0455	0.0256	0.01505	0.137
154	3	1	0.0303	0.0211	0.00774	0.119
155	2	1	0.0152	0.015	0.00217	0.106
156	1	1	0	NaN	NA	NA

Table A.133 Kiraz station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		70	70	9	8	11
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
2	70	1	0.9857	0.0142	0.9583	1.000
3	69	1	0.9714	0.0199	0.93317	1.000
4	68	1	0.9571	0.0242	0.91085	1.000
5	67	2	0.9286	0.0308	0.87016	0.991
6	65	6	0.8429	0.0435	0.76177	0.933
7	59	8	0.7286	0.0532	0.6315	0.841
8	51	9	0.6	0.0586	0.49554	0.726
9	42	8	0.4857	0.0597	0.38167	0.618
10	34	6	0.4	0.0586	0.30023	0.533
11	28	4	0.3429	0.0567	0.24789	0.474
12	24	3	0.3	0.0548	0.20976	0.429
13	21	2	0.2714	0.0532	0.18492	0.398
14	19	1	0.2571	0.0522	0.17268	0.383
15	18	1	0.2429	0.0513	0.16059	0.367
16	17	1	0.2286	0.0502	0.14863	0.352
20	16	1	0.2143	0.049	0.13683	0.336
21	15	2	0.1857	0.0465	0.11371	0.303
22	13	1	0.1714	0.045	0.10243	0.287
23	12	1	0.1571	0.0435	0.09134	0.27
24	11	1	0.1429	0.0418	0.08048	0.254
25	10	1	0.1286	0.04	0.06987	0.237
26	9	1	0.1143	0.038	0.05953	0.219
27	8	2	0.0857	0.0335	0.03988	0.184
28	6	1	0.0714	0.0308	0.03069	0.166
29	5	1	0.0571	0.0277	0.02206	0.148
30	4	1	0.0429	0.0242	0.01417	0.13
48	3	1	0.0286	0.0199	0.00729	0.112
64	2	1	0.0143	0.0142	0.00204	0.1
65	1	1	0	NaN	NA	NA

Table A.134 Kiraz station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		60	60	8	6	13
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	60	7	0.8833	0.0414	0.80573	0.968
2	53	4	0.8167	0.05	0.7244	0.921
3	49	3	0.7667	0.0546	0.66678	0.882
4	46	3	0.7167	0.0582	0.61125	0.84
5	43	3	0.6667	0.0609	0.55745	0.797
6	40	4	0.6	0.0632	0.48801	0.738
7	36	4	0.5333	0.0644	0.42093	0.676
8	32	3	0.4833	0.0645	0.37208	0.628
9	29	2	0.45	0.0642	0.34019	0.595
10	27	2	0.4167	0.0636	0.30886	0.562
11	25	1	0.4	0.0632	0.29341	0.545
12	24	2	0.3667	0.0622	0.26293	0.511
13	22	2	0.3333	0.0609	0.23306	0.477
14	20	2	0.3	0.0592	0.20383	0.442
15	18	2	0.2667	0.0571	0.17528	0.406
16	16	1	0.25	0.0559	0.16129	0.388
17	15	1	0.2333	0.0546	0.1475	0.369
18	14	1	0.2167	0.0532	0.13392	0.351
19	13	1	0.2	0.0516	0.12057	0.332
20	12	1	0.1833	0.05	0.10748	0.313
21	11	1	0.1667	0.0481	0.09465	0.293
22	10	1	0.15	0.0461	0.08213	0.274
23	9	1	0.1333	0.0439	0.06995	0.254
24	8	1	0.1167	0.0414	0.05815	0.234
25	7	1	0.1	0.0387	0.04681	0.214
27	6	1	0.0833	0.0357	0.036	0.193
28	5	1	0.0667	0.0322	0.02587	0.172
29	4	1	0.05	0.0281	0.01659	0.151
106	3	1	0.0333	0.0232	0.00853	0.13
120	2	1	0.0167	0.0165	0.00239	0.116
121	1	1	0	NaN	NA	NA

Table A.135 Kiraz station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0152	2	0.0143	1	0.1167
2	0.0455	3	0.0286	2	0.1833
3	0.0758	4	0.0429	3	0.2333
4	0.0909	5	0.0714	4	0.2833
5	0.1212	6	0.1571	5	0.3333
6	0.1364	7	0.2714	6	0.4
7	0.1667	8	0.4	7	0.4667
8	0.197	9	0.5143	8	0.5167
9	0.2273	10	0.6	9	0.55
10	0.2727	11	0.6571	10	0.5833
11	0.3182	12	0.7	11	0.6
12	0.3636	13	0.7286	12	0.6333
13	0.3939	14	0.7429	13	0.6667
14	0.4242	15	0.7571	14	0.7
15	0.4545	16	0.7714	15	0.7333
16	0.4848	20	0.7857	16	0.75
17	0.5152	21	0.8143	17	0.7667
18	0.5455	22	0.8286	18	0.7833
19	0.5758	23	0.8429	19	0.8
20	0.6061	24	0.8571	20	0.8167
21	0.6212	25	0.8714	21	0.8333
22	0.6364	26	0.8857	22	0.85
23	0.6515	27	0.9143	23	0.8667
24	0.6667	28	0.9286	24	0.8833
37	0.6818	29	0.9429	25	0.9
38	0.697	30	0.9571	27	0.9167
39	0.7121	48	0.9714	28	0.9333
40	0.7273	64	0.9857	29	0.95
41	0.7424	65	1	106	0.9667
42	0.7576			120	0.9833
86	0.7727			121	1
87	0.7879				
88	0.803				
89	0.8182				
90	0.8333				
91	0.8485				
92	0.8636				
93	0.8788				
94	0.8939				
95	0.9091				
96	0.9242				
152	0.9394				
153	0.9545				
154	0.9697				
155	0.9848				
156	1				

Table A.136 Kirkagac station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		39	39	7	5	12
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	39	5	0.8718	0.0535	0.7729	0.983
2	34	2	0.8205	0.0615	0.7085	0.95
3	32	4	0.7179	0.0721	0.5897	0.874
4	28	3	0.641	0.0768	0.5068	0.811
5	25	2	0.5897	0.0788	0.4539	0.766
6	23	3	0.5128	0.08	0.3777	0.696
7	20	1	0.4872	0.08	0.3531	0.672
8	19	2	0.4359	0.0794	0.305	0.623
9	17	3	0.359	0.0768	0.236	0.546
11	14	1	0.3333	0.0755	0.2139	0.52
12	13	1	0.3077	0.0739	0.1922	0.493
13	12	2	0.2564	0.0699	0.1503	0.438
14	10	1	0.2308	0.0675	0.1301	0.409
15	9	1	0.2051	0.0647	0.1106	0.38
16	8	3	0.1282	0.0535	0.0566	0.291
17	5	1	0.1026	0.0486	0.0405	0.26
18	4	1	0.0769	0.0427	0.0259	0.228
24	3	1	0.0513	0.0353	0.0133	0.198
25	2	2	0	NaN	NA	NA

Table A.137 Kirkagac station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		41	41	12	6	17
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	41	6	0.8537	0.0552	0.75204	0.969
2	35	4	0.7561	0.0671	0.63544	0.9
3	31	2	0.7073	0.0711	0.5809	0.861
4	29	1	0.6829	0.0727	0.55436	0.841
5	28	2	0.6341	0.0752	0.50259	0.8
6	26	1	0.6098	0.0762	0.47732	0.779
7	25	1	0.5854	0.0769	0.45242	0.757
10	24	1	0.561	0.0775	0.4279	0.735
11	23	2	0.5122	0.0781	0.37993	0.691
12	21	1	0.4878	0.0781	0.35647	0.668
13	20	1	0.4634	0.0779	0.33337	0.644
15	19	3	0.3902	0.0762	0.26617	0.572
16	16	2	0.3415	0.0741	0.22322	0.522
17	14	1	0.3171	0.0727	0.20233	0.497
18	13	1	0.2927	0.0711	0.18186	0.471
19	12	1	0.2683	0.0692	0.16184	0.445
20	11	1	0.2439	0.0671	0.14229	0.418
21	10	1	0.2195	0.0646	0.12325	0.391
22	9	1	0.1951	0.0619	0.10479	0.363
24	8	1	0.1707	0.0588	0.08696	0.335
25	7	1	0.1463	0.0552	0.06987	0.307
26	6	1	0.122	0.0511	0.05364	0.277
27	5	2	0.0732	0.0407	0.02462	0.217
37	3	2	0.0244	0.0241	0.00352	0.169
38	1	1	0	NaN	NA	NA

Table A.138 Kirkagac station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		34	34	23.5	19	40
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	34	2	0.9412	0.0404	0.86532	1
2	32	1	0.9118	0.0486	0.82124	1
3	31	1	0.8824	0.0553	0.78044	0.998
4	30	1	0.8529	0.0607	0.74183	0.981
5	29	1	0.8235	0.0654	0.70486	0.962
8	28	1	0.7941	0.0693	0.6692	0.942
14	27	1	0.7647	0.0727	0.63463	0.921
15	26	1	0.7353	0.0757	0.601	0.9
16	25	1	0.7059	0.0781	0.5682	0.877
17	24	1	0.6765	0.0802	0.53616	0.853
18	23	1	0.6471	0.082	0.50481	0.829
19	22	1	0.6176	0.0833	0.47412	0.805
20	21	1	0.5882	0.0844	0.44403	0.779
21	20	1	0.5588	0.0852	0.41454	0.753
22	19	1	0.5294	0.0856	0.38562	0.727
23	18	1	0.5	0.0857	0.35726	0.7
24	17	1	0.4706	0.0856	0.32946	0.672
25	16	1	0.4412	0.0852	0.30222	0.644
36	15	1	0.4118	0.0844	0.27553	0.615
37	14	1	0.3824	0.0833	0.24942	0.586
38	13	1	0.3529	0.082	0.2239	0.556
39	12	1	0.3235	0.0802	0.19899	0.526
40	11	1	0.2941	0.0781	0.17473	0.495
41	10	1	0.2647	0.0757	0.15117	0.464
42	9	1	0.2353	0.0727	0.12836	0.431
65	8	1	0.2059	0.0693	0.10639	0.398
66	7	1	0.1765	0.0654	0.08537	0.365
67	6	1	0.1471	0.0607	0.06545	0.33
68	5	1	0.1176	0.0553	0.04686	0.295
69	4	1	0.0882	0.0486	0.02995	0.26
70	3	1	0.0588	0.0404	0.01533	0.226
87	2	1	0.0294	0.029	0.00427	0.203
88	1	1	0	NaN	NA	NA

Table A.139 Kirkagac station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.1282	1	0.1463	1	0.0588
2	0.1795	2	0.2439	2	0.0882
3	0.2821	3	0.2927	3	0.1176
4	0.359	4	0.3171	4	0.1471
5	0.4103	5	0.3659	5	0.1765
6	0.4872	6	0.3902	6	0.1863
7	0.5128	7	0.4146	8	0.2059
8	0.5641	10	0.439	12	0.2255
9	0.641	11	0.4878	14	0.2353
11	0.6667	12	0.5122	15	0.2647
12	0.6923	13	0.5366	16	0.2941
13	0.7436	15	0.6098	17	0.3235
14	0.7692	16	0.6585	18	0.3529
15	0.7949	17	0.6829	19	0.3824
16	0.8718	18	0.7073	20	0.4118
17	0.8974	19	0.7317	21	0.4412
18	0.9231	20	0.7561	22	0.4706
24	0.9487	21	0.7805	23	0.5
25	1	22	0.8049	24	0.5294
		24	0.8293	25	0.5588
		25	0.8537	36	0.5882
		26	0.878	37	0.6176
		27	0.9268	38	0.6471
		37	0.9756	39	0.6765
		38	1	40	0.7059
				41	0.7353
				42	0.7647
				65	0.7941
				66	0.8235
				67	0.8529
				68	0.8824
				69	0.9118
				70	0.9412
				87	0.9706
				88	1

Table A.140 Kirkagac station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		48	48	5	3	8
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	48	6	0.875	0.0477	0.7863	0.974
2	42	7	0.7292	0.0641	0.6137	0.866
3	35	6	0.6042	0.0706	0.4805	0.76
4	29	4	0.5208	0.0721	0.3971	0.683
5	25	3	0.4583	0.0719	0.337	0.623
6	22	1	0.4375	0.0716	0.3174	0.603
7	21	2	0.3958	0.0706	0.2791	0.561
8	19	3	0.3333	0.068	0.2234	0.497
9	16	4	0.25	0.0625	0.1532	0.408
10	12	3	0.1875	0.0563	0.1041	0.338
11	9	1	0.1667	0.0538	0.0885	0.314
12	8	1	0.1458	0.0509	0.0735	0.289
13	7	3	0.0833	0.0399	0.0326	0.213
18	4	1	0.0625	0.0349	0.0209	0.187
19	3	1	0.0417	0.0288	0.0107	0.162
25	2	1	0.0208	0.0206	0.003	0.145
48	1	1	0	NaN	NA	NA

Table A.141 Kirkagac station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		48	48	17	15	20
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	48	3	0.9375	0.0349	0.8715	1.000
2	45	2	0.8958	0.0441	0.8135	0.987
3	43	1	0.875	0.0477	0.7863	0.974
4	42	1	0.8542	0.0509	0.7599	0.96
5	41	1	0.8333	0.0538	0.7343	0.946
6	40	1	0.8125	0.0563	0.7093	0.931
7	39	3	0.75	0.0625	0.637	0.883
8	36	2	0.7083	0.0656	0.5907	0.849
9	34	1	0.6875	0.0669	0.5681	0.832
10	33	1	0.6667	0.068	0.5458	0.814
14	32	1	0.6458	0.069	0.5238	0.796
15	31	3	0.5833	0.0712	0.4593	0.741
16	28	3	0.5208	0.0721	0.3971	0.683
17	25	2	0.4792	0.0721	0.3568	0.644
18	23	3	0.4167	0.0712	0.2981	0.582
19	20	2	0.375	0.0699	0.2603	0.54
20	18	2	0.3333	0.068	0.2234	0.497
21	16	2	0.2917	0.0656	0.1877	0.453
22	14	2	0.25	0.0625	0.1532	0.408
23	12	1	0.2292	0.0607	0.1364	0.385
24	11	1	0.2083	0.0586	0.12	0.362
25	10	1	0.1875	0.0563	0.1041	0.338
26	9	1	0.1667	0.0538	0.0885	0.314
27	8	1	0.1458	0.0509	0.0735	0.289
37	7	1	0.125	0.0477	0.0591	0.264
38	6	1	0.1042	0.0441	0.0454	0.239
39	5	1	0.0833	0.0399	0.0326	0.213
40	4	1	0.0625	0.0349	0.0209	0.187
41	3	1	0.0417	0.0288	0.0107	0.162
42	2	1	0.0208	0.0206	0.003	0.145
79	1	1	0	NaN	NA	NA

Table A.142 Kirkagac station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		41	41	23	20	27
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	41	2	0.9512	0.0336	0.88752	1.000
2	39	1	0.9268	0.0407	0.85045	1.000
3	38	2	0.878	0.0511	0.78339	0.984
4	36	2	0.8293	0.0588	0.72173	0.953
5	34	1	0.8049	0.0619	0.69227	0.936
8	33	1	0.7805	0.0646	0.66354	0.918
9	32	1	0.7561	0.0671	0.63544	0.9
17	31	1	0.7317	0.0692	0.60791	0.881
18	30	1	0.7073	0.0711	0.5809	0.861
19	29	2	0.6585	0.0741	0.52827	0.821
20	27	2	0.6098	0.0762	0.47732	0.779
21	25	2	0.561	0.0775	0.4279	0.735
22	23	2	0.5122	0.0781	0.37993	0.691
23	21	2	0.4634	0.0779	0.33337	0.644
24	19	2	0.4146	0.0769	0.28821	0.597
25	17	2	0.3659	0.0752	0.24451	0.547
26	15	1	0.3415	0.0741	0.22322	0.522
27	14	1	0.3171	0.0727	0.20233	0.497
28	13	1	0.2927	0.0711	0.18186	0.471
29	12	1	0.2683	0.0692	0.16184	0.445
32	11	1	0.2439	0.0671	0.14229	0.418
33	10	1	0.2195	0.0646	0.12325	0.391
34	9	1	0.1951	0.0619	0.10479	0.363
35	8	1	0.1707	0.0588	0.08696	0.335
39	7	1	0.1463	0.0552	0.06987	0.307
40	6	1	0.122	0.0511	0.05364	0.277
41	5	1	0.0976	0.0463	0.03846	0.248
42	4	1	0.0732	0.0407	0.02462	0.217
43	3	1	0.0488	0.0336	0.01262	0.188
44	2	1	0.0244	0.0241	0.00352	0.169
87	1	1	0	NaN	NA	NA

Table A.143 Kirkagac station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.125	1	0.0625	1	0.0488
2	0.2708	2	0.1042	2	0.0732
3	0.3958	3	0.125	3	0.122
4	0.4792	4	0.1458	4	0.1707
5	0.5417	5	0.1667	5	0.1951
6	0.5625	6	0.1875	6	0.203233
7	0.6042	7	0.25	8	0.2195
8	0.6667	8	0.2917	9	0.2439
9	0.75	9	0.3125	12	0.25305
10	0.8125	10	0.3333	17	0.2683
11	0.8333	12	0.34375	18	0.2927
12	0.8542	14	0.3542	19	0.3415
13	0.9167	15	0.4167	20	0.3902
18	0.9375	16	0.4792	21	0.439
19	0.9583	17	0.5208	22	0.4878
25	0.9792	18	0.5833	23	0.5366
48	1	19	0.625	24	0.5854
		20	0.6667	25	0.6341
		21	0.7083	26	0.6585
		22	0.75	27	0.6829
		23	0.7708	28	0.7073
		24	0.7917	29	0.7317
		25	0.8125	32	0.7561
		26	0.8333	33	0.7805
		27	0.8542	34	0.8049
		37	0.875	35	0.8293
		38	0.8958	39	0.8537
		39	0.9167	40	0.878
		40	0.9375	41	0.9024
		41	0.9583	42	0.9268
		42	0.9792	43	0.9512
		79	1	44	0.9756
				87	1

Table A.144 Kula station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		118	118	8	7	10
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	118	5	0.95763	0.01854	0.92196	0.9947
2	113	5	0.91525	0.02564	0.86636	0.9669
3	108	6	0.86441	0.03152	0.80479	0.9284
4	102	3	0.83898	0.03384	0.77522	0.908
5	99	10	0.75424	0.03963	0.68042	0.8361
6	89	12	0.65254	0.04383	0.57204	0.7444
7	77	13	0.54237	0.04586	0.45954	0.6401
8	64	7	0.48305	0.046	0.4008	0.5822
9	57	6	0.4322	0.0456	0.35146	0.5315
10	51	7	0.37288	0.04452	0.29509	0.4712
11	44	7	0.31356	0.04271	0.24009	0.4095
12	37	3	0.28814	0.04169	0.21699	0.3826
13	34	5	0.24576	0.03963	0.17916	0.3371
14	29	4	0.21186	0.03762	0.1496	0.3
15	25	2	0.19492	0.03647	0.13508	0.2813
17	23	2	0.17797	0.03521	0.12076	0.2623
18	21	2	0.16102	0.03384	0.10666	0.2431
19	19	1	0.15254	0.0331	0.0997	0.2334
20	18	3	0.12712	0.03066	0.07923	0.204
21	15	1	0.11864	0.02977	0.07256	0.194
22	14	3	0.09322	0.02676	0.0531	0.1636
23	11	2	0.07627	0.02443	0.04071	0.1429
24	9	3	0.05085	0.02022	0.02332	0.1109
25	6	3	0.02542	0.01449	0.00832	0.0777
26	3	1	0.01695	0.01188	0.00429	0.067
29	2	1	0.00847	0.00844	0.0012	0.0597
49	1	1	0	NaN	NA	NA

Table A.145 Kula station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		124	124	11.5	10	16
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	124	4	0.96774	0.01587	0.93714	0.9993
2	120	7	0.91129	0.02553	0.8626	0.9627
3	113	6	0.8629	0.03089	0.80444	0.9256
4	107	2	0.84677	0.03235	0.78569	0.9126
5	105	2	0.83065	0.03368	0.76719	0.8994
6	103	7	0.77419	0.03755	0.70399	0.8514
7	96	7	0.71774	0.04042	0.64274	0.8015
8	89	7	0.66129	0.0425	0.58302	0.7501
9	82	7	0.60484	0.0439	0.52463	0.6973
10	75	7	0.54839	0.04469	0.46743	0.6434
11	68	6	0.5	0.0449	0.4193	0.5962
12	62	4	0.46774	0.04481	0.38767	0.5643
13	58	2	0.45161	0.04469	0.37199	0.5483
14	56	2	0.43548	0.04453	0.3564	0.5321
15	54	3	0.41129	0.04419	0.33319	0.5077
16	51	2	0.39516	0.0439	0.31784	0.4913
17	49	3	0.37097	0.04338	0.29498	0.4665
18	46	2	0.35484	0.04297	0.27987	0.4499
19	44	2	0.33871	0.0425	0.26486	0.4331
22	42	1	0.33065	0.04225	0.2574	0.4247
23	41	2	0.31452	0.0417	0.24255	0.4078
24	39	3	0.29032	0.04076	0.22048	0.3823
25	36	4	0.25806	0.03929	0.19148	0.3478
26	32	3	0.23387	0.03801	0.17007	0.3216
27	29	2	0.21774	0.03706	0.15598	0.304
28	27	2	0.20161	0.03603	0.14204	0.2862
31	25	1	0.19355	0.03548	0.13513	0.2772
32	24	3	0.16935	0.03368	0.11469	0.2501
33	21	3	0.14516	0.03163	0.0947	0.2225
34	18	3	0.12097	0.02928	0.07527	0.1944
35	15	3	0.09677	0.02655	0.05652	0.1657
36	12	3	0.07258	0.0233	0.03869	0.1362
37	9	2	0.05645	0.02073	0.02749	0.1159
38	7	3	0.03226	0.01587	0.0123	0.0846
39	4	2	0.01613	0.01131	0.00408	0.0638
40	2	1	0.00806	0.00803	0.00115	0.0568
49	1	1	0	NaN	NA	NA

Table A.146 Kula station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		100	100	16.5	14	22
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	100	3	0.97	0.01706	0.93714	1
2	97	6	0.91	0.02862	0.8556	0.9679
3	91	5	0.86	0.0347	0.79461	0.9308
4	86	5	0.81	0.03923	0.73665	0.8907
5	81	2	0.79	0.04073	0.71407	0.874
6	79	2	0.77	0.04208	0.69178	0.8571
7	77	2	0.75	0.0433	0.66976	0.8399
8	75	2	0.73	0.0444	0.64797	0.8224
9	73	1	0.72	0.0449	0.63716	0.8136
10	72	2	0.7	0.04583	0.61571	0.7958
11	70	2	0.68	0.04665	0.59445	0.7779
12	68	3	0.65	0.0477	0.56293	0.7505
13	65	3	0.62	0.04854	0.53181	0.7228
14	62	4	0.58	0.04936	0.4909	0.6853
15	58	4	0.54	0.04984	0.45064	0.6471
16	54	4	0.5	0.05	0.41101	0.6083
17	50	2	0.48	0.04996	0.39142	0.5886
18	48	2	0.46	0.04984	0.37199	0.5688
19	46	2	0.44	0.04964	0.35272	0.5489
20	44	2	0.42	0.04936	0.3336	0.5288
21	42	1	0.41	0.04918	0.3241	0.5187
22	41	2	0.39	0.04877	0.30522	0.4983
23	39	2	0.37	0.04828	0.2865	0.4778
24	37	2	0.35	0.0477	0.26796	0.4572
25	35	1	0.34	0.04737	0.25875	0.4468
26	34	1	0.33	0.04702	0.24959	0.4363
27	33	2	0.31	0.04625	0.2314	0.4153
28	31	2	0.29	0.04538	0.21341	0.3941
29	29	1	0.28	0.0449	0.20449	0.3834
30	28	1	0.27	0.0444	0.19561	0.3727
31	27	1	0.26	0.04386	0.1868	0.3619
32	26	1	0.25	0.0433	0.17804	0.3511
33	25	2	0.23	0.04208	0.16069	0.3292
36	23	2	0.21	0.04073	0.14359	0.3071
37	21	1	0.2	0.04	0.13514	0.296
78	20	1	0.19	0.03923	0.12677	0.2848
79	19	1	0.18	0.03842	0.11847	0.2735
80	18	1	0.17	0.03756	0.11025	0.2621
81	17	1	0.16	0.03666	0.10211	0.2507

Table A.146 *Cont'd*

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		100	100	16.5	14	22
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
82	16	1	0.15	0.03571	0.09407	0.2392
93	15	1	0.14	0.0347	0.08613	0.2276
129	14	1	0.13	0.03363	0.0783	0.2158
130	13	1	0.12	0.0325	0.07058	0.204
131	12	1	0.11	0.03129	0.06299	0.1921
132	11	1	0.1	0.03	0.05554	0.18
133	10	1	0.09	0.02862	0.04826	0.1678
134	9	1	0.08	0.02713	0.04116	0.1555
135	8	1	0.07	0.02551	0.03426	0.143
136	7	1	0.06	0.02375	0.02762	0.1303
137	6	1	0.05	0.02179	0.02128	0.1175
138	5	1	0.04	0.0196	0.01531	0.1045
139	4	1	0.03	0.01706	0.00984	0.0914
140	3	1	0.02	0.014	0.00507	0.0789
141	2	1	0.01	0.00995	0.00142	0.0703
142	1	1	0	NaN	NA	NA

Table A.147 Kula station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.04237	1	0.03226	1	0.03
2	0.08475	2	0.08871	2	0.09
3	0.13559	3	0.1371	3	0.14
4	0.16102	4	0.15323	4	0.19
5	0.24576	5	0.16935	5	0.21
6	0.34746	6	0.22581	6	0.23
7	0.45763	7	0.28226	7	0.25
8	0.51695	8	0.33871	8	0.27
9	0.5678	9	0.39516	9	0.28
10	0.62712	10	0.45161	10	0.3
11	0.68644	11	0.5	11	0.32
12	0.71186	12	0.53226	12	0.35
13	0.75424	13	0.54839	13	0.38
14	0.78814	14	0.56452	14	0.42
15	0.80508	15	0.58871	15	0.46
17	0.82203	16	0.60484	16	0.5
18	0.83898	17	0.62903	17	0.52
19	0.84746	18	0.64516	18	0.54
20	0.87288	19	0.66129	19	0.56
21	0.88136	22	0.66935	20	0.58
22	0.90678	23	0.68548	21	0.59
23	0.92373	24	0.70968	22	0.61
24	0.94915	25	0.74194	23	0.63
25	0.97458	26	0.76613	24	0.65
26	0.98305	27	0.78226	25	0.66
29	0.99153	28	0.79839	26	0.67
49	1	31	0.80645	27	0.69
		32	0.83065	28	0.71
		33	0.85484	29	0.72
		34	0.87903	30	0.73
		35	0.90323	31	0.74
		36	0.92742	32	0.75
		37	0.94355	33	0.77
		38	0.96774	36	0.79
		39	0.98387	37	0.8
		40	0.99194	78	0.81
		49	1	79	0.82
				80	0.83
				81	0.84
				82	0.85
				93	0.86

Table A.147 *Cont'd*

Drought Risk (SPI12)	
Time	Time
129	0.87
130	0.88
131	0.89
132	0.9
133	0.91
134	0.92
135	0.93
136	0.94
137	0.95
138	0.96
139	0.97
140	0.98
141	0.99
142	1

Table A.148 Kula station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		61	61	8	7	9
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	61	2	0.9672	0.0228	0.92354	1.000
2	59	2	0.9344	0.0317	0.87433	0.999
3	57	5	0.8525	0.0454	0.76795	0.946
4	52	5	0.7705	0.0538	0.67187	0.884
5	47	5	0.6885	0.0593	0.58159	0.815
6	42	4	0.623	0.0621	0.51247	0.757
7	38	6	0.5246	0.0639	0.41311	0.666
8	32	6	0.4262	0.0633	0.31856	0.57
9	26	6	0.3279	0.0601	0.22891	0.47
10	20	4	0.2623	0.0563	0.17219	0.4
11	16	2	0.2295	0.0538	0.14491	0.363
17	14	1	0.2131	0.0524	0.13158	0.345
18	13	2	0.1803	0.0492	0.10561	0.308
19	11	1	0.1639	0.0474	0.09301	0.289
20	10	1	0.1475	0.0454	0.08071	0.27
21	9	1	0.1311	0.0432	0.06875	0.25
22	8	2	0.0984	0.0381	0.04601	0.21
23	6	2	0.0656	0.0317	0.02543	0.169
24	4	2	0.0328	0.0228	0.00839	0.128
47	2	1	0.0164	0.0163	0.00235	0.115
48	1	1	0	NaN	NA	NA

Table A.149 Kula station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		62	62	9.5	7	17
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	62	2	0.9677	0.0224	0.92475	1.000
2	60	4	0.9032	0.0375	0.83255	0.98
3	56	3	0.8548	0.0447	0.7715	0.947
4	53	2	0.8226	0.0485	0.73278	0.923
5	51	3	0.7742	0.0531	0.67681	0.886
6	48	5	0.6935	0.0585	0.58778	0.818
7	43	6	0.5968	0.0623	0.48635	0.732
8	37	4	0.5323	0.0634	0.42149	0.672
9	33	2	0.5	0.0635	0.38982	0.641
10	31	3	0.4516	0.0632	0.34328	0.594
11	28	1	0.4355	0.063	0.32801	0.578
12	27	1	0.4194	0.0627	0.31288	0.562
13	26	1	0.4032	0.0623	0.29788	0.546
16	25	1	0.3871	0.0619	0.283	0.529
17	24	2	0.3548	0.0608	0.25367	0.496
18	22	2	0.3226	0.0594	0.2249	0.463
19	20	2	0.2903	0.0576	0.19673	0.428
21	18	1	0.2742	0.0567	0.18288	0.411
22	17	1	0.2581	0.0556	0.16921	0.394
23	16	2	0.2258	0.0531	0.14242	0.358
24	14	2	0.1935	0.0502	0.11645	0.322
25	12	2	0.1613	0.0467	0.09143	0.285
26	10	1	0.1452	0.0447	0.07934	0.266
27	9	2	0.1129	0.0402	0.05619	0.227
28	7	2	0.0806	0.0346	0.0348	0.187
29	5	1	0.0645	0.0312	0.025	0.166
36	4	1	0.0484	0.0273	0.01604	0.146
37	3	1	0.0323	0.0224	0.00825	0.126
62	2	1	0.0161	0.016	0.00231	0.113
63	1	1	0	NaN	NA	NA

Table A.150 Kula station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		46	46	13.5	9	21
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	46	1	0.9783	0.0215	0.93701	1.000
2	45	2	0.9348	0.0364	0.86609	1.000
3	43	3	0.8696	0.0497	0.77749	0.973
4	40	3	0.8043	0.0585	0.6975	0.928
5	37	2	0.7609	0.0629	0.64707	0.895
6	35	2	0.7174	0.0664	0.59839	0.86
7	33	2	0.6739	0.0691	0.55119	0.824
8	31	2	0.6304	0.0712	0.5053	0.787
9	29	1	0.6087	0.072	0.48281	0.767
10	28	1	0.587	0.0726	0.4606	0.748
11	27	2	0.5435	0.0734	0.41702	0.708
12	25	1	0.5217	0.0737	0.39563	0.688
13	24	1	0.5	0.0737	0.37451	0.668
14	23	1	0.4783	0.0737	0.35366	0.647
15	22	1	0.4565	0.0734	0.33306	0.626
16	21	1	0.4348	0.0731	0.31274	0.604
17	20	1	0.413	0.0726	0.29268	0.583
18	19	1	0.3913	0.072	0.27289	0.561
19	18	1	0.3696	0.0712	0.25338	0.539
20	17	1	0.3478	0.0702	0.23416	0.517
21	16	2	0.3043	0.0678	0.19662	0.471
22	14	1	0.2826	0.0664	0.17833	0.448
23	13	1	0.2609	0.0647	0.16039	0.424
24	12	1	0.2391	0.0629	0.14281	0.4
27	11	1	0.2174	0.0608	0.12564	0.376
28	10	1	0.1957	0.0585	0.1089	0.352
42	9	1	0.1739	0.0559	0.09264	0.326
43	8	1	0.1522	0.053	0.07693	0.301
44	7	1	0.1304	0.0497	0.06185	0.275
45	6	1	0.1087	0.0459	0.04751	0.249
46	5	1	0.087	0.0415	0.03409	0.222
61	4	1	0.0652	0.0364	0.02184	0.195
62	3	1	0.0435	0.0301	0.01121	0.169
63	2	1	0.0217	0.0215	0.00313	0.151
87	1	1	0	NaN	NA	NA

Table A.151 Kula station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0328	1	0.0323	1	0.0217
2	0.0656	2	0.0968	2	0.0652
3	0.1475	3	0.1452	3	0.1304
4	0.2295	4	0.1774	4	0.1957
5	0.3115	5	0.2258	5	0.2391
6	0.377	6	0.3065	6	0.2826
7	0.4754	7	0.4032	7	0.3261
8	0.5738	8	0.4677	8	0.3696
9	0.6721	9	0.5	9	0.3913
10	0.7377	10	0.5484	10	0.413
11	0.7705	11	0.5645	11	0.4565
12	0.773233	12	0.5806	12	0.4783
17	0.7869	13	0.5968	13	0.5
18	0.8197	16	0.6129	14	0.5217
19	0.8361	17	0.6452	15	0.5435
20	0.8525	18	0.6774	16	0.5652
21	0.8689	19	0.7097	17	0.587
22	0.9016	21	0.7258	18	0.6087
23	0.9344	22	0.7419	19	0.6304
24	0.9672	23	0.7742	20	0.6522
47	0.9836	24	0.8065	21	0.6957
48	1	25	0.8387	22	0.7174
		26	0.8548	23	0.7391
		27	0.8871	24	0.7609
		28	0.9194	27	0.7826
		29	0.9355	28	0.8043
		36	0.9516	42	0.8261
		37	0.9677	43	0.8478
		62	0.9839	44	0.8696
		63	1	45	0.8913
				46	0.913
				61	0.9348
				62	0.9565
				63	0.9783
				87	1

Table A.152 Manisa station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		148	148	9	8	11
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	148	7	0.9527	0.01745	0.91911	0.9875
2	141	9	0.89189	0.02552	0.843242	0.9433
3	132	13	0.80405	0.03263	0.742583	0.8706
4	119	11	0.72973	0.0365	0.661577	0.8049
5	108	9	0.66892	0.03868	0.59724	0.7492
6	99	3	0.64865	0.03924	0.576122	0.7303
7	96	7	0.60135	0.04025	0.527424	0.6856
8	89	8	0.5473	0.04092	0.472703	0.6337
9	81	8	0.49324	0.0411	0.418929	0.5807
10	73	10	0.42568	0.04064	0.353026	0.5133
11	63	8	0.37162	0.03972	0.301382	0.4582
12	55	2	0.35811	0.03941	0.288628	0.4443
13	53	3	0.33784	0.03888	0.26962	0.4233
14	50	2	0.32432	0.03848	0.257033	0.4092
15	48	7	0.27703	0.03679	0.213545	0.3594
16	41	8	0.22297	0.03421	0.165058	0.3012
17	33	4	0.19595	0.03263	0.141384	0.2716
18	29	5	0.16216	0.0303	0.112437	0.2339
19	24	3	0.14189	0.02868	0.095476	0.2109
21	21	1	0.13514	0.0281	0.0899	0.2031
22	20	2	0.12162	0.02687	0.078882	0.1875
23	18	2	0.10811	0.02552	0.06806	0.1717
24	16	2	0.09459	0.02406	0.057465	0.1557
25	14	2	0.08108	0.02244	0.047138	0.1395
26	12	5	0.0473	0.01745	0.022952	0.0975
27	7	2	0.03378	0.01485	0.014273	0.08
28	5	2	0.02027	0.01158	0.006613	0.0621
29	3	1	0.01351	0.00949	0.003412	0.0535
30	2	1	0.00676	0.00673	0.000958	0.0476
37	1	1	0	NaN	NA	NA

Table A.153 Manisa station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		155	155	11	9	16
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	155	7	0.95484	0.01668	0.922701	0.9881
2	148	9	0.89677	0.02444	0.850133	0.946
3	139	9	0.83871	0.02954	0.782761	0.8987
4	130	7	0.79355	0.03251	0.732319	0.8599
5	123	7	0.74839	0.03485	0.683098	0.8199
6	116	10	0.68387	0.03735	0.614454	0.7611
7	106	7	0.63871	0.03858	0.567391	0.719
8	99	6	0.6	0.03935	0.527627	0.6823
9	93	6	0.56129	0.03986	0.488363	0.6451
10	87	9	0.50323	0.04016	0.430361	0.5884
11	78	5	0.47097	0.04009	0.398592	0.5565
12	73	2	0.45806	0.04002	0.385976	0.5436
13	71	3	0.43871	0.03986	0.36715	0.5242
14	68	1	0.43226	0.03979	0.3609	0.5177
15	67	1	0.42581	0.03972	0.354665	0.5112
16	66	3	0.40645	0.03945	0.336038	0.4916
17	63	3	0.3871	0.03912	0.317533	0.4719
19	60	1	0.38065	0.039	0.311393	0.4653
20	59	2	0.36774	0.03873	0.299154	0.4521
21	57	1	0.36129	0.03858	0.293056	0.4454
22	56	2	0.34839	0.03827	0.280904	0.4321
23	54	2	0.33548	0.03792	0.268811	0.4187
24	52	3	0.31613	0.03735	0.250787	0.3985
25	49	4	0.29032	0.03646	0.226979	0.3713
26	45	2	0.27742	0.03596	0.215176	0.3577
27	43	2	0.26452	0.03543	0.203445	0.3439
28	41	2	0.25161	0.03485	0.191787	0.3301
29	39	4	0.22581	0.03358	0.168709	0.3022
30	35	4	0.2	0.03213	0.145979	0.274
31	31	2	0.1871	0.03132	0.134758	0.2598
32	29	2	0.17419	0.03046	0.123643	0.2454
33	27	2	0.16129	0.02954	0.112642	0.2309
34	25	2	0.14839	0.02855	0.101767	0.2164
35	23	3	0.12903	0.02693	0.085717	0.1942
36	20	2	0.11613	0.02573	0.075218	0.1793
37	18	4	0.09032	0.02302	0.054805	0.1489
38	14	3	0.07097	0.02062	0.04015	0.1254
39	11	3	0.05161	0.01777	0.026283	0.1014
40	8	3	0.03226	0.01419	0.013619	0.0764
41	5	3	0.0129	0.00906	0.003256	0.0511
42	2	1	0.00645	0.00643	0.000915	0.0455
52	1	1	0	NaN	NA	NA

Table A.154 Manisa station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		158	158	15	13	21
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	158	6	0.96203	0.01521	0.932679	0.9923
2	152	7	0.91772	0.02186	0.87586	0.9616
3	145	7	0.87342	0.02645	0.82308	0.9268
4	138	7	0.82911	0.02995	0.772451	0.8899
5	131	6	0.79114	0.03234	0.730229	0.8571
6	125	5	0.75949	0.034	0.695692	0.8291
7	120	4	0.73418	0.03515	0.668426	0.8064
8	116	4	0.70886	0.03614	0.64145	0.7834
9	112	3	0.68987	0.0368	0.621392	0.7659
10	109	4	0.66456	0.03756	0.594868	0.7424
11	105	5	0.63291	0.03835	0.562044	0.7127
12	100	7	0.58861	0.03915	0.516669	0.6706
13	93	6	0.55063	0.03957	0.478286	0.6339
14	87	5	0.51899	0.03975	0.446646	0.603
15	82	4	0.49367	0.03977	0.421558	0.5781
16	78	4	0.46835	0.0397	0.396667	0.553
17	74	2	0.4557	0.03962	0.384296	0.5404
18	72	2	0.44304	0.03952	0.371975	0.5277
19	70	2	0.43038	0.03939	0.359704	0.5149
20	68	2	0.41772	0.03924	0.347485	0.5022
21	66	1	0.41139	0.03915	0.341394	0.4957
23	65	1	0.40506	0.03905	0.335316	0.4893
24	64	2	0.39241	0.03885	0.323199	0.4764
25	62	2	0.37975	0.03861	0.311135	0.4635
26	60	3	0.36076	0.0382	0.29314	0.444
27	57	2	0.3481	0.0379	0.281213	0.4309
28	55	2	0.33544	0.03756	0.269342	0.4178
29	53	2	0.32278	0.0372	0.257529	0.4046
30	51	3	0.3038	0.03659	0.239923	0.3847
31	48	3	0.28481	0.03591	0.222457	0.3646
32	45	3	0.26582	0.03515	0.205141	0.3445
33	42	2	0.25316	0.03459	0.193684	0.3309
34	40	1	0.24684	0.0343	0.187983	0.3241
35	39	2	0.23418	0.03369	0.176638	0.3105
36	37	2	0.22152	0.03304	0.165373	0.2967
37	35	2	0.20886	0.03234	0.154192	0.2829
38	33	1	0.20253	0.03197	0.148634	0.276
39	32	1	0.1962	0.03159	0.1431	0.269
40	31	1	0.18987	0.0312	0.13759	0.262

Table A.154 *Cont'd*

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		158	158	15	13	21
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
41	30	1	0.18354	0.0308	0.132104	0.255
42	29	1	0.17722	0.03038	0.126645	0.248
43	28	1	0.17089	0.02995	0.121212	0.2409
44	27	1	0.16456	0.0295	0.115807	0.2338
45	26	1	0.15823	0.02903	0.110431	0.2267
59	25	1	0.1519	0.02855	0.105086	0.2196
64	24	1	0.14557	0.02806	0.099772	0.2124
65	23	1	0.13924	0.02754	0.094492	0.2052
71	22	1	0.13291	0.02701	0.089248	0.1979
72	21	1	0.12658	0.02645	0.084041	0.1907
96	20	1	0.12025	0.02588	0.078874	0.1833
97	19	1	0.11392	0.02528	0.073749	0.176
98	18	1	0.10759	0.02465	0.06867	0.1686
99	17	1	0.10127	0.024	0.063639	0.1611
100	16	1	0.09494	0.02332	0.058661	0.1536
101	15	1	0.08861	0.02261	0.053739	0.1461
102	14	1	0.08228	0.02186	0.048879	0.1385
103	13	1	0.07595	0.02108	0.044088	0.1308
104	12	1	0.06962	0.02025	0.039372	0.1231
116	11	1	0.06329	0.01937	0.03474	0.1153
117	10	1	0.05696	0.01844	0.030203	0.1074
118	9	1	0.05063	0.01744	0.025775	0.0995
145	8	1	0.0443	0.01637	0.021475	0.0914
146	7	1	0.03797	0.01521	0.017324	0.0832
147	6	1	0.03165	0.01393	0.013357	0.075
148	5	1	0.02532	0.0125	0.009621	0.0666
149	4	1	0.01899	0.01086	0.00619	0.0582
150	3	1	0.01266	0.00889	0.003194	0.0502
151	2	1	0.00633	0.00631	0.000897	0.0447
152	1	1	0	NaN	NA	NA

Table A.155 Manisa station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0473	1	0.04516	1	0.03797
2	0.10811	2	0.10323	2	0.08228
3	0.19595	3	0.16129	3	0.12658
4	0.27027	4	0.20645	4	0.17089
5	0.33108	5	0.25161	5	0.20886
6	0.35135	6	0.31613	6	0.24051
7	0.39865	7	0.36129	7	0.26582
8	0.4527	8	0.4	8	0.29114
9	0.50676	9	0.43871	9	0.31013
10	0.57432	10	0.49677	10	0.33544
11	0.62838	11	0.52903	11	0.36709
12	0.64189	12	0.54194	12	0.41139
13	0.66216	13	0.56129	13	0.44937
14	0.67568	14	0.56774	14	0.48101
15	0.72297	15	0.57419	15	0.50633
16	0.77703	16	0.59355	16	0.53165
17	0.80405	17	0.6129	17	0.5443
18	0.83784	19	0.61935	18	0.55696
19	0.85811	20	0.63226	19	0.56962
21	0.86486	21	0.63871	20	0.58228
22	0.87838	22	0.65161	21	0.58861
23	0.89189	23	0.66452	23	0.59494
24	0.90541	24	0.68387	24	0.60759
25	0.91892	25	0.70968	25	0.62025
26	0.9527	26	0.72258	26	0.63924
27	0.96622	27	0.73548	27	0.6519
28	0.97973	28	0.74839	28	0.66456
29	0.98649	29	0.77419	29	0.67722
30	0.99324	30	0.8	30	0.6962
37	1	31	0.8129	31	0.71519
		32	0.82581	32	0.73418
		33	0.83871	33	0.74684
		34	0.85161	34	0.75316
		35	0.87097	35	0.76582
		36	0.88387	36	0.77848
		37	0.90968	37	0.79114
		38	0.92903	38	0.79747
		39	0.94839	39	0.8038
		40	0.96774	40	0.81013

Table A.155 *Cont'd*

Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk
41	0.9871	41	0.81646
42	0.99355	42	0.82278
52	1	43	0.82911
		44	0.83544
		45	0.84177
		59	0.8481
		64	0.85443
		65	0.86076
		71	0.86709
		72	0.87342
		96	0.87975
		97	0.88608
		98	0.89241
		99	0.89873
		100	0.90506
		101	0.91139
		102	0.91772
		103	0.92405
		104	0.93038
		116	0.93671
		117	0.94304
		118	0.94937
		145	0.9557
		146	0.96203
		147	0.96835
		148	0.97468
		149	0.98101
		150	0.98734
		151	0.99367
		152	1

Table A.156 Manisa station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		178	178	8	7	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	178	11	0.9382	0.01805	0.903488	0.9743
2	167	11	0.8764	0.02467	0.829365	0.9261
3	156	17	0.7809	0.031	0.722437	0.8441
4	139	16	0.69101	0.03463	0.626357	0.7623
5	123	14	0.61236	0.03652	0.54481	0.6883
6	109	7	0.57303	0.03707	0.504787	0.6505
7	102	12	0.50562	0.03747	0.437255	0.5847
8	90	9	0.45506	0.03732	0.387478	0.5344
9	81	6	0.42135	0.03701	0.354711	0.5005
10	75	7	0.38202	0.03642	0.316915	0.4605
11	68	5	0.35393	0.03584	0.290216	0.4316
12	63	6	0.32022	0.03497	0.258523	0.3967
13	57	5	0.29213	0.03408	0.232418	0.3672
14	52	2	0.2809	0.03369	0.22206	0.3553
15	50	1	0.27528	0.03348	0.216899	0.3494
16	49	6	0.24157	0.03208	0.18621	0.3134
17	43	5	0.21348	0.03071	0.161029	0.283
18	38	7	0.17416	0.02843	0.126477	0.2398
19	31	4	0.15169	0.02689	0.107168	0.2147
20	27	2	0.14045	0.02604	0.097653	0.202
21	25	3	0.1236	0.02467	0.083582	0.1828
22	22	4	0.10112	0.0226	0.065258	0.1567
23	18	4	0.07865	0.02018	0.047571	0.13
24	14	3	0.0618	0.01805	0.034864	0.1095
25	11	2	0.05056	0.01642	0.026752	0.0956
26	9	3	0.03371	0.01353	0.015351	0.074
27	6	2	0.02247	0.01111	0.008528	0.0592
28	4	1	0.01685	0.00965	0.005488	0.0518
30	3	1	0.01124	0.0079	0.002832	0.0446
33	2	1	0.00562	0.0056	0.000796	0.0397
49	1	1	0	NaN	NA	NA

Table A.157 Manisa station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		178	178	15.5	13	20
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	178	8	0.95506	0.01553	0.9251	0.986
2	170	14	0.8764	0.02467	0.829365	0.9261
3	156	12	0.80899	0.02946	0.753253	0.8688
4	144	7	0.76966	0.03156	0.710229	0.8341
5	137	4	0.74719	0.03258	0.685994	0.8138
6	133	6	0.71348	0.03389	0.65006	0.7831
7	127	3	0.69663	0.03446	0.632265	0.7675
8	124	2	0.68539	0.03481	0.620461	0.7571
9	122	2	0.67416	0.03513	0.608704	0.7466
10	120	5	0.64607	0.03584	0.579503	0.7203
11	115	6	0.61236	0.03652	0.54481	0.6883
12	109	6	0.57865	0.03701	0.510476	0.6559
13	103	4	0.55618	0.03724	0.487778	0.6342
14	99	5	0.52809	0.03742	0.459618	0.6068
15	94	5	0.5	0.03748	0.431688	0.5791
16	89	4	0.47753	0.03744	0.409509	0.5568
17	85	3	0.46067	0.03736	0.392972	0.54
18	82	3	0.44382	0.03724	0.376518	0.5232
19	79	2	0.43258	0.03713	0.365596	0.5118
20	77	3	0.41573	0.03694	0.349282	0.4948
21	74	5	0.38764	0.03652	0.322286	0.4662
22	69	1	0.38202	0.03642	0.316915	0.4605
23	68	3	0.36517	0.03609	0.300865	0.4432
24	65	3	0.34831	0.03571	0.284907	0.4258
25	62	3	0.33146	0.03528	0.269044	0.4084
26	59	2	0.32022	0.03497	0.258523	0.3967
27	57	3	0.30337	0.03446	0.242825	0.379
28	54	3	0.28652	0.03389	0.227233	0.3613
29	51	3	0.26966	0.03326	0.211751	0.3434
30	48	4	0.24719	0.03233	0.19129	0.3194
31	44	2	0.23596	0.03182	0.181143	0.3074
32	42	3	0.2191	0.031	0.166034	0.2891
33	39	2	0.20787	0.03041	0.15604	0.2769
34	37	1	0.20225	0.03011	0.151068	0.2708
35	36	2	0.19101	0.02946	0.141175	0.2584
37	34	1	0.18539	0.02913	0.136257	0.2522
38	33	1	0.17978	0.02878	0.131357	0.246
39	32	1	0.17416	0.02843	0.126477	0.2398
40	31	1	0.16854	0.02806	0.121617	0.2336

Table A.157 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		178	178	15.5	13	20
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
41	30	2	0.1573	0.02729	0.111962	0.221
42	28	2	0.14607	0.02647	0.102398	0.2084
47	26	1	0.14045	0.02604	0.097653	0.202
48	25	2	0.12921	0.02514	0.088244	0.1892
49	23	2	0.11798	0.02418	0.07895	0.1763
50	21	2	0.10674	0.02314	0.069786	0.1633
51	19	3	0.08989	0.02144	0.056323	0.1435
52	16	3	0.07303	0.0195	0.043274	0.1233
53	13	3	0.05618	0.01726	0.030766	0.1026
54	10	3	0.03933	0.01457	0.019026	0.0813
55	7	1	0.03371	0.01353	0.015351	0.074
56	6	1	0.02809	0.01238	0.011838	0.0667
57	5	1	0.02247	0.01111	0.008528	0.0592
58	4	1	0.01685	0.00965	0.005488	0.0518
63	3	1	0.01124	0.0079	0.002832	0.0446
64	2	1	0.00562	0.0056	0.000796	0.0397
65	1	1	0	NaN	NA	NA

Table A.158 Manisa station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		170	170	19	17	23
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	170	7	0.95882	0.01524	0.929415	0.9892
2	163	5	0.92941	0.01964	0.891695	0.9687
3	158	6	0.89412	0.0236	0.849041	0.9416
4	152	4	0.87059	0.02574	0.821566	0.9225
5	148	4	0.84706	0.02761	0.794645	0.9029
6	144	2	0.83529	0.02845	0.781358	0.893
7	142	3	0.81765	0.02962	0.761615	0.8778
8	139	3	0.8	0.03068	0.742075	0.8624
9	136	3	0.78235	0.03165	0.722718	0.8469
10	133	3	0.76471	0.03253	0.703528	0.8312
11	130	3	0.74706	0.03334	0.68449	0.8153
12	127	7	0.70588	0.03495	0.640607	0.7778
13	120	6	0.67059	0.03605	0.603531	0.7451
14	114	6	0.63529	0.03692	0.566905	0.7119
15	108	5	0.60588	0.03748	0.536704	0.684
16	103	5	0.57647	0.0379	0.50678	0.6557
17	98	6	0.54118	0.03822	0.471223	0.6215
18	92	6	0.50588	0.03835	0.436043	0.5869
19	86	5	0.47647	0.03831	0.407009	0.5578
20	81	4	0.45294	0.03818	0.383968	0.5343
21	77	3	0.43529	0.03803	0.366796	0.5166
22	74	2	0.42353	0.0379	0.355401	0.5047
23	72	3	0.40588	0.03766	0.338388	0.4868
24	69	4	0.38235	0.03727	0.315856	0.4628
25	65	3	0.36471	0.03692	0.299074	0.4447
26	62	3	0.34706	0.03651	0.282395	0.4265
27	59	4	0.32353	0.03588	0.260323	0.4021
28	55	4	0.3	0.03515	0.23845	0.3774
29	51	3	0.28235	0.03452	0.222184	0.3588
30	48	3	0.26471	0.03384	0.206042	0.3401
31	45	3	0.24706	0.03308	0.190034	0.3212
32	42	2	0.23529	0.03253	0.17944	0.3085
33	40	2	0.22353	0.03195	0.168911	0.2958
34	38	1	0.21765	0.03165	0.163673	0.2894
35	37	1	0.21176	0.03134	0.158453	0.283
36	36	1	0.20588	0.03101	0.153251	0.2766
37	35	1	0.2	0.03068	0.148068	0.2701

Table A.158 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		170	170	19	17	23
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
38	34	1	0.19412	0.03033	0.142905	0.2637
39	33	1	0.18824	0.02998	0.137762	0.2572
40	32	1	0.18235	0.02962	0.132639	0.2507
41	31	1	0.17647	0.02924	0.127539	0.2442
42	30	1	0.17059	0.02885	0.122461	0.2376
43	29	1	0.16471	0.02845	0.117406	0.2311
44	28	1	0.15882	0.02803	0.112376	0.2245
45	27	1	0.15294	0.02761	0.107371	0.2179
46	26	1	0.14706	0.02716	0.102392	0.2112
64	25	1	0.14118	0.02671	0.097441	0.2045
70	24	1	0.13529	0.02623	0.09252	0.1978
71	23	1	0.12941	0.02574	0.087629	0.1911
85	22	1	0.12353	0.02524	0.08277	0.1844
92	21	1	0.11765	0.02471	0.077946	0.1776
93	20	1	0.11176	0.02417	0.073158	0.1707
94	19	1	0.10588	0.0236	0.068409	0.1639
95	18	1	0.1	0.02301	0.063701	0.157
96	17	2	0.08824	0.02175	0.054423	0.1431
97	15	2	0.07647	0.02038	0.045354	0.1289
98	13	1	0.07059	0.01964	0.040911	0.1218
99	12	1	0.06471	0.01887	0.036538	0.1146
100	11	1	0.05882	0.01805	0.032241	0.1073
101	10	1	0.05294	0.01717	0.028033	0.1
102	9	1	0.04706	0.01624	0.023926	0.0926
145	8	1	0.04118	0.01524	0.019935	0.0851
146	7	1	0.03529	0.01415	0.016084	0.0774
147	6	1	0.02941	0.01296	0.012402	0.0698
148	5	1	0.02353	0.01163	0.008934	0.062
149	4	1	0.01765	0.0101	0.005749	0.0542
150	3	1	0.01176	0.00827	0.002966	0.0467
151	2	1	0.00588	0.00587	0.000833	0.0415
152	1	1	0	NaN	NA	NA

Table A.159 Manisa station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0618	1	0.04494	1	0.04118
2	0.1236	2	0.1236	2	0.07059
3	0.2191	3	0.19101	3	0.10588
4	0.30899	4	0.23034	4	0.12941
5	0.38764	5	0.25281	5	0.15294
6	0.42697	6	0.28652	6	0.16471
7	0.49438	7	0.30337	7	0.18235
8	0.54494	8	0.31461	8	0.2
9	0.57865	9	0.32584	9	0.21765
10	0.61798	10	0.35393	10	0.23529
11	0.64607	11	0.38764	11	0.25294
12	0.67978	12	0.42135	12	0.29412
13	0.70787	13	0.44382	13	0.32941
14	0.7191	14	0.47191	14	0.36471
15	0.72472	15	0.5	15	0.39412
16	0.75843	16	0.52247	16	0.42353
17	0.78652	17	0.53933	17	0.45882
18	0.82584	18	0.55618	18	0.49412
19	0.84831	19	0.56742	19	0.52353
20	0.85955	20	0.58427	20	0.54706
21	0.8764	21	0.61236	21	0.56471
22	0.89888	22	0.61798	22	0.57647
23	0.92135	23	0.63483	23	0.59412
24	0.9382	24	0.65169	24	0.61765
25	0.94944	25	0.66854	25	0.63529
26	0.96629	26	0.67978	26	0.65294
27	0.97753	27	0.69663	27	0.67647
28	0.98315	28	0.71348	28	0.7
30	0.98876	29	0.73034	29	0.71765
33	0.99438	30	0.75281	30	0.73529
49	1	31	0.76404	31	0.75294
		32	0.7809	32	0.76471
		33	0.79213	33	0.77647
		34	0.79775	34	0.78235
		35	0.80899	35	0.78824
		37	0.81461	36	0.79412
		38	0.82022	37	0.8
		39	0.82584	38	0.80588
		40	0.83146	39	0.81176

Table A.159 *Cont'd*

Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk
41	0.8427	40	0.81765
42	0.85393	41	0.82353
47	0.85955	42	0.82941
48	0.87079	43	0.83529
49	0.88202	44	0.84118
50	0.89326	45	0.84706
51	0.91011	46	0.85294
52	0.92697	64	0.85882
53	0.94382	70	0.86471
54	0.96067	71	0.87059
55	0.96629	85	0.87647
56	0.97191	92	0.88235
57	0.97753	93	0.88824
58	0.98315	94	0.89412
63	0.98876	95	0.9
64	0.99438	96	0.91176
65	1	97	0.92353
		98	0.92941
		99	0.93529
		100	0.94118
		101	0.94706
		102	0.95294
		145	0.95882
		146	0.96471
		147	0.97059
		148	0.97647
		149	0.98235
		150	0.98824
		151	0.99412
		152	1

Table A.160 Menemen station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		77	77	9	6	12
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	77	5	0.9351	0.0281	0.88162	0.992
2	72	6	0.8571	0.0399	0.78244	0.939
3	66	9	0.7403	0.05	0.64852	0.845
4	57	6	0.6623	0.0539	0.5647	0.777
5	51	3	0.6234	0.0552	0.52402	0.742
6	48	4	0.5714	0.0564	0.47093	0.693
7	44	3	0.5325	0.0569	0.43191	0.656
8	41	2	0.5065	0.057	0.40628	0.631
9	39	4	0.4545	0.0567	0.35589	0.581
10	35	3	0.4156	0.0562	0.31888	0.542
11	32	3	0.3766	0.0552	0.28256	0.502
12	29	2	0.3506	0.0544	0.25874	0.475
13	27	2	0.3247	0.0534	0.23526	0.448
14	25	3	0.2857	0.0515	0.2007	0.407
15	22	3	0.2468	0.0491	0.16702	0.365
16	19	2	0.2208	0.0473	0.14512	0.336
17	17	3	0.1818	0.044	0.1132	0.292
18	14	5	0.1169	0.0366	0.06326	0.216
19	9	1	0.1039	0.0348	0.05392	0.2
20	8	1	0.0909	0.0328	0.04486	0.184
21	7	1	0.0779	0.0305	0.03614	0.168
23	6	1	0.0649	0.0281	0.02782	0.152
24	5	1	0.0519	0.0253	0.02001	0.135
25	4	1	0.039	0.0221	0.01285	0.118
26	3	1	0.026	0.0181	0.00661	0.102
27	2	1	0.013	0.0129	0.00185	0.091
36	1	1	0	NaN	NA	NA

Table A.161 Menemen station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		83	83	13	10	17
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	83	7	0.9157	0.0305	0.85779	0.9774
2	76	9	0.8072	0.0433	0.72667	0.8967
3	67	5	0.747	0.0477	0.65908	0.8466
4	62	2	0.7229	0.0491	0.63274	0.8259
5	60	1	0.7108	0.0498	0.6197	0.8154
6	59	3	0.6747	0.0514	0.58108	0.7834
7	56	2	0.6506	0.0523	0.55571	0.7617
8	54	2	0.6265	0.0531	0.53062	0.7397
9	52	2	0.6024	0.0537	0.50581	0.7175
10	50	2	0.5783	0.0542	0.48126	0.6949
11	48	2	0.5542	0.0546	0.45697	0.6722
12	46	2	0.5301	0.0548	0.43292	0.6491
13	44	4	0.4819	0.0548	0.38558	0.6024
14	40	3	0.4458	0.0546	0.35071	0.5666
15	37	2	0.4217	0.0542	0.32777	0.5425
16	35	2	0.3976	0.0537	0.30509	0.5181
17	33	2	0.3735	0.0531	0.28267	0.4935
18	31	4	0.3253	0.0514	0.23863	0.4434
19	27	3	0.2892	0.0498	0.20637	0.4052
20	24	1	0.2771	0.0491	0.19577	0.3922
21	23	1	0.2651	0.0484	0.18525	0.3792
22	22	2	0.241	0.0469	0.16449	0.353
23	20	2	0.2169	0.0452	0.14409	0.3264
24	18	2	0.1928	0.0433	0.12412	0.2994
26	16	1	0.1807	0.0422	0.11431	0.2857
27	15	1	0.1687	0.0411	0.10462	0.2719
37	14	1	0.1566	0.0399	0.09507	0.258
38	13	1	0.1446	0.0386	0.08567	0.244
39	12	2	0.1205	0.0357	0.06737	0.2155
40	10	1	0.1084	0.0341	0.05851	0.2009
41	9	1	0.0964	0.0324	0.04988	0.1862
42	8	1	0.0843	0.0305	0.04151	0.1713
43	7	1	0.0723	0.0284	0.03345	0.1562
44	6	1	0.0602	0.0261	0.02576	0.1409
45	5	1	0.0482	0.0235	0.01853	0.1254
46	4	1	0.0361	0.0205	0.0119	0.1098
52	3	1	0.0241	0.0168	0.00613	0.0947
53	2	1	0.012	0.012	0.00172	0.0845
54	1	1	0	NaN	NA	NA

Table A.162 Menemen station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		92	92	17.5	16	20
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	92	7	0.9239	0.0276	0.87129	0.9797
2	85	6	0.8587	0.0363	0.79039	0.9329
3	79	2	0.837	0.0385	0.76478	0.9159
4	77	2	0.8152	0.0405	0.73964	0.8985
5	75	1	0.8043	0.0414	0.72724	0.8896
6	74	1	0.7935	0.0422	0.71493	0.8807
7	73	1	0.7826	0.043	0.7027	0.8716
8	72	3	0.75	0.0451	0.66654	0.8439
9	69	3	0.7174	0.0469	0.63104	0.8156
10	66	1	0.7065	0.0475	0.61934	0.806
11	65	1	0.6957	0.048	0.60771	0.7963
12	64	1	0.6848	0.0484	0.59613	0.7866
13	63	2	0.663	0.0493	0.57316	0.767
14	61	2	0.6413	0.05	0.55042	0.7472
15	59	3	0.6087	0.0509	0.51671	0.7171
16	56	5	0.5543	0.0518	0.46154	0.6658
17	51	5	0.5	0.0521	0.40759	0.6134
18	46	5	0.4457	0.0518	0.35483	0.5597
19	41	4	0.4022	0.0511	0.31348	0.516
20	37	4	0.3587	0.05	0.27294	0.4714
21	33	4	0.3152	0.0484	0.23324	0.426
22	29	5	0.2609	0.0458	0.18495	0.368
23	24	3	0.2283	0.0438	0.15677	0.3324
24	21	3	0.1957	0.0414	0.12929	0.2961
25	18	1	0.1848	0.0405	0.1203	0.2838
26	17	1	0.1739	0.0395	0.11141	0.2715
27	16	1	0.163	0.0385	0.10262	0.259
36	15	1	0.1522	0.0374	0.09394	0.2465
38	14	1	0.1413	0.0363	0.08539	0.2338
39	13	1	0.1304	0.0351	0.07696	0.2211
40	12	1	0.1196	0.0338	0.06867	0.2082
41	11	1	0.1087	0.0325	0.06055	0.1951
42	10	2	0.087	0.0294	0.04485	0.1686
43	8	1	0.0761	0.0276	0.03733	0.1551
44	7	1	0.0652	0.0257	0.03009	0.1414
45	6	1	0.0543	0.0236	0.02317	0.1275
46	5	1	0.0435	0.0213	0.01667	0.1134
47	4	1	0.0326	0.0185	0.01071	0.0992
54	3	1	0.0217	0.0152	0.00552	0.0856
59	2	1	0.0109	0.0108	0.00155	0.0763
60	1	1	0	NaN	NA	NA

Table A.163 Menemen station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0649	1	0.0843	1	0.0761
2	0.1429	2	0.1928	2	0.1413
3	0.2597	3	0.253	3	0.163
4	0.3377	4	0.2771	4	0.1848
5	0.3766	5	0.2892	5	0.1957
6	0.4286	6	0.3253	6	0.2065
7	0.4675	7	0.3494	7	0.2174
8	0.4935	8	0.3735	8	0.25
9	0.5455	9	0.3976	9	0.2826
10	0.5844	10	0.4217	10	0.2935
11	0.6234	11	0.4458	11	0.3043
12	0.6494	12	0.4699	12	0.3152
13	0.6753	13	0.5181	13	0.337
14	0.7143	14	0.5542	14	0.3587
15	0.7532	15	0.5783	15	0.3913
16	0.7792	16	0.6024	16	0.4457
17	0.8182	17	0.6265	17	0.5
18	0.8831	18	0.6747	18	0.5543
19	0.8961	19	0.7108	19	0.5978
20	0.9091	20	0.7229	20	0.6413
21	0.9221	21	0.7349	21	0.6848
23	0.9351	22	0.759	22	0.7391
24	0.9481	23	0.7831	23	0.7717
25	0.961	24	0.8072	24	0.8043
26	0.974	26	0.8193	25	0.8152
27	0.987	27	0.8313	26	0.8261
36	1	37	0.8434	27	0.837
		38	0.8554	36	0.8478
		39	0.8795	38	0.8587
		40	0.8916	39	0.8696
		41	0.9036	40	0.8804
		42	0.9157	41	0.8913
		43	0.9277	42	0.913
		44	0.9398	43	0.9239
		45	0.9518	44	0.9348
		46	0.9639	45	0.9457
		52	0.9759	46	0.9565
		53	0.988	47	0.9674
		54	1	54	0.9783
				59	0.9891
				60	1

Table A.164 Menemen station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		93	93	7	5	9
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	93	6	0.9355	0.0255	0.88686	0.9868
2	87	6	0.871	0.0348	0.80543	0.9418
3	81	11	0.7527	0.0447	0.66992	0.8457
4	70	6	0.6882	0.048	0.60018	0.7891
5	64	9	0.5914	0.051	0.49947	0.7002
6	55	7	0.5161	0.0518	0.42393	0.6284
7	48	6	0.4516	0.0516	0.361	0.565
8	42	4	0.4086	0.051	0.31997	0.5218
9	38	5	0.3548	0.0496	0.26978	0.4667
10	33	3	0.3226	0.0485	0.24029	0.4331
11	30	3	0.2903	0.0471	0.21129	0.3989
12	27	4	0.2473	0.0447	0.17348	0.3526
13	23	4	0.2043	0.0418	0.1368	0.3051
14	19	4	0.1613	0.0381	0.10147	0.2564
15	15	3	0.129	0.0348	0.0761	0.2188
16	12	2	0.1075	0.0321	0.05987	0.1931
17	10	3	0.0753	0.0274	0.03692	0.1535
18	7	1	0.0645	0.0255	0.02976	0.1399
19	6	1	0.0538	0.0234	0.02292	0.1261
25	5	1	0.043	0.021	0.01649	0.1122
26	4	2	0.0215	0.015	0.00546	0.0847
27	2	1	0.0108	0.0107	0.00153	0.0755
37	1	1	0	NaN	NA	NA

Table A.165 Menemen station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		88	88	14	12	17
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	88	5	0.9432	0.0247	0.89603	0.9928
2	83	5	0.8864	0.0338	0.82247	0.9552
3	78	6	0.8182	0.0411	0.74144	0.9029
4	72	3	0.7841	0.0439	0.70267	0.8749
6	69	1	0.7727	0.0447	0.68995	0.8654
7	68	3	0.7386	0.0468	0.65231	0.8364
8	65	3	0.7045	0.0486	0.61539	0.8066
9	62	3	0.6705	0.0501	0.5791	0.7762
10	59	3	0.6364	0.0513	0.54339	0.7452
11	56	3	0.6023	0.0522	0.50822	0.7137
12	53	3	0.5682	0.0528	0.47357	0.6817
13	50	4	0.5227	0.0532	0.42813	0.6382
14	46	3	0.4886	0.0533	0.3946	0.6051
15	43	3	0.4545	0.0531	0.36156	0.5714
16	40	4	0.4091	0.0524	0.31825	0.5259
17	36	3	0.375	0.0516	0.28634	0.4911
18	33	4	0.3295	0.0501	0.24462	0.444
19	29	5	0.2727	0.0475	0.19389	0.3836
20	24	3	0.2386	0.0454	0.16431	0.3466
21	21	2	0.2159	0.0439	0.145	0.3215
22	19	2	0.1932	0.0421	0.12605	0.2961
23	17	1	0.1818	0.0411	0.11672	0.2832
24	16	1	0.1705	0.0401	0.10751	0.2703
25	15	2	0.1477	0.0378	0.08944	0.244
26	13	1	0.1364	0.0366	0.0806	0.2307
27	12	1	0.125	0.0353	0.07192	0.2173
29	11	1	0.1136	0.0338	0.0634	0.2037
30	10	1	0.1023	0.0323	0.05507	0.1899
41	9	1	0.0909	0.0306	0.04695	0.176
42	8	1	0.0795	0.0288	0.03908	0.1619
43	7	1	0.0682	0.0269	0.03149	0.1476
44	6	1	0.0568	0.0247	0.02425	0.1331
53	5	1	0.0455	0.0222	0.01745	0.1184
54	4	1	0.0341	0.0193	0.01121	0.1037
63	3	1	0.0227	0.0159	0.00577	0.0894
64	2	1	0.0114	0.0113	0.00162	0.0798
65	1	1	0	NaN	NA	NA

Table A.166 Menemen station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		96	96	15	13	17
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	96	5	0.9479	0.0227	0.9045	0.9934
2	91	6	0.8854	0.0325	0.82394	0.9515
3	85	4	0.8437	0.0371	0.77416	0.9196
4	81	3	0.8125	0.0398	0.73806	0.8945
5	78	3	0.7812	0.0422	0.70278	0.8685
6	75	1	0.7708	0.0429	0.69118	0.8597
7	74	1	0.7604	0.0436	0.67965	0.8508
8	73	1	0.75	0.0442	0.6682	0.8418
9	72	2	0.7292	0.0454	0.64548	0.8237
10	70	3	0.6979	0.0469	0.61185	0.7961
11	67	4	0.6562	0.0485	0.5678	0.7585
12	63	4	0.6146	0.0497	0.52455	0.7201
13	59	4	0.5729	0.0505	0.48204	0.6809
14	55	4	0.5312	0.0509	0.44024	0.6411
15	51	4	0.4896	0.051	0.39914	0.6005
16	47	5	0.4375	0.0506	0.34871	0.5489
17	42	5	0.3854	0.0497	0.29938	0.4962
18	37	5	0.3333	0.0481	0.2512	0.4423
19	32	4	0.2917	0.0464	0.21355	0.3984
20	28	4	0.25	0.0442	0.17679	0.3535
21	24	3	0.2187	0.0422	0.14989	0.3192
22	21	2	0.1979	0.0407	0.13231	0.2961
23	19	2	0.1771	0.039	0.11505	0.2726
24	17	1	0.1667	0.038	0.10656	0.2607
38	16	1	0.1562	0.0371	0.09816	0.2487
39	15	1	0.1458	0.036	0.08987	0.2367
40	14	1	0.1354	0.0349	0.08169	0.2245
41	13	1	0.125	0.0338	0.07363	0.2122
42	12	2	0.1042	0.0312	0.05794	0.1873
43	10	1	0.0938	0.0297	0.05033	0.1746
44	9	1	0.0833	0.0282	0.04292	0.1618
45	8	1	0.0729	0.0265	0.03573	0.1488
46	7	1	0.0625	0.0247	0.0288	0.1356
47	6	3	0.0313	0.0178	0.01026	0.0952
48	3	1	0.0208	0.0146	0.00529	0.0821
49	2	1	0.0104	0.0104	0.00148	0.0732
96	1	1	0	NaN	NA	NA

Table A.167 Menemen station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0645	1	0.0568	1	0.0521
2	0.129	2	0.1136	2	0.1146
3	0.2473	3	0.1818	3	0.1563
4	0.3118	4	0.2159	4	0.1875
5	0.4086	6	0.2273	5	0.2188
6	0.4839	7	0.2614	6	0.2292
7	0.5484	8	0.2955	7	0.2396
8	0.5914	9	0.3295	8	0.25
9	0.6452	10	0.3636	9	0.2708
10	0.6774	11	0.3977	10	0.3021
11	0.7097	12	0.4318	11	0.3438
12	0.7527	13	0.4773	12	0.3854
13	0.7957	14	0.5114	13	0.4271
14	0.8387	15	0.5455	14	0.4688
15	0.871	16	0.5909	15	0.5104
16	0.8925	17	0.625	16	0.5625
17	0.9247	18	0.6705	17	0.6146
18	0.9355	19	0.7273	18	0.6667
19	0.9462	20	0.7614	19	0.7083
25	0.957	21	0.7841	20	0.75
26	0.9785	22	0.8068	21	0.7813
27	0.9892	23	0.8182	22	0.8021
37	1	24	0.8295	23	0.8229
		25	0.8523	24	0.8333
		26	0.8636	38	0.8438
		27	0.875	39	0.8542
		29	0.8864	40	0.8646
		30	0.8977	41	0.875
		41	0.9091	42	0.8958
		42	0.9205	43	0.9062
		43	0.9318	44	0.9167
		44	0.9432	45	0.9271
		53	0.9545	46	0.9375
		54	0.9659	47	0.9687
		63	0.9773	48	0.9792
		64	0.9886	49	0.9896
		65	1	96	1

Table A.168 Odemis station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		96	96	7.5	6	9
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	96	2	0.9792	0.0146	0.95101	1
2	94	3	0.9479	0.0227	0.9045	0.9934
3	91	11	0.8333	0.038	0.76202	0.9113
4	80	8	0.75	0.0442	0.6682	0.8418
5	72	8	0.6667	0.0481	0.57873	0.768
6	64	8	0.5833	0.0503	0.4926	0.6908
7	56	8	0.5	0.051	0.40935	0.6107
8	48	8	0.4167	0.0503	0.32885	0.5279
9	40	6	0.3542	0.0488	0.27033	0.464
10	34	4	0.3125	0.0473	0.23227	0.4204
11	30	5	0.2604	0.0448	0.18589	0.3648
12	25	2	0.2396	0.0436	0.16776	0.3422
13	23	2	0.2187	0.0422	0.14989	0.3192
14	21	1	0.2083	0.0414	0.14106	0.3077
15	20	1	0.1979	0.0407	0.13231	0.2961
16	19	3	0.1667	0.038	0.10656	0.2607
17	16	1	0.1562	0.0371	0.09816	0.2487
18	15	2	0.1354	0.0349	0.08169	0.2245
20	13	1	0.125	0.0338	0.07363	0.2122
21	12	1	0.1146	0.0325	0.06571	0.1998
22	11	1	0.1042	0.0312	0.05794	0.1873
27	10	1	0.0937	0.0297	0.05033	0.1746
32	9	1	0.0833	0.0282	0.04292	0.1618
33	8	1	0.0729	0.0265	0.03573	0.1488
34	7	1	0.0625	0.0247	0.0288	0.1356
36	6	1	0.0521	0.0227	0.02219	0.1223
37	5	2	0.0312	0.0178	0.01026	0.0952
48	3	1	0.0208	0.0146	0.00529	0.0821
49	2	1	0.0104	0.0104	0.00148	0.0732
50	1	1	0	NaN	NA	NA

Table A.169 Odemis station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		86	86	8	7	10
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	86	3	0.9651	0.0198	0.92711	1
2	83	5	0.907	0.0313	0.84762	0.9705
3	78	7	0.8256	0.0409	0.74915	0.9098
4	71	6	0.7558	0.0463	0.67026	0.8523
5	65	5	0.6977	0.0495	0.60706	0.8018
6	60	8	0.6047	0.0527	0.50967	0.7173
7	52	7	0.5233	0.0539	0.42766	0.6402
8	45	5	0.4651	0.0538	0.37079	0.5834
9	40	4	0.4186	0.0532	0.32631	0.537
10	36	5	0.3605	0.0518	0.27202	0.4777
11	31	3	0.3256	0.0505	0.24019	0.4413
12	28	1	0.314	0.05	0.22971	0.4291
13	27	1	0.3023	0.0495	0.2193	0.4168
14	26	1	0.2907	0.049	0.20896	0.4044
15	25	1	0.2791	0.0484	0.19869	0.392
16	24	1	0.2674	0.0477	0.1885	0.3794
17	23	1	0.2558	0.047	0.17839	0.3668
19	22	1	0.2442	0.0463	0.16836	0.3542
21	21	2	0.2209	0.0447	0.14856	0.3286
22	19	1	0.2093	0.0439	0.13879	0.3156
23	18	2	0.186	0.042	0.11957	0.2895
24	16	1	0.1744	0.0409	0.11013	0.2762
25	15	1	0.1628	0.0398	0.1008	0.2629
26	14	1	0.1512	0.0386	0.09161	0.2494
27	13	1	0.1395	0.0374	0.08256	0.2358
28	12	1	0.1279	0.036	0.07366	0.2221
29	11	1	0.1163	0.0346	0.06493	0.2082
30	10	1	0.1047	0.033	0.0564	0.1942
34	9	1	0.093	0.0313	0.04808	0.18
39	8	1	0.0814	0.0295	0.04002	0.1656
45	7	1	0.0698	0.0275	0.03225	0.1509
46	6	2	0.0465	0.0227	0.01786	0.1211
47	4	1	0.0349	0.0198	0.01148	0.106
48	3	1	0.0233	0.0163	0.00591	0.0915
49	2	1	0.0116	0.0116	0.00166	0.0816
133	1	1	0	NaN	NA	NA

Table A.170 Odemis station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		80	80	17.5	15	20
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	80	4	0.95	0.0244	0.90342	0.999
2	76	4	0.9	0.0335	0.8366	0.9682
3	72	3	0.8625	0.0385	0.79024	0.9414
4	69	2	0.8375	0.0412	0.76044	0.9224
5	67	2	0.8125	0.0436	0.73132	0.9027
6	65	1	0.8	0.0447	0.71698	0.8926
7	64	1	0.7875	0.0457	0.70277	0.8824
9	63	1	0.775	0.0467	0.68869	0.8721
10	62	1	0.7625	0.0476	0.67473	0.8617
11	61	2	0.7375	0.0492	0.64712	0.8405
12	59	3	0.7	0.0512	0.60645	0.808
13	56	3	0.6625	0.0529	0.56658	0.7747
14	53	3	0.625	0.0541	0.52743	0.7406
15	50	3	0.5875	0.055	0.48895	0.7059
16	47	3	0.55	0.0556	0.45111	0.6706
17	44	4	0.5	0.0559	0.40161	0.6225
18	40	4	0.45	0.0556	0.35318	0.5734
19	36	4	0.4	0.0548	0.30585	0.5231
20	32	4	0.35	0.0533	0.25964	0.4718
21	28	3	0.3125	0.0518	0.22578	0.4325
22	25	3	0.275	0.0499	0.19267	0.3925
23	22	3	0.2375	0.0476	0.16038	0.3517
24	19	3	0.2	0.0447	0.12903	0.31
25	16	1	0.1875	0.0436	0.11882	0.2959
26	15	1	0.175	0.0425	0.10874	0.2816
27	14	1	0.1625	0.0412	0.09881	0.2672
28	13	1	0.15	0.0399	0.08903	0.2527
29	12	1	0.1375	0.0385	0.07942	0.238
30	11	1	0.125	0.037	0.07	0.2232
31	10	1	0.1125	0.0353	0.06079	0.2082
32	9	1	0.1	0.0335	0.05182	0.193
33	8	1	0.0875	0.0316	0.04312	0.1776
37	7	1	0.075	0.0294	0.03474	0.1619
38	6	1	0.0625	0.0271	0.02675	0.146
39	5	1	0.05	0.0244	0.01924	0.13
85	4	1	0.0375	0.0212	0.01236	0.1138
86	3	1	0.025	0.0175	0.00636	0.0982
277	2	1	0.0125	0.0124	0.00178	0.0877
278	1	1	0	NaN	NA	NA

Table A.171 Odemis station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0208	1	0.0349	1	0.05
2	0.0521	2	0.093	2	0.1
3	0.1667	3	0.1744	3	0.1375
4	0.25	4	0.2442	4	0.1625
5	0.3333	5	0.3023	5	0.1875
6	0.4167	6	0.3953	6	0.2
7	0.5	7	0.4767	7	0.2125
8	0.5833	8	0.5349	9	0.225
9	0.6458	9	0.5814	10	0.2375
10	0.6875	10	0.6395	11	0.2625
11	0.7396	11	0.6744	12	0.3
12	0.7604	12	0.686	13	0.3375
13	0.7813	13	0.6977	14	0.375
14	0.7917	14	0.7093	15	0.4125
15	0.8021	15	0.7209	16	0.45
16	0.8333	16	0.7326	17	0.5
17	0.8438	17	0.7442	18	0.55
18	0.8646	19	0.7558	19	0.6
20	0.875	21	0.7791	20	0.65
21	0.8854	22	0.7907	21	0.6875
22	0.8958	23	0.814	22	0.725
27	0.9063	24	0.8256	23	0.7625
32	0.9167	25	0.8372	24	0.8
33	0.9271	26	0.8488	25	0.8125
34	0.9375	27	0.8605	26	0.825
36	0.9479	28	0.8721	27	0.8375
37	0.9688	29	0.8837	28	0.85
48	0.9792	30	0.8953	29	0.8625
49	0.9896	34	0.907	30	0.875
50	1	39	0.9186	31	0.8875
		45	0.9302	32	0.9
		46	0.9535	33	0.9125
		47	0.9651	37	0.925
		48	0.9767	38	0.9375
		49	0.9884	39	0.95
		133	1	85	0.9625
				86	0.975
				277	0.9875
				278	1

Table A.172 Odemis station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		93	93	7	6	8
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	93	2	0.9785	0.015	0.94945	10.000
2	91	1	0.9677	0.0183	0.93249	10.000
3	90	9	0.871	0.0348	0.80543	0.9418
4	81	8	0.7849	0.0426	0.70573	0.8731
5	73	9	0.6882	0.048	0.60018	0.7891
6	64	11	0.5699	0.0513	0.47765	0.6799
7	53	9	0.4731	0.0518	0.38179	0.5863
8	44	8	0.3871	0.0505	0.29975	0.4999
9	36	6	0.3226	0.0485	0.24029	0.4331
10	30	5	0.2688	0.046	0.19226	0.3759
11	25	3	0.2366	0.0441	0.1642	0.3408
12	22	1	0.2258	0.0434	0.15499	0.329
13	21	2	0.2043	0.0418	0.1368	0.3051
14	19	1	0.1935	0.041	0.12783	0.2931
15	18	1	0.1828	0.0401	0.11894	0.2809
16	17	1	0.172	0.0391	0.11016	0.2687
17	16	1	0.1613	0.0381	0.10147	0.2564
18	15	2	0.1398	0.036	0.08443	0.2314
21	13	1	0.129	0.0348	0.0761	0.2188
22	12	4	0.086	0.0291	0.04435	0.1668
23	8	1	0.0753	0.0274	0.03692	0.1535
31	7	1	0.0645	0.0255	0.02976	0.1399
32	6	1	0.0538	0.0234	0.02292	0.1261
36	5	1	0.043	0.021	0.01649	0.1122
37	4	1	0.0323	0.0183	0.0106	0.0982
41	3	1	0.0215	0.015	0.00546	0.0847
42	2	1	0.0108	0.0107	0.00153	0.0755
43	1	1	0	NaN	NA	NA

Table A.173 Odemis station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		94	94	9	7	11
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	94	4	0.9574	0.0208	0.9175	0.9991
2	90	5	0.9043	0.0303	0.84669	0.9657
3	85	5	0.8511	0.0367	0.78205	0.9262
4	80	5	0.7979	0.0414	0.72068	0.8833
5	75	6	0.734	0.0456	0.64994	0.829
6	69	10	0.6277	0.0499	0.53716	0.7334
7	59	6	0.5638	0.0511	0.47199	0.6735
8	53	5	0.5106	0.0516	0.41895	0.6224
9	48	6	0.4468	0.0513	0.35681	0.5595
10	42	5	0.3936	0.0504	0.30627	0.5059
11	37	2	0.3723	0.0499	0.28639	0.4841
12	35	1	0.3617	0.0496	0.27652	0.4731
13	34	1	0.3511	0.0492	0.2667	0.4621
14	33	1	0.3404	0.0489	0.25693	0.4511
15	32	1	0.3298	0.0485	0.24722	0.4399
16	31	1	0.3191	0.0481	0.23755	0.4288
17	30	2	0.2979	0.0472	0.21839	0.4063
18	28	3	0.266	0.0456	0.19009	0.3721
19	25	2	0.2447	0.0443	0.17153	0.349
20	23	1	0.234	0.0437	0.16236	0.3374
21	22	2	0.2128	0.0422	0.14422	0.3139
22	20	1	0.2021	0.0414	0.13527	0.302
23	19	1	0.1915	0.0406	0.1264	0.2901
24	18	1	0.1809	0.0397	0.11762	0.2781
25	17	1	0.1702	0.0388	0.10893	0.266
26	16	1	0.1596	0.0378	0.10034	0.2538
27	15	1	0.1489	0.0367	0.09186	0.2415
28	14	1	0.1383	0.0356	0.0835	0.2291
29	13	1	0.1277	0.0344	0.07526	0.2165
30	12	1	0.117	0.0332	0.06716	0.2039
31	11	1	0.1064	0.0318	0.05921	0.1911
43	10	1	0.0957	0.0303	0.05144	0.1782
44	9	1	0.0851	0.0288	0.04386	0.1651
45	8	1	0.0745	0.0271	0.03651	0.1519
46	7	1	0.0638	0.0252	0.02943	0.1384
62	6	1	0.0532	0.0231	0.02267	0.1248
68	5	1	0.0426	0.0208	0.01631	0.111
69	4	1	0.0319	0.0181	0.01048	0.0972
70	3	1	0.0213	0.0149	0.0054	0.0838
71	2	1	0.0106	0.0106	0.00151	0.0747
87	1	1	0	NaN	NA	NA

Table A.174 Odemis station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		100	100	17.5	15	20
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	100	4	0.96	0.0196	0.92235	0.9992
2	96	5	0.91	0.02862	0.8556	0.9679
3	91	4	0.87	0.03363	0.80652	0.9385
4	87	3	0.84	0.03666	0.77113	0.915
5	84	3	0.81	0.03923	0.73665	0.8907
6	81	3	0.78	0.04142	0.70289	0.8656
7	78	3	0.75	0.0433	0.66976	0.8399
8	75	3	0.72	0.0449	0.63716	0.8136
9	72	2	0.7	0.04583	0.61571	0.7958
10	70	2	0.68	0.04665	0.59445	0.7779
11	68	2	0.66	0.04737	0.57339	0.7597
12	66	2	0.64	0.048	0.55251	0.7413
13	64	2	0.62	0.04854	0.53181	0.7228
14	62	2	0.6	0.04899	0.51127	0.7041
15	60	2	0.58	0.04936	0.4909	0.6853
16	58	3	0.55	0.04975	0.46065	0.6567
17	55	5	0.5	0.05	0.41101	0.6083
18	50	4	0.46	0.04984	0.37199	0.5688
19	46	4	0.42	0.04936	0.3336	0.5288
20	42	3	0.39	0.04877	0.30522	0.4983
21	39	1	0.38	0.04854	0.29584	0.4881
22	38	1	0.37	0.04828	0.2865	0.4778
23	37	1	0.36	0.048	0.27721	0.4675
24	36	1	0.35	0.0477	0.26796	0.4572
25	35	1	0.34	0.04737	0.25875	0.4468
26	34	1	0.33	0.04702	0.24959	0.4363
27	33	1	0.32	0.04665	0.24047	0.4258
28	32	1	0.31	0.04625	0.2314	0.4153
29	31	1	0.3	0.04583	0.22238	0.4047
30	30	1	0.29	0.04538	0.21341	0.3941
31	29	1	0.28	0.0449	0.20449	0.3834
32	28	1	0.27	0.0444	0.19561	0.3727
33	27	1	0.26	0.04386	0.1868	0.3619
34	26	1	0.25	0.0433	0.17804	0.3511
35	25	1	0.24	0.04271	0.16933	0.3402
36	24	2	0.22	0.04142	0.15211	0.3182
37	22	2	0.2	0.04	0.13514	0.296

Table A.174 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		100	100	17.5	15	20
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
38	20	2	0.18	0.03842	0.11847	0.2735
39	18	1	0.17	0.03756	0.11025	0.2621
40	17	1	0.16	0.03666	0.10211	0.2507
41	16	1	0.15	0.03571	0.09407	0.2392
74	15	1	0.14	0.0347	0.08613	0.2276
75	14	1	0.13	0.03363	0.0783	0.2158
76	13	1	0.12	0.0325	0.07058	0.204
77	12	1	0.11	0.03129	0.06299	0.1921
78	11	1	0.1	0.03	0.05554	0.18
79	10	1	0.09	0.02862	0.04826	0.1678
80	9	1	0.08	0.02713	0.04116	0.1555
81	8	1	0.07	0.02551	0.03426	0.143
82	7	1	0.06	0.02375	0.02762	0.1303
83	6	1	0.05	0.02179	0.02128	0.1175
84	5	1	0.04	0.0196	0.01531	0.1045
85	4	1	0.03	0.01706	0.00984	0.0914
120	3	1	0.02	0.014	0.00507	0.0789
121	2	1	0.01	0.00995	0.00142	0.0703
156	1	1	0	NaN	NA	NA

Table A.175 Odemis station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0215	1	0.0426	1	0.04
2	0.0323	2	0.0957	2	0.09
3	0.129	3	0.1489	3	0.13
4	0.2151	4	0.2021	4	0.16
5	0.3118	5	0.266	5	0.19
6	0.4301	6	0.3723	6	0.22
7	0.5269	7	0.4362	7	0.25
8	0.6129	8	0.4894	8	0.28
9	0.6774	9	0.5532	9	0.3
10	0.7312	10	0.6064	10	0.32
11	0.7634	11	0.6277	11	0.34
12	0.7742	12	0.6383	12	0.36
13	0.7957	13	0.6489	13	0.38
14	0.8065	14	0.6596	14	0.4
15	0.8172	15	0.6702	15	0.42
16	0.828	16	0.6809	16	0.45
17	0.8387	17	0.7021	17	0.5
18	0.8602	18	0.734	18	0.54
21	0.871	19	0.7553	19	0.58
22	0.914	20	0.766	20	0.61
23	0.9247	21	0.7872	21	0.62
31	0.9355	22	0.7979	22	0.63
32	0.9462	23	0.8085	23	0.64
36	0.957	24	0.8191	24	0.65
37	0.9677	25	0.8298	25	0.66
41	0.9785	26	0.8404	26	0.67
42	0.9892	27	0.8511	27	0.68
43	1	28	0.8617	28	0.69
		29	0.8723	29	0.7
		30	0.883	30	0.71
		31	0.8936	31	0.72
		43	0.9043	32	0.73
		44	0.9149	33	0.74
		45	0.9255	34	0.75
		46	0.9362	35	0.76
		62	0.9468	36	0.78
		68	0.9574	37	0.8
		69	0.9681	38	0.82
		70	0.9787	39	0.83

Table A.175 *Cont'd*

Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk
71	0.9894	40	0.84
87	1	41	0.85
		74	0.86
		75	0.87
		76	0.88
		77	0.89
		78	0.9
		79	0.91
		80	0.92
		81	0.93
		82	0.94
		83	0.95
		84	0.96
		85	0.97
		120	0.98
		121	0.99
		156	1

Table A.176 Salihli station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		140	140	12	10	14
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	140	6	0.95714	0.01712	0.92417	0.9913
2	134	5	0.92143	0.02274	0.87792	0.9671
3	129	6	0.87857	0.0276	0.8261	0.9344
4	123	7	0.82857	0.03185	0.76844	0.8934
5	116	5	0.79286	0.03425	0.72849	0.8629
6	111	5	0.75714	0.03624	0.68934	0.8316
7	106	10	0.68571	0.03923	0.61297	0.7671
8	96	6	0.64286	0.0405	0.56819	0.7273
9	90	8	0.58571	0.04163	0.50955	0.6733
10	82	4	0.55714	0.04198	0.48065	0.6458
11	78	5	0.52143	0.04222	0.44491	0.6111
12	73	4	0.49286	0.04225	0.41663	0.583
13	69	5	0.45714	0.0421	0.38164	0.5476
14	64	7	0.40714	0.04152	0.33338	0.4972
15	57	7	0.35714	0.0405	0.28597	0.446
16	50	7	0.30714	0.03899	0.23949	0.3939
17	43	6	0.26429	0.03727	0.20047	0.3484
18	37	5	0.22857	0.03549	0.1686	0.3099
19	32	2	0.21429	0.03468	0.15604	0.2943
20	30	2	0.2	0.03381	0.1436	0.2786
21	28	2	0.18571	0.03287	0.13128	0.2627
22	26	2	0.17143	0.03185	0.1191	0.2467
23	24	1	0.16429	0.03132	0.11307	0.2387
24	23	2	0.15	0.03018	0.10112	0.2225
25	21	2	0.13571	0.02895	0.08935	0.2061
26	19	2	0.12143	0.0276	0.07777	0.1896
27	17	3	0.1	0.02535	0.06084	0.1644
28	14	3	0.07857	0.02274	0.04456	0.1386
29	11	1	0.07143	0.02177	0.03931	0.1298
30	10	1	0.06429	0.02073	0.03417	0.1209
31	9	1	0.05714	0.01962	0.02916	0.112
32	8	1	0.05	0.01842	0.02429	0.1029
33	7	1	0.04286	0.01712	0.01959	0.0938
37	6	1	0.03571	0.01568	0.0151	0.0845
38	5	2	0.02143	0.01224	0.007	0.0656
39	3	2	0.00714	0.00712	0.00101	0.0504
40	1	1	0	NaN	NA	NA

Table A.177 Salihli station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		133	133	12	10	18
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	133	8	0.93985	0.02062	0.9003	0.9811
2	125	8	0.8797	0.02821	0.82611	0.9368
3	117	7	0.82707	0.03279	0.76523	0.8939
4	110	3	0.80451	0.03439	0.73986	0.8748
5	107	5	0.76692	0.03666	0.69833	0.8422
6	102	2	0.75188	0.03745	0.68194	0.829
7	100	6	0.70677	0.03947	0.63348	0.7885
8	94	6	0.66165	0.04103	0.58594	0.7472
9	88	6	0.61654	0.04216	0.53921	0.705
10	82	8	0.55639	0.04308	0.47805	0.6476
11	74	4	0.52632	0.0433	0.44795	0.6184
12	70	4	0.49624	0.04335	0.41814	0.5889
13	66	5	0.45865	0.04321	0.38132	0.5517
14	61	2	0.44361	0.04308	0.36672	0.5366
15	59	1	0.43609	0.043	0.35946	0.5291
16	58	1	0.42857	0.04291	0.35221	0.5215
17	57	2	0.41353	0.0427	0.33776	0.5063
18	55	3	0.39098	0.04231	0.31625	0.4834
19	52	3	0.36842	0.04183	0.29492	0.4602
20	49	3	0.34586	0.04124	0.27378	0.4369
21	46	2	0.33083	0.0408	0.25979	0.4213
22	44	3	0.30827	0.04004	0.23898	0.3976
23	41	3	0.28571	0.03917	0.21839	0.3738
24	38	3	0.26316	0.03818	0.19802	0.3497
25	35	2	0.24812	0.03745	0.18458	0.3335
26	33	2	0.23308	0.03666	0.17125	0.3172
27	31	3	0.21053	0.03535	0.15149	0.2926
28	28	1	0.20301	0.03488	0.14497	0.2843
29	27	1	0.19549	0.03439	0.13848	0.276
30	26	1	0.18797	0.03388	0.13203	0.2676
32	25	2	0.17293	0.03279	0.11925	0.2508
34	23	1	0.16541	0.03222	0.11292	0.2423
35	22	1	0.15789	0.03162	0.10664	0.2338
36	21	2	0.14286	0.03034	0.09421	0.2166
37	19	1	0.13534	0.02966	0.08808	0.208
38	18	2	0.1203	0.02821	0.07598	0.1905
39	16	3	0.09774	0.02575	0.05832	0.1638
40	13	1	0.09023	0.02484	0.0526	0.1548
41	12	1	0.08271	0.02388	0.04696	0.1457
42	11	2	0.06767	0.02178	0.03601	0.1272
43	9	2	0.05263	0.01936	0.02559	0.1082
44	7	1	0.04511	0.018	0.02064	0.0986
45	6	1	0.03759	0.01649	0.01591	0.0888
46	5	1	0.03008	0.01481	0.01146	0.079
47	4	1	0.02256	0.01288	0.00737	0.069
48	3	1	0.01504	0.01055	0.0038	0.0595
57	2	1	0.00752	0.00749	0.00107	0.053
91	1	1	0	NaN	NA	NA

Table A.178 Salihli station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		130	130	25	21	29
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	130	5	0.96154	0.01687	0.92904	0.9952
2	125	6	0.91538	0.02441	0.86877	0.9645
3	119	3	0.89231	0.02719	0.84058	0.9472
4	116	3	0.86923	0.02957	0.81316	0.9292
5	113	2	0.85385	0.03098	0.79523	0.9168
11	111	1	0.84615	0.03164	0.78635	0.9105
12	110	3	0.82308	0.03347	0.76003	0.8914
13	107	4	0.79231	0.03558	0.72556	0.8652
14	103	4	0.76154	0.03738	0.6917	0.8384
15	99	4	0.73077	0.0389	0.65836	0.8111
16	95	3	0.70769	0.03989	0.63367	0.7904
17	92	4	0.67692	0.04102	0.60112	0.7623
18	88	4	0.64615	0.04194	0.56897	0.7338
19	84	3	0.62308	0.0425	0.5451	0.7122
20	81	3	0.6	0.04297	0.52143	0.6904
21	78	3	0.57692	0.04333	0.49795	0.6684
22	75	3	0.55385	0.0436	0.47466	0.6462
23	72	3	0.53077	0.04377	0.45156	0.6239
24	69	3	0.50769	0.04385	0.42863	0.6013
25	66	2	0.49231	0.04385	0.41345	0.5862
26	64	3	0.46923	0.04377	0.39083	0.5634
27	61	3	0.44615	0.0436	0.36839	0.5403
28	58	3	0.42308	0.04333	0.34613	0.5171
29	55	3	0.4	0.04297	0.32406	0.4937
30	52	1	0.39231	0.04282	0.31675	0.4859
31	51	1	0.38462	0.04267	0.30945	0.478
32	50	1	0.37692	0.0425	0.30218	0.4702
33	49	2	0.36154	0.04214	0.2877	0.4543
34	47	2	0.34615	0.04173	0.27332	0.4384
35	45	2	0.33077	0.04126	0.25902	0.4224
36	43	3	0.30769	0.04048	0.23776	0.3982
37	40	3	0.28462	0.03958	0.21672	0.3738
38	37	2	0.26923	0.0389	0.20283	0.3574
39	35	2	0.25385	0.03817	0.18905	0.3409
40	33	1	0.24615	0.03778	0.1822	0.3325
41	32	1	0.23846	0.03738	0.17539	0.3242
42	31	1	0.23077	0.03695	0.16861	0.3158

Table A.178 *Cont'd*

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		130	130	25	21	29
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
43	30	1	0.22308	0.03651	0.16186	0.3075
44	29	1	0.21538	0.03605	0.15514	0.299
45	28	1	0.20769	0.03558	0.14846	0.2906
46	27	1	0.2	0.03508	0.14181	0.2821
47	26	1	0.19231	0.03457	0.13521	0.2735
48	25	1	0.18462	0.03403	0.12864	0.2649
49	24	1	0.17692	0.03347	0.12211	0.2563
50	23	1	0.16923	0.03289	0.11563	0.2477
69	22	1	0.16154	0.03228	0.10919	0.239
70	21	1	0.15385	0.03164	0.1028	0.2302
85	20	1	0.14615	0.03098	0.09646	0.2214
94	19	1	0.13846	0.03029	0.09018	0.2126
95	18	1	0.13077	0.02957	0.08395	0.2037
96	17	1	0.12308	0.02881	0.07779	0.1947
97	16	1	0.11538	0.02802	0.07169	0.1857
98	15	1	0.10769	0.02719	0.06566	0.1766
99	14	1	0.1	0.02631	0.05971	0.1675
100	13	1	0.09231	0.02539	0.05384	0.1582
101	12	1	0.08462	0.02441	0.04807	0.1489
102	11	1	0.07692	0.02337	0.04241	0.1395
103	10	1	0.06923	0.02226	0.03686	0.13
104	9	1	0.06154	0.02108	0.03145	0.1204
136	8	1	0.05385	0.0198	0.02619	0.1107
137	7	1	0.04615	0.0184	0.02113	0.1008
138	6	1	0.03846	0.01687	0.01628	0.0908
139	5	1	0.03077	0.01515	0.01173	0.0807
140	4	1	0.02308	0.01317	0.00754	0.0706
141	3	1	0.01538	0.01079	0.00389	0.0609
142	2	1	0.00769	0.00766	0.00109	0.0542
143	1	1	0	NaN	NA	NA

Table A.179 Salihli station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.04286	1	0.06015	1	0.03846
2	0.07857	2	0.1203	2	0.08462
3	0.12143	3	0.17293	3	0.10769
4	0.17143	4	0.19549	4	0.13077
5	0.20714	5	0.23308	5	0.14615
6	0.24286	6	0.24812	6	0.147433
7	0.31429	7	0.29323	11	0.15385
8	0.35714	8	0.33835	12	0.17692
9	0.41429	9	0.38346	13	0.20769
10	0.44286	10	0.44361	14	0.23846
11	0.47857	11	0.47368	15	0.26923
12	0.50714	12	0.50376	16	0.29231
13	0.54286	13	0.54135	17	0.32308
14	0.59286	14	0.55639	18	0.35385
15	0.64286	15	0.56391	19	0.37692
16	0.69286	16	0.57143	20	0.4
17	0.73571	17	0.58647	21	0.42308
18	0.77143	18	0.60902	22	0.44615
19	0.78571	19	0.63158	23	0.46923
20	0.8	20	0.65414	24	0.49231
21	0.81429	21	0.66917	25	0.50769
22	0.82857	22	0.69173	26	0.53077
23	0.83571	23	0.71429	27	0.55385
24	0.85	24	0.73684	28	0.57692
25	0.86429	25	0.75188	29	0.6
26	0.87857	26	0.76692	30	0.60769
27	0.9	27	0.78947	31	0.61538
28	0.92143	28	0.79699	32	0.62308
29	0.92857	29	0.80451	33	0.63846
30	0.93571	30	0.81203	34	0.65385
31	0.94286	32	0.82707	35	0.66923
32	0.95	34	0.83459	36	0.69231
33	0.95714	35	0.84211	37	0.71538
37	0.96429	36	0.85714	38	0.73077
38	0.97857	37	0.86466	39	0.74615
39	0.99286	38	0.8797	40	0.75385
40	1	39	0.90226	41	0.76154
		40	0.90977	42	0.76923
		41	0.91729	43	0.77692

Table A.179 *Cont'd*

Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk
42	0.93233	44	0.78462
43	0.94737	45	0.79231
44	0.95489	46	0.8
45	0.96241	47	0.80769
46	0.96992	48	0.81538
47	0.97744	49	0.82308
48	0.98496	50	0.83077
57	0.99248	69	0.83846
91	1	70	0.84615
		85	0.85385
		94	0.86154
		95	0.86923
		96	0.87692
		97	0.88462
		98	0.89231
		99	0.9
		100	0.90769
		101	0.91538
		102	0.92308
		103	0.93077
		104	0.93846
		136	0.94615
		137	0.95385
		138	0.96154
		139	0.96923
		140	0.97692
		141	0.98462
		142	0.99231
		143	1

Table A.180 Salihli station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		85	85	8	6	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	85	4	0.9529	0.023	0.90897	0.999
2	81	2	0.9294	0.0278	0.87652	0.9855
3	79	7	0.8471	0.039	0.7739	0.9271
4	72	7	0.7647	0.046	0.67964	0.8604
5	65	8	0.6706	0.051	0.57776	0.7783
6	57	9	0.5647	0.0538	0.46856	0.6806
7	48	5	0.5059	0.0542	0.41002	0.6242
8	43	6	0.4353	0.0538	0.34168	0.5546
9	37	2	0.4118	0.0534	0.31937	0.5309
10	35	5	0.3529	0.0518	0.26466	0.4707
11	30	2	0.3294	0.051	0.24323	0.4461
12	28	2	0.3059	0.05	0.22206	0.4213
13	26	2	0.2824	0.0488	0.20119	0.3963
14	24	2	0.2588	0.0475	0.18062	0.3709
15	22	2	0.2353	0.046	0.16039	0.3452
16	20	1	0.2235	0.0452	0.1504	0.3322
21	19	1	0.2118	0.0443	0.14052	0.3191
22	18	3	0.1765	0.0413	0.11149	0.2793
23	15	2	0.1529	0.039	0.09274	0.2522
24	13	1	0.1412	0.0378	0.08357	0.2385
25	12	2	0.1176	0.0349	0.06573	0.2106
30	10	1	0.1059	0.0334	0.05709	0.1964
31	9	1	0.0941	0.0317	0.04867	0.182
39	8	1	0.0824	0.0298	0.0405	0.1674
40	7	1	0.0706	0.0278	0.03264	0.1527
41	6	1	0.0588	0.0255	0.02513	0.1377
42	5	1	0.0471	0.023	0.01808	0.1225
43	4	2	0.0235	0.0164	0.00598	0.0926
46	2	1	0.0118	0.0117	0.00168	0.0826
56	1	1	0	NaN	NA	NA

Table A.181 Salihli station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		91	91	10	8	13
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	91	6	0.9341	0.026	0.88444	0.9865
2	85	9	0.8352	0.0389	0.76231	0.915
3	76	8	0.7473	0.0456	0.66309	0.8421
4	68	5	0.6923	0.0484	0.60369	0.7939
5	63	2	0.6703	0.0493	0.58038	0.7742
6	61	2	0.6484	0.0501	0.55731	0.7543
7	59	4	0.6044	0.0513	0.51184	0.7137
8	55	4	0.5604	0.052	0.4672	0.6723
9	51	5	0.5055	0.0524	0.41254	0.6194
10	46	3	0.4725	0.0523	0.38032	0.5871
11	43	3	0.4396	0.052	0.34855	0.5543
12	40	3	0.4066	0.0515	0.31722	0.5211
13	37	3	0.3736	0.0507	0.28635	0.4875
14	34	3	0.3407	0.0497	0.25597	0.4534
15	31	2	0.3187	0.0488	0.23599	0.4304
16	29	1	0.3077	0.0484	0.22608	0.4188
17	28	1	0.2967	0.0479	0.21624	0.4071
18	27	2	0.2747	0.0468	0.19675	0.3836
21	25	1	0.2637	0.0462	0.1871	0.3718
24	24	2	0.2418	0.0449	0.16802	0.3479
25	22	1	0.2308	0.0442	0.15859	0.3358
26	21	1	0.2198	0.0434	0.14923	0.3237
27	20	2	0.1978	0.0418	0.13078	0.2992
28	18	1	0.1868	0.0409	0.12169	0.2868
29	17	1	0.1758	0.0399	0.11269	0.2743
30	16	2	0.1538	0.0378	0.09502	0.2491
31	14	2	0.1319	0.0355	0.07784	0.2234
32	12	1	0.1209	0.0342	0.06946	0.2104
37	11	1	0.1099	0.0328	0.06124	0.1972
38	10	1	0.0989	0.0313	0.05319	0.1839
39	9	2	0.0769	0.0279	0.03775	0.1567
40	7	1	0.0659	0.026	0.03043	0.1429
41	6	1	0.0549	0.0239	0.02344	0.1288
42	5	1	0.044	0.0215	0.01686	0.1146
43	4	1	0.033	0.0187	0.01083	0.1003
44	3	1	0.022	0.0154	0.00558	0.0865
66	2	1	0.011	0.0109	0.00156	0.0772
90	1	1	0	NaN	NA	NA

Table A.182 Salihli station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		97	97	18	15	24
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	97	3	0.9691	0.0176	0.93523	10.000
2	94	4	0.9278	0.0263	0.87774	0.9808
3	90	3	0.8969	0.0309	0.83839	0.9595
4	87	2	0.8763	0.0334	0.81316	0.9443
5	85	2	0.8557	0.0357	0.78852	0.9285
6	83	1	0.8454	0.0367	0.77639	0.9205
7	82	1	0.8351	0.0377	0.76437	0.9123
8	81	2	0.8144	0.0395	0.74063	0.8956
9	79	2	0.7938	0.0411	0.71725	0.8785
10	77	2	0.7732	0.0425	0.69419	0.8612
11	75	1	0.7629	0.0432	0.68277	0.8524
12	74	3	0.732	0.045	0.64891	0.8256
13	71	5	0.6804	0.0473	0.59366	0.7798
14	66	5	0.6289	0.0491	0.53971	0.7327
15	61	4	0.5876	0.05	0.4974	0.6942
16	57	4	0.5464	0.0505	0.45578	0.655
17	53	4	0.5052	0.0508	0.41484	0.6151
18	49	4	0.4639	0.0506	0.37457	0.5746
19	45	2	0.4433	0.0504	0.35469	0.554
20	43	2	0.4227	0.0502	0.33497	0.5334
21	41	1	0.4124	0.05	0.32518	0.5229
23	40	1	0.4021	0.0498	0.31542	0.5125
24	39	2	0.3814	0.0493	0.29605	0.4915
25	37	1	0.3711	0.0491	0.28644	0.4809
26	36	1	0.3608	0.0488	0.27686	0.4702
27	35	1	0.3505	0.0484	0.26734	0.4596
28	34	1	0.3402	0.0481	0.25786	0.4489
29	33	1	0.3299	0.0477	0.24843	0.4381
30	32	1	0.3196	0.0473	0.23905	0.4273
31	31	1	0.3093	0.0469	0.22972	0.4164
32	30	1	0.299	0.0465	0.22044	0.4055
33	29	1	0.2887	0.046	0.21121	0.3945
34	28	1	0.2784	0.0455	0.20204	0.3835
35	27	2	0.2577	0.0444	0.18386	0.3613
36	25	2	0.2371	0.0432	0.16593	0.3388
37	23	3	0.2062	0.0411	0.13953	0.3047
38	20	2	0.1856	0.0395	0.1223	0.2816

Table A.182 *Cont'd*

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		97	97	18	15	24
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
39	18	1	0.1753	0.0386	0.11381	0.2699
40	17	1	0.1649	0.0377	0.10541	0.2581
41	16	1	0.1546	0.0367	0.09711	0.2463
42	15	1	0.1443	0.0357	0.0889	0.2343
43	14	1	0.134	0.0346	0.08081	0.2223
52	13	1	0.1237	0.0334	0.07284	0.2101
53	12	1	0.1134	0.0322	0.06501	0.1978
65	11	1	0.1031	0.0309	0.05732	0.1854
134	10	1	0.0928	0.0295	0.0498	0.1729
135	9	1	0.0825	0.0279	0.04247	0.1602
136	8	1	0.0722	0.0263	0.03535	0.1473
137	7	1	0.0619	0.0245	0.0285	0.1343
138	6	1	0.0515	0.0225	0.02195	0.121
139	5	1	0.0412	0.0202	0.0158	0.1077
140	4	1	0.0309	0.0176	0.01015	0.0942
141	3	1	0.0206	0.0144	0.00523	0.0813
142	2	1	0.0103	0.0103	0.00147	0.0724
143	1	1	0	NaN	NA	NA

Table A.183 Salihli station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0471	1	0.0659	1	0.0309
2	0.0706	2	0.1648	2	0.0722
3	0.1529	3	0.2527	3	0.1031
4	0.2353	4	0.3077	4	0.1237
5	0.3294	5	0.3297	5	0.1443
6	0.4353	6	0.3516	6	0.1546
7	0.4941	7	0.3956	7	0.1649
8	0.5647	8	0.4396	8	0.1856
9	0.5882	9	0.4945	9	0.2062
10	0.6471	10	0.5275	10	0.2268
11	0.6706	11	0.5604	11	0.2371
12	0.6941	12	0.5934	12	0.268
13	0.7176	13	0.6264	13	0.3196
14	0.7412	14	0.6593	14	0.3711
15	0.7647	15	0.6813	15	0.4124
16	0.7765	16	0.6923	16	0.4536
21	0.7882	17	0.7033	17	0.4948
22	0.8235	18	0.7253	18	0.5361
23	0.8471	21	0.7363	19	0.5567
24	0.8588	24	0.7582	20	0.5773
25	0.8824	25	0.7692	21	0.5876
30	0.8941	26	0.7802	23	0.5979
31	0.9059	27	0.8022	24	0.6186
39	0.9176	28	0.8132	25	0.6289
40	0.9294	29	0.8242	26	0.6392
41	0.9412	30	0.8462	27	0.6495
42	0.9529	31	0.8681	28	0.6598
43	0.9765	32	0.8791	29	0.6701
46	0.9882	37	0.8901	30	0.6804
56	1	38	0.9011	31	0.6907
		39	0.9231	32	0.701
		40	0.9341	33	0.7113
		41	0.9451	34	0.7216
		42	0.956	35	0.7423
		43	0.967	36	0.7629
		44	0.978	37	0.7938
		66	0.989	38	0.8144
		90	1	39	0.8247
				40	0.8351

Table A.183 *Cont'd*

Drought Risk (SPEI12)	
Time	Time
41	0.8454
42	0.8557
43	0.866
52	0.8763
53	0.8866
65	0.8969
134	0.9072
135	0.9175
136	0.9278
137	0.9381
138	0.9485
139	0.9588
140	0.9691
141	0.9794
142	0.9897
143	1

Table A.184 Sarigol station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		45	45	7	6	9
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
2	45	2	0.9556	0.0307	0.8972	1
3	43	4	0.8667	0.0507	0.7728	0.972
4	39	7	0.7111	0.0676	0.5903	0.857
5	32	3	0.6444	0.0714	0.5187	0.801
6	29	4	0.5556	0.0741	0.4278	0.721
7	25	5	0.4444	0.0741	0.3206	0.616
8	20	4	0.3556	0.0714	0.2399	0.527
9	16	2	0.3111	0.069	0.2014	0.481
10	14	3	0.2444	0.0641	0.1462	0.409
11	11	3	0.1778	0.057	0.0948	0.333
14	8	1	0.1556	0.054	0.0787	0.307
17	7	1	0.1333	0.0507	0.0633	0.281
18	6	1	0.1111	0.0468	0.0486	0.254
19	5	2	0.0667	0.0372	0.0223	0.199
21	3	1	0.0444	0.0307	0.0115	0.172
23	2	1	0.0222	0.022	0.0032	0.154
27	1	1	0	NaN	NA	NA

Table A.185 Sarigol station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		50	50	8	6	11
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	50	4	0.92	0.0384	0.84779	0.998
2	46	1	0.9	0.0424	0.82057	0.987
3	45	2	0.86	0.0491	0.769	0.962
4	43	4	0.78	0.0586	0.67323	0.904
5	39	3	0.72	0.0635	0.60571	0.856
6	36	5	0.62	0.0686	0.49906	0.77
7	31	4	0.54	0.0705	0.41811	0.697
8	27	4	0.46	0.0705	0.34067	0.621
9	23	3	0.4	0.0693	0.28486	0.562
10	20	3	0.34	0.067	0.23108	0.5
11	17	4	0.26	0.062	0.16289	0.415
12	13	2	0.22	0.0586	0.13054	0.371
13	11	1	0.2	0.0566	0.11489	0.348
22	10	1	0.18	0.0543	0.09962	0.325
27	9	1	0.16	0.0518	0.08478	0.302
28	8	1	0.14	0.0491	0.07043	0.278
30	7	1	0.12	0.046	0.05665	0.254
32	6	1	0.1	0.0424	0.04354	0.23
33	5	1	0.08	0.0384	0.03125	0.205
48	4	1	0.06	0.0336	0.02003	0.18
49	3	1	0.04	0.0277	0.01029	0.156
50	2	1	0.02	0.0198	0.00287	0.139
51	1	1	0	NaN	NA	NA

Table A.186 Sarigol station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		44	44	7	5	36
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	44	1	0.9773	0.0225	0.93421	1
2	43	4	0.8864	0.0478	0.79738	0.985
3	39	4	0.7955	0.0608	0.68477	0.924
4	35	4	0.7045	0.0688	0.58185	0.853
5	31	4	0.6136	0.0734	0.48539	0.776
6	27	3	0.5455	0.0751	0.4165	0.714
7	24	3	0.4773	0.0753	0.35033	0.65
8	21	2	0.4318	0.0747	0.30768	0.606
9	19	2	0.3864	0.0734	0.26624	0.561
10	17	1	0.3636	0.0725	0.24599	0.538
11	16	1	0.3409	0.0715	0.22605	0.514
36	15	2	0.2955	0.0688	0.18721	0.466
41	13	1	0.2727	0.0671	0.16834	0.442
42	12	1	0.25	0.0653	0.14986	0.417
48	11	1	0.2273	0.0632	0.1318	0.392
49	10	2	0.1818	0.0581	0.09715	0.34
50	8	2	0.1364	0.0517	0.06483	0.287
51	6	1	0.1136	0.0478	0.04979	0.259
52	5	1	0.0909	0.0433	0.03571	0.231
53	4	1	0.0682	0.038	0.02287	0.203
54	3	1	0.0455	0.0314	0.01174	0.176
55	2	1	0.0227	0.0225	0.00327	0.158
56	1	1	0	NaN	NA	NA

Table A.187 Sarigol station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
2	0.0444	1	0.08	1	0.0227
3	0.1333	2	0.1	2	0.1136
4	0.2889	3	0.14	3	0.2045
5	0.3556	4	0.22	4	0.2955
6	0.4444	5	0.28	5	0.3864
7	0.5556	6	0.38	6	0.4545
8	0.6444	7	0.46	7	0.5227
9	0.6889	8	0.54	8	0.5682
10	0.7556	9	0.6	9	0.6136
11	0.8222	10	0.66	10	0.6364
12	0.7402	11	0.74	11	0.6591
14	0.8444	12	0.78	12	0.660916
17	0.8667	13	0.8	36	0.7045
18	0.8889	22	0.82	41	0.7273
19	0.9333	27	0.84	42	0.75
21	0.9556	28	0.86	48	0.7727
23	0.9778	30	0.88	49	0.8182
27	1	32	0.9	50	0.8636
		33	0.92	51	0.8864
		48	0.94	52	0.9091
		49	0.96	53	0.9318
		50	0.98	54	0.9545
		51	1	55	0.9773
				56	1

Table A.188 Sarigol station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		43	43	9	7	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	43	2	0.9535	0.0321	0.89258	1.000
2	41	1	0.9302	0.0388	0.85712	1.000
3	40	4	0.8372	0.0563	0.73383	0.955
4	36	3	0.7674	0.0644	0.65101	0.905
5	33	3	0.6977	0.07	0.57306	0.849
6	30	2	0.6512	0.0727	0.52322	0.81
7	28	3	0.5814	0.0752	0.45116	0.749
8	25	3	0.5116	0.0762	0.38206	0.685
9	22	5	0.3953	0.0746	0.27318	0.572
10	17	4	0.3023	0.07	0.19199	0.476
11	13	3	0.2326	0.0644	0.13512	0.4
14	10	2	0.186	0.0593	0.09957	0.348
16	8	1	0.1628	0.0563	0.08265	0.321
17	7	1	0.1395	0.0528	0.06643	0.293
18	6	1	0.1163	0.0489	0.05101	0.265
19	5	1	0.093	0.0443	0.03658	0.237
29	4	1	0.0698	0.0388	0.02342	0.208
30	3	1	0.0465	0.0321	0.01202	0.18
31	2	1	0.0233	0.023	0.00335	0.161
32	1	1	0	NaN	NA	NA

Table A.189 Sarigol station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		51	51	15	13	18
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	51	3	0.9412	0.0329	0.87877	1.000
2	48	3	0.8824	0.0451	0.79821	0.975
3	45	1	0.8627	0.0482	0.77329	0.963
6	44	2	0.8235	0.0534	0.72528	0.935
7	42	1	0.8039	0.0556	0.70202	0.921
8	41	1	0.7843	0.0576	0.67918	0.906
9	40	1	0.7647	0.0594	0.65672	0.89
10	39	1	0.7451	0.061	0.6346	0.875
11	38	2	0.7059	0.0638	0.59128	0.843
12	36	4	0.6275	0.0677	0.50785	0.775
13	32	3	0.5686	0.0694	0.44773	0.722
14	29	2	0.5294	0.0699	0.40871	0.686
15	27	3	0.4706	0.0699	0.35174	0.63
16	24	2	0.4314	0.0694	0.31478	0.591
17	22	3	0.3725	0.0677	0.26092	0.532
18	19	2	0.3333	0.066	0.22611	0.491
19	17	2	0.2941	0.0638	0.19225	0.45
20	15	1	0.2745	0.0625	0.17571	0.429
21	14	1	0.2549	0.061	0.15944	0.408
22	13	1	0.2353	0.0594	0.14346	0.386
23	12	1	0.2157	0.0576	0.1278	0.364
24	11	1	0.1961	0.0556	0.11248	0.342
25	10	1	0.1765	0.0534	0.09754	0.319
26	9	1	0.1569	0.0509	0.08302	0.296
27	8	1	0.1373	0.0482	0.06898	0.273
28	7	1	0.1176	0.0451	0.05548	0.249
29	6	1	0.098	0.0416	0.04265	0.225
30	5	2	0.0588	0.0329	0.01962	0.176
31	3	1	0.0392	0.0272	0.01008	0.153
32	2	1	0.0196	0.0194	0.00282	0.137
54	1	1	0	NaN	NA	NA

Table A.190 Sarigol station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		38	38	12.5	6	43
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	38	1	0.9737	0.026	0.9241	1.000
2	37	3	0.8947	0.0498	0.8023	0.998
3	34	4	0.7895	0.0661	0.6699	0.93
4	30	3	0.7105	0.0736	0.58	0.87
5	27	2	0.6579	0.077	0.5231	0.827
6	25	1	0.6316	0.0783	0.4954	0.805
7	24	1	0.6053	0.0793	0.4682	0.782
8	23	1	0.5789	0.0801	0.4414	0.759
9	22	1	0.5526	0.0807	0.4151	0.736
11	21	1	0.5263	0.081	0.3893	0.712
12	20	1	0.5	0.0811	0.3638	0.687
13	19	1	0.4737	0.081	0.3388	0.662
14	18	1	0.4474	0.0807	0.3142	0.637
33	17	1	0.4211	0.0801	0.29	0.611
39	16	1	0.3947	0.0793	0.2663	0.585
40	15	1	0.3684	0.0783	0.243	0.559
41	14	1	0.3421	0.077	0.2201	0.532
42	13	1	0.3158	0.0754	0.1978	0.504
43	12	1	0.2895	0.0736	0.1759	0.476
44	11	1	0.2632	0.0714	0.1546	0.448
45	10	1	0.2368	0.069	0.1338	0.419
46	9	1	0.2105	0.0661	0.1137	0.39
47	8	2	0.1579	0.0592	0.0758	0.329
48	6	1	0.1316	0.0548	0.0581	0.298
49	5	1	0.1053	0.0498	0.0417	0.266
50	4	1	0.0789	0.0437	0.0266	0.234
51	3	1	0.0526	0.0362	0.0137	0.203
52	2	1	0.0263	0.026	0.0038	0.182
74	1	1	0	NaN	NA	NA

Table A.191 Sarigol station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0465	1	0.0588	1	0.0263
2	0.0698	2	0.1176	2	0.1053
3	0.1628	3	0.1373	3	0.2105
4	0.2326	6	0.1765	4	0.2895
5	0.3023	7	0.1961	5	0.3421
6	0.3488	8	0.2157	6	0.3684
7	0.4186	9	0.2353	7	0.3947
8	0.4884	10	0.2549	8	0.4211
9	0.6047	11	0.2941	9	0.4474
10	0.6977	12	0.3725	11	0.4737
11	0.7674	13	0.4314	12	0.5
12	0.782933	14	0.4706	13	0.5263
14	0.814	15	0.5294	14	0.5526
16	0.8372	16	0.5686	33	0.5789
17	0.8605	17	0.6275	39	0.6053
18	0.8837	18	0.6667	40	0.6316
19	0.907	19	0.7059	41	0.6579
29	0.9302	20	0.7255	42	0.6842
30	0.9535	21	0.7451	43	0.7105
31	0.9767	22	0.7647	44	0.7368
32	1	23	0.7843	45	0.7632
		24	0.8039	46	0.7895
		25	0.8235	47	0.8421
		26	0.8431	48	0.8684
		27	0.8627	49	0.8947
		28	0.8824	50	0.9211
		29	0.902	51	0.9474
		30	0.9412	52	0.9737
		31	0.9608	74	1
		32	0.9804		
		54	1		

Table A.192 Saruhanli station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		66	66	8	7	9
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	66	2	0.9697	0.0211	0.92921	1
2	64	2	0.9394	0.0294	0.88356	0.999
3	62	10	0.7879	0.0503	0.69517	0.893
4	52	3	0.7424	0.0538	0.64408	0.856
5	49	4	0.6818	0.0573	0.57822	0.804
6	45	3	0.6364	0.0592	0.53028	0.764
7	42	8	0.5152	0.0615	0.40765	0.651
8	34	4	0.4545	0.0613	0.34898	0.592
9	30	7	0.3485	0.0587	0.25057	0.485
10	23	4	0.2879	0.0557	0.19698	0.421
11	19	2	0.2576	0.0538	0.17101	0.388
12	17	2	0.2273	0.0516	0.14566	0.355
13	15	4	0.1667	0.0459	0.09718	0.286
14	11	3	0.1212	0.0402	0.0633	0.232
15	8	1	0.1061	0.0379	0.05265	0.214
16	7	1	0.0909	0.0354	0.04239	0.195
17	6	1	0.0758	0.0326	0.03262	0.176
18	5	3	0.0303	0.0211	0.00774	0.119
19	2	1	0.0152	0.015	0.00217	0.106
20	1	1	0	NaN	NA	NA

Table A.193 Saruhanli station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		59	59	9	6	12
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	59	5	0.9153	0.0363	0.84688	0.989
2	54	6	0.8136	0.0507	0.72001	0.919
3	48	4	0.7458	0.0567	0.64254	0.866
4	44	3	0.6949	0.0599	0.58682	0.823
5	41	2	0.661	0.0616	0.55062	0.794
6	39	3	0.6102	0.0635	0.49759	0.748
7	36	3	0.5593	0.0646	0.44596	0.701
8	33	3	0.5085	0.0651	0.39565	0.653
9	30	2	0.4746	0.065	0.36283	0.621
10	28	3	0.4237	0.0643	0.31467	0.571
11	25	4	0.3559	0.0623	0.25252	0.502
12	21	1	0.339	0.0616	0.23737	0.484
13	20	1	0.322	0.0608	0.22239	0.466
14	19	1	0.3051	0.0599	0.20757	0.448
15	18	2	0.2712	0.0579	0.17848	0.412
16	16	1	0.2542	0.0567	0.16423	0.394
18	15	2	0.2203	0.054	0.13634	0.356
19	13	2	0.1864	0.0507	0.10941	0.318
20	11	1	0.1695	0.0488	0.09635	0.298
21	10	1	0.1525	0.0468	0.0836	0.278
23	9	1	0.1356	0.0446	0.07119	0.258
28	8	1	0.1186	0.0421	0.05918	0.238
36	7	1	0.1017	0.0393	0.04764	0.217
37	6	1	0.0847	0.0363	0.03664	0.196
38	5	1	0.0678	0.0327	0.02632	0.175
39	4	1	0.0508	0.0286	0.01688	0.153
40	3	1	0.0339	0.0236	0.00868	0.132
41	2	1	0.0169	0.0168	0.00243	0.118
42	1	1	0	NaN	NA	NA

Table A.194 Saruhanli station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		64	64	22.5	21	34
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	64	3	0.9531	0.0264	0.90272	1
2	61	5	0.875	0.0413	0.79761	0.96
3	56	3	0.8281	0.0472	0.74067	0.926
4	53	3	0.7812	0.0517	0.68626	0.889
5	50	3	0.7344	0.0552	0.63376	0.851
6	47	1	0.7188	0.0562	0.61662	0.838
7	46	1	0.7031	0.0571	0.59965	0.824
17	45	1	0.6875	0.0579	0.58282	0.811
18	44	1	0.6719	0.0587	0.56615	0.797
19	43	1	0.6562	0.0594	0.54962	0.784
20	42	3	0.6094	0.061	0.50084	0.741
21	39	4	0.5469	0.0622	0.43756	0.684
22	35	3	0.5	0.0625	0.39135	0.639
23	32	1	0.4844	0.0625	0.37619	0.624
24	31	1	0.4688	0.0624	0.36114	0.608
25	30	1	0.4531	0.0622	0.3462	0.593
27	29	1	0.4375	0.062	0.33138	0.578
28	28	1	0.4219	0.0617	0.31669	0.562
31	27	1	0.4062	0.0614	0.30211	0.546
32	26	1	0.3906	0.061	0.28765	0.53
33	25	1	0.375	0.0605	0.27332	0.515
34	24	1	0.3594	0.06	0.25911	0.498
35	23	1	0.3438	0.0594	0.24504	0.482
36	22	2	0.3125	0.0579	0.21729	0.449
37	20	2	0.2812	0.0562	0.19011	0.416
38	18	2	0.25	0.0541	0.16355	0.382
39	16	1	0.2344	0.053	0.15052	0.365
40	15	1	0.2188	0.0517	0.13768	0.348
41	14	1	0.2031	0.0503	0.12503	0.33
42	13	1	0.1875	0.0488	0.11259	0.312
43	12	1	0.1719	0.0472	0.10038	0.294
44	11	1	0.1562	0.0454	0.08842	0.276
45	10	1	0.1406	0.0435	0.07674	0.258
46	9	1	0.125	0.0413	0.06537	0.239
60	8	1	0.1094	0.039	0.05436	0.22
61	7	1	0.0938	0.0364	0.04377	0.201
62	6	1	0.0781	0.0335	0.03367	0.181
63	5	1	0.0625	0.0303	0.0242	0.161
64	4	1	0.0469	0.0264	0.01553	0.141
65	3	1	0.0312	0.0217	0.00799	0.122
66	2	1	0.0156	0.0155	0.00224	0.109
67	1	1	0	NaN	NA	NA

Table A.195 Saruhanli station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0303	1	0.0847	1	0.0469
2	0.0606	2	0.1864	2	0.125
3	0.2121	3	0.2542	3	0.1719
4	0.2576	4	0.3051	4	0.2188
5	0.3182	5	0.339	5	0.2656
6	0.3636	6	0.3898	6	0.2812
7	0.4848	7	0.4407	7	0.2969
8	0.5455	8	0.4915	12	0.3047
9	0.6515	9	0.5254	17	0.3125
10	0.7121	10	0.5763	18	0.3281
11	0.7424	11	0.6441	19	0.3438
12	0.7727	12	0.661	20	0.3906
13	0.8333	13	0.678	21	0.4531
14	0.8788	14	0.6949	22	0.5
15	0.8939	15	0.7288	23	0.5156
16	0.9091	16	0.7458	24	0.5312
17	0.9242	18	0.7797	25	0.5469
18	0.9697	19	0.8136	27	0.5625
19	0.9848	20	0.8305	28	0.5781
20	1	21	0.8475	31	0.5938
		23	0.8644	32	0.6094
		28	0.8814	33	0.625
		36	0.8983	34	0.6406
		37	0.9153	35	0.6562
		38	0.9322	36	0.6875
		39	0.9492	37	0.7188
		40	0.9661	38	0.75
		41	0.9831	39	0.7656
		42	1	40	0.7812
				41	0.7969
				42	0.8125
				43	0.8281
				44	0.8438
				45	0.8594
				46	0.875
				60	0.8906
				61	0.9062
				62	0.9219
				63	0.9375
				64	0.9531
				65	0.9688
				66	0.9844
				67	1

Table A.196 Saruhanli station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		80	80	8	7	9
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	80	4	0.95	0.0244	0.90342	0.999
2	76	3	0.9125	0.0316	0.85264	0.9766
3	73	10	0.7875	0.0457	0.70277	0.8824
4	63	7	0.7	0.0512	0.60645	0.808
5	56	3	0.6625	0.0529	0.56658	0.7747
6	53	5	0.6	0.0548	0.5017	0.7176
7	48	6	0.525	0.0558	0.42622	0.6467
8	42	7	0.4375	0.0555	0.34125	0.5609
9	35	7	0.35	0.0533	0.25964	0.4718
10	28	6	0.275	0.0499	0.19267	0.3925
11	22	3	0.2375	0.0476	0.16038	0.3517
12	19	1	0.225	0.0467	0.14982	0.3379
13	18	1	0.2125	0.0457	0.13937	0.324
14	17	5	0.15	0.0399	0.08903	0.2527
15	12	4	0.1	0.0335	0.05182	0.193
16	8	3	0.0625	0.0271	0.02675	0.146
17	5	1	0.05	0.0244	0.01924	0.13
18	4	1	0.0375	0.0212	0.01236	0.1138
25	3	1	0.025	0.0175	0.00636	0.0982
26	2	1	0.0125	0.0124	0.00178	0.0877
27	1	1	0	NaN	NA	NA

Table A.197 Saruhanli station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		73	73	11	9	15
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	73	5	0.9315	0.0296	0.87533	0.9913
2	68	5	0.863	0.0402	0.78764	0.9456
3	63	5	0.7945	0.0473	0.70703	0.8928
4	58	5	0.726	0.0522	0.6306	0.8359
5	53	3	0.6849	0.0544	0.58624	0.8002
6	50	3	0.6438	0.056	0.54285	0.7636
7	47	2	0.6164	0.0569	0.5144	0.7387
8	45	1	0.6027	0.0573	0.50032	0.7261
9	44	3	0.5616	0.0581	0.45861	0.6878
10	41	4	0.5068	0.0585	0.40421	0.6355
11	37	3	0.4658	0.0584	0.3643	0.5955
12	34	2	0.4384	0.0581	0.33811	0.5683
13	32	2	0.411	0.0576	0.31227	0.5408
14	30	2	0.3836	0.0569	0.28677	0.513
15	28	1	0.3699	0.0565	0.27416	0.499
16	27	2	0.3425	0.0555	0.24921	0.4706
17	25	3	0.3014	0.0537	0.21253	0.4274
18	22	4	0.2466	0.0504	0.16512	0.3682
19	18	3	0.2055	0.0473	0.13088	0.3226
20	15	2	0.1781	0.0448	0.10879	0.2915
21	13	1	0.1644	0.0434	0.098	0.2757
22	12	1	0.1507	0.0419	0.08741	0.2598
23	11	1	0.137	0.0402	0.07702	0.2436
24	10	1	0.1233	0.0385	0.06687	0.2273
28	9	1	0.1096	0.0366	0.05699	0.2107
38	8	1	0.0959	0.0345	0.04741	0.1939
39	7	1	0.0822	0.0321	0.03819	0.1769
40	6	1	0.0685	0.0296	0.02939	0.1596
41	5	1	0.0548	0.0266	0.02113	0.1421
42	4	1	0.0411	0.0232	0.01357	0.1245
43	3	1	0.0274	0.0191	0.00698	0.1075
44	2	1	0.0137	0.0136	0.00196	0.0959
107	1	1	0	NaN	NA	NA

Table A.198 Saruhanli station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		80	80	15.5	14	17
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	80	4	0.95	0.0244	0.90342	0.999
2	76	4	0.9	0.0335	0.8366	0.9682
3	72	3	0.8625	0.0385	0.79024	0.9414
4	69	3	0.825	0.0425	0.7458	0.9126
5	66	3	0.7875	0.0457	0.70277	0.8824
6	63	2	0.7625	0.0476	0.67473	0.8617
7	61	2	0.7375	0.0492	0.64712	0.8405
8	59	2	0.7125	0.0506	0.61992	0.8189
9	57	1	0.7	0.0512	0.60645	0.808
12	56	2	0.675	0.0524	0.57979	0.7858
13	54	2	0.65	0.0533	0.55345	0.7634
14	52	5	0.5875	0.055	0.48895	0.7059
15	47	7	0.5	0.0559	0.40161	0.6225
16	40	5	0.4375	0.0555	0.34125	0.5609
17	35	5	0.375	0.0541	0.2826	0.4976
18	30	5	0.3125	0.0518	0.22578	0.4325
19	25	4	0.2625	0.0492	0.18181	0.379
20	21	3	0.225	0.0467	0.14982	0.3379
21	18	3	0.1875	0.0436	0.11882	0.2959
22	15	1	0.175	0.0425	0.10874	0.2816
27	14	1	0.1625	0.0412	0.09881	0.2672
38	13	1	0.15	0.0399	0.08903	0.2527
59	12	2	0.125	0.037	0.07	0.2232
60	10	1	0.1125	0.0353	0.06079	0.2082
61	9	1	0.1	0.0335	0.05182	0.193
62	8	1	0.0875	0.0316	0.04312	0.1776
63	7	1	0.075	0.0294	0.03474	0.1619
64	6	1	0.0625	0.0271	0.02675	0.146
65	5	1	0.05	0.0244	0.01924	0.13
66	4	1	0.0375	0.0212	0.01236	0.1138
67	3	1	0.025	0.0175	0.00636	0.0982
68	2	1	0.0125	0.0124	0.00178	0.0877
69	1	1	0	NaN	NA	NA

Table A.199 Saruhanli station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.05	1	0.0685	1	0.05
2	0.0875	2	0.137	2	0.1
3	0.2125	3	0.2055	3	0.1375
4	0.3	4	0.274	4	0.175
5	0.3375	5	0.3151	5	0.2125
6	0.4	6	0.3562	6	0.2375
7	0.475	7	0.3836	7	0.2625
8	0.5625	8	0.3973	8	0.2875
9	0.65	9	0.4384	9	0.3
10	0.725	10	0.4932	12	0.325
11	0.7625	11	0.5342	13	0.35
12	0.775	12	0.5616	14	0.4125
13	0.7875	13	0.589	15	0.5
14	0.85	14	0.6164	16	0.5625
15	0.9	15	0.6301	17	0.625
16	0.9375	16	0.6575	18	0.6875
17	0.95	17	0.6986	19	0.7375
18	0.9625	18	0.7534	20	0.775
25	0.975	19	0.7945	21	0.8125
26	0.9875	20	0.8219	22	0.825
27	1	21	0.8356	27	0.8375
		22	0.8493	38	0.85
		23	0.863	59	0.875
		24	0.8767	60	0.8875
		28	0.8904	61	0.9
		38	0.9041	62	0.9125
		39	0.9178	63	0.925
		40	0.9315	64	0.9375
		41	0.9452	65	0.95
		42	0.9589	66	0.9625
		43	0.9726	67	0.975
		44	0.9863	68	0.9875
		107	1	69	1

Table A.200 Selendi station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		78	78	7	6	9
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
0	78	1	0.9872	0.0127	0.96253	1
1	77	7	0.8974	0.0344	0.83257	0.9674
2	70	3	0.859	0.0394	0.78511	0.9398
3	67	4	0.8077	0.0446	0.7248	0.9001
4	63	6	0.7308	0.0502	0.63868	0.8361
5	57	7	0.641	0.0543	0.54294	0.7568
6	50	4	0.5897	0.0557	0.49009	0.7097
7	46	8	0.4872	0.0566	0.38798	0.6117
8	38	5	0.4231	0.0559	0.32649	0.5482
9	33	5	0.359	0.0543	0.26685	0.4829
10	28	5	0.2949	0.0516	0.20922	0.4156
11	23	4	0.2436	0.0486	0.16475	0.3602
12	19	4	0.1923	0.0446	0.12203	0.3031
13	15	2	0.1667	0.0422	0.10147	0.2738
15	13	1	0.1538	0.0409	0.09142	0.2589
16	12	1	0.141	0.0394	0.08155	0.2439
17	11	3	0.1026	0.0344	0.0532	0.1977
24	8	1	0.0897	0.0324	0.04426	0.1819
25	7	1	0.0769	0.0302	0.03566	0.1659
29	6	1	0.0641	0.0277	0.02745	0.1497
30	5	1	0.0513	0.025	0.01974	0.1332
31	4	1	0.0385	0.0218	0.01268	0.1167
32	3	1	0.0256	0.0179	0.00653	0.1007
49	2	1	0.0128	0.0127	0.00183	0.0899
50	1	1	0	NaN	NA	NA

Table A.201 Selendi station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		66	66	10	8	13
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
0	66	1	0.9848	0.015	0.95581	1
1	65	2	0.9545	0.0256	0.90559	1
2	63	3	0.9091	0.0354	0.84231	0.981
3	60	4	0.8485	0.0441	0.76625	0.94
4	56	1	0.8333	0.0459	0.7481	0.928
5	55	1	0.8182	0.0475	0.73023	0.917
6	54	3	0.7727	0.0516	0.67796	0.881
7	51	7	0.6667	0.058	0.56211	0.791
8	44	6	0.5758	0.0608	0.46806	0.708
9	38	3	0.5303	0.0614	0.42259	0.665
10	35	4	0.4697	0.0614	0.36349	0.607
11	31	4	0.4091	0.0605	0.30612	0.547
12	27	2	0.3788	0.0597	0.27811	0.516
13	25	3	0.3333	0.058	0.23698	0.469
14	22	2	0.303	0.0566	0.21018	0.437
15	20	2	0.2727	0.0548	0.18392	0.404
16	18	2	0.2424	0.0528	0.15825	0.371
17	16	2	0.2121	0.0503	0.13325	0.338
18	14	3	0.1667	0.0459	0.09718	0.286
19	11	2	0.1364	0.0422	0.07431	0.25
20	9	1	0.1212	0.0402	0.0633	0.232
24	8	1	0.1061	0.0379	0.05265	0.214
25	7	1	0.0909	0.0354	0.04239	0.195
26	6	1	0.0758	0.0326	0.03262	0.176
77	5	1	0.0606	0.0294	0.02344	0.157
78	4	1	0.0455	0.0256	0.01505	0.137
79	3	1	0.0303	0.0211	0.00774	0.119
86	2	1	0.0152	0.015	0.00217	0.106
87	1	1	0	NaN	NA	NA

Table A.202 Selendi station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		64	64	15	12	18
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	64	2	0.9688	0.0217	0.92705	1
2	62	1	0.9531	0.0264	0.90272	1
3	61	2	0.9219	0.0335	0.85842	0.99
4	59	3	0.875	0.0413	0.79761	0.96
5	56	3	0.8281	0.0472	0.74067	0.926
6	53	3	0.7812	0.0517	0.68626	0.889
7	50	2	0.75	0.0541	0.65108	0.864
8	48	2	0.7188	0.0562	0.61662	0.838
9	46	2	0.6875	0.0579	0.58282	0.811
10	44	2	0.6562	0.0594	0.54962	0.784
11	42	3	0.6094	0.061	0.50084	0.741
12	39	2	0.5781	0.0617	0.46895	0.713
13	37	2	0.5469	0.0622	0.43756	0.684
14	35	2	0.5156	0.0625	0.40664	0.654
15	33	2	0.4844	0.0625	0.37619	0.624
16	31	3	0.4375	0.062	0.33138	0.578
17	28	3	0.3906	0.061	0.28765	0.53
18	25	2	0.3594	0.06	0.25911	0.498
19	23	2	0.3281	0.0587	0.23109	0.466
20	21	2	0.2969	0.0571	0.20362	0.433
21	19	2	0.2656	0.0552	0.17675	0.399
22	17	1	0.25	0.0541	0.16355	0.382
23	16	1	0.2344	0.053	0.15052	0.365
24	15	1	0.2188	0.0517	0.13768	0.348
25	14	1	0.2031	0.0503	0.12503	0.33
26	13	1	0.1875	0.0488	0.11259	0.312
27	12	1	0.1719	0.0472	0.10038	0.294
28	11	1	0.1562	0.0454	0.08842	0.276
29	10	2	0.125	0.0413	0.06537	0.239
30	8	1	0.1094	0.039	0.05436	0.22
31	7	1	0.0938	0.0364	0.04377	0.201
32	6	1	0.0781	0.0335	0.03367	0.181
50	5	1	0.0625	0.0303	0.0242	0.161
51	4	1	0.0469	0.0264	0.01553	0.141
91	3	1	0.0312	0.0217	0.00799	0.122
92	2	1	0.0156	0.0155	0.00224	0.109
108	1	1	0	NaN	NA	NA

Table A.203 Selendi station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
0	0.0128	0	0.0152	1	0.0312
1	0.1026	1	0.0455	2	0.0469
2	0.141	2	0.0909	3	0.0781
3	0.1923	3	0.1515	4	0.125
4	0.2692	4	0.1667	5	0.1719
5	0.359	5	0.1818	6	0.2188
6	0.4103	6	0.2273	7	0.25
7	0.5128	7	0.3333	8	0.2812
8	0.5769	8	0.4242	9	0.3125
9	0.641	9	0.4697	10	0.3438
10	0.7051	10	0.5303	11	0.3906
11	0.7564	11	0.5909	12	0.4219
12	0.8077	12	0.6212	13	0.4531
13	0.8333	13	0.6667	14	0.4844
15	0.8462	14	0.697	15	0.5156
16	0.859	15	0.7273	16	0.5625
17	0.8974	16	0.7576	17	0.6094
24	0.9103	17	0.7879	18	0.6406
25	0.9231	18	0.8333	19	0.6719
29	0.9359	19	0.8636	20	0.7031
30	0.9487	20	0.8788	21	0.7344
31	0.9615	24	0.8939	22	0.75
32	0.9744	25	0.9091	23	0.7656
49	0.9872	26	0.9242	24	0.7812
50	1	77	0.9394	25	0.7969
		78	0.9545	26	0.8125
		79	0.9697	27	0.8281
		86	0.9848	28	0.8438
		87	1	29	0.875
				30	0.8906
				31	0.9062
				32	0.9219
				50	0.9375
				51	0.9531
				91	0.9688
				92	0.9844
				108	1

Table A.204 Selendi station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		76	76	9	7	13
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
0	76	1	0.9868	0.0131	0.96155	10.000
1	75	6	0.9079	0.0332	0.84515	0.9753
2	69	4	0.8553	0.0404	0.77971	0.9381
3	65	5	0.7895	0.0468	0.70294	0.8867
4	60	4	0.7368	0.0505	0.6442	0.8428
5	56	4	0.6842	0.0533	0.5873	0.7971
6	52	3	0.6447	0.0549	0.54564	0.7618
7	49	5	0.5789	0.0566	0.47794	0.7013
8	44	5	0.5132	0.0573	0.41224	0.6388
9	39	3	0.4737	0.0573	0.37374	0.6004
10	36	4	0.4211	0.0566	0.32348	0.5481
11	32	2	0.3947	0.0561	0.29882	0.5214
12	30	1	0.3816	0.0557	0.2866	0.508
13	29	1	0.3684	0.0553	0.27448	0.4945
14	28	2	0.3421	0.0544	0.25047	0.4673
15	26	2	0.3158	0.0533	0.22682	0.4397
16	24	2	0.2895	0.052	0.20353	0.4117
17	22	3	0.25	0.0497	0.16936	0.369
18	19	3	0.2105	0.0468	0.13622	0.3254
19	16	3	0.1711	0.0432	0.10428	0.2806
20	13	2	0.1447	0.0404	0.0838	0.25
21	11	2	0.1184	0.0371	0.06412	0.2187
22	9	3	0.0789	0.0309	0.03663	0.1702
23	6	2	0.0526	0.0256	0.02028	0.1366
24	4	1	0.0395	0.0223	0.01302	0.1197
25	3	1	0.0263	0.0184	0.0067	0.1033
47	2	1	0.0132	0.0131	0.00188	0.0922
48	1	1	0	NaN	NA	NA

Table A.205 Selendi station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		67	67	15	9	20
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
0	67	1	0.9851	0.0148	0.95646	1.000
1	66	2	0.9552	0.0253	0.90696	1.000
2	64	1	0.9403	0.0289	0.88524	0.999
3	63	2	0.9104	0.0349	0.84458	0.981
4	61	1	0.8955	0.0374	0.8252	0.972
5	60	1	0.8806	0.0396	0.80628	0.962
6	59	3	0.8358	0.0453	0.75166	0.929
7	56	8	0.7164	0.0551	0.61623	0.833
8	48	5	0.6418	0.0586	0.53667	0.768
9	43	3	0.597	0.0599	0.4904	0.727
10	40	2	0.5672	0.0605	0.46011	0.699
11	38	1	0.5522	0.0608	0.44513	0.685
12	37	1	0.5373	0.0609	0.43026	0.671
13	36	1	0.5224	0.061	0.41549	0.657
14	35	1	0.5075	0.0611	0.40082	0.642
15	34	1	0.4925	0.0611	0.38626	0.628
16	33	1	0.4776	0.061	0.37181	0.614
17	32	1	0.4627	0.0609	0.35746	0.599
18	31	2	0.4328	0.0605	0.32907	0.569
19	29	3	0.3881	0.0595	0.28728	0.524
20	26	2	0.3582	0.0586	0.25998	0.494
21	24	2	0.3284	0.0574	0.23314	0.462
22	22	1	0.3134	0.0567	0.21991	0.447
23	21	3	0.2687	0.0542	0.18098	0.399
24	18	3	0.2239	0.0509	0.14335	0.35
25	15	3	0.1791	0.0468	0.10727	0.299
26	12	2	0.1493	0.0435	0.08427	0.264
27	10	2	0.1194	0.0396	0.06232	0.229
28	8	2	0.0896	0.0349	0.04173	0.192
40	6	1	0.0746	0.0321	0.03211	0.173
41	5	1	0.0597	0.0289	0.02308	0.154
57	4	2	0.0299	0.0208	0.00762	0.117
58	2	2	0	NaN	NA	NA

Table A.206 Selendi station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		81	81	15	12	21
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	81	3	0.963	0.021	0.9227	10.000
2	78	2	0.9383	0.0267	0.8873	0.9922
3	76	3	0.9012	0.0331	0.83855	0.9686
4	73	3	0.8642	0.0381	0.79272	0.9421
5	70	3	0.8272	0.042	0.74878	0.9137
6	67	3	0.7901	0.0452	0.70624	0.884
7	64	3	0.7531	0.0479	0.6648	0.8531
8	61	3	0.716	0.0501	0.62429	0.8213
9	58	2	0.6914	0.0513	0.59774	0.7996
10	56	2	0.6667	0.0524	0.57152	0.7777
11	54	3	0.6296	0.0537	0.53278	0.7441
12	51	4	0.5802	0.0548	0.48214	0.6983
13	47	3	0.5432	0.0553	0.44488	0.6633
14	44	3	0.5062	0.0556	0.40821	0.6276
15	41	2	0.4815	0.0555	0.38409	0.6036
16	39	2	0.4568	0.0553	0.36023	0.5792
17	37	2	0.4321	0.055	0.33663	0.5546
18	35	1	0.4198	0.0548	0.32493	0.5422
19	34	1	0.4074	0.0546	0.3133	0.5298
20	33	1	0.3951	0.0543	0.30174	0.5172
21	32	3	0.358	0.0533	0.26746	0.4792
22	29	3	0.321	0.0519	0.23385	0.4406
23	26	2	0.2963	0.0507	0.21182	0.4145
24	24	1	0.284	0.0501	0.20093	0.4013
25	23	1	0.2716	0.0494	0.19013	0.388
26	22	1	0.2593	0.0487	0.17942	0.3746
27	21	1	0.2469	0.0479	0.1688	0.3612
28	20	2	0.2222	0.0462	0.14786	0.334
29	18	2	0.1975	0.0442	0.12735	0.3064
30	16	1	0.1852	0.0432	0.11728	0.2924
31	15	1	0.1728	0.042	0.10734	0.2783
32	14	1	0.1605	0.0408	0.09753	0.2641
33	13	1	0.1481	0.0395	0.08788	0.2497
34	12	1	0.1358	0.0381	0.0784	0.2352
35	11	1	0.1235	0.0366	0.0691	0.2206
40	10	1	0.1111	0.0349	0.06001	0.2057
41	9	1	0.0988	0.0331	0.05116	0.1907
42	8	1	0.0864	0.0312	0.04257	0.1754
43	7	1	0.0741	0.0291	0.0343	0.16
44	6	1	0.0617	0.0267	0.02641	0.1443
45	5	1	0.0494	0.0241	0.01899	0.1284
46	4	1	0.037	0.021	0.0122	0.1124
59	3	1	0.0247	0.0172	0.00628	0.097
60	2	1	0.0123	0.0123	0.00176	0.0866
107	1	1	0	NaN	NA	NA

Table A.207 Selendi station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
0	0.0132	0	0.0149	1	0.037
1	0.0921	1	0.0448	2	0.0617
2	0.1447	2	0.0597	3	0.0988
3	0.2105	3	0.0896	4	0.1358
4	0.2632	4	0.1045	5	0.1728
5	0.3158	5	0.1194	6	0.2099
6	0.3553	6	0.1642	7	0.2469
7	0.4211	7	0.2836	8	0.284
8	0.4868	8	0.3582	9	0.3086
9	0.5263	9	0.403	10	0.3333
10	0.5789	10	0.4328	11	0.3704
11	0.6053	11	0.4478	12	0.4198
12	0.6184	12	0.4627	13	0.4568
13	0.6316	13	0.4776	14	0.4938
14	0.6579	14	0.4925	15	0.5185
15	0.6842	15	0.5075	16	0.5432
16	0.7105	16	0.5224	17	0.5679
17	0.75	17	0.5373	18	0.5802
18	0.7895	18	0.5672	19	0.5926
19	0.8289	19	0.6119	20	0.6049
20	0.8553	20	0.6418	21	0.642
21	0.8816	21	0.6716	22	0.679
22	0.9211	22	0.6866	23	0.7037
23	0.9474	23	0.7313	24	0.716
24	0.9605	24	0.7761	25	0.7284
25	0.9737	25	0.8209	26	0.7407
47	0.9868	26	0.8507	27	0.7531
48	1	27	0.8806	28	0.7778
		28	0.9104	29	0.8025
		40	0.9254	30	0.8148
		41	0.9403	31	0.8272
		57	0.9701	32	0.8395
		58	1	33	0.8519
				34	0.8642
				35	0.8765
				40	0.8889
				41	0.9012
				42	0.9136
				43	0.9259
				44	0.9383
				45	0.9506
				46	0.963
				59	0.9753
				60	0.9877
				107	1

Table A.208 Turgutlu station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		123	123	9	7	10
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	123	8	0.935	0.0222	0.89238	0.9796
2	115	5	0.8943	0.0277	0.84159	0.9503
3	110	6	0.8455	0.0326	0.78401	0.9119
4	104	9	0.7724	0.0378	0.7017	0.8501
5	95	6	0.7236	0.0403	0.6487	0.8071
6	89	7	0.6667	0.0425	0.58835	0.7554
7	82	11	0.5772	0.0445	0.49622	0.6715
8	71	8	0.5122	0.0451	0.43106	0.6086
9	63	8	0.4472	0.0448	0.36738	0.5442
10	55	7	0.3902	0.044	0.31289	0.4867
11	48	3	0.3659	0.0434	0.28991	0.4617
12	45	2	0.3496	0.043	0.27471	0.4449
13	43	2	0.3333	0.0425	0.25962	0.428
14	41	1	0.3252	0.0422	0.25211	0.4195
15	40	4	0.2927	0.041	0.22237	0.3852
16	36	4	0.2602	0.0396	0.19312	0.3505
17	32	5	0.2195	0.0373	0.1573	0.3063
18	27	4	0.187	0.0352	0.12936	0.2703
20	23	3	0.1626	0.0333	0.10888	0.2428
21	20	5	0.122	0.0295	0.0759	0.1959
22	15	3	0.0976	0.0268	0.057	0.167
23	12	2	0.0813	0.0246	0.04488	0.1473
24	10	3	0.0569	0.0209	0.02772	0.1168
25	7	2	0.0407	0.0178	0.01723	0.0959
27	5	1	0.0325	0.016	0.0124	0.0853
28	4	2	0.0163	0.0114	0.00411	0.0643
29	2	2	0	NaN	NA	NA

Table A.209 Turgutlu station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		112	112	13	11	17
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	112	12	0.89286	0.02923	0.83737	0.952
2	100	10	0.80357	0.03754	0.73326	0.8806
3	90	4	0.76786	0.03989	0.69352	0.8502
4	86	2	0.75	0.04092	0.67394	0.8346
5	84	2	0.73214	0.04184	0.65456	0.8189
6	82	4	0.69643	0.04345	0.61627	0.787
7	78	3	0.66964	0.04444	0.58796	0.7627
8	75	4	0.63393	0.04552	0.55071	0.7297
9	71	2	0.61607	0.04595	0.53228	0.7131
10	69	3	0.58929	0.04649	0.50487	0.6878
11	66	5	0.54464	0.04706	0.4598	0.6451
12	61	2	0.52679	0.04718	0.44198	0.6279
13	59	4	0.49107	0.04724	0.40669	0.593
14	55	2	0.47321	0.04718	0.38922	0.5753
15	53	4	0.4375	0.04687	0.35463	0.5397
16	49	3	0.41071	0.04649	0.329	0.5127
17	46	3	0.38393	0.04595	0.30364	0.4854
18	43	3	0.35714	0.04528	0.27857	0.4579
19	40	4	0.32143	0.04413	0.2456	0.4207
20	36	3	0.29464	0.04308	0.22123	0.3924
21	33	3	0.26786	0.04184	0.19721	0.3638
22	30	1	0.25893	0.04139	0.18928	0.3542
23	29	1	0.25	0.04092	0.1814	0.3445
24	28	1	0.24107	0.04042	0.17355	0.3349
25	27	3	0.21429	0.03877	0.15031	0.3055
26	24	4	0.17857	0.03619	0.12003	0.2657
27	20	2	0.16071	0.0347	0.10526	0.2454
28	18	2	0.14286	0.03307	0.09076	0.2249
29	16	1	0.13393	0.03218	0.08363	0.2145
30	15	1	0.125	0.03125	0.07658	0.204
34	14	1	0.11607	0.03027	0.06963	0.1935
35	13	1	0.10714	0.02923	0.06277	0.1829
36	12	1	0.09821	0.02812	0.05603	0.1721
37	11	1	0.08929	0.02694	0.04942	0.1613
38	10	1	0.08036	0.02569	0.04295	0.1504
39	9	1	0.07143	0.02434	0.03663	0.1393
40	8	2	0.05357	0.02128	0.0246	0.1167
41	6	2	0.03571	0.01754	0.01364	0.0935
43	4	1	0.02679	0.01526	0.00877	0.0818
44	3	1	0.01786	0.01251	0.00452	0.0705
45	2	1	0.00893	0.00889	0.00127	0.0628
58	1	1	0	NaN	NA	NA

Table A.210 Turgutlu station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		101	101	18	16	20
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	101	2	0.9802	0.01386	0.9534	1
2	99	3	0.9505	0.02158	0.90912	0.9938
3	96	4	0.9109	0.02835	0.85699	0.9682
4	92	1	0.901	0.02972	0.84458	0.9612
5	91	2	0.8812	0.0322	0.82029	0.9466
6	89	3	0.8515	0.03538	0.78488	0.9237
7	86	2	0.8317	0.03723	0.76182	0.9079
8	84	2	0.8119	0.03889	0.73913	0.8918
9	82	2	0.7921	0.04038	0.71676	0.8753
10	80	1	0.7822	0.04107	0.70568	0.867
11	79	3	0.7525	0.04294	0.67284	0.8415
12	76	4	0.7129	0.04502	0.62988	0.8068
13	72	3	0.6832	0.04629	0.5982	0.7802
14	69	3	0.6535	0.04735	0.56695	0.7532
15	66	4	0.6139	0.04844	0.52589	0.7165
16	62	5	0.5644	0.04934	0.47549	0.6698
17	57	5	0.5149	0.04973	0.42605	0.6222
18	52	5	0.4653	0.04963	0.37756	0.5735
19	47	5	0.4158	0.04904	0.33002	0.524
20	42	4	0.3762	0.0482	0.29269	0.4836
21	38	3	0.3465	0.04735	0.26512	0.453
22	35	3	0.3168	0.04629	0.23793	0.4219
23	32	2	0.297	0.04547	0.22004	0.401
24	30	3	0.2673	0.04404	0.19356	0.3692
25	27	2	0.2475	0.04294	0.17617	0.3478
26	25	2	0.2277	0.04173	0.15901	0.3261
27	23	2	0.2079	0.04038	0.1421	0.3042
28	21	1	0.198	0.03965	0.13374	0.2932
29	20	1	0.1881	0.03889	0.12545	0.2821
30	19	1	0.1782	0.03808	0.11724	0.2709
31	18	1	0.1683	0.03723	0.10911	0.2597
32	17	1	0.1584	0.03633	0.10106	0.2483
35	16	1	0.1485	0.03538	0.0931	0.2369
36	15	1	0.1386	0.03438	0.08524	0.2254
37	14	1	0.1287	0.03332	0.07749	0.2138
38	13	2	0.1089	0.031	0.06235	0.1903
39	11	2	0.0891	0.02835	0.04777	0.1662
59	9	1	0.0792	0.02687	0.04074	0.154
79	8	1	0.0693	0.02527	0.03392	0.1416
80	7	1	0.0594	0.02352	0.02734	0.1291
81	6	1	0.0495	0.02158	0.02106	0.1164
89	5	1	0.0396	0.01941	0.01516	0.1035
90	4	1	0.0297	0.01689	0.00974	0.0905
194	3	1	0.0198	0.01386	0.00502	0.0781
195	2	1	0.0099	0.00985	0.00141	0.0696
196	1	1	0	NaN	NA	NA

Table A.211 Turgutlu station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.065	1	0.10714	1	0.0198
2	0.1057	2	0.19643	2	0.0495
3	0.1545	3	0.23214	3	0.0891
4	0.2276	4	0.25	4	0.099
5	0.2764	5	0.26786	5	0.1188
6	0.3333	6	0.30357	6	0.1485
7	0.4228	7	0.33036	7	0.1683
8	0.4878	8	0.36607	8	0.1881
9	0.5528	9	0.38393	9	0.2079
10	0.6098	10	0.41071	10	0.2178
11	0.6341	11	0.45536	11	0.2475
12	0.6504	12	0.47321	12	0.2871
13	0.6667	13	0.50893	13	0.3168
14	0.6748	14	0.52679	14	0.3465
15	0.7073	15	0.5625	15	0.3861
16	0.7398	16	0.58929	16	0.4356
17	0.7805	17	0.61607	17	0.4851
18	0.813	18	0.64286	18	0.5347
20	0.8374	19	0.67857	19	0.5842
21	0.878	20	0.70536	20	0.6238
22	0.9024	21	0.73214	21	0.6535
23	0.9187	22	0.74107	22	0.6832
24	0.9431	23	0.75	23	0.703
25	0.9593	24	0.75893	24	0.7327
27	0.9675	25	0.78571	25	0.7525
28	0.9837	26	0.82143	26	0.7723
29	1	27	0.83929	27	0.7921
		28	0.85714	28	0.802
		29	0.86607	29	0.8119
		30	0.875	30	0.8218
		34	0.88393	31	0.8317
		35	0.89286	32	0.8416
		36	0.90179	35	0.8515
		37	0.91071	36	0.8614
		38	0.91964	37	0.8713
		39	0.92857	38	0.8911
		40	0.94643	39	0.9109
		41	0.96429	59	0.9208
		43	0.97321	79	0.9307
		44	0.98214	80	0.9406
		45	0.99107	81	0.9505
		58	1	89	0.9604
				90	0.9703
				194	0.9802
				195	0.9901
				196	1

Table A.212 Turgutlu station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		43	43	6	4	12
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	43	5	0.8837	0.0489	0.79292	0.985
2	38	3	0.814	0.0593	0.70557	0.939
3	35	4	0.7209	0.0684	0.59859	0.868
4	31	6	0.5814	0.0752	0.45116	0.749
5	25	3	0.5116	0.0762	0.38206	0.685
6	22	1	0.4884	0.0762	0.35966	0.663
7	21	3	0.4186	0.0752	0.29432	0.595
9	18	1	0.3953	0.0746	0.27318	0.572
10	17	1	0.3721	0.0737	0.25236	0.549
11	16	2	0.3256	0.0715	0.21176	0.501
12	14	1	0.3023	0.07	0.19199	0.476
13	13	2	0.2558	0.0665	0.15365	0.426
14	11	2	0.2093	0.062	0.11708	0.374
15	9	2	0.1628	0.0563	0.08265	0.321
16	7	2	0.1163	0.0489	0.05101	0.265
17	5	1	0.093	0.0443	0.03658	0.237
21	4	2	0.0465	0.0321	0.01202	0.18
22	2	1	0.0233	0.023	0.00335	0.161
27	1	1	0	NaN	NA	NA

Table A.213 Turgutlu station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		35	35	15	11	19
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
2	35	1	0.9714	0.0282	0.91777	1.000
3	34	2	0.9143	0.0473	0.82609	1.000
6	32	2	0.8571	0.0591	0.74871	0.981
7	30	1	0.8286	0.0637	0.71266	0.963
8	29	1	0.8	0.0676	0.67788	0.944
9	28	2	0.7429	0.0739	0.6113	0.903
10	26	3	0.6571	0.0802	0.51729	0.835
11	23	2	0.6	0.0828	0.4578	0.786
12	21	1	0.5714	0.0836	0.4289	0.761
13	20	1	0.5429	0.0842	0.40055	0.736
14	19	1	0.5143	0.0845	0.37272	0.71
15	18	1	0.4857	0.0845	0.34541	0.683
16	17	1	0.4571	0.0842	0.31861	0.656
17	16	3	0.3714	0.0817	0.24138	0.572
18	13	2	0.3143	0.0785	0.19266	0.513
19	11	2	0.2571	0.0739	0.14643	0.452
20	9	2	0.2	0.0676	0.1031	0.388
21	7	2	0.1429	0.0591	0.06346	0.322
22	5	1	0.1143	0.0538	0.04544	0.287
23	4	1	0.0857	0.0473	0.02905	0.253
41	3	1	0.0571	0.0392	0.01488	0.219
58	2	1	0.0286	0.0282	0.00414	0.197
59	1	1	0	NaN	NA	NA

Table A.214 Turgutlu station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		37	37	22	20	70
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
0	37	1	0.973	0.0267	0.9221	1.000
14	36	1	0.9459	0.0372	0.87582	1.000
15	35	2	0.8919	0.051	0.79725	0.998
16	33	3	0.8108	0.0644	0.69394	0.947
17	30	2	0.7568	0.0705	0.63041	0.908
18	28	2	0.7027	0.0751	0.56984	0.867
19	26	2	0.6486	0.0785	0.5117	0.822
20	24	2	0.5946	0.0807	0.45569	0.776
21	22	2	0.5405	0.0819	0.40162	0.728
22	20	2	0.4865	0.0822	0.34938	0.677
23	18	1	0.4595	0.0819	0.32394	0.652
24	17	2	0.4054	0.0807	0.27442	0.599
25	15	1	0.3784	0.0797	0.25036	0.572
38	14	1	0.3514	0.0785	0.22678	0.544
69	13	1	0.3243	0.077	0.2037	0.516
70	12	1	0.2973	0.0751	0.18116	0.488
71	11	1	0.2703	0.073	0.15917	0.459
72	10	1	0.2432	0.0705	0.13779	0.429
73	9	1	0.2162	0.0677	0.11707	0.399
74	8	1	0.1892	0.0644	0.0971	0.369
75	7	1	0.1622	0.0606	0.07796	0.337
76	6	1	0.1351	0.0562	0.05981	0.305
77	5	1	0.1081	0.051	0.04285	0.273
78	4	1	0.0811	0.0449	0.0274	0.24
79	3	1	0.0541	0.0372	0.01404	0.208
80	2	1	0.027	0.0267	0.00391	0.187
81	1	1	0	NaN	NA	NA

Table A.215 Turgutlu station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.1163	2	0.0286	0	0.027
2	0.186	3	0.0857	3	0.032807
3	0.2791	6	0.1429	6	0.038614
4	0.4186	7	0.1714	12	0.050229
5	0.4884	8	0.2	14	0.0541
6	0.5116	9	0.2571	15	0.1081
7	0.5814	10	0.3429	16	0.1892
9	0.6047	11	0.4	17	0.2432
10	0.6279	12	0.4286	18	0.2973
11	0.6744	13	0.4571	19	0.3514
12	0.6977	14	0.4857	20	0.4054
13	0.7442	15	0.5143	21	0.4595
14	0.7907	16	0.5429	22	0.5135
15	0.8372	17	0.6286	23	0.5405
16	0.8837	18	0.6857	24	0.5946
17	0.907	19	0.7429	25	0.6216
21	0.9535	20	0.8	38	0.6486
22	0.9767	21	0.8571	69	0.6757
27	1	22	0.8857	70	0.7027
		23	0.9143	71	0.7297
		41	0.9429	72	0.7568
		58	0.9714	73	0.7838
		59	1	74	0.8108
				75	0.8378
				76	0.8649
				77	0.8919
				78	0.9189
				79	0.9459
				80	0.973
				81	1

Table A.216 Ulubey station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		69	69	6	5	8
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	69	9	0.8696	0.0405	0.79362	0.953
2	60	5	0.7971	0.0484	0.70764	0.898
3	55	7	0.6957	0.0554	0.59513	0.813
4	48	5	0.6232	0.0583	0.51873	0.749
5	43	5	0.5507	0.0599	0.44502	0.682
6	38	6	0.4638	0.06	0.35984	0.598
7	32	6	0.3768	0.0583	0.27819	0.51
8	26	1	0.3623	0.0579	0.26494	0.495
9	25	2	0.3333	0.0568	0.23876	0.465
10	23	2	0.3043	0.0554	0.21303	0.435
13	21	1	0.2899	0.0546	0.20035	0.419
14	20	2	0.2609	0.0529	0.17536	0.388
15	18	2	0.2319	0.0508	0.15093	0.356
18	16	2	0.2029	0.0484	0.12711	0.324
20	14	1	0.1884	0.0471	0.11545	0.307
21	13	2	0.1594	0.0441	0.09273	0.274
22	11	3	0.1159	0.0385	0.06043	0.222
23	8	2	0.087	0.0339	0.04048	0.187
26	6	2	0.058	0.0281	0.02239	0.15
27	4	1	0.0435	0.0246	0.01438	0.131
28	3	1	0.029	0.0202	0.0074	0.114
40	2	1	0.0145	0.0144	0.00207	0.101
41	1	1	0	NaN	NA	NA

Table A.217 Ulubey station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		66	66	10	8	15
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	66	3	0.9545	0.0256	0.90559	1
2	63	4	0.8939	0.0379	0.82266	0.971
3	59	5	0.8182	0.0475	0.73023	0.917
4	54	1	0.803	0.049	0.71259	0.905
5	53	1	0.7879	0.0503	0.69517	0.893
6	52	4	0.7273	0.0548	0.62739	0.843
7	48	6	0.6364	0.0592	0.53028	0.764
8	42	4	0.5758	0.0608	0.46806	0.708
9	38	4	0.5152	0.0615	0.40765	0.651
10	34	4	0.4545	0.0613	0.34898	0.592
11	30	2	0.4242	0.0608	0.3203	0.562
12	28	1	0.4091	0.0605	0.30612	0.547
13	27	1	0.3939	0.0601	0.29206	0.531
14	26	1	0.3788	0.0597	0.27811	0.516
15	25	2	0.3485	0.0587	0.25057	0.485
16	23	1	0.3333	0.058	0.23698	0.469
17	22	1	0.3182	0.0573	0.22351	0.453
18	21	2	0.2879	0.0557	0.19698	0.421
19	19	1	0.2727	0.0548	0.18392	0.404
20	18	1	0.2576	0.0538	0.17101	0.388
23	17	1	0.2424	0.0528	0.15825	0.371
24	16	1	0.2273	0.0516	0.14566	0.355
25	15	1	0.2121	0.0503	0.13325	0.338
31	14	1	0.197	0.049	0.12102	0.321
32	13	1	0.1818	0.0475	0.10899	0.303
33	12	1	0.1667	0.0459	0.09718	0.286
35	11	1	0.1515	0.0441	0.08561	0.268
36	10	1	0.1364	0.0422	0.07431	0.25
37	9	1	0.1212	0.0402	0.0633	0.232
38	8	1	0.1061	0.0379	0.05265	0.214
39	7	1	0.0909	0.0354	0.04239	0.195
40	6	1	0.0758	0.0326	0.03262	0.176
41	5	1	0.0606	0.0294	0.02344	0.157
42	4	1	0.0455	0.0256	0.01505	0.137
43	3	1	0.0303	0.0211	0.00774	0.119
50	2	1	0.0152	0.015	0.00217	0.106
56	1	1	0	NaN	NA	NA

Table A.218 Ulubey station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		65	65	6	4	12
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	65	5	0.9231	0.0331	0.86052	0.99
2	60	8	0.8	0.0496	0.70844	0.903
3	52	6	0.7077	0.0564	0.60533	0.827
4	46	7	0.6	0.0608	0.49198	0.732
5	39	5	0.5231	0.062	0.41472	0.66
6	34	4	0.4615	0.0618	0.35495	0.6
7	30	2	0.4308	0.0614	0.32575	0.57
8	28	1	0.4154	0.0611	0.31131	0.554
9	27	1	0.4	0.0608	0.297	0.539
10	26	1	0.3846	0.0603	0.2828	0.523
11	25	1	0.3692	0.0599	0.26872	0.507
12	24	1	0.3538	0.0593	0.25477	0.491
13	23	2	0.3231	0.058	0.22724	0.459
14	21	1	0.3077	0.0572	0.21367	0.443
15	20	1	0.2923	0.0564	0.20025	0.427
16	19	1	0.2769	0.0555	0.18696	0.41
17	18	1	0.2615	0.0545	0.17383	0.393
26	17	1	0.2462	0.0534	0.16086	0.377
27	16	1	0.2308	0.0523	0.14805	0.36
28	15	1	0.2154	0.051	0.13543	0.343
29	14	1	0.2	0.0496	0.12299	0.325
57	13	1	0.1846	0.0481	0.11076	0.308
58	12	1	0.1692	0.0465	0.09875	0.29
59	11	1	0.1538	0.0448	0.08699	0.272
85	10	1	0.1385	0.0428	0.0755	0.254
86	9	1	0.1231	0.0407	0.06432	0.236
87	8	1	0.1077	0.0384	0.05349	0.217
88	7	1	0.0923	0.0359	0.04307	0.198
89	6	1	0.0769	0.0331	0.03314	0.179
90	5	1	0.0615	0.0298	0.02381	0.159
91	4	1	0.0462	0.026	0.01528	0.139
92	3	1	0.0308	0.0214	0.00786	0.12
93	2	1	0.0154	0.0153	0.0022	0.108
96	1	1	0	NaN	NA	NA

Table A.219 Ulubey station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.1304	1	0.0455	1	0.0769
2	0.2029	2	0.1061	2	0.2
3	0.3043	3	0.1818	3	0.2923
4	0.3768	4	0.197	4	0.4
5	0.4493	5	0.2121	5	0.4769
6	0.5362	6	0.2727	6	0.5385
7	0.6232	7	0.3636	7	0.5692
8	0.6377	8	0.4242	8	0.5846
9	0.6667	9	0.4848	9	0.6
10	0.6957	10	0.5455	10	0.6154
12	0.7053	11	0.5758	11	0.6308
13	0.7101	12	0.5909	12	0.6462
14	0.7391	13	0.6061	13	0.6769
15	0.7681	14	0.6212	14	0.6923
18	0.7971	15	0.6515	15	0.7077
20	0.8116	16	0.6667	16	0.7231
21	0.8406	17	0.6818	17	0.7385
22	0.8841	18	0.7121	26	0.7538
23	0.913	19	0.7273	27	0.7692
26	0.942	20	0.7424	28	0.7846
27	0.9565	23	0.7576	29	0.8
28	0.971	24	0.7727	57	0.8154
40	0.9855	25	0.7879	58	0.8308
41	1	31	0.803	59	0.8462
		32	0.8182	85	0.8615
		33	0.8333	86	0.8769
		35	0.8485	87	0.8923
		36	0.8636	88	0.9077
		37	0.8788	89	0.9231
		38	0.8939	90	0.9385
		39	0.9091	91	0.9538
		40	0.9242	92	0.9692
		41	0.9394	93	0.9846
		42	0.9545	96	1
		43	0.9697		
		50	0.9848		
		56	1		

Table A.220 Ulubey station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		77	77	8	7	10
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	77	7	0.9091	0.0328	0.8471	0.976
2	70	4	0.8571	0.0399	0.78244	0.939
3	66	7	0.7662	0.0482	0.6773	0.867
4	59	1	0.7532	0.0491	0.66285	0.856
5	58	5	0.6883	0.0528	0.59226	0.8
6	53	2	0.6623	0.0539	0.5647	0.777
7	51	6	0.5844	0.0562	0.48408	0.706
8	45	8	0.4805	0.0569	0.38094	0.606
9	37	7	0.3896	0.0556	0.29459	0.515
10	30	6	0.3117	0.0528	0.22365	0.434
11	24	3	0.2727	0.0508	0.18938	0.393
12	21	1	0.2597	0.05	0.17815	0.379
13	20	2	0.2338	0.0482	0.15601	0.35
14	18	3	0.1948	0.0451	0.1237	0.307
15	15	3	0.1558	0.0413	0.09267	0.262
16	12	2	0.1299	0.0383	0.07285	0.232
17	10	1	0.1169	0.0366	0.06326	0.216
18	9	1	0.1039	0.0348	0.05392	0.2
19	8	1	0.0909	0.0328	0.04486	0.184
20	7	1	0.0779	0.0305	0.03614	0.168
28	6	1	0.0649	0.0281	0.02782	0.152
35	5	1	0.0519	0.0253	0.02001	0.135
39	4	1	0.039	0.0221	0.01285	0.118
40	3	1	0.026	0.0181	0.00661	0.102
48	2	1	0.013	0.0129	0.00185	0.091
49	1	1	0	NaN	NA	NA

Table A.221 Ulubey station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		80	80	9	7	11
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	80	3	0.9625	0.0212	0.92176	10.000
2	77	5	0.9	0.0335	0.8366	0.9682
3	72	4	0.85	0.0399	0.77525	0.932
4	68	3	0.8125	0.0436	0.73132	0.9027
5	65	3	0.775	0.0467	0.68869	0.8721
6	62	7	0.6875	0.0518	0.59308	0.797
7	55	8	0.5875	0.055	0.48895	0.7059
8	47	6	0.5125	0.0559	0.41388	0.6346
9	41	4	0.4625	0.0557	0.36519	0.5857
10	37	4	0.4125	0.055	0.31758	0.5358
11	33	3	0.375	0.0541	0.2826	0.4976
12	30	1	0.3625	0.0537	0.27108	0.4847
13	29	1	0.35	0.0533	0.25964	0.4718
14	28	1	0.3375	0.0529	0.24828	0.4588
15	27	2	0.3125	0.0518	0.22578	0.4325
16	25	2	0.2875	0.0506	0.20362	0.4059
17	23	4	0.2375	0.0476	0.16038	0.3517
18	19	1	0.225	0.0467	0.14982	0.3379
19	18	2	0.2	0.0447	0.12903	0.31
22	16	1	0.1875	0.0436	0.11882	0.2959
23	15	1	0.175	0.0425	0.10874	0.2816
24	14	1	0.1625	0.0412	0.09881	0.2672
28	13	1	0.15	0.0399	0.08903	0.2527
46	12	1	0.1375	0.0385	0.07942	0.238
47	11	1	0.125	0.037	0.07	0.2232
48	10	1	0.1125	0.0353	0.06079	0.2082
49	9	1	0.1	0.0335	0.05182	0.193
50	8	1	0.0875	0.0316	0.04312	0.1776
51	7	1	0.075	0.0294	0.03474	0.1619
52	6	1	0.0625	0.0271	0.02675	0.146
53	5	1	0.05	0.0244	0.01924	0.13
54	4	1	0.0375	0.0212	0.01236	0.1138
55	3	1	0.025	0.0175	0.00636	0.0982
74	2	1	0.0125	0.0124	0.00178	0.0877
75	1	1	0	NaN	NA	NA

Table A.222 Ulubey station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		86	86	7.5	6	11
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	86	5	0.9419	0.0252	0.89368	0.9926
2	81	7	0.8605	0.0374	0.79026	0.9369
3	74	9	0.7558	0.0463	0.67026	0.8523
4	65	6	0.686	0.05	0.59465	0.7915
5	59	6	0.6163	0.0524	0.52162	0.7281
6	53	5	0.5581	0.0536	0.46246	0.6736
7	48	5	0.5	0.0539	0.40475	0.6177
8	43	3	0.4651	0.0538	0.37079	0.5834
9	40	3	0.4302	0.0534	0.33735	0.5487
10	37	3	0.3953	0.0527	0.30442	0.5134
11	34	3	0.3605	0.0518	0.27202	0.4777
12	31	4	0.314	0.05	0.22971	0.4291
13	27	2	0.2907	0.049	0.20896	0.4044
14	25	3	0.2558	0.047	0.17839	0.3668
15	22	2	0.2326	0.0456	0.15841	0.3414
16	20	1	0.2209	0.0447	0.14856	0.3286
17	19	1	0.2093	0.0439	0.13879	0.3156
18	18	1	0.1977	0.0429	0.12913	0.3026
19	17	1	0.186	0.042	0.11957	0.2895
25	16	1	0.1744	0.0409	0.11013	0.2762
26	15	1	0.1628	0.0398	0.1008	0.2629
27	14	1	0.1512	0.0386	0.09161	0.2494
28	13	1	0.1395	0.0374	0.08256	0.2358
29	12	1	0.1279	0.036	0.07366	0.2221
71	11	1	0.1163	0.0346	0.06493	0.2082
72	10	1	0.1047	0.033	0.0564	0.1942
150	9	1	0.093	0.0313	0.04808	0.18
151	8	1	0.0814	0.0295	0.04002	0.1656
152	7	1	0.0698	0.0275	0.03225	0.1509
153	6	1	0.0581	0.0252	0.02483	0.1361
154	5	1	0.0465	0.0227	0.01786	0.1211
155	4	1	0.0349	0.0198	0.01148	0.106
156	3	1	0.0233	0.0163	0.00591	0.0915
157	2	1	0.0116	0.0116	0.00166	0.0816
158	1	1	0	NaN	NA	NA

Table A.223 Ulubey station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0909	1	0.0375	1	0.0581
2	0.1429	2	0.1	2	0.1395
3	0.2338	3	0.15	3	0.2442
4	0.2468	4	0.1875	4	0.314
5	0.3117	5	0.225	5	0.3837
6	0.3377	6	0.3125	6	0.4419
7	0.4156	7	0.4125	7	0.5
8	0.5195	8	0.4875	8	0.5349
9	0.6104	9	0.5375	9	0.5698
10	0.6883	10	0.5875	10	0.6047
11	0.7273	11	0.625	11	0.6395
12	0.7403	12	0.6375	12	0.686
13	0.7662	13	0.65	13	0.7093
14	0.8052	14	0.6625	14	0.7442
15	0.8442	15	0.6875	15	0.7674
16	0.8701	16	0.7125	16	0.7791
17	0.8831	17	0.7625	17	0.7907
18	0.8961	18	0.775	18	0.8023
19	0.9091	19	0.8	19	0.814
20	0.9221	22	0.8125	25	0.8256
28	0.9351	23	0.825	26	0.8372
35	0.9481	24	0.8375	27	0.8488
39	0.961	28	0.85	28	0.8605
40	0.974	46	0.8625	29	0.8721
48	0.987	47	0.875	71	0.8837
49	1	48	0.8875	72	0.8953
		49	0.9	150	0.907
		50	0.9125	151	0.9186
		51	0.925	152	0.9302
		52	0.9375	153	0.9419
		53	0.95	154	0.9535
		54	0.9625	155	0.9651
		55	0.975	156	0.9767
		74	0.9875	157	0.9884
		75	1	158	1

Table A.224 Usak station Kaplan-Meier survival estimates according to SPI-3

Kaplan-Meier Wet to Dry (SPI3)						
		n	events	median	0.95LCL	0.95UCL
		157	157	8	7	9
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
0	157	1	0.99363	0.00635	0.981264	1
1	156	12	0.9172	0.02199	0.875087	0.9613
2	144	3	0.89809	0.02414	0.851992	0.9467
3	141	8	0.84713	0.02872	0.792673	0.9053
4	133	13	0.76433	0.03387	0.700745	0.8337
5	120	12	0.6879	0.03698	0.619107	0.7643
6	108	12	0.61146	0.0389	0.539784	0.6927
7	96	15	0.51592	0.03988	0.443386	0.6003
8	81	11	0.44586	0.03967	0.37451	0.5308
9	70	10	0.38217	0.03878	0.313239	0.4663
10	60	5	0.35032	0.03807	0.283107	0.4335
11	55	4	0.32484	0.03738	0.259258	0.407
12	51	2	0.3121	0.03698	0.247424	0.3937
13	49	6	0.27389	0.03559	0.212304	0.3533
14	43	5	0.24204	0.03418	0.183513	0.3192
15	38	5	0.21019	0.03252	0.155213	0.2846
16	33	4	0.18471	0.03097	0.132977	0.2566
17	29	6	0.1465	0.02822	0.100428	0.2137
18	23	4	0.12102	0.02603	0.079391	0.1845
19	19	1	0.11465	0.02543	0.074232	0.1771
20	18	3	0.09554	0.02346	0.059044	0.1546
21	15	2	0.0828	0.02199	0.049198	0.1394
22	13	3	0.06369	0.01949	0.034966	0.116
23	10	1	0.05732	0.01855	0.030399	0.1081
25	9	1	0.05096	0.01755	0.025943	0.1001
26	8	1	0.04459	0.01647	0.021614	0.092
29	7	1	0.03822	0.0153	0.017436	0.0838
32	6	1	0.03185	0.01401	0.013443	0.0754
33	5	2	0.01911	0.01093	0.00623	0.0586
37	3	1	0.01274	0.00895	0.003214	0.0505
41	2	1	0.00637	0.00635	0.000903	0.0449
48	1	1	0	NaN	NA	NA

Table A.225 Usak station Kaplan-Meier survival estimates according to SPI-6

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		152	152	15	13	18
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
1	152	5	0.96711	0.01447	0.939162	0.9959
2	147	8	0.91447	0.02268	0.871078	0.96
3	139	6	0.875	0.02682	0.823973	0.9292
4	133	2	0.86184	0.02799	0.808695	0.9185
5	131	1	0.85526	0.02854	0.80112	0.9131
6	130	3	0.83553	0.03007	0.778624	0.8966
7	127	6	0.79605	0.03268	0.734507	0.8628
8	121	8	0.74342	0.03542	0.677134	0.8162
9	113	7	0.69737	0.03726	0.62803	0.7744
10	106	7	0.65132	0.03865	0.579796	0.7317
11	99	7	0.60526	0.03965	0.532339	0.6882
12	92	4	0.57895	0.04005	0.505545	0.663
13	88	4	0.55263	0.04033	0.478979	0.6376
14	84	5	0.51974	0.04052	0.446083	0.6056
15	79	5	0.48684	0.04054	0.413528	0.5732
16	74	5	0.45395	0.04038	0.381314	0.5404
17	69	6	0.41447	0.03996	0.343112	0.5007
18	63	5	0.38158	0.0394	0.311667	0.4672
19	58	2	0.36842	0.03913	0.299191	0.4537
20	56	4	0.34211	0.03848	0.27442	0.4265
21	52	5	0.30921	0.03749	0.243815	0.3921
22	47	6	0.26974	0.036	0.207654	0.3504
23	41	2	0.25658	0.03542	0.195749	0.3363
24	39	3	0.23684	0.03448	0.178043	0.3151
25	36	3	0.21711	0.03344	0.160533	0.2936
26	33	3	0.19737	0.03228	0.143235	0.272
27	30	2	0.18421	0.03144	0.131832	0.2574
28	28	2	0.17105	0.03054	0.120543	0.2427
29	26	1	0.16447	0.03007	0.114944	0.2353
30	25	1	0.15789	0.02958	0.109376	0.2279
31	24	1	0.15132	0.02907	0.103843	0.2205
32	23	1	0.14474	0.02854	0.098344	0.213
33	22	1	0.13816	0.02799	0.092883	0.2055
34	21	1	0.13158	0.02742	0.087461	0.198
36	20	1	0.125	0.02682	0.082081	0.1904
37	19	1	0.11842	0.02621	0.076745	0.1827
38	18	2	0.10526	0.02489	0.06622	0.1673

Table A.225 *Cont'd*

Kaplan-Meier Wet to Dry (SPI6)						
		n	events	median	0.95LCL	0.95UCL
		152	152	15	13	18
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
39	16	2	0.09211	0.02346	0.055914	0.1517
40	14	1	0.08553	0.02268	0.050856	0.1438
41	13	2	0.07237	0.02102	0.04096	0.1279
42	11	2	0.05921	0.01914	0.031419	0.1116
43	9	1	0.05263	0.01811	0.026812	0.1033
44	8	1	0.04605	0.017	0.022337	0.0949
45	7	1	0.03947	0.01579	0.018019	0.0865
46	6	1	0.03289	0.01447	0.013892	0.0779
47	5	1	0.02632	0.01298	0.010006	0.0692
48	4	1	0.01974	0.01128	0.006437	0.0605
49	3	1	0.01316	0.00924	0.003321	0.0521
50	2	1	0.00658	0.00656	0.000933	0.0464
57	1	1	0	NaN	NA	NA

Table A.226 Usak station Kaplan-Meier survival estimates according to SPI-12

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		174	174	20	18	22
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
0	174	1	0.99425	0.00573	0.983084	1
1	173	9	0.94253	0.01764	0.908574	0.9778
2	164	8	0.89655	0.02309	0.852424	0.943
3	156	9	0.84483	0.02745	0.792707	0.9004
4	147	7	0.8046	0.03006	0.747788	0.8657
5	140	7	0.76437	0.03217	0.703841	0.8301
6	133	4	0.74138	0.0332	0.679091	0.8094
7	129	4	0.71839	0.0341	0.654574	0.7884
8	125	1	0.71264	0.03431	0.648479	0.7832
9	124	2	0.70115	0.0347	0.636329	0.7726
10	122	1	0.6954	0.03489	0.630273	0.7673
11	121	2	0.68391	0.03525	0.618198	0.7566
12	119	3	0.66667	0.03574	0.600177	0.7405
13	116	3	0.64943	0.03617	0.582261	0.7243
14	113	2	0.63793	0.03643	0.570373	0.7135
15	111	2	0.62644	0.03667	0.558529	0.7026
16	109	3	0.6092	0.03699	0.540844	0.6862
17	106	5	0.58046	0.03741	0.511578	0.6586
18	101	5	0.55172	0.0377	0.482565	0.6308
19	96	6	0.51724	0.03788	0.448076	0.5971
20	90	7	0.47701	0.03786	0.408283	0.5573
21	83	8	0.43103	0.03754	0.36339	0.5113
22	75	5	0.4023	0.03717	0.335656	0.4822
23	70	4	0.37931	0.03678	0.313652	0.4587
24	66	3	0.36207	0.03643	0.29726	0.441
25	63	5	0.33333	0.03574	0.27016	0.4113
26	58	5	0.3046	0.03489	0.243346	0.3813
27	53	7	0.26437	0.03343	0.206332	0.3387
28	46	4	0.24138	0.03244	0.185482	0.3141
29	42	3	0.22414	0.03161	0.170003	0.2955
30	39	1	0.21839	0.03132	0.164876	0.2893
31	38	2	0.2069	0.03071	0.154672	0.2768
32	36	1	0.20115	0.03039	0.149597	0.2705
33	35	2	0.18966	0.02972	0.139501	0.2578
34	33	1	0.18391	0.02937	0.134483	0.2515
35	32	1	0.17816	0.02901	0.129485	0.2451
41	31	1	0.17241	0.02864	0.124507	0.2388
42	30	1	0.16667	0.02825	0.119552	0.2323
43	29	1	0.16092	0.02786	0.114619	0.2259
44	28	1	0.15517	0.02745	0.10971	0.2195
47	27	1	0.14943	0.02703	0.104825	0.213
48	26	1	0.14368	0.02659	0.099966	0.2065
49	25	1	0.13793	0.02614	0.095135	0.2
50	24	1	0.13218	0.02568	0.090331	0.1934
51	23	1	0.12644	0.02519	0.085557	0.1868
52	22	1	0.12069	0.0247	0.080815	0.1802
53	21	1	0.11494	0.02418	0.076106	0.1736
54	20	1	0.1092	0.02364	0.071432	0.1669
58	19	1	0.10345	0.02309	0.066797	0.1602

Table A.226 *Cont'd*

Kaplan-Meier Wet to Dry (SPI12)						
		n	events	median	0.95LCL	0.95UCL
		174	174	20	18	22
time	n.risk	n.event	survival	std.err	lower 95% CL	upper 95% CL
59	18	2	0.09195	0.02191	0.057649	0.1467
60	16	1	0.08621	0.02128	0.053143	0.1398
61	15	1	0.08046	0.02062	0.048689	0.133
73	14	1	0.07471	0.01993	0.04429	0.126
74	13	1	0.06897	0.01921	0.039952	0.119
90	12	1	0.06322	0.01845	0.035681	0.112
91	11	1	0.05747	0.01764	0.031487	0.1049
92	10	1	0.05172	0.01679	0.027378	0.0977
93	9	1	0.04598	0.01588	0.023367	0.0905
94	8	1	0.04023	0.0149	0.01947	0.0831
95	7	1	0.03448	0.01383	0.015709	0.0757
96	6	1	0.02874	0.01266	0.012113	0.0682
97	5	1	0.02299	0.01136	0.008726	0.0606
98	4	1	0.01724	0.00987	0.005615	0.0529
99	3	1	0.01149	0.00808	0.002898	0.0456
100	2	1	0.00575	0.00573	0.000814	0.0406
101	1	1	0	NaN	NA	NA

Table A.227 Usak station Kaplan-Meier drought risk estimates according to SPI-3, 6, and 12

Drought Risk (SPI3)		Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
0	0.00637	1	0.03289	0	0.00575
1	0.0828	2	0.08553	1	0.05747
2	0.10191	3	0.125	2	0.10345
3	0.15287	4	0.13816	3	0.15517
4	0.23567	5	0.14474	4	0.1954
5	0.3121	6	0.16447	5	0.23563
6	0.38854	7	0.20395	6	0.25862
7	0.48408	8	0.25658	7	0.28161
8	0.55414	9	0.30263	8	0.28736
9	0.61783	10	0.34868	9	0.29885
10	0.64968	11	0.39474	10	0.3046
11	0.67516	12	0.42105	11	0.31609
12	0.6879	13	0.44737	12	0.33333
13	0.72611	14	0.48026	13	0.35057
14	0.75796	15	0.51316	14	0.36207
15	0.78981	16	0.54605	15	0.37356
16	0.81529	17	0.58553	16	0.3908
17	0.8535	18	0.61842	17	0.41954
18	0.87898	19	0.63158	18	0.44828
19	0.88535	20	0.65789	19	0.48276
20	0.90446	21	0.69079	20	0.52299
21	0.9172	22	0.73026	21	0.56897
22	0.93631	23	0.74342	22	0.5977
23	0.94268	24	0.76316	23	0.62069
25	0.94904	25	0.78289	24	0.63793
26	0.95541	26	0.80263	25	0.66667
29	0.96178	27	0.81579	26	0.6954
32	0.96815	28	0.82895	27	0.73563
33	0.98089	29	0.83553	28	0.75862
37	0.98726	30	0.84211	29	0.77586
41	0.99363	31	0.84868	30	0.78161
48	1	32	0.85526	31	0.7931
		33	0.86184	32	0.79885
		34	0.86842	33	0.81034
		36	0.875	34	0.81609
		37	0.88158	35	0.82184
		38	0.89474	41	0.82759
		39	0.90789	42	0.83333
		40	0.91447	43	0.83908

Table A.227 *Cont'd*

Drought Risk (SPI6)		Drought Risk (SPI12)	
Time	Drought Risk	Time	Drought Risk
41	0.92763	44	0.84483
42	0.94079	47	0.85057
43	0.94737	48	0.85632
44	0.95395	49	0.86207
45	0.96053	50	0.86782
46	0.96711	51	0.87356
47	0.97368	52	0.87931
48	0.98026	53	0.88506
49	0.98684	54	0.8908
50	0.99342	58	0.89655
57	1	59	0.90805
		60	0.91379
		61	0.91954
		73	0.92529
		74	0.93103
		90	0.93678
		91	0.94253
		92	0.94828
		93	0.95402
		94	0.95977
		95	0.96552
		96	0.97126
		97	0.97701
		98	0.98276
		99	0.98851
		100	0.99425
		101	1

Table A.228 Usak station Kaplan-Meier survival estimates according to SPEI-3

Kaplan-Meier Wet to Dry (SPEI3)						
		n	events	median	0.95LCL	0.95UCL
		102	102	8	6	12
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	102	8	0.9216	0.02662	0.87084	0.9752
2	94	5	0.8725	0.03302	0.81017	0.9397
3	89	8	0.7941	0.04004	0.7194	0.8766
4	81	6	0.7353	0.04368	0.65447	0.8261
5	75	8	0.6569	0.04701	0.5709	0.7558
6	67	8	0.5784	0.04889	0.49012	0.6827
7	59	6	0.5196	0.04947	0.43116	0.6262
8	53	4	0.4804	0.04947	0.39259	0.5878
9	49	6	0.4216	0.04889	0.33585	0.5292
10	43	1	0.4118	0.04873	0.32652	0.5193
11	42	1	0.402	0.04855	0.31723	0.5093
12	41	1	0.3922	0.04834	0.30799	0.4993
13	40	3	0.3627	0.04761	0.28047	0.4691
14	37	5	0.3137	0.04594	0.23545	0.418
15	32	4	0.2745	0.04419	0.20024	0.3763
16	28	5	0.2255	0.04138	0.15737	0.3231
17	23	6	0.1667	0.0369	0.10799	0.2572
18	17	5	0.1176	0.0319	0.06915	0.2002
19	12	6	0.0588	0.0233	0.02707	0.1278
20	6	2	0.0392	0.01922	0.01501	0.1025
21	4	1	0.0294	0.01673	0.00965	0.0897
24	3	1	0.0196	0.01373	0.00497	0.0773
37	2	1	0.0098	0.00976	0.00139	0.0689
48	1	1	0	NaN	NA	NA

Table A.229 Usak station Kaplan-Meier survival estimates according to SPEI-6

Kaplan-Meier Wet to Dry (SPEI6)						
		n	events	median	0.95LCL	0.95UCL
		102	102	10	7	14
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	102	7	0.9314	0.02503	0.88358	0.9818
2	95	7	0.8627	0.03407	0.79848	0.9322
3	88	6	0.8039	0.03931	0.73045	0.8848
4	82	6	0.7451	0.04315	0.66515	0.8347
5	76	5	0.6961	0.04554	0.6123	0.7913
6	71	4	0.6569	0.04701	0.5709	0.7558
7	67	8	0.5784	0.04889	0.49012	0.6827
8	59	3	0.549	0.04927	0.46047	0.6546
9	56	4	0.5098	0.0495	0.42146	0.6167
10	52	3	0.4804	0.04947	0.39259	0.5878
11	49	1	0.4706	0.04942	0.38304	0.5781
12	48	2	0.451	0.04927	0.36405	0.5587
13	46	4	0.4118	0.04873	0.32652	0.5193
14	42	5	0.3627	0.04761	0.28047	0.4691
15	37	4	0.3235	0.04632	0.24437	0.4283
16	33	4	0.2843	0.04466	0.20897	0.3868
17	29	4	0.2451	0.04259	0.17435	0.3446
18	25	2	0.2255	0.04138	0.15737	0.3231
19	23	1	0.2157	0.04072	0.14897	0.3123
20	22	1	0.2059	0.04004	0.14064	0.3014
22	21	1	0.1961	0.03931	0.13236	0.2905
23	20	1	0.1863	0.03855	0.12416	0.2795
24	19	1	0.1765	0.03775	0.11604	0.2684
25	18	1	0.1667	0.0369	0.10799	0.2572
26	17	3	0.1373	0.03407	0.08438	0.2233
27	14	1	0.1275	0.03302	0.0767	0.2118
28	13	1	0.1176	0.0319	0.06915	0.2002
30	12	1	0.1078	0.03071	0.06171	0.1885
39	11	1	0.098	0.02944	0.05442	0.1766
40	10	1	0.0882	0.02808	0.04728	0.1647
41	9	1	0.0784	0.02662	0.04033	0.1525
42	8	1	0.0686	0.02503	0.03357	0.1403
43	7	1	0.0588	0.0233	0.02707	0.1278
44	6	1	0.049	0.02138	0.02085	0.1152
45	5	1	0.0392	0.01922	0.01501	0.1025
46	4	1	0.0294	0.01673	0.00965	0.0897
53	3	1	0.0196	0.01373	0.00497	0.0773
57	2	1	0.0098	0.00976	0.00139	0.0689
58	1	1	0	NaN	NA	NA

Table A.230 Usak station Kaplan-Meier survival estimates according to SPEI-12

Kaplan-Meier Wet to Dry (SPEI12)						
		n	events	median	0.95LCL	0.95UCL
		107	107	18	16	2
time	n.risk	n.event	survival	std.err	lower 95% CI	upper 95% CI
1	107	6	0.9439	0.0222	0.90132	0.9885
2	101	5	0.8972	0.0294	0.84146	0.9566
3	96	4	0.8598	0.0336	0.79648	0.9282
4	92	2	0.8411	0.0353	0.77463	0.9133
5	90	3	0.8131	0.0377	0.74247	0.8904
6	87	1	0.8037	0.0384	0.7319	0.8826
7	86	2	0.785	0.0397	0.71095	0.8669
8	84	2	0.7664	0.0409	0.69023	0.8509
9	82	2	0.7477	0.042	0.66973	0.8347
10	80	2	0.729	0.043	0.64943	0.8183
11	78	3	0.7009	0.0443	0.61934	0.7933
12	75	3	0.6729	0.0454	0.58962	0.7679
13	72	3	0.6449	0.0463	0.56027	0.7422
14	69	2	0.6262	0.0468	0.54089	0.7249
15	67	3	0.5981	0.0474	0.51209	0.6986
16	64	4	0.5607	0.048	0.47417	0.6631
17	60	4	0.5234	0.0483	0.43679	0.6271
18	56	5	0.4766	0.0483	0.3908	0.5813
19	51	4	0.4393	0.048	0.3546	0.5441
20	47	4	0.4019	0.0474	0.31893	0.5064
21	43	4	0.3645	0.0465	0.28381	0.4681
22	39	2	0.3458	0.046	0.26646	0.4487
23	37	2	0.3271	0.0454	0.24926	0.4292
24	35	2	0.3084	0.0446	0.23222	0.4096
25	33	2	0.2897	0.0439	0.21534	0.3898
26	31	2	0.271	0.043	0.19864	0.3698
27	29	2	0.2523	0.042	0.18211	0.3496
28	27	2	0.2336	0.0409	0.16578	0.3293
29	25	1	0.2243	0.0403	0.15769	0.319
30	24	1	0.215	0.0397	0.14965	0.3087
41	23	1	0.2056	0.0391	0.14167	0.2984
42	22	1	0.1963	0.0384	0.13376	0.288
43	21	1	0.1869	0.0377	0.1259	0.2775
44	20	1	0.1776	0.0369	0.11811	0.267
45	19	2	0.1589	0.0353	0.10274	0.2457
46	17	2	0.1402	0.0336	0.08768	0.2241
47	15	2	0.1215	0.0316	0.07299	0.2022
48	13	2	0.1028	0.0294	0.05874	0.1799
49	11	2	0.0841	0.0268	0.04501	0.1572
58	9	1	0.0748	0.0254	0.03839	0.1456
72	8	1	0.0654	0.0239	0.03197	0.1339
73	7	1	0.0561	0.0222	0.02577	0.122
74	6	2	0.0374	0.0183	0.01429	0.0978
75	4	2	0.0187	0.0131	0.00474	0.0738
76	2	2	0	NaN	NA	NA

Table A.231 Usak station Kaplan-Meier drought risk estimates according to SPEI-3, 6, and 12

Drought Risk (SPEI3)		Drought Risk (SPEI6)		Drought Risk (SPEI12)	
Time	Drought Risk	Time	Drought Risk	Time	Drought Risk
1	0.0784	1	0.0686	1	0.0561
2	0.1275	2	0.1373	2	0.1028
3	0.2059	3	0.1961	3	0.1402
4	0.2647	4	0.2549	4	0.1589
5	0.3431	5	0.3039	5	0.1869
6	0.4216	6	0.3431	6	0.1963
7	0.4804	7	0.4216	7	0.215
8	0.5196	8	0.451	8	0.2336
9	0.5784	9	0.4902	9	0.2523
10	0.5882	10	0.5196	10	0.271
11	0.598	11	0.5294	11	0.2991
12	0.6078	12	0.549	12	0.3271
13	0.6373	13	0.5882	13	0.3551
14	0.6863	14	0.6373	14	0.3738
15	0.7255	15	0.6765	15	0.4019
16	0.7745	16	0.7157	16	0.4393
17	0.8333	17	0.7549	17	0.4766
18	0.8824	18	0.7745	18	0.5234
19	0.9412	19	0.7843	19	0.5607
20	0.9608	20	0.7941	20	0.5981
21	0.9706	22	0.8039	21	0.6355
24	0.9804	23	0.8137	22	0.6542
37	0.9902	24	0.8235	23	0.6729
48	1	25	0.8333	24	0.6916
		26	0.8627	25	0.7103
		27	0.8725	26	0.729
		28	0.8824	27	0.7477
		30	0.8922	28	0.7664
		39	0.902	29	0.7757
		40	0.9118	30	0.785
		41	0.9216	41	0.7944
		42	0.9314	42	0.8037
		43	0.9412	43	0.8131
		44	0.951	44	0.8224
		45	0.9608	45	0.8411
		46	0.9706	46	0.8598
		53	0.9804	47	0.8785
		57	0.9902	48	0.8972
		58	1	49	0.9159

Table A.231 *Cont'd*

Drought Risk (SPEI12)	
Time	Time
58	0.9252
72	0.9346
73	0.9439
74	0.9626
75	0.9813
76	1