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Land and Climate



T *Introduction*

he statistical information appeared in this chapter includes the Geographical characteristics and administrative divisions, and Climate.

1. Geographical characteristics and administrative divisions

Iran comprises a land area of over 1.6 million square kilometers. It lies down on the southern half of the northern temperate zone, between latitudes 25° 00' and 39° 47' north, and longitudes 44° 02' and 63° 20' east. The land's average height is over 1200 meters. The lowest place, located in Chaleh-ye-Loot, is only 56 meters high, while the highest point, Damavand peak in Alborz Mountains, rises as high as 5610 meters. The land height at the southern coastal strip of the Caspian Sea is 28 meters lower than the open seas.

Iran is bounded by Turkmenistan, Caspian Sea, Azerbaijan, and Armenia on the north, Afghanistan and Pakistan on the east, Oman Sea and Persian Gulf on the south, and Iraq and Turkey on the west

Administratively, the country is divided into Ostans, Ostans into Shahrestans, and Shahrestans into cities and Dehestans.

Highlands of Iran can be divided into four mountain ranges: northern, western, southern and central and eastern ranges. The northern mountain ranges have extended from Ararat Mountain in Turkey to Hindu Kush Mountain in Afghanistan, including Alamdar, Sahand, Sabalan, Talesh, Qafan Kuh mountains in Azarbayejan, Albourz mountain ranges at the north of Tehran and south of Mazandaran and

Gilan Ostans, Ala Dagh, Binalud, Hezar Masjed and Qarah Dagh in Khorasan Ostanon the east of Iran.

The mountain ranges in the west, which have extended from Ararat Mountain to the north west and the south east of the country, cover Sari Dash, Chehel Cheshmeh, Panjeh Ali, Alvand, Bakhtiyari mountains, Pish Kuh, Posht Kuh, Oshtoran Kuh and Zard Kuh and form Zagros ranges. The highest peak of this range is "Dena" with a 4409 m height.

Southern mountain range stretches from Khouzestan province to Sistan & Baluchestan province and joins Soleyman Mountains in Pakistan. The mountain range includes Sepidar, Meymand, Bashagard and Bam Posht mountains. Central and eastern mountains mainly comprise Karkas, Shir Kuh, Kuh Banan, Jebal Barez, Hezar, Bazman and Taftan mountains, the highest of which is Hezar mountain with a 4465 m height.

The largest Iranian islands that are mainly located at Persian Gulf and Hormuz Strait, are Qeshm, Kish, Lavan, Larak Shahri, Hormuz, Hengam Jadid (new Hengam), Kabudan, Ashk (Orumiyeh Lake), Faroor Bozorg (Great Faroor), Hendurabi, Khark, Minou, Siri, Khan, Abu Mosa, Espir (Orumiyeh Lake), Tonb Bozorg (Great Tonb), Morghi, Kharku, Arezoo, (Orumiyeh Lake), Faroor Kuchak (Small Faroor) and Tunb Kuchak (Small Tonb).

The Caspian Sea (the world's largest lake) lies on the north of Iran and connects Iran to European countries through Russian waterways. The water of most of the Iranian lakes is salty.

The major internal lakes are: Orumiyeh, Namak, Hamoun Jazmourian, Hamoun-e-Saberi, Bakhtegan, Toshak, Hamoun-e-Pouzak, Maharlu, Hamoun-e-Hirmand, Talab-e-Anzali (Anzali lagoon), Howz-e-Sultan, Parishan and Zarivar of Marivan.

2. Climate

Due to its vast area, abundant mountains, desert lands and being adjacent to two large seas at the north and south as well as its closeness to Europe, Mediterranean Sea, African large Sahara desert, Indian Ocean, Asian internal highlands and large cold areas, Iran enjoys a very diverse climate. The effect of distance from the sea, namely closeness and remoteness from sea, can be easily perceived by comparing the large amount of rainfall and rich vegetation and highly populated areas around the Caspian Sea with the uninhabited arid deserts in the centre of Iran. The continuation of the mountain ranges, their location opposite or parallel to the winds direction and air flows are among the factors, which always affect climate change. There is a significant difference among slopes facing or backing onto humid winds in terms of rainfall amount and vegetation.

The country generally features three climatic zones:

1. **Arid and semi-arid climate** of the interior and far south, characterized by long, warm and dry periods, lasting some years over 7 months. The annual precipitation in such regions varies between 30 to 250 mm.

2. **Mountainous climate**, which are sub-divided into cold and moderate mountainous climate.

2.1. Cold mountainous climate: about 40000 sq km of the total country consists of major highlands, including Alborz and Zagross

mountain ranges, as well as Sahand and Sabalan high peaks. The annual precipitation in these regions exceeds 500 mm.

2.2. Moderate mountainous climate: some 300000 sq km of the country enjoys moderate mountainous climate, where the annual precipitation varies from 250 to 600 mm.

3. Caspian climate, which is a narrow strip with a limited extension, trapped between the Caspian Sea and Alborz mountains range with as much as 600 to 2000 mm precipitation per annum.

Measurement of climatic characteristics, which dates back to the year 1320, is currently performed by the National Meteorological Organization at its numerous synoptic stations scattered around the country. The data in this chapter, however, are only from those located in Ostan (provincial) centers. They include temperature, precipitation, and relative humidity, the number of frosty days, hours of bright sunshine and speed of wind.

Notes:

1. Some capitals of Ostans have several synoptic stations and the data appeared here are from those located at the airports of Ostan's capitals.

2. Central basins, Hamun and Sarakhs, were renamed Central Plateau, Eastern Border, and Qareh Qum, respectively in the year 1383.

The Statistics in this Chapter have been gathered from Armed Forces Geographical Organization, Ministry of Interior, I.R. of Iran Meteorological Organization and Iran Water Resource Management Company.

Definitions and concepts

Shahrestan (subprovince): an administrative division with a certain geographical boundary,

formed from joining of a few neighboring Bakhshes(county) which enjoy homogeneous natural, social, economic, political and cultural conditions.

Bakhsh (county): an administrative division with a specific geographical boundary, including a number of neighboring Dehestans and their adjacent fields, places, Roostas (hamlets), and possibly Shahrs, which are similar in natural, social, cultural, economic and political aspects.

Shahr (city .town):an area with a legal boundary, located within the geographical boundary of a certain Bakhsh and in terms of constructional context, employment and other factors, having the distinctive features of a city.

Dehestan (rural agglomeration): the smallest unit among administrative divisions with a specific geographical boundary, comprised of a number of neighboring Roostas and their adjacent places and fields, homogeneous in environment, economic and social conditions that allow for providing public services and planning within a single system and network.

Synoptic stations (simultaneous meteorological reporting stations): These are stations at which, various climatic features including dry and humid temperatures, amount and type of cloud, amount of precipitation, type of climatic phenomenon, direction and speed of wind, amount of evaporation, air pressure, hours of bright sunshine, changes in pressure, amount of solar radiation, etc. are according to certain instructions at certain hours measured and communicated to meteorological centers across the globe by devices like SSB, telephone or telex after being registered.

Absolute minimum: the lowest temperature during a certain period (24 hours, one month, one year, or a few years).

Absolute maximum: the highest temperature during a certain period (24 hours, one month, one year, or a few years).

Relative humidity: the amount of humid air in a volume unit of air.

Average height of precipitation: is the weighted mean of an area. By dividing the area into several polygons and considering the precipitation in each polygon, the average height of precipitation is calculated.

Water basin: is a geographical area in which overland flows from, and drains downhill into a body of water, such as ocean, sea, or flat. If the concentration point is located inside the basin, the basin is a closed one (e.g. Orumiyeh Lake), but if the point is located at the end of the basin, so that the flow can leave there, then there is an open basin. Every given point in a river is considered the concentration point for the basin just above it.

Aquatic year: from the first day of Mehr to the end of Shahrivar of the next year.

Coefficient of overland flow: the ratio of the volume of water flowed in a given hydrometric station to the volume of the precipitation of the basin stretching to the station.

Hydrometric stations: stations in which parameters of debit (discharge), sediment, temperature, physical properties of water and features of ice cover and chemical properties of rivers, lake and dams reservoir are observed and measured.

Volume of overland flow: To estimate the volume of overland flow of each of the country's main basins, a total of 42 rivers have been selected to indicate and represent the overland flow whose annual total volume exceeds 60 percent of the country's grand total. To reach the volume of any individual flow, a proper

coefficient is applied to the total volume.

Selected information

The total length of the I.R. Iran's borderlines is 8574 kilometers out of which the longest borderline is for that of Iran-Iraq and the shortest one goes to Iran-Armenia which equals 1608 and 45 kilometers respectively.

In the year 1391, Sistan & Baluchestan, Kerman, South Khorasan, Fars, Khorasan-e-Razavi and Esfahan were among the largest provinces in the country respectively, and each of them has an area of more than 100000 Km². Tehran province with an area of about 14000 Km² ranks 29th among the nation's provinces.

In the year 1391, I.R.Iran was divided into 31 Ostans (provinces), 422 Shahrestans (sub-provinces), 1041 Bakhshes (counties), 1224 Shahrs (cities) and 2566 Dehestans (rural agglomerations).

Moreover, average maximum and minimum temperatures in Ostans' centers belong to Ahvaz, with 33.9^o C and Hamedan with 4.5^o C respectively. Furthermore, the absolute maximum belongs to Ahvaz with 51.0^o C and the absolute minimum goes to Mashhad with -17.2^o C. Also in the said year, the highest annual precipitation of the country belongs to Rasht and Sari, which amounted to 1442 and 855 mm respectively, and Zahedan and Yazd with 53 and 77 mm respectively had the lowest annual precipitation amongst all Ostans' centers. In the year 1391, the maximum frosty days belong to Shahr-e-Kord with 130 days, Orumiyeh with 112 days and Yasuj with 106 days; and Ahvaz, Bandar Abbas and Bushehr have not experienced any frosty day.

The volume of precipitation in national main basins during the aquatic year of 1390-91 was approximately 337.197 bln m³ out of which the

share of each basin is as follows: the Caspian Sea 90.121 bln m³, the Persian Gulf and Oman Sea 95.865 bln m³, the Lake of Orumiyeh 15.393 bln m³, Central Plateau 116.623 bln m³, Eastern Border 8.226 bln m³ & Qareh Qum 10.969 bln m³.

It is also noteworthy that the ratio of the area of main water basins to the total country area is as follows: the Caspian Sea 11.00%, the Persian Gulf and Oman Sea 26.00%, Lake of Orumiyeh 3.00%, Central Plateau 51.00%, Eastern Border 6.00 % & Qareh Qum 3.00%.

1. 1. LENGTH OF IRANIAN BORDERLINES: 1391 (km)

Total	Iran-Iraq borderline	Iran- Turkey borderline	Iran- Turkmenistan borderline	Iran- Azerbaijan borderline
8574.....	1608	566.1	1190	756.8

Iran- Armenia border	Northern coastline	Iran- Afghanistan borderline	Iran- Pakistan borderline	Southern coastline
45	524	919.1	924.8	2040

Source: Armed Forces Geographical Organization

1. 2. LONGITUDE AND LATITUDE OF OSTANS, THE YEAR 1391

Ostan	Longitude				Latitude			
	Lower limit		Upper limit		Lower limit		Upper limit	
	Minute	Degree	Minute	Degree	Minute	Degree	Minute	Degree
Total country	2	44	20	63	0	25	47	39
East Azarbayejan	5	45	21	48	45	36	26	39
West Azarbayejan	2	44	24	47	58	35	46	39
Ardebil	18	47	55	48	6	37	42	39
Esfahan	38	49	30	55	42	30	30	34
Alborz.....	10	50	28	51	33	35	21	36
Ilam	41	45	3	48	3	32	2	34
Bushehr	6	50	56	52	18	27	17	30
Tehran	20	50	9	53	52	34	8	36
Chaharmahal & Bakhtiari	30	49	26	51	9	31	49	32
South Khorasan	40	57	56	60	31	30	9	34
Khorasan-e-Razavi	14	56	16	61	28	33	42	37
North Khorasan	25	55	54	58	35	36	17	38
Khuzestan	40	47	33	50	53	29	0	33
Zanjan	10	47	26	49	33	35	15	37
Semnan	50	51	3	57	14	34	20	37
Sistan & Baluchestan	50	58	19	63	4	25	29	31
Fars	36	50	35	55	3	27	40	31
Qazvin	44	48	51	50	24	35	49	36
Qom	5	50	58	51	9	34	11	35
Kordestan	33	45	59	48	44	34	28	36
Kerman	20	54	34	59	29	26	58	31
Kermanshah	24	45	6	48	41	33	17	35
Kohgiluyeh & Boyerahmad	53	49	53	51	56	29	29	31
Golestan	51	53	19	56	30	36	7	38
Gilan	34	48	36	50	34	36	27	38
Lorestan	48	47	28	49	0	34	44	35
Mazandaran	21	50	8	54	46	35	58	36
Markazi	57	48	3	51	23	32	34	35
Hormozgan	44	52	16	59	25	25	53	28
Hamedan	50	46	1	50	39	32	23	34
Yazd	48	52	21	58	36	29	6	35

Source: Armed Forces Geographical Organization.

**1. 3. NUMBER OF SHAHRESTANS, BAKHSHES, CITIES AND DEHESTANS ACCORDING
TO THE ADMINISTRATIVE DIVISIONS**

Year	Number of Shahrestans	Number of Bakhshes	Number of cities	Number of Dehestans
1375.....	265	707	678	2227
1380.....	299	794	889	2305
1385.....	336	889	1015	2400
1387.....	363	919	1061	2430
1388.....	380	945	1105	2459
1389.....	397	982	1144	2496
1390.....	400	994	1166	2507
1391.....	422	1041	1224	2566

Sources: Statistical Centre of Iran;
- Ministry of the Interior.

1. 4. GENERAL CHARACTERISTICS OF OSTANS ACCORDING TO THE ADMINISTRATIVE DIVISIONS AT THE END OF THE YEAR 1391

Ostan	Capital of Ostan	Area ⁽¹⁾ (sq km)	Number of Shahrestans	Number of Bakhshes	Number of cities	Number of Dehestans
Total country ..	××	1628763	422	1041	1224	2566
East Azarbayejan	Tabriz	45650	20	44	59	142
West Azarbayejan	Orumiyeh	37411	17	40	42	113
Ardebil	Ardebil	17799	10	29	26	71
Esfahan	Esfahan	107019	23	48	106	126
Alborz.....	Karaj	5124	5	11	16	25
Ilam	Ilam	20132	9	22	23	43
Bushehr	Bushehr	22742	10	24	36	46
Tehran	Tehran	13689	16	33	43	71
Chaharmahal & Bakhtiari...	Shahr-e-Kord	16327	9	24	36	49
South Khorasan	Birjand	150797	11	25	28	61
Khorasan-e-Razavi	Mashhad	118851	28	70	72	164
North Khorasan	Bojnurd	28434	8	19	18	45
Khuzestan	Ahvaz	64054	27	67	77	142
Zanjan	Zanjan	21773	7	16	19	46
Semnan	Semnan	97490	8	15	20	31
Sistan & Baluchestan	Zahedan	181785	18	47	37	111
Fars	Shiraz	122608	29	84	101	205
Qazvin	Qazvin	15567	6	19	25	46
Qom	Qom	11526	1	5	6	9
Kordestan	Sanandaj	29137	10	31	29	86
Kerman	Kerman	180726	23	58	71	151
Kermanshah	Kermanshah	25008	14	31	31	86
Kohgiluyeh & Boyerahmad .	Yasuj	15504	8	19	17	45
Golestan	Gorgan	20367	14	27	27	60
Gilan	Rasht	14042	16	43	52	109
Lorestan	Khorramabad	28294	10	29	25	85
Mazandaran	Sari	23842	21	56	58	131
Markazi	Arak	29127	12	23	35	66
Hormozgan	BandarAbbas	70697	13	38	39	85
Hamedan	Hamedan	19368	9	25	29	73
Yazd	Yazd	73873	10	19	21	43

1. Only land area

Source: Ministry of the Interior.

ADMINISTRATIVE DIVISIONS, THE YEAR 1391



1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1391

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Total country	1041	1224	2566
East Azarbayejan	44	59	142
Azarshahr	3	4	7
Osku	2	3	5
Ahar	2	2	9
Bostanabad	2	2	9
Bonab	1	1	3
Tabriz	2	4	6
Jolfa	2	3	5
Charoimaq	2	1	6
Khoda Afarien	3	1	7
Sarab	2	4	9
Shabestar	3	9	8
Ajabshir	2	1	4
Kaleibar	2	2	7
Maragheh	2	2	6
Marand	2	5	9
Malekan	2	2	5
Miyaneh	4	4	17
Haris	2	5	6
Hashtrud	2	2	7
Varzaqan	2	2	7
West Azarbayejan	40	42	113
Orumiyeh	5	5	20
Oshnaviyeh	2	2	4
Bukan	2	2	7
Poldasht	2	2	4
Piranshahr	2	2	5
Takab	2	1	6
Chaldoran	2	2	5
Chaypareh Eh	2	1	4
Khoy	4	6	11
Sardasht	2	3	6
Salmas	2	2	7
Shahindezh	2	3	5
Shout	2	2	4
Maku	2	2	5
Mahabad	2	2	5
Miandoab	3	3	11
Naqadeh	2	2	4

1. 5. BAKHSHEH, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1391 (continued)

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
<i>Ardebil</i>	29	26	71
Ardebil	3	2	10
Bilehsavar	2	2	4
Parsabad	4	4	8
Khalkhal	3	3	8
Sareyn.....	2	1	4
Kowsar	2	1	4
Garmi	3	2	9
Meshkinshahr	5	6	12
Namin	3	3	7
Nayer	2	2	5
<i>Esfahan</i>	48	106	126
Aran & Bidgol	2	4	3
Ardestan	2	3	7
Esfahan	6	15	19
Borkhar	2	7	4
Tiran & Karvan	2	3	4
Chadegan	2	2	4
Khomeinishahr	1	4	3
Khansar	1	1	3
Khour& Biyabanak.....	1	3	3
Dehaghan.....	1	2	3
Semirom	4	4	8
Shahin Shahr& Meymeh	2	6	4
Shahreza	1	2	4
Faridan	2	4	9
Fereydunshahr	1	2	5
Falavarjan	3	8	6
Kashan	4	6	9
Golpayegan	1	3	3
Lenjan	2	9	5
Mobarakeh	2	5	5
Naeen	2	3	5
Najafabad	2	6	5
Natanz.....	2	4	5
<i>Alborz</i>	11	16	25
Eshtehard.....	2	1	4
Savojbalagh.....	3	5	6
Taleghan.....	2	1	4
Karaj.....	2	7	6
Nazarabad.....	2	2	5
<i>Ilam</i>	22	23	43

1. 5. BAKHSHEH, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1391 (continued)

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Bakhshes
Abdanan	3	3	6
Ilam	3	2	6
Ivan	2	2	4
Darrehshahr	3	3	6
Dehloran	3	4	6
Sirvan	2	1	4
Shirvan & Chardavel	2	3	5
Malekshahi.....	2	3	4
Mehran	2	2	2
Bushehr	24	36	46
Bushehr	2	3	2
Tangestan	2	3	4
Jam	2	3	5
Dashtestan	6	9	12
Dashti	3	4	7
Dayyer	2	5	4
Deylam	2	2	4
Asalouye.....	2	2	4
Kangan	1	3	2
Genaveh	2	2	2
Tehran	33	43	71
Eslamshahr	3	2	6
Baharestan.....	2	3	4
Pakdasht.....	2	3	6
Pardis.....	2	2	4
Pishva.....	2	1	4
Tehran.....	3	1	4
Damavand	2	5	5
Robotkarim	1	3	3
Rey	5	4	9
Shemiranat	2	4	3
Shahriar	1	7	6
Firuzkuh.....	2	2	5
Qods.....	1	1	2
Qarchak	1	1	2
Malard	2	2	4
Varamin	2	2	4
Chaharmahal & Bakhtiari ...	24	36	49
Ardal	2	4	4
Borujen	3	6	5
Bon.....	2	2	4
Saman.....	2	1	4
Shahr-e-Kord	2	8	4
Farsan	3	6	5
Kuhrang	3	1	7
Keyar.....	2	4	5
Lordegan ..	5	4	11
South Khorasan	25	28	61
Boshroye	2	2	4

1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1391 (continued)

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Birjand.....	1	1	6
Khosaf.....	2	2	5
Darmiyān	3	4	6
Zeerkooh.....	3	2	6
Sarayan	2	3	4
Sarbisheh	3	2	6
Tabas.....	3	3	8
Ferdows	1	2	3
Qayenat	3	5	8
Nahbandan	2	2	5
<i>Khorasan-e-Razavi</i>	70	72	164
Bakharz.....	2	1	4
Bajestan.....	2	2	4
Bardeskan	3	3	6
Binalood.....	2	2	4
Taybad	2	3	4
Torbat-e-Jam	5	5	13
Torbat-e-Heydariyeh	4	4	8
Joghatay.....	2	1	4
Jovin.....	2	1	4
Chenaran	2	2	5
Khalil Abad	2	2	4
Khaf	4	5	8
Khooshab.....	2	1	5
Davarzan.....	2	1	4
Dargaz	4	4	7
Rashtkhar	2	2	4
Zaveh.....	2	1	4
Sabzevar	3	3	11
Serakhs	2	2	6
Fariman	2	4	5
Firooze ⁽¹⁾	2	2	4
Quchan	2	2	5
Kashmar	2	2	5
Kalat	2	2	4
Gonabad	2	3	4
Mashhad	3	3	11
Mah-Velat	2	2	4
Neyshabur	4	7	13
<i>North Khorasan</i>	19	18	45
Esfarayen	2	2	7
Bojnurd	2	2	5
Jajarm	3	3	5
Raz & Jargalan.....	3	1	6
Shirvan	3	2	9
Faruj	2	2	5

1. 5. BAKHSHEH, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1391 (continued)

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Garmeh.....	1	3	2
Maneh and Samalqan	3	3	6
Khuzestan	67	77	142
Abadan	2	3	6
Aghajaree.....	2	1	2
Omidiyeh	2	2	3
Andimeshk	2	5	4
Endika	3	2	6
Ahvaz	3	2	6
Izeh	3	2	10
Baghmalek ..	3	4	8
Bavi.....	2	3	4
Bandar-e-Mahshahr	2	3	1
Hamidiyeh.....	3	4	6
Behbahan	2	1	4
Khorramshahr	2	3	4
Dezful	4	9	11
Dasht-e-Azadegan	2	4	5
Ramshir	2	2	4
Ramhormoz	4	1	8
Shadegan	3	3	8
Shush	3	5	7
Shushtar	3	4	6
Karoun.....	2	1	4
Gotvand	2	5	4
Lali	2	1	4
Masjed Soleyman	3	2	6
haftgol.....	2	1	3
Hendijan	2	2	4
Hovayzeh.....	2	2	4
Zanjan	16	19	46
Abhar	2	4	8
Ijerd	2	2	4
Khodabandeh	4	5	10
Khorramdarreh	1	1	2
Zanjan	3	3	12
Tarom	2	2	5
Mahneshan	2	2	5
Semnan	15	20	31
Aradan.....	2	2	4
Damghan	2	4	6
Sorkhe.....	1	1	2
Semnan	1	1	1
Shahrud	3	6	7
Garmsar	2	2	3
Mehdishahr.....	2	3	3
Mayamee.....	2	1	5
Sistan & Baluchestan	47	37	111
Iranshahr	3	4	7
Chabahar	3	2	6
Khash	3	2	11
Delgan	2	1	5
Zabol	1	2	1

1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1391 (continued)

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Zahedan	3	2	6
Zahak	2	1	4
Saravan	3	5	8
Sarbaz	4	3	11
Sibsavarani	2	2	4
Ghaser-e Ghand	3	1	6
Konarak	2	2	4
Mehrestan	2	1	4
Mirjave	3	1	7
Neekshahr	5	4	14
Neemrooz	2	1	4
Hamoon	2	2	4
Hirmand	2	1	5
Fars	84	101	205
Abadeh	1	5	4
Arsanjan	1	1	3
Estahban	2	3	3
Eqlid	3	4	9
Bavanat	3	4	7
Pasargad	2	2	4
Jahrom	4	5	12
Kharameh	2	2	5
Khorrumbid	2	2	3
Khonj	2	1	4
Darab	4	4	12
Rostam	2	2	4
Zarrindasht	2	3	5
Sepidan	3	3	8
Sarvestan	2	2	4
Shiraz	3	6	12
Farashband	2	3	4
Fasa	4	5	8
Firuzabad	2	2	5
Qirokarzin	2	5	5
Kazerun	6	6	14
Kavar	2	1	4
Gerash	2	1	4
Larestan	6	8	13
Lamerd	4	4	8
Marvdasht	5	5	15
Mamasani	3	3	9
Mohr	4	5	8
Neyriz	4	4	9
Qazvin	19	25	46
Abyek	2	2	5
Avaj	2	2	5
Alborz	2	4	4
Boyinzahra	4	5	9

1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1391 (continued)

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Takestan	4	5	9
Qazvin	5	7	14
<i>Qom</i>	5	6	9
Qom	5	6	9
<i>Kordestan</i>	31	29	86
Baneh	4	4	8
Bijar	3	5	11
Dehgalan.....	2	2	5
Divandarreh	3	2	8
Sarvabad	2	2	8
Saqqez	4	2	11
Sanandaj	4	2	12
Qorveh	4	4	10
Kamyaran	2	2	7
Marivan	3	4	6
<i>Kerman</i>	58	71	151
Arzooeyeh.....	2	1	5
Anar.....	1	2	2
Baft	2	2	6
Bardsir	4	5	8
Bam	2	2	4
Jiroft	4	4	14
Rabar.....	2	2	4
Ravar	2	2	3
Rafsanjan	4	5	14
Rudbar-e-Jonub	2	2	4
Reegan.....	2	2	4
Zarand	2	4	11
Sirjan	5	7	10
Shahr-e-Babak	2	5	9
Anbarabad	2	3	7
Faryab.....	2	1	4
Fahraj.....	2	1	4
Ghaleh-Ganj	2	1	5
Kerman	6	13	16
Kahnuj	2	1	5
Kohbonan	2	2	3
Manujan	2	2	5
Narmashir	2	2	4
<i>Kermanshah</i>	31	31	86
Eslamabad-E-Gharb	2	2	7
Paveh	3	5	5
Salas-e-Babajani	2	2	6
Javanrud	2	1	4
Dalahu	2	3	5
Ravansar	2	2	6

1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1391 (continued)

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Sar-e-pol-e-Zahab	2	1	6
Sonqor	2	2	8
Sahneh	2	2	7
Qasr-e-Shirin	2	2	4
Kermanshah	5	4	13
Kangavar	1	1	5
Gilan-e-Gharb	2	2	6
Harsin	2	2	4
<i>Kohgiluyeh & Boyerahmad</i>	19	17	45
Basht.....	2	1	4
Bahmaee	2	1	4
Boyerahmad	4	5	11
Cheram.....	2	2	4
Dena	2	2	4
Kohgiluyeh	4	4	10
Gachsaran	1	1	4
Lande.....	2	1	4
<i>Golestan</i>	27	27	60
Azadshahr	2	3	4
Aq Qala	2	2	5
Bandar Gaz	2	2	4
Torkaman	2	1	4
Ramyar	2	4	4
Aliabad	2	2	4
Kordkuy	1	1	3
Kalaleh	2	2	5
Galikesh.....	2	1	4
Gorgan	2	3	5
Gomishan.....	2	2	4
Gonbad-e-Kavus	2	2	6
Marave-Tapeh.....	2	1	4
Minudasht	2	1	4
<i>Gilan</i>	43	52	109
Astara	2	2	4
Astane-ye-Ashrafiyeh	2	2	6
Amlash	2	2	5
Bandar Anzali	1	1	2
Rasht	6	7	18
Rezvanshahr	2	2	4
Rudbar	4	7	10
Rudsar	4	5	10
Siahkal	2	2	5
Shaft	2	2	4
Sumaehsara	3	3	7
Tavalesh	4	5	10

1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1391 (continued)

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Fuman	2	3	6
Lahijan	2	2	7
Langrud	3	5	7
Masal	2	2	4
Lorestan	29	25	85
Azna	2	2	4
Aligudarz	5	2	12
Borujerd	2	2	7
Poldokhtar	2	2	7
Khorramabad	4	4	17
Delfan	2	2	10
Doreh.....	3	2	6
Dorud	2	2	5
Selseleh	2	2	6
Kuhdasht	5	5	11
Mazandaran	56	58	131
Amol	5	5	11
Babol	6	7	13
Babolsar	3	3	6
Behshahr	2	3	5
Tonkabon	3	4	7
Juybar	2	2	4
Chalus	3	4	6
Ramsar	1	2	4
Sari	6	4	15
Savadkuh	2	3	4
Savadkuh-e Shomali.....	2	1	4
Seemorgh.....	2	1	4
Abbasabad.....	3	3	5
Ferydonkenar.....	2	1	4
Qaemshahr	1	2	5
Galugah	2	1	4
Mahmoudabad	2	2	5
Miandorood.....	2	1	5
Neka	2	1	5
Nur	3	5	9
Noshahr	2	3	6
Markazi	23	35	66
Ashtian	1	1	3
Arak	3	6	11
Tafresh	1	1	4
Khomein	2	2	7
Khondab	2	2	5
Delijan	1	2	4

1. 5. BAKHSHEH, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1391 (continued)

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Zarandiyeh.....	2	5	6
Saveh	2	4	7
Shazand	4	6	9
Farahan.....	2	2	4
Komeijan	2	2	4
Mahallat	1	2	2
Hormozgan	38	39	85
Abumusa	2	1	2
Bastak	3	3	7
Bashagerd.....	3	2	6
Bandar Abbas	4	5	11
Bandar Lengeh	4	5	8
parsiyan	2	3	4
Jask	2	1	5
Hajiabad	3	3	6
Khamir	2	2	4
Rudan	4	3	10
Sireek.....	2	3	4
Qeshm	3	4	7
Minab	4	4	11
Hamedan	25	29	73
Asadabad	2	2	6
Bahar	3	4	6
Tuyserkan	2	3	7
Razan	3	3	7
Famenin.....	2	1	4
Kabudarahang	3	3	10
Malayer	4	5	15
Nahavand	4	4	9
Hamedan	2	4	9
Yazd	19	21	43
Abarkuh	2	2	4
Ardakan	3	3	5
Bafgh	1	1	3
Behabad.....	2	1	3
Taft	3	2	10
Khatam	2	2	4
Sadugh	2	3	3
Mehriz	1	1	5
Meybod	1	2	2
Yazd	2	4	4

1. Takhte Jolge Shahrastan was renamed "Firooze".

Source: Ministry of the Interior.

1.6. METEOROLOGICAL DATA FROM SYNOPTIC STATIONS IN CAPITALS OF OSTANS FROM THE YEAR OF ESTABLISHMENT TO THE END OF THE YEAR 1390

Capital of Ostan	Station characteristics		Air temperature (°c)				
	Year of establishment	Altitude (m)	Average max	Average min	Absolute max	Absolute min	Mean
Arak	1328	1702.8	20.8	7.1	44	-30.5	14
Ardebil	1355	1335.2	15.6	3.1	39.8	-33.8	9.3
Orumiyeh	1330	1328	17.8	5.5	39.2	-22.8	11.6
Esfahan	1330	1550	23.5	9.1	43	-19.4	16.3
Ahvaz	1330	22.5	33.2	17.9	54	-7	25.6
Ilam	1361	1337	22.6	11.4	41.4	-13.6	17
Bojnurd	1355	1112	19.9	7	42.3	-25	13.4
Bandar Abbas	1335	9.8	32.2	21.9	51	2	27
Bushehr	1330	6	28.3	21.5	47	4	24.9
Birjand	1334	1491	24.7	8.5	44	-21.5	16.6
Tabriz	1327	1345	18.2	7	42	-25	12.6
Tehran	1321	1191	22.8	12	43	-15	17.4
Khorramabad	1328	1147.8	25.3	9.1	47	-14.6	17.2
Rasht	1334	24.8	21.1	11.8	37.5	-13.6	16.4
Zahedan	1330	1370	26.9	10.2	43	-22	18.5
Zanjan	1335	1659.4	18.2	4.1	43	-30	11.2
Sari	1378	23	22	11.6	46	-11	16.8
Semnan	1342	1127	23.9	12.5	44	-12.6	18.2
Sanandaj	1338	1373.4	21.6	5.6	44	-31	13.6
Shahr-e-Kord	1334	2050	20.2	3.3	42	-32.4	11.8
Shiraz	1336	1488	25.8	9.9	43.2	-14	17.8
Qazvin	1334	1279.1	21.3	6.9	43	-24	14.1
Qom	1364	879.1	25.8	10.9	46	-23	18.3
Karaj	1352	1292.9	21.3	8.8	42	-17	15.1
Kerman	1328	1754	24.8	7	42	-30	15.9
Kermanshah	1321	1318.5	22.8	6.1	44.1	-27	14.5
Gorgan	1331	0	22.8	12.8	45	-11.8	17.8
Mashhad	1328	999	21.2	7.3	43.8	-28	14.3
Hamedan	1354	1740.8	19.4	3.5	40	-32.8	11.5
Yasuj	1365	1816.3	22.5	7.9	40.4	-19	15.2
Yazd	1331	1230.2	26.6	11.9	45.6	-16	19.3

1.6. METEOROLOGICAL DATA FROM SYNOPTIC STATIONS IN CAPITALS OF OSTANS FROM THE YEAR OF ESTABLISHMENT TO THE END OF THE YEAR 1390 (continued)

Capital of Ostan	Average annual precipitation (mm)	Max. daily precipitation (mm)	Mean of relative humidity (%)		Average number of frosty days	Average total bright sunshine (hours)	Max. wind speed (mps)
			Max.	Min.			
Arak	337.1	80	63	31	79	2759.8	28
Ardebil	295.5	63	90	53	113	2359.9	31
Orumiyeh	338.9	79	78	42	100	2678.7	31
Esfahan	125	48	59	24	65	2972	30
Ahvaz	209.2	107	63	27	2	2746.6	30
Ilam	583.7	162	54	27	33	2855.8	25
Bojnurd	267.8	54.3	80	40	82	2635.1	35
Bandar Abbas	176.1	211	82	47	0	2864.4	30
Bushehr	268	150	80	55	0	2933.5	30
Birjand	168.5	52	54	22	68	3116.7	19
Tabriz	283.8	63	71	36	91	2617.3	26
Tehran	232.7	50	56	28	36	2847	23
Khorramabad	504.3	78	65	29	41	2762.7	26
Rasht	1337.5	170	97	64	15	1736.8	18
Zahedan	89.3	62	50	19	45	2966.6	41
Zanjan	311.1	50.6	75	37	107	2681.2	23
Sari	738.9	77.2	92	70	14	1858.1	30
Semnan	140.7	41	54	30	37	2831.9	26
Sanandaj	449.9	73	70	29	91	2744	25
Shahr-e-Kord	321.8	88.8	68	30	113	2933.6	23
Shiraz	334.7	128	60	24	37	3147.1	29
Qazvin	314.4	50	73	32	78	2776.1	34
Qom	148.2	43	59	27	42	2625.8	31
Karaj	251.7	57	69	32	59	2819.4	25
Kerman	148	60	51	19	77	2978.6	35
Kermanshah	439.2	108	66	29	80	2730.4	31
Gorgan	583.8	105	85	53	12	1917.4	31
Mashhad	251.5	52	74	36	76	2758.3	22
Hamedan	317.7	56	76	35	111	2673.2	22
Yasuj	823.3	135	65	25	59	3131.9	30
Yazd	59.2	48	46	20	39	2920	33

Source: I. R. I. Meteorological Organization.

1. 7. CLIMATIC CONDITIONS OF CAPITALS OF OSTANS, THE YEAR 1391

Capital of Ostan	Air temperature (°c)					Annual precipitation (mm)
	Average max	Average min	Absolute min	Absolute max	Mean	
Arak	21.7	7.9	-11.6	40.2	14.8	289
Ardebil	17.5	5.7	-15.6	34.4	11.6	282
Orumiyeh	19.3	5.9	-11.4	36.4	12.7	317
Esfahan	24.6	10.2	-9	42.2	17.4	222
Ahvaz	33.9	19.6	2.2	51	26.8	210
Ilam	24.1	10.8	-11	40.4	17.4	455
Bojnurd	21	7.4	-15	39	14.3	205
Bandar Abbas	32.9	22.3	4.1	46.7	27.6	84
Bushehr	29.9	22.5	7	45.6	26.2	201
Birjand	24.1	8.3	-10	40.8	16.3	162
Tabriz	20.3	8.7	-10.4	38.8	14.5	245
Tehran	22.4	14.8	-5.4	39.6	18.6	215
Khorramabad	25.8	9.6	-6.6	43.2	17.8	382
Rasht	22.2	12.7	-2.4	37	17.4	1442
Zahedan	27.2	11.1	-10.2	41.6	19.2	53
Zanjan	19.5	5.5	-15	35.4	12.5	392
Sari	24	14.3	-2	37.2	19.1	855
Semnan	24.8	12.7	-7	42.2	18.7	133
Sanandaj	22.9	6.3	-11	41.8	14.5	306
Shahr-e-Kord	26.2	6.4	-10.2	36.6	16.3	386
Shiraz	25.8	9.7	-6	41.8	17.8	305
Qazvin	22	7.8	-11	39.4	14.9	315
Qom	26.5	11.4	-8	42.8	19	150
Karaj.....	22	9.9	-7.8	38.4	16	290
Kerman	23.1	6.8	-10.4	35.8	14.9	119
Kermanshah	25.3	9	-9.5	41.9	17.1	317
Gorgan	24.7	13.2	-3.6	40.2	18.9	676
Mashhad	23.9	10	-17.2	40.1	17.8	282
Hamedan	21	4.5	-15.7	39.9	13.6	230
Yasuj	23.3	7.6	-9	38.5	15.4	826
Yazd	27.2	13.8	-4.8	45.6	20.5	77

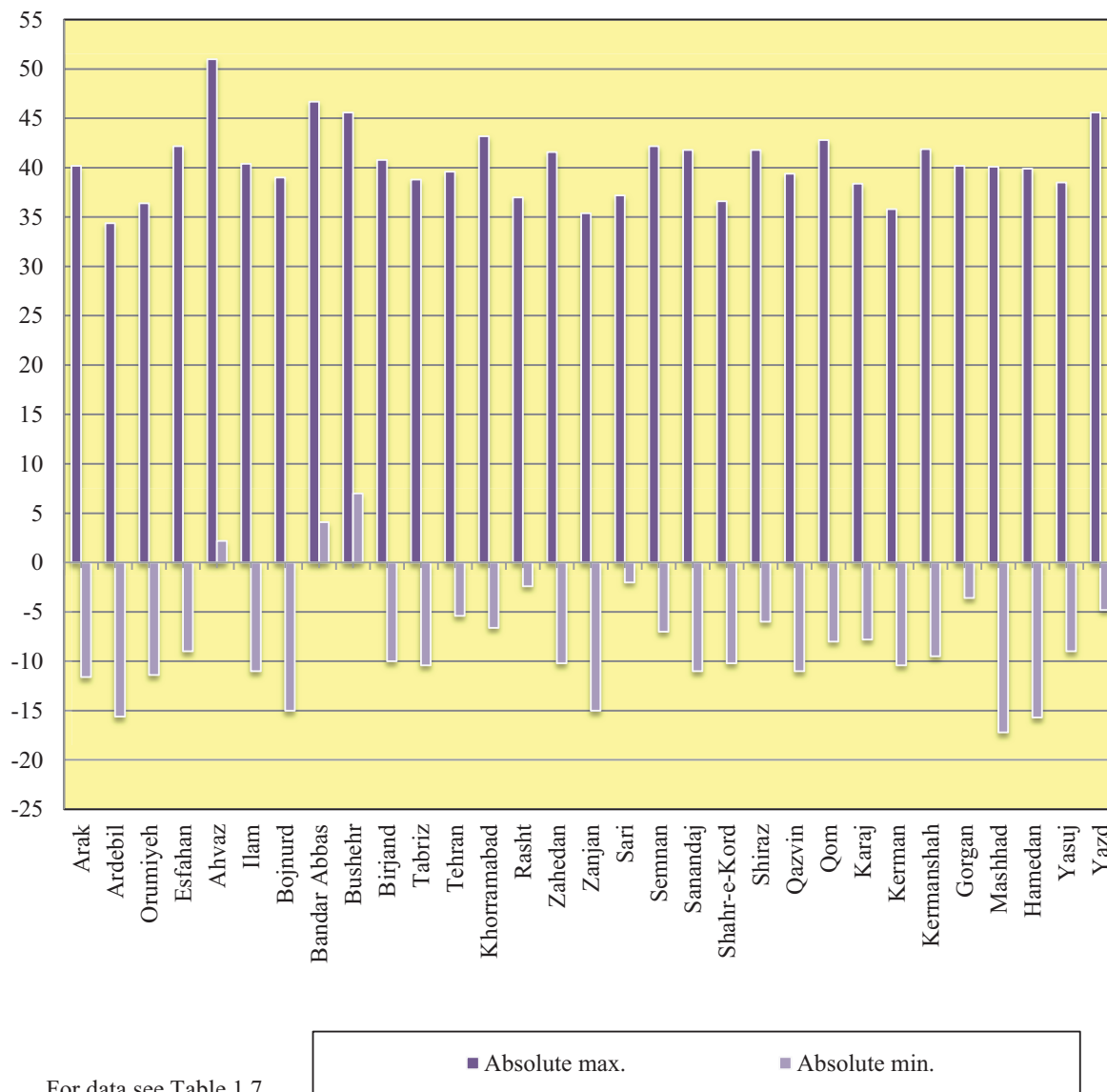
1. 7. CLIMATIC CONDITIONS OF CAPITALS OF OSTANS, THE YEAR 1391 (continued)

Capital of Ostan	Max. daily precipitation (mm)	Mean of relative humidity (%)		Number of frosty days	Bright sunshine (hours)	Max. wind speed (mps)
		Max.	Min.			
Arak	30.7	65	28	75	2941.8	15
Ardebil	25.6	90	47	71	2357.3	25
Orumiyeh	41	82	38	112	2909.5	18
Esfahan	19.3	86	8	55	3912.7	18
Ahvaz	41.9	86	17	0	3047.4	12
Ilam	47.4	58	26	34	3070.8	16
Bojnurd	13.5	81	35	73	2684.9	17
Bandar Abbas	23.6	82	40	0	3049.7	19
Bushehr	39.8	87	37	0	3092.9	22
Birjand	17.9	80	6	62	3488.3	15
Tabriz	23.7	72	32	77	2881.4	20
Tehran	23.8	54	23	20	2974.8	24
Khorramabad	25.3	63	23	57	2919.6	18
Rasht	125.2	100	32	16	1668.8	30
Zahedan	16.8	44	15	36	3302.4	25
Zanjan	35.8	80	34	86	2826.9	20
Sari	57.6	95	59	7	2281.8	19
Semnan	20.8	62	27	32	3048.3	21
Sanandaj	32.6	74	25	83	2739.8	15
Shahr-e-Kord	30.8	78	16	130	3150.3	23
Shiraz	32.5	65	19	45	3004.9	13
Qazvin	18	79	30	64	2778.7	21
Qom	18.7	86	11	43	3126.2	27
Karaj.....	22.7	71	30	37	2693.3	20
Kerman	20.5	59	20	63	2431.4	24
Kermanshah	44.9	59	19	54	2697	22
Gorgan	78.8	94	53	25	2625	25
Mashhad	30.7	87	10	46	2940.8	14
Hamedan	16.8	71	28	98	3029.8	25
Yasuj	66.5	89	7	106	2975	19
Yazd	17.9	75	6	17	3381.6	24

Source: I. R. I., Meteorological Organization.

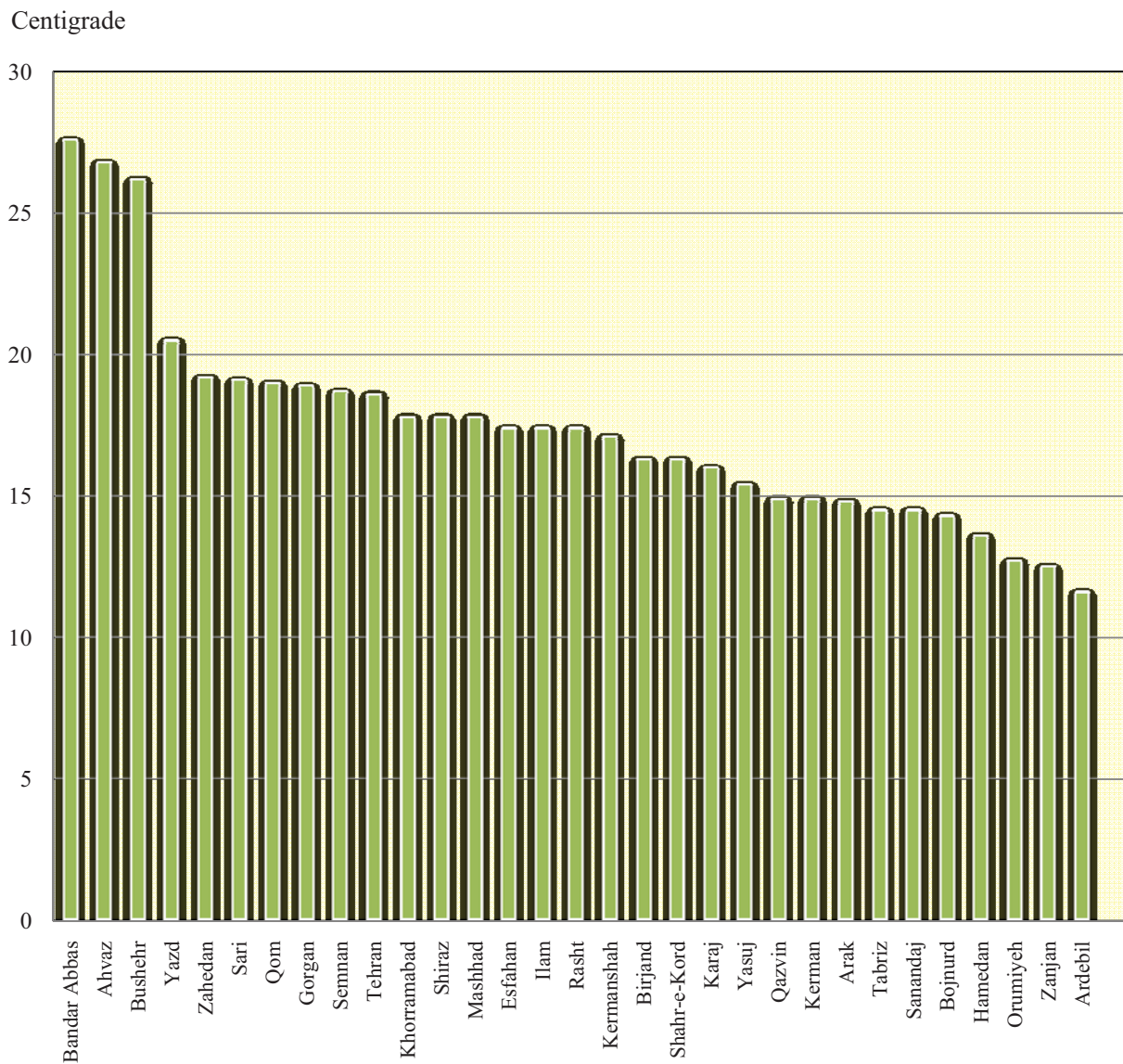
1. 1. ABSOLUTE MAXIMUM AND MINIMUM TEMPERATURES IN CAPITALS OF OSTANS, THE YEAR 1391

Centigrade



For data see Table 1.7.

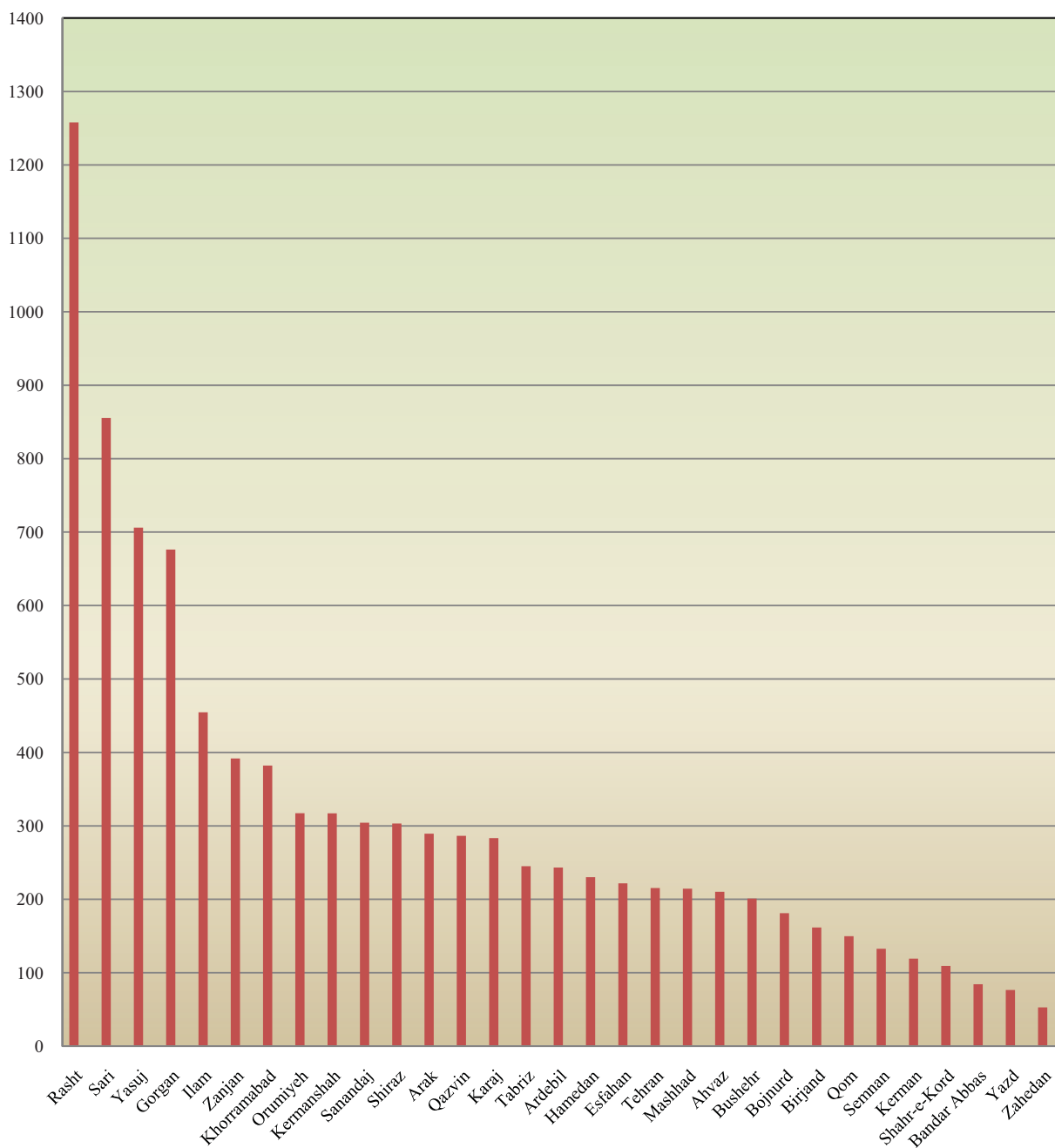
1. 2. AVERAGE ANNUAL TEMPERATURES IN CAPITALS OF OSTANS, THE YEAR 1391



For data see Table 1.7.

1. 3. ANNUAL RAINFALL IN CAPITALS OF OSTANS, THE YEAR 1391

Millimetre



For data see Table 1.7.

**1. 8. ABSOLUTE MAXIMUM TEMPERATURE IN CAPITALS OF OSTANS BY MONTH,
THE YEAR 1391** (°c)

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak	24. 8	30. 6	35. 2	40. 2	38	31. 9
Ardebil.....	26	23. 6	31	29. 2	32. 4	34. 4
Orumiyeh	23	27. 8	34	33. 6	36. 4	35. 2
Esfahan.....	26. 8	32	37. 4	42. 2	38	35. 8
Ahvaz	35. 6	44. 6	47. 6	51	50. 6	47. 2
Ilam.....	25. 8	32. 6	37. 4	40	40. 4	37. 4
Bojnurd	30	30. 2	35	39	35. 2	35. 8
Bandar Abbas	35. 2	42. 2	43. 7	46. 5	46. 7	42. 7
Bushehr	34. 2	40. 8	39	44. 6	45. 6	41. 6
Birjand	29	32. 4	35	40. 8	36. 3	35. 2
Tabriz	23. 2	28. 3	34. 4	36. 6	38. 8	36. 6
Tehran	30	31. 4	37	39. 2	39. 6	37. 6
Khorramabad	27. 4	24. 8	39. 6	41. 4	43. 2	41. 2
Rasht	37	30	34. 4	33	36. 8	33. 4
Zahedan	31. 1	37	38. 1	41. 6	38	38. 6
Zanjan	24. 6	27. 4	32. 4	35. 2	35. 4	34. 4
Sari.....	36. 2	32. 6	34. 8	33. 4	37. 2	35. 1
Semnan	31. 6	32	39. 6	42. 2	39. 6	34. 1
Sanandaj	25. 4	32. 3	37. 4	39. 4	41. 8	38. 8
Shahr-e-Kord	22. 6	28	32. 4	36. 6	34. 8	32. 6
Shiraz	26. 2	34	39. 2	41. 8	39. 2	39. 8
Qazvin	28. 2	30. 4	36. 9	39. 4	37. 4	36. 6
Qom	33	35	40. 8	42. 8	42. 2	40. 6
Karaj.....	27. 6	30. 2	36. 2	38. 4	38. 4	36. 8
Kerman	26. 6	33	35. 1	41	35. 8	33. 8
Kermanshah	26. 1	34. 6	38. 8	40. 6	41. 9	40. 2
Gorgan	32. 6	35. 6	40. 2	36. 2	38. 2	37. 8
Mashhad	30	31. 6	37. 4	40. 1	38. 5	37. 1
Hamedan	24	29. 5	34	39. 9	38	36. 2
Yasuj	23. 5	31. 6	35. 5	38. 5	37. 4	36
Yazd	30. 8	35. 3	41	45. 6	41. 2	37. 9

**8. ABSOLUTE MAXIMUM TEMPERATURE IN CAPITALS OF OSTANS BY MONTH,
THE YEAR 1391 (continued)**

(°C)

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak	32.2	23.6	13.4	12.6	17	24
Ardebil.....	30.4	22.4	18.4	11.2	16.2	23.8
Orumiyeh	30.4	20	11	8.8	14	21.6
Esfahan.....	33.4	25.2	15.2	16.6	20.6	25.2
Ahvaz	44.2	36.4	23.4	22	27.2	34.4
Ilam.....	33.2	26	18.8	15.4	19.4	25.8
Bojnurd	31.8	24.2	15.8	15.2	18	25.2
Bandar Abbas	41.3	36.6	29.3	29.9	25.6	32
Bushehr	37	34.4	26.6	27	25.4	29
Birjand	32.9	26.9	18.3	18.7	18.6	26.5
Tabriz	30	21.2	12.2	10.4	14.4	21.8
Tehran	33.4	26	14.6	15.2	17.6	24.8
Khorrarnabad	34.8	27.4	18.4	17.2	20.6	25.6
Rasht	30.8	27.8	26.6	22.6	25.6	29.4
Zahedan	34	29.7	20.6	21.9	23	28.9
Zanjan	29	22	15.4	11	15.4	22.4
Sari.....	35.6	30.6	27.8	25.8	27.4	30.2
Semnan	34	26	14.8	14.4	18.2	25.6
Sanandaj	32.8	24.4	16.6	13.8	18	25.4
Shahr-e-Kord	29.2	20.8	12.4	12.2	16.4	21.6
Shiraz	33.6	28	17.4	17.2	20.8	26
Qazvin	32	23.4	14.2	14.4	17.6	24.2
Qom	35.4	29.2	18.2	18	21.6	29.2
Karaj.....	33.2	23.8	14.4	14.2	16.4	23.2
Kerman	33	26.6	18.4	19.4	22.4	27.6
Kermanshah	34.6	24.8	15.6	15	19.2	25.4
Gorgan	38	31.6	25.6	21.6	24	28.6
Mashhad	32	27.1	18	18.6	19.8	27
Hamedan	29	21	14	12.7	16.5	21.2
Yasuj	31	24	15.2	15.8	19.2	23.4
Yazd	37.4	30.4	18.8	21.8	24.8	29

Source: I. R. I. Meteorological Organization.

1. 9. ABSOLUTE MINIMUM TEMPERATURE IN CAPITALS OF OSTANS BY MONTH, THE YEAR 1391 (°c)

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak.....	-6	3.8	11	13.4	17	12.2
Ardebil.....	-8.6	-3	7	9	6.8	4.4
Orumiyeh	-6	3	6.2	10	12.8	8.2
Esfahan.....	-5	9.2	14.8	14.6	17.2	14
Ahvaz	7.4	16	24.4	27.4	27.4	21.6
Ilam.....	0.2	6.2	11.4	15.6	18	15.8
Bojnurd	-5	5	10.4	11	12.4	7
Bandar Abbas	12.2	19.8	25.7	26.9	29	26
Bushehr	11	20	24.8	26.5	29	26.5
Birjand	-6.8	6.5	11.7	14.8	12	5.4
Tabriz	-3.6	5.4	9.6	15.2	17.8	13
Tehran	2	11	14.4	18.4	22	18.2
Khorramabad	-3.2	6	11	14.6	15.2	12
Rasht	-0.2	12.6	16.4	17	19.6	16
Zahedan ...	-4.9	8.8	15.3	17.6	15.8	8.8
Zanjan	-5.8	3	5.4	7	12.4	8
Sari	1.4	12	17.1	18.4	22.3	17.8
Semnan	-0.4	10.2	15.6	14.6	21	21.7
Sanandaj	-5.6	3	7.6	8.6	12.3	8.2
Shahr-e-Kord	-12.6	-0.4	2.4	7	8.2	5.4
Shiraz	-1.8	6.6	13	16.2	16.8	13.8
Qazvin ...	-3.6	5	9.8	11.4	15.8	11.2
Qom	-4	11.3	16	17.4	17.2	13.6
Karaj.....	-1.4	8	11.8	12.8	17.6	11.8
Kerman	-5.8	5.4	9.6	14	10.8	9.6
Kermanshah	-4.2	3.5	8.9	10	14.9	10.1
Gorgan	-0.4	9.8	16.4	19.2	21.4	15.4
Mashhad	-3.4	9.2	13.6	17.6	17	11
Hamedan ...	-10.5	2	5.9	7.8	12.2	7.2
Yasuj	-3.4	4.4	9.4	12.8	14.4	10.2
Yazd	-0.8	12.4	18.8	17.2	20	17.5

1. 9. ABSOLUTE MINIMUM TEMPERATURE IN CAPITALS OF OSTANS BY MONTH, THE YEAR 1391 (continued) (c)

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak.....	4.8	-1.2	-4.8	-11.6	-5.6	-4.4
Ardebil.....	-0.8	0.2	-15.6	-14.8	-5	-10
Orumiyeh	4.8	-0.4	-8	-11.4	-5.6	-10.6
Esfahan.....	7.2	1.8	-2.2	-9	-6.2	-2.2
Ahvaz	17	13	6.8	2.2	7.3	7.8
Ilam.....	10.4	3.6	-1.4	-11	-1.2	-2.8
Bojnurd	0.8	-1.2	-3.2	-15	-3.8	-7
Bandar Abbas	20.3	16	11.6	4.1	8.6	13.2
Bushehr	22.4	16.2	9.4	7	9.6	11.6
Birjand	2.4	-1.4	-3.4	-10	-5	-5.2
Tabriz	7	0.8	-7.4	-10.4	-8	-7.6
Tehran	12	6	0.4	-5.4	-1.2	-3.4
Khorramabad	6.2	1.8	-3.6	-6.6	-4.6	-3
Rasht	12.2	6.6	0.2	-2.4	-0.4	-0.2
Zahedan	6.3	1.2	-3.6	-10.2	-1.7	0
Zanjan	1	-2.8	-5.4	-15	-8.6	-10.2
Sari	13.2	7.2	2.4	-2	1.2	0
Semnan	10	4.8	-1.4	-7	-1	-3.4
Sanandaj	3.6	-0.4	-6	-11	-6.8	-6.4
Shahr-e-Kord	0.4	-3	-10.2	-17.4	-13.8	-12.4
Shiraz	9	1.8	-2.6	-6	-3.2	-1.4
Qazvin	5.4	1.2	-6	-11	-5	-8
Qom	7.4	2.8	-1.9	-8	-3.9	-1.6
Karaj.....	7.2	3	-4.4	-7.8	-3.4	-4.8
Kerman	3.6	0	-3.4	-10.4	-5.4	-4.8
Kermanshah	6.4	0.9	-5.6	-9.5	-5.9	-6
Gorgan	11.2	5	-0.6	-3.6	0	-1.6
Mashhad	1.4	1.6	-4.6	-17.2	-1.7	-8.8
Hamedan	1.5	-2.2	-8.1	-15.7	-9.6	-10.4
Yasuj	5.6	1	-4.4	-9	-4.8	-2.6
Yazd	10	6	0	-4.8	-0.5	1.4

Source: I. R. I. Meteorological Organization.

1. 10. MONTHLY AVERAGE TEMPERATURE IN CAPITALS OF OSTANS, THE YEAR 1391 (°c)

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak	10.9	17.1	22.7	26.3	27.1	23.8
Ardebil.....	9.4	14.1	17.8	18.4	20.1	17.1
Orumiyeh	9.9	15.8	20	22.7	24.6	20.9
Esfahan.....	14	20.4	25.7	28.9	27.5	25
Ahvaz	23.5	31	35.9	38	39.5	35.4
Ilam.....	12.7	19.6	24.9	27.8	29.7	26.1
Bojnurd	13.3	16.4	21.8	25.2	24.6	21.5
Bandar Abbas	25.5	30.2	33.4	34.7	35.4	33.4
Bushehr	22.8	30.2	30.9	33.1	35.6	33.2
Birjand	15.2	20.1	23.9	27.1	25.1	22
Tabriz	10.3	17.3	22.1	25.3	28.9	23.9
Tehran	15.8	21.9	27	29.6	30.5	27.5
Khorramabad	13.1	19	26.8	29.4	31.3	26.9
Rasht	15.1	21	24.6	24.8	27.8	23.4
Zahedan	19.3	23.5	26.9	29.3	27.3	24
Zanjan	9	14.7	18.9	22	24.3	21.2
Sari	15.5	22	25.7	26.6	29.4	25.9
Semnan	16.7	21.5	28.1	31.1	30.7	27.9
Sanandaj	10.8	17.2	22.7	26.3	28.4	24.9
Shahr-e-Kord	7.8	13.8	18.6	21.8	21.9	19.2
Shiraz	14.1	13	25.8	28.5	28.4	26.2
Qazvin	11.8	17.5	23	25.6	26.7	23.5
Qom	16.4	23.2	27.8	31.5	30.6	27
Karaj.....	13.4	18.7	24.1	26.3	27.8	24.4
Kerman	14.8	20.2	23.9	27.1	24.5	22.6
Kermanshah	11.8	18.4	24.9	28.1	27.2	25.9
Gorgan	15.4	21.7	26.7	27.7	29.7	26.8
Mashhad	16.2	18.6	25.2	28.5	27.6	23.1
Hamedan	9.4	16.4	22.1	25.4	26.8	23.1
Yasuj	10.9	17.4	22.5	25.4	26	23.4
Yazd	18.1	24.5	29.3	32.4	30.4	27.6

1. 10. MONTHLY AVERAGE TEMPERATURE IN CAPITALS OF OSTANS, THE YEAR 1391
(continued) (°C)

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak	18.1	11.2	4.4	1	6.5	8.6
Ardebil.....	14.6	10.8	4.6	1.8	6	6.5
Orumiyeh	16.1	9.9	3.1	-1.2	3.8	6.2
Esfahan.....	19.7	13.8	6.1	3.7	8.3	11.4
Ahvaz	30.6	24.3	16	13.1	14.2	19.9
Ilam.....	21.9	14.9	8.1	5	8.2	10.2
Bojnurd	16.1	11.3	5.5	0.8	6.2	7.5
Bandar Abbas	30.4	26.5	21.4	18	19.5	22.8
Bushehr	29.9	25.7	19	16.5	17.9	20
Birjand	17.7	13.1	7.3	4.1	8	11.4
Tabriz	18.7	11.7	4.6	-0.4	4.4	6.6
Tehran	22.3	15.4	7.9	4.2	9.6	11.6
Khorramabad	21.4	14.7	7.2	4.3	8.3	10.6
Rasht	21.6	17.1	11.1	7.7	10.1	10.6
Zahedan	19.6	16	9.7	6.6	11.6	16
Zanjan	15.7	9.8	3.9	-0.3	4.7	6
Sari	22.6	18.1	12.3	8.5	11.1	12
Semnan	22.2	15.5	7.7	2.7	8.7	11.8
Sanandaj	18.4	11.9	6.1	0.8	6.2	8.5
Shahr-e-Kord	13.9	8.7	2.3	0.3	3.4	5
Shiraz	20.9	15.1	8.3	6.7	9.5	12.1
Qazvin	18.7	12.1	5.3	1.4	7.2	8.5
Qom	20.8	15.7	8.2	4.1	9.9	12.7
Karaj.....	19.9	13.4	6.3	3	8	9.1
Kerman	18	13.6	7.4	5.4	9.2	11.8
Kermanshah	20.1	12.7	6.8	2.8	6.9	8.9
Gorgan	22.7	17.5	10.3	6.9	10.3	11.3
Mashhad	17.7	13.5	5.8	10.7	8.4	9.3
Hamedan	16.4	9.9	3.2	-0.7	4.9	6.8
Yasuj	18.6	12.1	4.7	4.2	7.1	9.5
Yazd	23.1	17.6	9.6	7.2	12.9	13.5

Source: I.R. I. Meteorological Organization.

1. 11. ANNUAL PRECIPITATION IN CAPITALS OF OSTANS**(mm)**

Capital of Ostan	1375	1380	1385	1387	1388	1389	1390	1391
Arak	303	260	283	191	322	262	199	289
Ardebil.....	347	234	237	189	296	237	259	282
Orumiyeh	263	228	372	266	300	342	334	317
Esfahan.....	67	94	220	85	179	98	150	222
Ahvaz	152	235	184	95	186	173	89	210
Ilam	578	598	555	261	477	473	361	455
Bojnurd	172	176	241	233	282	232	209	205
Bandar Abbas	167	85	277	51	186	99	58	84
Bushehr	217	488	224	86	156	145	124	201
Birjand	102	145	135	147	233	83	95	162
Tabriz	259	210	129	197	233	180	272	245
Tehran	156	192	227	139	238	213	316	215
Khorramabad	428	440	510	317	475	415	286	382
Rasht	1015	1262	1476	1058	1088	1127	1637	1442
Zahedan	73	14	55	58	99	99	47	53
Zanjan	249	232	308	152	325	233	366	392
Sari	000	591	684	715	955	547	919	855
Semnan	128	73	177	91	141	105	176	133
Sanandaj	413	310	449	229	414	311	373	306
Shahr-e-Kord	258	334	413	200	420	274	240	386
Shiraz	202	317	305	114	270	239	274	305
Qazvin	265	232	325	162	338	353	424	315
Qom	78	125	111	97	165	87	123	150
Karaj.....	290	351	302	152	285	295	351	290
Kerman	123	119	134	99	78	119	108	119
Kermanshah	396	357	430	292	415	342	415	317
Gorgan	477	468	522	422	649	360	724	676
Mashhad	170	153	223	165	277	156	254	282
Hamedan	213	225	283	221	396	301	313	230
Yasuj	474	1126	777	367	561	769	661	826
Yazd	29	60	44	53	45	36	22	77

Source: I.R. I. Meteorological Organization.

1. 12. AVERAGE ANNUAL HEIGHT OF PRECIPITATION IN OSTANS**(mm)**

Ostan	1380	1385	1387	1388	1389	1390	1391	Long term
Total country	195. 98	147. 68	113. 22	249. 68	201. 69	205. 92	226. 3	235
East Azarbajejan	206. 66	204. 80	114. 22	287. 85	253. 36	295. 60	308. 6	285. 3
West Azarbajejan	278. 78	289. 83	180. 83	374. 10	334. 72	407. 57	408. 3	375. 9
Ardebil	291. 21	195. 15	144. 53	365. 61	341. 60	378. 85	368. 1	333. 6
Esfahan	136. 10	127. 9	97. 26	195. 20	145. 77	144. 56	216. 3	180. 7
Alborz	⁽¹⁾ 000	⁽¹⁾ 000	⁽¹⁾ 000	⁽¹⁾ 000	⁽¹⁾ 000	⁽¹⁾ 000	332. 6	330. 5
Ilam	432. 08	245. 55	178. 50	386. 53	365. 15	262. 11	355. 7	437. 3
Bushehr	457. 87	174. 04	76. 11	280. 00	182. 08	124. 28	207. 6	278. 5
Tehran	⁽¹⁾ 235. 47	⁽¹⁾ 185. 01	⁽¹⁾ 130. 47	⁽¹⁾ 290. 00	⁽¹⁾ 283. 77	⁽¹⁾ 380. 99	324. 3	330. 1
Chaharmahal & Bakhtiyari...	670. 53	432. 25	331. 33	647. 53	540. 78	488. 99	687. 9	662. 4
South Khorasan	⁽²⁾ 000	36. 53	86. 94	146. 25	81. 29	99. 10	110. 6	126. 6
Khorasan-e-Razavi	⁽²⁾ 114. 95	86. 85	98. 52	232. 69	163. 17	198. 34	217. 6	205. 1
North Khorasan	⁽²⁾ 000	185. 51	150. 73	339. 32	273. 00	300. 66	312. 4	299. 3
Khuzestan	360. 70	195. 36	120. 45	293. 75	261. 39	179. 27	326. 7	325
Zanjan	237. 74	211. 37	129. 64	358. 87	323. 32	383. 55	370	317. 1
Semnan	110. 04	105. 22	80. 09	142. 47	117. 20	156. 36	174. 3	149
Sistan & Baluchestan	31. 95	48. 78	67. 24	137. 08	107. 18	74. 10	72	109. 5
Fars	305. 62	205. 79	92. 64	317. 05	260. 11	226. 74	235. 6	295. 1
Qazvin	330. 04	266. 95	179. 91	361. 22	378. 05	422. 24	335. 8	337. 4
Qom	107. 95	99. 01	85. 83	170. 40	115. 92	141. 74	177	175. 8
Kordestan	399. 62	309. 74	234. 30	456. 10	407. 02	472. 39	410. 3	467. 4
Kerman	93. 08	58. 79	45. 64	139. 67	112. 63	79. 30	103. 4	129. 4
Kermanshah	370. 12	285. 22	248. 49	469. 26	391. 59	432. 58	372. 6	452. 2
Kohgiluyeh & Boyerahmad ..	712. 05	286. 45	202. 26	553. 75	488. 65	426. 15	577. 6	535. 4
Golestan	382. 98	302. 73	237. 03	532. 67	379. 66	567. 95	652. 2	475. 9
Gilan	1057. 41	897. 20	666. 38	841. 07	916. 54	1231. 13	907. 5	961
Lorestan	405. 97	336. 20	239. 06	460. 64	414. 99	331. 13	418. 8	455. 9
Mazandaran	774. 84	570. 26	536. 59	751. 63	585. 17	909. 19	749. 4	702. 9
Markazi	193. 89	190. 95	140. 34	351. 18	252. 87	238. 27	294. 1	294. 6
Hormozgan	105. 33	93. 91	39. 15	197. 52	121. 08	73. 51	98. 6	157. 8
Hamedan	271. 51	248. 53	194. 88	401. 94	356. 54	350. 89	270. 2	355. 1
Yazd	76. 19	46. 52	51. 52	94. 40	57. 89	60. 31	102	82. 2

1. Statistics for Alborz is included with Tehran

2. Statistics for South Khorasan and North Khorasan are included with Khorasan-e-Razavi

Source: I.R. I. Meteorological Organization:

1. 13. MONTHLY PRECIPITATION IN CAPITALS OF OSTANS, THE YEAR 1391 (mm)

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak	116.7	5.7	0.4	3.1	0.3	0
Ardebil	34.6	38.4	46.5	29.2	6.1	2.7
Orumiyeh	31.9	15	18.8	9.2	1.8	8.4
Esfahan	34.8	13.8	2.6	0	0	0
Ahvaz	6	1.4	0	0	0	0
Ilam	81.4	7.3	0	0	0	0
Bojnurd	24.2	27.8	30.6	4.1	0	2.7
Bandar Abbas	4.4	0	0	0	0	0
Bushehr	9.6	0	0	0	0	0
Birjand	24.1	8.2	0.7	0.2	0	0
Tabriz	35.1	10.1	23.9	14.3	5.6	2.1
Tehran	49.2	11.6	3.5	7.2	0	0.2
Khorramabad	102.4	11.5	0	0.01	0	0.01
Rasht	96.4	5	77.4	131.5	39.8	184.4
Zahedan	14.1	9.7	0.1	1	0	0
Zanjan	94.3	55	17.7	33.4	5.4	6
Sari	13.6	12.3	58	25.1	3.5	110.3
Semnan	19.5	17.5	0.9	2.5	0	2.9
Sanandaj	53.4	25.6	1.8	0.01	3.7	0.6
Shahr-e-Kord	86.5	4.5	0.8	10	0	0
Shiraz	33.8	1.8	0	0	0	0
Qazvin	50	28.9	6.3	29.3	0.01	7.4
Qom	36.6	1.5	6.3	0.5	0	0
Karaj	66	6.8	3.3	25.1	0	0
Kerman	17.5	1	0	0	0	0
Kermanshah	45.7	17.9	0	0.01	0.01	0
Gorgan	10.5	19	68.3	111.3	0	40.7
Mashhad	18	52.7	8.8	1.6	0	0
Hamedan	71.7	7.4	1	12.5	0.2	0
Yasuj	120.8	7.4	0	0.01	0.01	2
Yazd	6	0.1	0	0	0	0

1. 13. MONTHLY PRECIPITATION IN CAPITALS OF OSTANS, THE YEAR 1391 (continued)**(mm)**

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak	1.6	63.7	23.4	32	13.8	28.6
Ardebil	8.3	25.6	26.7	11	28.5	24.1
Orumiyeh	12.6	74.4	56.8	11.8	55.4	21.2
Esfahan	9.9	25.9	61.6	20.5	4.6	28.2
Ahvaz	0.01	30.2	94.5	34.8	42.2	1.2
Ilam	2	71.8	83.4	87	112.2	9.6
Bojnurd	1	39.7	17.4	12.3	20.6	24.9
Bandar Abbas	0	25	43.9	0.8	7	3.3
Bushehr	4.9	65.8	78.7	17.7	18.7	5.5
Birjand	0	10.8	43.7	25.9	27.5	20.5
Tabriz	5.2	15.3	37.4	12.3	60.5	23.3
Tehran	1	50.8	28.7	10.6	27.8	24.7
Khorramabad	2.6	66.2	52.8	50.1	68.4	28.2
Rasht	250.5	166.4	158.7	133.4	74.7	124
Zahedan	0.2	0.1	17.9	6.3	2.4	1.1
Zanjan	5.7	58.2	17.4	18.5	50.3	29.8
Sari	109.9	121.3	137.5	117.8	50	96
Semnan	0	9	31.1	1.6	37.2	10.5
Sanandaj	0.7	107.4	33.5	15.5	46.2	17.7
Shahr-e-Kord	6.8	54.8	91.8	47.8	33.2	53.8
Shiraz	5	33.2	116.4	51.2	38.7	24.9
Qazvin	0.2	63.6	28.9	12	46	42.7
Qom	0	34.5	22	23.4	12.4	12.6
Karaj.....	3.4	71.3	51.9	9.4	37.2	15.7
Kerman	7.2	10.3	35	25.6	7.5	15
Kermanshah	2	115.3	59.1	56	61	19.2
Gorgan	85.9	38.2	78.5	114.3	60.7	48.8
Mashhad	1.3	15.3	56.2	35	25.6	67.1
Hamedan	0.7	60.5	15.7	24.2	9.5	26.8
Yasuj	3.8	119.6	199.9	175.4	71.1	125.7
Yazd	0.2	9.7	29.8	6.6	0.2	24

Source: I. R. I. Meteorological Organization.

AVERAGE PRECIPITATION HEIGHT RATIO IN OSTANS IN THE YEAR 1391 TO LONG_TERM AVERAGE



Average precipitation height ratio	
	6.2 - 0.87
	0.88 - 1.13
	1.14 - 1.39

For data See Table 1.12

1. 14. HOURS OF BRIGHT SUNSHINE IN CAPITALS OF OSTANS BY MONTH, THE YEAR 1391 (hour)

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak	232. 2	289	328. 9	320. 7	344. 2	294
Ardebil.....	199. 4	230. 9	313. 7	266. 5	333	213. 9
Orumiyeh	218	276. 2	350. 4	340. 4	342. 7	319. 3
Esfahan.....	254. 8	286. 6	335. 9	357. 9	373	343. 9
Ahvaz	241. 4	255. 1	300. 8	344. 3	341. 1	332. 3
Ilam.....	247. 1	288. 7	317. 7	338. 6	331. 4	339. 4
Bojnurd	254. 5	244	313. 6	335. 9	377. 6	338. 7
Bandar Abbas	201. 1	294. 7	294	266. 6	283. 2	281. 4
Bushehr	196. 3	241. 5	303. 1	324. 4	337. 3	305. 2
Birjand	236. 8	313. 4	361. 7	375. 4	383. 4	355. 7
Tabriz	205. 9	265. 9	319. 1	332. 1	328. 7	332. 5
Tehran	237	293. 3	326	328. 2	346. 7	342. 6
Khorrabad	247. 9	184. 4	307. 1	335. 7	334. 9	334. 1
Rasht	167. 5	144	267. 7	181. 2	213. 7	123. 2
Zahedan	205. 4	276. 7	323. 7	317. 7	343. 8	328. 8
Zanjan	217. 2	273. 8	335. 1	326. 6	337. 9	318. 3
Sari	179. 8	241. 2	280	159. 9	310. 3	172. 3
Semnan	257. 8	246. 3	323. 5	312. 8	355. 8	315. 8
Sanandaj	229. 4	314	337. 6	365. 5	347. 3	336. 5
Shahr-e-Kord	246	274. 9	332. 7	347. 5	342. 2	315. 4
Shiraz	223. 5	290	335. 3	345. 3	352. 6	307. 1
Qazvin	231. 2	286. 9	350. 1	345. 8	360. 6	333. 4
Qom	249. 1	297. 1	349. 4	343. 1	362. 1	333. 1
Karaj.....	234. 8	289	339	325	347	319
Kerman	207	271. 5	325. 6	332. 5	373. 9	337. 1
Kermanshah	212. 5	258. 5	300. 8	317	307. 5	317. 8
Gorgan	216	252. 8	280. 3	263	340. 1	247. 4
Mashhad	252. 5	242. 5	342. 5	364. 3	390. 3	353
Hamedan	245	309. 4	326. 6	340. 1	331. 8	320. 2
Yasuj	229. 1	279. 9	335	358	350. 8	319. 7
Yazd	243. 3	288. 3	357. 8	357. 7	385. 7	345. 2

1. 14. HOURS OF BRIGHT SUNSHINE IN CAPITALS OF OSTANS BY MONTH, THE YEAR 1390 (continued) (hour)

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak	265.1	173.9	127.9	179	200.8	186.1
Ardebil.....	244	168.4	120.1	173	170.5	154.8
Orumiyeh	268	157	87.2	192	176	182.3
Esfahan.....	289.8	231.2	170.3	214.7	241.2	233.8
Ahvaz	278	215.1	150.8	185.3	201.1	202.1
Ilam.....	260	187.6	173.4	191.9	180.8	214.2
Bojnurd	278.3	170.8	135.3	173.7	159.5	157.5
Bandar Abbas	272.3	255.2	213.3	234	207.1	246.8
Bushehr	284.6	249.5	183	216.8	212.6	238.6
Birjand	302.2	244	209	245	231.3	230.4
Tabriz	276.5	174.6	105.3	195.9	164.8	180.1
Tehran	230.4	199.4	137.4	175.7	200	158.1
Khorramabad	268.9	178	163.6	183.1	182.1	199.8
Rasht	176.1	112.1	83	146.4	105.9	71.2
Zahedan	275.4	263.7	223.4	235.3	251.5	257
Zanjan	268.5	163.6	100.6	165.1	166.1	154.1
Sari	219	167.2	133.9	174.4	115.4	128.4
Semnan	285.5	212.7	133.8	196.9	225.8	181.6
Sanandaj	276	178.5	132.9	184.4	176.9	198.4
Shahr-e-Kord	270	219	131.4	209.2	234	228
Shiraz	288.8	242.6	195.6	215.6	240.7	257.8
Qazvin	286.4	190.1	132.1	188.5	181.2	179.3
Qom	281	196.5	132.6	189.6	210.5	182.1
Karaj.....	260	186	139	174	198	171.5
Kerman	272	262.3	203.5	222.3	238.7	240.9
Kermanshah	249.9	177.1	143.8	184.9	196.2	174.8
Gorgan	253.8	180.7	145.4	179.4	133.9	132.2
Mashhad	289.1	192	142.4	178.7	193.5	146
Hamedan	283	181.2	123.2	171.3	197	201
Yasuj	292.2	223.3	140.3	196.9	227.7	245.4
Yazd	287.3	242.3	196.2	224.7	244.2	208.9

Source: I. R. I. Meteorological Organization.

1. 15. MAXIMUM WIND SPEED IN CAPITALS OF OSTANS BY MONTH, THE YEAR 1391
(mps)

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak	12	10	15	10	8	13
Ardebil.....	24	17	16	16	16	14
Orumiyeh	15	13	15	13	18	12
Esfahan.....	17	10	15	13	8	8
Ahvaz	9	12	12	11	10	10
Ilam.....	12	15	12	13	16	11
Bojnurd	21	15	12	14	9	12
Bandar Abbas	13	10	11	9	9	9
Bushehr	12	12	14	13	10	12
Birjand	13	15	13	14	12	13
Tabriz	18	14	15	18	16	20
Tehran	20	22	15	15	12	10
Khorramabad	10	10	13	10	9	11
Rasht	18	17	7	10	11	8
Zahedan	24	18	22	19	17	14
Zanjan	16	11	14	15	10	13
Sari	13	8	6	7	6	7
Semnan	10	21	13	12	10	10
Sanandaj	10	11	11	15	10	10
Shahr-e-Kord	14	13	12	9	7	11
Shiraz	13	11	11	10	8	7
Qazvin	11	9	12	12	16	11
Qom	27	22	19	18	12	14
Karaj.....	20	22	18	13	12	17
Kerman	20	2	24	13	11	12
Kermanshah	11	3	22	15	12	11
Gorgan	17	13	20	15	10	10
Mashhad	12	14	12	12	12	12
Hamedan	25	21	21	21	20	21
Yasuj	10	13	19	7	11	17
Yazd	19	24	18	15	15	11

**1. 15. MAXIMUM WIND SPEED IN CAPITALS OF OSTANS BY MONTH, THE YEAR 1391
(continued) (mps)**

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak	9	9	6	9	9	12
Ardebil.....	24	16	16	20	20	25
Orumiyeh	11	7	9	10	9	18
Esfahan.....	10	11	8	10	18	14
Ahvaz	10	10	10	12	12	12
Ilam.....	10	9	9	11	10	14
Bojnurd	16	7	13	15	17	11
Bandar Abbas	10	12	11	19	10	13
Bushehr	22	22	22	15	18	18
Birjand	9	10	12	11	14	15
Tabriz	15	13	10	17	16	16
Tehran	24	14	10	13	14	15
Khorrarnabad	10	18	10	9	9	11
Rasht	30	10	15	14	15	3
Zahedan	14	16	25	24	23	25
Zanjan	11	10	8	13	10	20
Sari	8	10	5	6	19	15
Semnan	10	8	4	7	7	13
Sanandaj	10	10	10	12	14	14
Shahr-e-Kord	11	10	23	15	7	17
Shiraz	8	8	9	10	9	13
Qazvin	10	14	9	14	15	21
Qom	12	19	16	17	20	20
Karaj.....	15	7	9	10	12	15
Kerman	19	14	15	13	16	21
Kermanshah	16	13	5	12	12	11
Gorgan	25	15	12	15	24	12
Mashhad	12	10	7	11	11	11
Hamedan	14	10	12	10	19	25
Yasuj	8	10	8	9	11	10
Yazd	15	12	12	17	24	18

Source: I. R. I. Meteorological Organization.

1. 16. AREA AND OVERLAND FLOW COEFFICIENT OF MAIN BASINS

Main basin	Area (1000 km2)	Coefficient of overland flow, 43-year average (1347-1390)(%)
Total country	1622.6	22.3
Caspian Sea	174.6	23.1
Persian Gulf and Oman Sea	424.5	31.6
Lake Orumiyeh	51.8	30.2
Central Plateau	824.4	10.1
Eastern Border	103.2	14.4
Qareh Qum	44.2	31.7

Source: Ministry of Energy.

1. 17. VOLUME OF PRECIPITATION IN THE MAIN BASINS (bln m3)

Aquatic year	Total country	Caspian Sea	Persian Gulf & Oman Sea	Lake Orumiyeh	Central Plateau	Eastern Border	Qareh Qum
Average 43-year (from the years 1347-48 through 1389-90).....	403.261	73.554	156.45	17.651	135.34	10.868	9.703
1374-75.....	511.800	68.410	212.650	16.000	189.200	19.490	6.040
1379-80.....	229.550	60.756	110.450	12.031	105.931	3.923	6.459
1384-85.....	351.635	66.164	147.105	17.102	109.583	4.731	6.950
1386-87.....	227.973	52.985	80.709	10.048	71.886	7.091	5.255
1387-88.....	352.384	75.312	107.879	15.514	128.816	13.664	11.200
1388-89.....	390.763	78.210	151.606	20.055	121.485	10.37	9.036
1389-90.....	328.184	66.913	120.200	15.405	110.723	8.331	6.613
1390-91.....	337.197	90.121	95.865	15.393	116.623	8.226	10.96

Source: Ministry of Energy.

1. 18. ESTIMATED VOLUME OF OVERLAND FLOWS OF THE MAIN BASINS (bln m3)

Aquatic year	Total country	Caspian Sea	Persian Gulf & Oman Sea	Lake Orumiyeh	Central Plateau	Eastern Border & Qareh Qum
Average 43-year (from the years 1347-48 through 1389-90).....	89.952	17.000	49.388	5.331	13.593	4.64
1374-75.....	109.560	19.360	59.890	4.770	22.200	3.340
1379-80.....	37.640	6.540	23.560	1.270	4.520	1.750
1384-85.....	90.317	11.148	62.297	3.701	11.458	1.713
1386-87.....	41.595	7.172	24.695	1.680	6.291	1.757
1387-88.....	37.605	7.756	18.832	2.053	7.244	1.719
1388-89.....	52.067	10.409	27.520	3.139	9.294	1.707
1389-90.....	44.187	7.904	23.290	2.947	8.718	1.327
1390-91.....	50.891	14.188	20.04	4.184	10.731	1.749

Source: Ministry of Energy.

