

Babarmahal, Kathmandu

31st July 2023

### Preliminary Precipitation and Temperature Summary June, 2023

#### **Highlights**

Country remained drier and warmer during June 2023. A prolonged heat wave affected the lives in the southern plains and valleys in the first half of the month.

#### **Synoptic Sequences**

Country was dominated by western disturbances activities during first two weeks of June. Monsoon entered into eastern Nepal on 14<sup>th</sup> of June, a day later than the normal onset date (13<sup>th</sup> June). It took 9 days (23<sup>rd</sup> June) to cover the whole country. Low pressure area developed near Bihar of India, western disturbance and the moisture flow from the Bay of Bengal contributed precipitation in the country during second week of June. Monsoon system was very active in the fourth week and contributed precipitation throughout the country. Further, the weather over the country was influenced by the low-pressure systems developed over Uttar-Pradesh of India and Bay of Bengal during the end of June.

#### **Precipitation**

Large parts of the county recorded below normal precipitation during June. However, central parts of Koshi, Bagmati and Lumbini provinces, some isolated parts of Gandaki, Karnali and Sudurpaschim provinces recorded normal to above normal precipitation (Figure 1). As usual, Kaski and Lamjung districts received the precipitation more than 500mm while Mustang and Dolpa received less than 50mm.

Khudi Bazar of Lamjung district recorded the highest 24-hours precipitation of 219.6.0 mm on 15<sup>th</sup> June 2023. The highest monthly total precipitation of 867.5 mm was also recorded at Khudi Bazar of Lamjung district while the lowest monthly total precipitation of 16.4 mm was recorded at Dunai of Dolpa district. Similarly, the highest (190.8%) and the lowest (9.6%) percentage of monthly normal precipitation were recorded at Phidim of Panchthar district and Jaleshwor of Mahottari district respectively (Annex 1). Based on the average of 96 stations shown in figure 1, Nepal received 83.3% of the normal precipitation of the month. However, based on the average of 20 major stations shown in figure 1, Nepal received 87.1% of monthly normal precipitation. In general, 90 to 110% of normal precipitation is considered as the near normal precipitation for the month. Diktel station of Khotang district broke the June's highest record as well as ever-recorded highest daily precipitation record in this June.



#### **Government of Nepal**

### Ministry of Energy, Water Resource and Irrigation Department of Hydrology and Meteorology

#### **Climate Division (Climate Analysis Section)**

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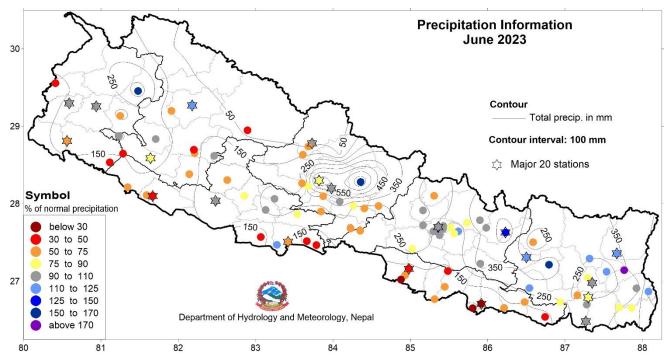


Figure 1: Precipitation in June 2023. Contour lines indicate the total precipitation in mm and coloured circles indicate the percentage of monthly normal precipitation at the meteorological stations.

Figures 2 and 3, respectively, show the temporal distribution of monthly and monsoon seasonal cumulative average of daily precipitation at 20 major stations located as shown in figure 1. The timeseries of precipitation shows that precipitation was below normal over the month.

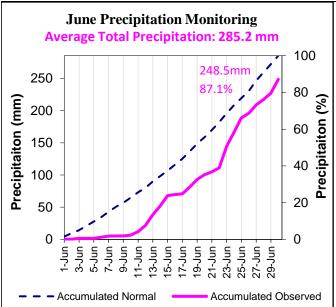


Figure 2: In the above graph, blue dotted line indicates the cumulative average of daily normal precipitation at 20 stations throughout June 2023 and pink solid line indicates the cumulative average of daily observed precipitation.

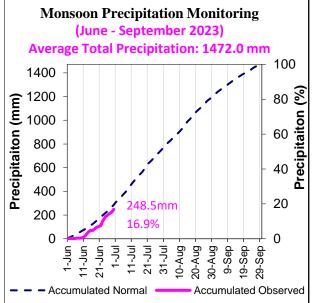


Figure 3: In the above graph, blue dotted line indicates the cumulate average of daily normal precipitation of 20 stations during monsoon season and pink solid line indicates the cumulative average of daily observed precipitation.



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#### **Maximum Temperature**

Most parts of the country recorded above normal maximum temperature during June (Figure 4). However, some isolated parts of Koshi, Gandaki, Lumbini and Karnali province recorded near-normal maximum temperature. As usual, northern parts of the country recorded less than 20°C and southern plains recorded above 35°C. Hot days and heat wave gripped the large parts of the country during the first half of June.

Compared to other stations, Dumkauli station of Nawalparasi-East district recorded both the highest monthly maximum temperature of 40.7°C and highest anomaly of 5.6°C. Similarly, Humde station of Manang district recorded the lowest monthly maximum temperature of 19.2°C and Dailekh station of Dailekh district recorded the lowest departure of -0.1°C (Annex 1). The highest daily maximum temperature of 44.8°C was recorded at Dumkauli station of Nawalparasi-East district on 9<sup>th</sup> June while the lowest daily maximum temperature of 15.5°C was recorded at Rara of Mugu district on 6<sup>th</sup> June. Some of the stations broke the June's highest record and some of the stations broke both June's and ever-recorded highest maximum temperature.

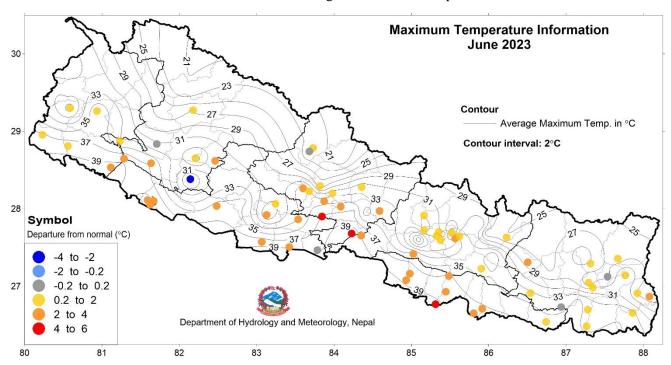


Figure 4: Maximum Temperature in June 2023. Contour lines indicate the average maximum temperature in Degree Celsius and coloured circles indicate the departure from normal maximum temperature at the meteorological stations.

#### **Minimum Temperature**

Most parts of Lumbini and Madhesh provinces, large parts of Koshi, western parts of Bagamati province and southern parts of Gandaki and Karnali provinces recorded above normal minimum temperature while large parts of Sudurpaschim province, central and northern parts of Karnali and Gandaki provinces and some isolated areas of Bagamati and Koshi provinces recorded near-normal to below normal minimum temperature during this June (Figure 5). As usual, there was sharp decrease in temperature from southern to northern parts of the country. Southern parts recorded monthly minimum temperature more than 25°C and northern parts recorded less than 10°C.



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Compared to other stations, Birganj station of Parsa district and Humde station of Manang district recorded the highest and lowest monthly minimum temperature of 27.6°C and 8.0°C respectively. Similarly, the highest monthly anomaly of 2.4°C was recorded at Tansen station of Palpa district and the lowest anomaly of -4.6°C was recorded at Chaurjharitar station of Rukum-West district (Annex 1). The highest daily minimum temperature of 31.5°C was recorded at Gulariya station of Bardiya district on 15<sup>th</sup> June while the lowest daily minimum temperature of 1.0°C was recorded at Humde station of Manang district on 3<sup>rd</sup> June.

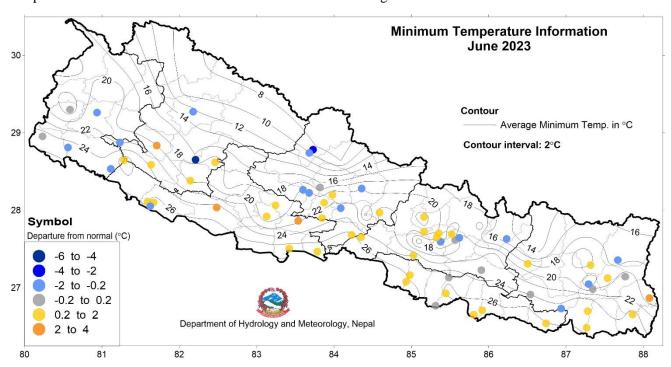


Figure 5: Minimum Temperature in June 2023. Contour lines indicate the average minimum temperature in Degree Celsius and coloured circles indicate the departure from normal minimum temperature at the meteorological stations.

#### **Extreme Weather**

#### 1. Hot days and Heat wave

Sudden increase in maximum temperature by the end of May led to mild to severe heat wave conditions over large parts of the country and it continued until the second week of June. The heat wave was persistent over central and western parts of the country until third week of June, before the onset of monsoon over the region (Figure 6). The temperature was exceeding 42°C for a few days at some places in the southern parts specially Kapilbastu, Rupandehi, Nawalparasi-West, Chitwan, Parsa, Bara, Sarlahi, Dhanusha, Mahottari and Siraha districts (Figure 7, 8).



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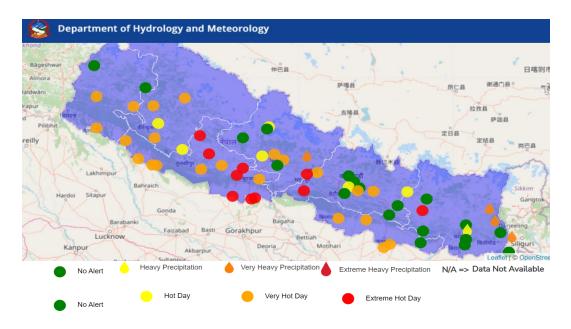


Figure 6: Observed hot days and heat wave alert on 17<sup>th</sup> June 2023.

Parameter	Alert	Threshold	Observations											
rarameter	Alert	TitleStiold	2023-06-12	2023-06-13	2023-06-14	2023-06-15	2023-06-16	2023-06-17	2023-06-18					
24 hr Precipitation (mm)	No Alert	Heavy = 53.8, Very Heavy = 77.86, Extreme = 130.902	0	0	0	0	0	0	0					
48 hr Precipitation (mm)	No Alert	Heavy = 72.78, Very Heavy = 102.57, Extreme = 177.108	0	0	0	0	0	0	0					
72 hr Precipiitation (mm)	No Alert	Heavy = 90.2, Very Heavy = 125.95, Extreme = 219.09	0	0	0	0	0	0	0					
Maximum Temp (deg C)	Extreme Hot Day Severe Heat Wave	Hot = 39.4, Very Hot = 40.5, Extreme Hot = 42.2	40.3	40.7	43.7	43.5	42.5	44.6	43.2					

Figure 7: Observed maximum temperature at Taulihawa station of Kapilbastu district.

Parameter	Alert	Threshold				Observations					
raiametei	Alert	Titleshold	2023-06-12	2023-06-13	2023-06-14	2023-06-15	2023-06-16	2023-06-17	2023-06-18		
24 hr Precipiitation (mm)	No Alert	Heavy = 42, Very Heavy = 56, Extreme = 83.955	0	0	0	0	0	0	2		
48 hr Precipiltation (mm)	No Alert	Heavy = 66, Very Heavy = 85.2, Extreme = 120.7	0	0	0	0	0	0	2.00		
72 hr Precipiitation (mm)	No Alert	Heavy = 89.2, Very Heavy = 109.135, Extreme = 153.501	0	0	0	0	0	0	2.00		
Maximum Temp (deg C)	Extreme Hot Day Severe Heat Wave	Hot = 31.4, Very Hot = 32.08, Extreme Hot = 33.5	34.1	33.5	31.5	32.6	32.7	34.3	34.1		

Figure 8: Observed maximum temperature at Musikot station of Rukum-West district.



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#### 2. Drought

Southern parts of the country faced moderate and severe drought condition in June. Janakpur, Birgunj and Jaleshore stations of Madhesh province recorded below normal precipitation by 70% indicating extreme drought over the region (Annex 1). Similarly, some isolated areas of Madhesh, Lumbini, Karnali and Sudurpaschim province faced severe drought condition and large areas of Madhesh and Gandaki provinces and some isolated parts of remaining provinces faced moderate drought condition in this June. However, wet condition has been observed over large parts of Koshi province.

Drought has been categorized based on the observed precipitation compared to normal. A drought is defined as moderate, severe and extreme as given in the table below.

S.N.	Percentage of normal precipitation (%)	Drought category
1	50 - 75	Moderate drought
2	30 - 50	Severe drought
3	< 30	Extreme drought

#### 3. Historical record break

In this June, several stations broke the previous record of June's extremes and ever-recorded extremes of temperature and precipitation (Table 1-4).

Table 1: List of stations breaking ever-recorded highest daily maximum temperature in June 2023.

S.N.	Station Name	District	Record break maximum temperature (°C)/Date	Previous highest maximum temperature (°C)/Date
1	Bandipur	Tanahun	35.7/2023-06-08	35.5/2018-06-12
2	Chautara	Sindhupalchok	35.6/2023-06-23	34.8/2011-04-26
3	Dharan Bazar	Sunsari	39.3/2023-06-07	38.8/2013-04-12
4	Dumkauli	Nawalparasi-East	44.8/2023-06-09	43.7/1979-06-05
5	Gorkha (Birenchowk)	Gorkha	39.0/2023-06-08	38.0/2014-05-08
6	Janakpur Airport	Dhanusha	42.5/2023-06-09	42.2/1989-05-07
7	Kanyam Tea Estate	Ilam	30.0/2023-06-03	29.0/1973-07-10
8	Okhaldhunga	Okhaldhunga	32.5/2023-06-09	30.9/1999-04-28
9	Rampur	Chitwan	43.5/2023-06-08	43.2/1989-05-06
10	Simara Airport	Bara	42.6/2023-06-08	42.4/1979-06-02
11	Siraha	Siraha	42.5/2023-06-08	41.5/2012-05-15

Table 2: List of stations breaking ever-recorded highest daily precipitation in June 2023.

S.N.	Station Name	District	Record break daily precipitation (mm)/Date	Previous highest precipitation(mm)/Date
1	Diktel	Khotang	205.4/2023-06-12	158.6/1993-07-21



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Table 3: List of stations breaking the June's highest daily maximum temperature in June 2023.

S.N.	Station Name	District	Record break maximum temperature (°C)/Date	Previous highest maximum temperature (°C)/Date
1	Bandipur	Tanahun	35.7/2023-06-08	35.5/2018-06-12
2	Biratnagar Airport	Morong	41.5/2023-06-08	39.5/2012-06-16
3	Chapakot	Syangja	40.6/2023-06-09	40.4/1979-06-02
4	Chatara	Sunsari	39.7/2023-06-07	38.5/2018-06-10
5	Chautara	Sindhupalchok	35.6/2023-06-23	34.4/2019-06-17
6	Dharan Bazar	Sunsari	39.3/2023-06-07	37.9/2018-06-10
7	Diktel	Khotang	30.0/2023-06-08	29.4/2019-06-15
8	Dumkauli	Nawalparasi-East	44.8/2023-06-09	43.7/1979-06-05
9	Gaida (Kankai)	Jhapa	39.0/2023-06-08	38.5/2019-06-14
10	Gaur	Rautahat	43.4/2023-06-08	41.4/1992-06-03
11	Gorkha (Birenchowk)	Gorkha	39.0/2023-06-08	37.8/2015-06-09
12	Hetauda N.F.I.	Makwanpur	40.5/2023-06-08	40.0/1979-06-02
13	Jalesor	Mahottari	42.5/2023-06-08	41.0/1998-06-11
14	Janakpur Airport	Dhanusha	42.5/2023-06-09	42.0/1972-06-11
15	Kanyam Tea Estate	Ilam	30.0/2023-06-03	28.2/1992-06-06
16	Karmaiya	Sarlahi	42.2/2023-06-08	42.0/2005-06-01
17	Lahan	Siraha	41.5/2023-06-08	39.1/2009-06-24
18	Okhaldhunga	Okhaldhunga	32.5/2023-06-09	30.7/1998-06-09
19	Pakhribas	Dhankuta	31.5/2023-06-07	28.5/1992-06-06
20	Parasi	Nawalparasi-West	43.0/2023-06-17	42.4/2015-06-05
21	Phidim	Panchther	36.0/2023-06-06	34.8/2015-06-07
22	Pokhara Airport	Kaski	36.0/2023-06-09	35.3/1979-06-07
23	Rajbiraj	Saptari	42.2/2023-06-08	41.0/2005-06-01
24	Rampur	Chitwan	43.5/2023-06-08	41.8/1986-06-09
25	Salleri	Solukhumbu	29.6/2023-06-08	29.0/2008-06-25
26	Simara Airport	Bara	42.6/2023-06-08	42.4/1979-06-02
27	Siraha	Siraha	42.5/2023-06-08	41.5/2015-06-06
28	Syangja	Syangja	38.1/2023-06-09	38.0/1979-06-01
29	Tarahara	Sunsari	40.6/2023-06-07	38.0/2018-06-10

Table 4: List of stations breaking June's lowest daily minimum temperature in June 2023.

S.N.	Station Name	District	Record break minimum temperature (°C)/Date	Previous lowest minimum temperature (°C)/Date
1	Charikot	Dolakha	10.2/2023-06-14	11.6/2014-06-09
2	Dipayal	Doti	15.0/2023-06-03	16.0/1988-06-01
3	Mangalsen	Achham	14.6/2023-06-03	15.5/2018-06-27



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#### Annex 1: Monthly precipitation and temperature data of June 2023

						Prec	ipitati	ion					Te	mpera	ature		
						No.	of Ra	iny D	ays	ıte		Maxin	num		Minim	num	C
Station	Latitude	Longitude	Elevation	Total (mm)	% of Normal	≥1.0mm	≥10.0mm	>25.0mm	>50.0mm	24hr Highest precipitaiton (mm)/Date	Average (°C)	Departure form normal (°C)	Highest temperature / Date	Average (°C)	Departure form normal (°C)	Lowest temperature / Date	No. of days with maximum temp. > 30°C
Baglung	28.2636	83.6003	964	213.3	59.1	17.0	7.0	2.0	1.0	60.5/29	34.4	2.6	37.5/9	20.3	-0.5	16.5/3	29
Bahrabise	27.7887	85.9000	884	457.9	98.9	22.0	14.0	7.0	2.0	90.2/13	33.1	-	36.8/8	21.1	-	17.7/7	26
Baitadi (Gothalapani)	29.5574	80.4132	1352	103.5	48.3	9.0	3.0	1.0	0.0	25.6/22	31.4	-	34.5/22	18.4	-	15.5/6	24
Bajura (Martadi)	29.4570	81.4804	1598	415.8	164.0	22.0	14.0	5.0	3.0	55.9/25	29.3	-	31.5/9	18.1	-	13.8/1	13
Bandipur	27.9418	84.4064	991	204.7	65.2	12.0	6.0	4.0	1.0	54.3/14	32.0	-	35.7/8	17.4	-	16/3	26
Bhairahawa Airport	27.5068	83.4204	108	145.3	57.1	6.0	3.0	2.0	2.0	70.4/23	38.9	3.4	43.7/17	27.0	1.1	22.9/24	29
Bhaktapur	27.6767	85.4240	1315	243.7	108.6	16.0	6.0	2.0	1.0	91/14	32.4	-	35.5/8	19.4	-	15.5/3	29
Bijuwar Tar	28.1035	82.8520	835	176.4	87.2	12.0	8.0	2.0	0.0	37/30	35.4	-	38.3/17	21.9	-	17.5/7	29
Biratnagar Airport	26.4840	87.2670	72	307.7	100.5	10.0	9.0	6.0	1.0	85.7/23	34.6	1.5	41.5/8	25.7	0.4	21/15	27
Birganj	27.0232	84.8782	67	55.9	22.2	6.0	3.0	0.0	0.0	21/21	39.5	-	43.5/16	27.6	-	24.5/3	30
Chainpur (East)	27.2921	87.3170	1277	254.8	113.0	21.0	9.0	4.0	0.0	48.4/13	28.8	0.4	31.2/8	19.9	1.7	16.4/6	13
Chainpur (Bajhang)	29.5459	81.2011	1405	268.3	-	12.0	5.0	4.0	1.0	102/26	30.6	-	33.6/21	20.9	-	19.4/26	22
Changu Narayan	27.7161	85.4268	1502	279.0	100.5	14.0	8.0	3.0	1.0	82.5/14	29.8	-	32.2/8	19.0	-	17.4/4	15
Chapakot	27.8999	83.8459	617	203.1	60.2	12.0	4.0	2.0	2.0	85.5/30	37.1	4.1	40.6/9	23.1	1.0	19.5/27	29
Charikot	27.6902	85.9802	2132	351.4	105.2	18.0	13.0	4.0	1.0	56/14	25.6	-	26.9/19	15.2	-	10.2/14	0
Chatara	26.8204	87.1592	105	236.2	68.9	16.0	8.0	4.0	0.0	45.7/30	35.6	-	39.7/7	25.4	1	23.3/30	30
Chaurjhari Tar	28.6540	82.2103	863	96.2	58.2	6.0	2.0	2.0	0.0	46/23	36.7	1.6	39/10	17.4	-4.6	12.6/7	30
Chautara	27.7538	85.7321	1552	296.8	82.1	13.0	10.0	6.0	0.0	43.2/29	31.5	-	35.6/23	18.3	-	15.7/6	21
Chisapani (Karnali)	28.6472	81.2854	201	153.4	49.4	10.0	4.0	2.0	0.0	49.5/21	38.7	3.7	41.6/17	27.4	1.6	24.5/21	30
Dadeldhura	29.3014	80.5878	1879	168.7	92.1	14.0	5.0	2.0	0.0	42/13	27.8	1.4	30/19	16.7	0.0	13.8/6	1
Dailekh	28.8381	81.7085	1394	225.3	93.4	12.0	7.0	4.0	2.0	58.8/25	31.3	-0.1	34.6/18	20.0	2.4	17.6/1	20
Damak	26.6623	87.6988	119	346.8	82.2	17.0	12.0	5.0	1.0	80.5/30	34.6	-	39.5/4	23.1	-	20.5/20	28
Daman	27.6044	85.0920	2265	331.7	-	16.0	8.0	6.0	2.0	74.5/15	23.0	-	25.7/9	14.4	-	10.8/3	0
Damauli	27.9737	84.2651	347	249.4	75.7	13.0	8.0	3.0	1.0	69/23	37.0	-	40.5/9	23.8	-	20/3	30
Darchula New	29.8429	80.5388	887	236.0	-	18.0	10.0	1.0	0.0	29.5/30	34.9	-	38/10	21.1	-	16.5/2	29
Dhangadhi (Attariya)	28.8127	80.5600	184	168.8	67.1	10.0	5.0	3.0	0.0	49.6/26	38.2	1.9	41.6/18	25.2	-0.2	21.5/3	30
Dhankuta	26.9832	87.3460	1192	154.7	107.7	15.0	6.0	2.0	0.0	32.7/18	29.4	1.5	32/8	20.3	0.0	17.3/7	15
Dharan Bazar	26.7922	87.2978	310	243.5	76.6	14.0	10.0	3.0	1.0	51.4/12	33.7	-	39.3/7	25.6	-	22.5/12	26
Dhulikhel	27.6161	85.5655	1543	182.5	81.3	14.0	5.0	3.0	1.0	63/24	29.3	2.6	31.5/9	17.8	-0.1	15/3	13
Dhunche	28.1053	85.3077	2005	168.9	61.2	20.0	6.0	1.0	0.0	39/28	-	-	-	-	-	-	-
Dhunibesi	27.7229	85.1643	991	237.3	100.7	16.0	9.0	3.0	0.0	42.2/13	33.7	1.9	38.3/7	22.1	0.6	20.4/15	28
Diktel	27.2125	86.7919	1612							205.4/12		-	30/8	18.7		16/6	1
Dipayal (Doti)	29.2621	80.9369	563	158.2	95.4	10.0	5.0	3.0		50.2/23		0.5			-0.9	15/3	30
Dumkauli	27.6807	84.2285	183	264.5	63.0	6.0	5.0			127/23		5.6		26.6	1.4	23/20	30
Dunai	28.9507	82.8960	2098	16.4	36.4	6.0	0.0		0.0		29.6	-	32.6/17			7.5/7	19
Gaida (Kankai)	26.6569	87.8607	107	389.6	87.3	19.0	13.0	6.0	2.0			0.3	39/8	25.0	1.7	21/20	28
Gaur	26.7671	85.3130	77	121.7	54.3	6.0	2.0	1.0	1.0		39.6		43.4/8	24.4	-0.2	22/23	30
Ghorai (Dang)	28.0372	82.4842	663	234.0	93.6	8.0	4.0	2.0		118.4/25		3.1	39.5/18		2.0	21.9/3	29
Godavari	27.5929	85.3788	1527	246.1	95.4	15.0	8.0	4.0		51.5/15		1.9	30.5/1	17.0	-0.4	13.5/3	7
Gorkha (Birenchowk)	27.9714	84.5894	724	222.3	69.0	11.0	6.0		2.0		34.8	3.3	39/8	22.8	0.8	19.5/3	29
Gulariya	28.2128	81.3452	126	137.8	68.3	5.0	2.0	1.0		106.8/25		-			-	21/4	30
Hardinath	26.8000	85.9833	93	47.5	77.1	6.0	2.0			18.4/13		-		26.3	-	21.8/13	30
Hetauda N.F.I.	27.4202	85.0252	452	280.7	77.1	13.0	8.0	6.0		54.7/14		2.2		24.2	0.9	21.2/22	29
Humde	28.6399	84.0881	3401	38.3	101.4	6.0	2.0			17.1/22		- 0.5	21.8/25		-	1/3	0
Ilam Tea Estate	26.9096	87.9231	1208	282.7	101.4	17.0	9.0	5.0		60.3/18		0.5	30.9/8	16.0	-	1 / 5 / 1 5	1
Jajarkot	28.6990	82.2001	1236	111.7	41.1	9.0	3.0			48.5/23		- 2.7	36/23	16.0	1 1	14.5/15	30
Jalesor	26.6522	85.8073	68	18.1	9.6	5.0	1.0	0.0	U.U	10.5/30	37.6	2.7	42.5/8	26.8	1.1	24.5/2	29



### Babarmahal, Kathmandu

				Precipitation									Te	mper	ature		
							of Ra		ays	ite		Maxin	num		Minin	num	Ü
Station	Latitude	Longitude	Elevation	Total (mm)	% of Normal	≥1.0mm	≥10.0mm	>25.0mm	>50.0mm	24hr Highest precipitaiton (mm)/Date	Average (°C)	Departure form normal (°C)	Highest temperature / Date	Average (°C)	Departure form normal (°C)	Lowest temperature / Date	No. of days with maximum temp. > 30°C
Janakpur Airport	26.7097	85.9172	76	76.4	29.5	5.0	3.0	1.0	0.0	37.2/30	37.3	3.2	42.5/9	26.8	0.6	24/2	30
Jiri	27.6304	86.2321	1877	525.2	138.5	22.0	13.0	10.0	3.0		25.2	0.7	26.5/21	14.9	-0.7	9.7/7	0
Jomsom	28.7840	83.7298	2741	30.9	97.2	8.0	1.0	0.0	0.0	11.1/3	23.5	0.9	25/11	8.6	-3.6	2/3	0
Jumla	29.2747	82.1796	2363	95.9	121.1	12.0	3.0	1.0	0.0	27.6/27	27.2	1.0	31.1/23	12.8	-0.5	6/3	2
Jumla Airport	29.2740	82.1942	2384	101.5	-	13.0	4.0	1.0	0.0	26.1/27	26.3	-	30.7/23	12.4	-	5.4/3	2
Kanyam Tea Estate	26.8681	88.0783	1570	593.1	110.7	18.0	11.0	10.0	4.0	125/18	25.7	2.3	30/3	18.6	2.3	17.5/14	2
Karmaiya	27.1330	85.4841	139	119.2	46.7	12.0	4.0	0.0	0.0		37.3	2.3	42.2/8	25.8	-0.2	22.6/14	30
Kathmandu Airport	27.7038	85.3562	1337	225.8	93.3	15.0	7.0	3.0	0.0		31.0	1.5	33.3/10	19.8	0.5	17.2/3	24
Khadbari	27.3911	87.2044	1064	270.2	-	18.0	11.0	3.0	0.0	35.2/28	30.6	-	34/8	22.0	-	18.5/7	17
Khairini Tar	28.0270	84.0866	515	417.7	90.3	17.0	12.0	5.0	2.0	90.5/23	35.7	2.3	38.9/9	22.2	-0.6	17.5/3	30
Khajura (Nepalganj)	28.1137	81.5903	129	112.5	60.7	9.0	2.0	1.0	1.0	54.5/25	39.7	3.2	42.5/8	25.9	0.4	21/3	30
Khanchikot	27.9221	83.1298	1801	260.9	90.7	11.0	3.0	3.0	3.0	99.4/22	26.8	2.4	30.3/17	18.5	1.2	14.5/7	1
Khokana	27.6438	85.2967	1309	232.6	108.5	16.0	8.0	3.0	1.0	55.5/15	30.7	-	33.6/9	18.4	-	13.6/3	18
Khudi Bazar	28.2822	84.3564	838	867.5	160.7	16.0	12.0	10.0	4.0	219.6/15	32.2	1.0	35.8/9	20.0	-0.7	17.5/3	27
Khumaltar	27.6517	85.3257	1334	241.1	128.7	16.0	6.0	4.0	1.0	56.2/15	30.1	1.4	32.2/9	19.7	0.5	16.2/3	21
Kushma	28.2249	83.6769	900	393.5	87.4	16.0	11.0	6.0	3.0	72.8/23	33.8	1.6	37.6/9	20.6	-0.4	16.6/2	27
Lahan	26.7327	86.4776	110	154.3	68.3	11.0	5.0	3.0	0.0		35.9	-	41.5/8	26.3	-	23/13	30
Lete	28.6327	83.6092	2490	138.5	73.6	16.0	8.0	0.0	0.0	16.6/30	23.3	-	26/23	12.9	-	7.5/3	0
Libang Gaun	28.3062	82.6323	1314	195.2	73.3	12.0	7.0	3.0	0.0	49/25	32.5	-	36.5/16	17.3	-	13/3	27
Lumbini	27.4703	83.2761	95	242.0	118.2	5.0	4.0	4.0	2.0	132/23	39.6	-	-	27.1	-	22.5/2	-
Lumle	28.2965	83.8179	1738	757.7	87.5	21.0	13.0	9.0	8.0	138.2/25	25.5	1.5	27.6/9	16.9	0.1	-	0
Mahendra Nagar	28.9548	80.2305	197	-	-	-	-	-	-	-	37.4	1.2	40.3/8	25.1	-0.1	20.6/3	30
Mangalsen	29.1361	81.2501	1310	133.9	66.1	10.0	3.0	2.0	0.0	48.7/30	33.2	-	36.2/11	19.2	-	14.6/3	27
Manma	29.1488	81.6135	1729	219.7	-	15.0	7.0	2.0	1.0	68/25	27.6	-	30/13	17.2	-	4.6/6	1
Manthali	27.3947	86.0612	497	-	-	-	-	-	-	-	36.8	-	-	23.8	-	20.7/3	-
Manusmara	26.9280	85.4451	90	142.4	68.0	7.0	1.0	1.0	1.0	114.4/23	37.8	2.7	42.5/8	26.2	0.5	22.6/2	30
Musikot(Rukumkot)	28.6190	82.4625	1412	280.9	90.0	13.0	10.0	2.0	2.0	83/23	31.6	2.1	34.1/17	19.4	1.0	16.2/3	24
Nagarkot	27.6933	85.5209	2147	228.4	78.8	15.0	8.0	3.0	0.0	46.2/13	24.6	1.6	-	15.3	0.5	12.5/14	-
Nagma	29.2006	81.9106	2017	67.0	72.0	12.0	1.0	0.0	0.0		26.3	-	29/23	15.2	-	11/3	0
Nepalgunj Airport	28.1006	81.6682	165	70.0	33.4	9.0	3.0	0.0	0.0		38.9	2.3	42/19	26.9	1.5	23/2	30
Nepalgunj (Reg.Off.)	28.0520	81.6228	141	43.0	20.0	6.0	2.0	0.0	0.0	11/25	-	-	-	-	-	-	-
Nuwakot	27.9150	85.1646	966	278.4	94.0		10.0			59.8/15				22.6	1.2	20.3/15	27
Okhaldhunga	27.3081	86.5042	1731	350.9	119.8	17.0		6.0	1.0			2.5	32.5/9	18.4	1.2	16.8/14	9
Oli Gaun (Patkani)	29.1559	81.2831	989	102.2	-	12.0		1.0		38.3/30		-		19.4	-	16.5/25	29
Pakhribas	27.0463	87.2925	1720	205.4	77.2		9.0	1.0	0.0		25.0		31.5/7	16.1	-1.3	11/7	1
Panchkhal	27.6451	85.6209	857	208.4	118.3	11.0	6.0	4.0		51.5/24		1.6	36.8/8	21.2	-0.1	16.8/7	30
Parasi	27.5193	83.6622	112	108.6	39.2	4.0	3.0	2.0		52.2/30		-	43/17	26.8	-	22.5/3	29
Parwanipur	27.0789	84.9327	87	148.2	57.6	7.0	3.0	3.0	1.0			3.2	43/8	26.2	0.5	22/2	30
Patan new	29.4664	80.5506	1299	139.1	-	12.0		0.0	0.0			-	-	17.4	-	12.5/2	-
Phattepur	26.7305	86.9348	101	247.1	78.9		9.0	5.0		39.3/12			39.5/7	24.5	-0.6	18/14	29
Phidim (Panchther)	27.1437	87.7656	1157	339.2	190.8		10.0	6.0		70.6/20		1.5	36/6	21.3	0.1	18/7	23
Pokhara Airport	28.2002	83.9795	827	621.8	95.9		13.0	9.0		157.6/23		1.6	36/9	21.6	0.4	17.5/3	29
Pusma Camp	28.8755	81.2327	953	278.7	104.7	8.0	5.0	3.0		118.2/25				21.8	-0.5	19/2	24
Rajbiraj	26.5407	86.7425	68	114.7	45.4		5.0	0.0		20.5/13		1.6	42.2/8	26.1	1.1	22.4/13	28
Rampur	27.6540	84.3508	189	233.1	63.6	8.0	4.0	4.0		99.5/23		3.7	43.5/8	25.2	0.6	20.5/2	30
Rara	29.5401	82.0818	2989	72.8	-	8.0	3.0	1.0		27.6/30		-	25/23	9.1	-	-	0
Salleri	27.5051	86.5862	2383	158.4	64.6	17.0	7.0	0.0	0.0	19.2/24	26.5	-	29.6/8	12.5	-	9/6	0



#### Babarmahal, Kathmandu

						Prec	ipitati	on					Te	mpera	ature		
						No.	of Ra	iny D	ays	ıte		Maximum			Minin	ıum	C
Station	Latitude	Longitude	Elevation	Total (mm)	% of Normal	21.0mm	$\geq$ 10.0mm	≥25.0mm	≥50.0mm	24hr Highest precipitaiton (mm)/Date	Average (°C)	Departure form normal (°C)	Highest temperature / Date	Average (°C)	Departure form normal (°C)	Lowest temperature / Date	No. of days with maximum temp. $> 30$ °C
Salyan Bazar	28.3821	82.1423	1557	105.2	65.8	8.0	4.0	1.0	0.0	41.2/25	-	-	-	-	-	-	-
Semari	27.4682	83.7861	110	96.5	37.1	7.0	4.0	2.0	0.0	27/23	38.2	-0.3	43/17	26.7	1.1	22/10	29
Simara Airport	27.1642	84.9800	137	113.6	41.5	6.0	2.0	1.0	1.0	81/24	38.1	3.6	42.6/8	25.8	0.5	21/2	30
Simikot	29.9715	81.8161	2993	63.3	ı	9.0	1.0	0.0	0.0	21.2/30	22.3	1	28.5/20	11.0	1	5.5/1	0
Sindhuli Madhi	27.2281	85.9050	556	394.0	106.0	16.0	10.0	5.0	3.0	108.3/23	34.2	2.0	37.5/8	22.4	-0.2	19.2/4	30
Siraha	26.6561	86.2117	63	129.3	52.9	9.0	4.0	2.0	1.0	52.2/23	37.0	-	42.5/8	26.3	-	21.5/13	30
Surkhet Airport	28.5879	81.6352	683	186.4	75.3	8.0	6.0	4.0	0.0	48.7/25	36.8	3.2	41/18	23.7	0.7	19.9/3	30
Syangja	28.0988	83.8722	871	338.5	61.3	16.0	12.0	4.0	1.0	87/23	34.2	2.9	38.1/9	21.1	0.3	16/3	29
Tamghas	28.0636	83.2435	1547	330.0	102.8	12.0	6.0	2.0	2.0	137.5/25	28.8	1.6	31.5/17	18.4	0.4	15/7	11
Tansen	27.8637	83.5387	1183	236.1	83.5	9.0	5.0	2.0	1.0	141/30	32.6	2.8	36.5/16	21.6	2.4	20/3	25
Taplejung	27.3586	87.6700	1744	331.8	111.8	20.0	10.0	4.0	1.0	71.6/19	25.8	0.5	28.8/8	17.0	-0.4	14/6	0
Tarahara	26.6987	87.2786	120	306.6	93.2	14.0	7.0	5.0	2.0	84.1/30	34.4	1.6	40.6/7	25.2	0.4	23/2	29
Taulihawa	27.5711	83.0672	106	95.3	45.4	7.0	3.0	2.0	0.0	31.5/25	38.3	2.4	42.7/16	26.3	1	22.5/4	29
Terhathum	27.1230	87.5362	1525	185.3	124.0	13.0	7.0	3.0	0.0	35.3/14	26.6	0.0	30/8	18.7	1.0	17/6	1
Thakmarpha	28.7409	83.6816	2655	30.1	61.2	7.0	1.0	0.0	0.0	10.2/3	21.9	0.2	24.7/23	10.1	-1.1	3/3	0
Tikapur	28.5366	81.1150	149	112.3	47.4	7.0	4.0	2.0	0.0	38/29	39.7	3.2	43.3/8	24.0	-1.3	20.4/3	30
Udayapur Gadhi	26.9130	86.5397	469	317.1	112.3	16.0	9.0	6.0	0.0	46.2/10	33.4	1.3	37.5/8	24.0	-0.1	21.5/14	28

#### Note:

- "mm" = millimeter; "hr" = hour; "temp" = temperature; "-" = Data Not Available.
- This summary is prepared based on the precipitation and temperature received at 111 meteorological stations during June, 2023. Out of 111 stations, 100 stations have normal precipitation data, 70 stations have normal maximum temperature data and 68 stations have normal minimum temperature data. Normal precipitation/temperature is the average of the monthly precipitation/temperature for period of 1991-2020.