

Annex 1:

Agromet Network Agromet Project Situation

A: Weather Stations

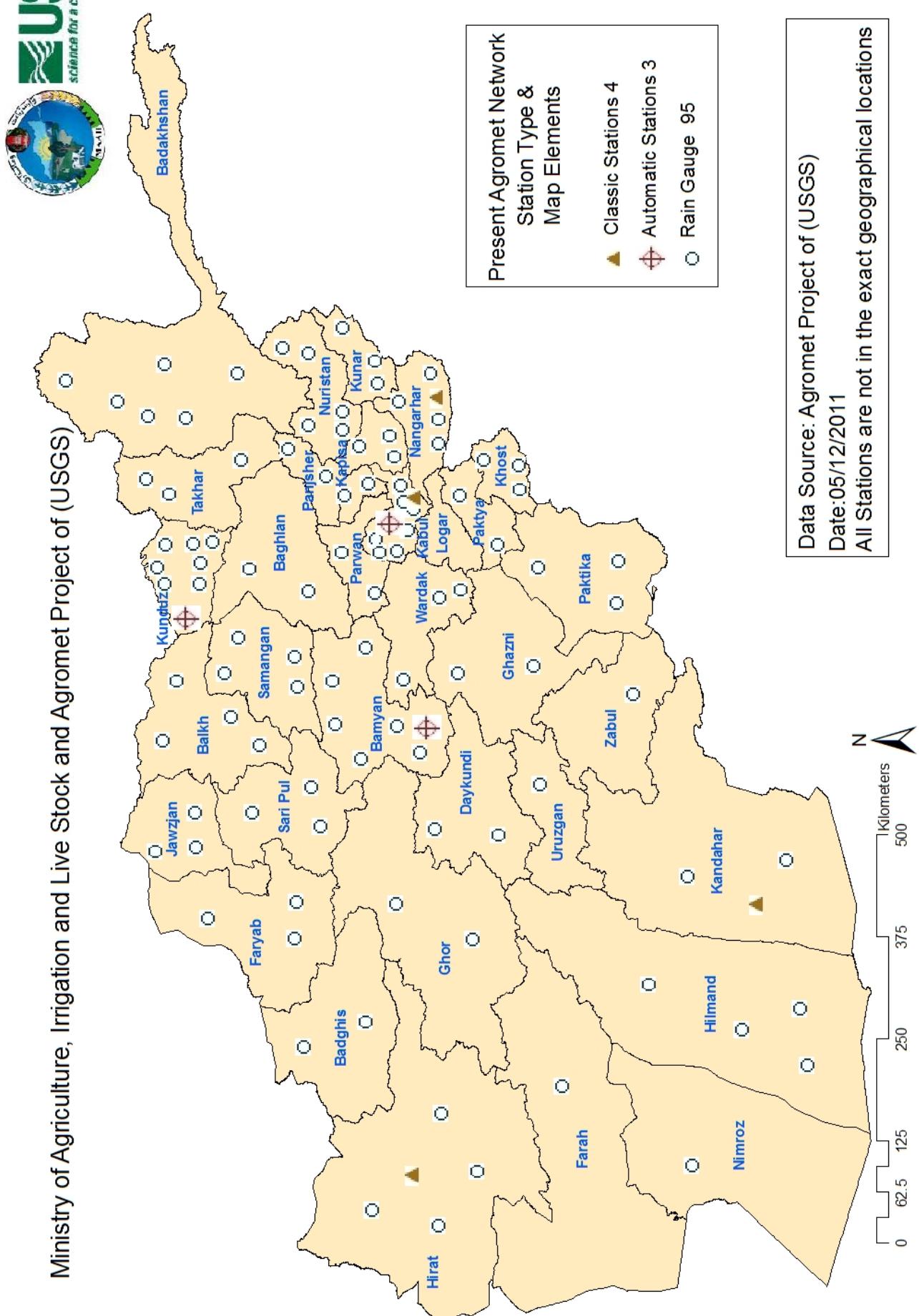
B: Crop Monitoring

MAIL/USGS Agromet Project: Status as of September 2011

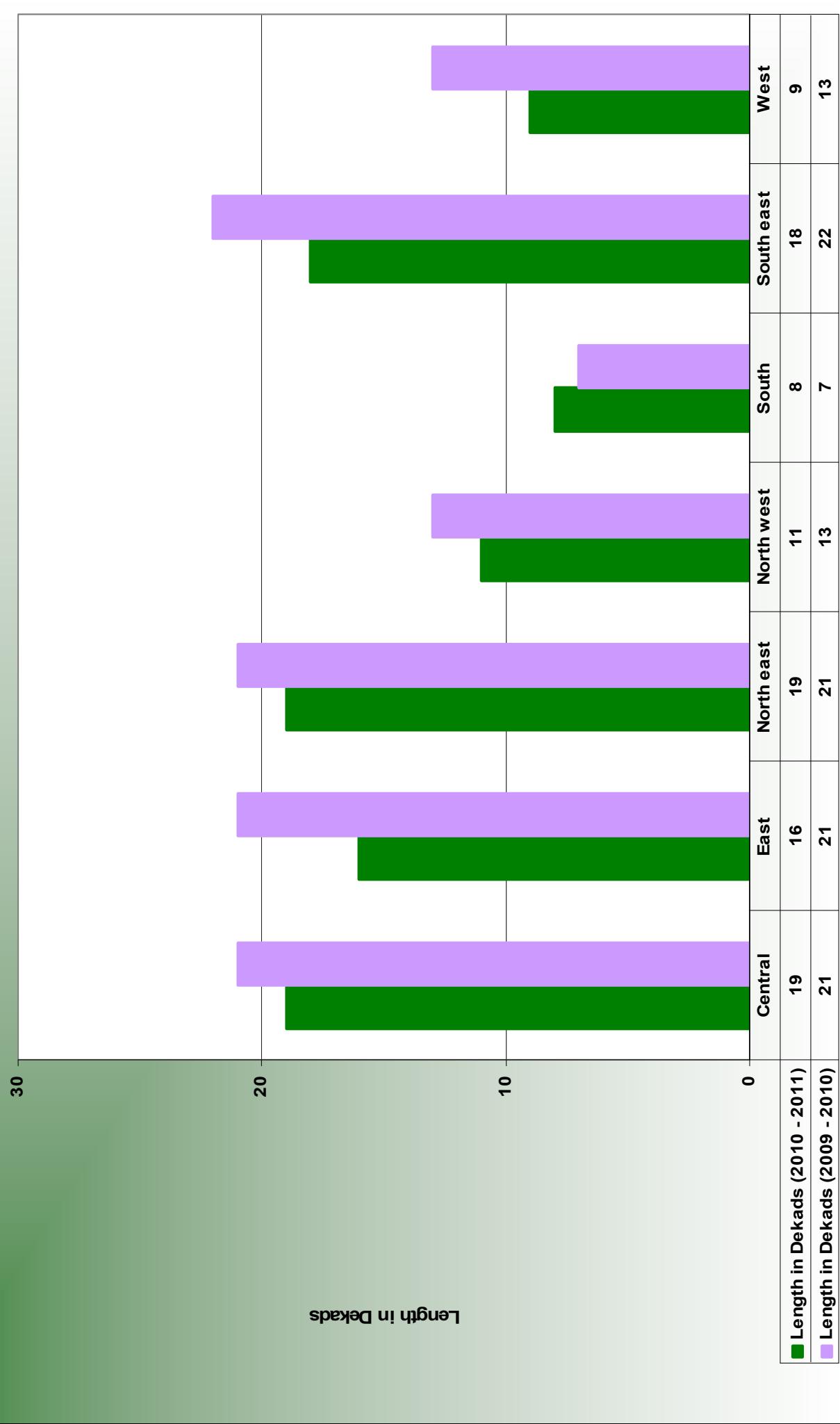
- 1) MAIL/USGS Agromet Project was established in Afghanistan 1st January 2004 to install a network of Agrometeorological stations and develop a complete Agromet services. To date, the Agromet Project has installed and is managing 102 sites. All 102 sites record rainfall and snowfall. In addition to rainfall and snowfall, 92 out of 102 report on crop (wheat, maize, rice and barley), pasture and grazing conditions twice a month. The information collected includes all adverse weather conditions, shortage of agricultural inputs, weeds, pests, diseases etc. Other recorded information includes crop phonological stages(land preparation), planting and harvesting dates, expected and actual The Agromet project receive data from 18 classic station from AMA which consist 8 meteorological parameter and publish on its monthly bulletins. providing observations three times a day.
- 2) The Agromet project has developed an Agrometeorological database and information system. Information in the data base includes data from past 7 years (taken from 102 stations), historical data from 1942 to 1993 (depending on sites) with up to 29 weather parameters. The data base heart was built using the “Agrometshell” which includes around 20 Agrometeorological applications fully integrated into the database.
- 3) Agromet Project has trained 260 observers, including people from different Government and Non Government Organizations, although some of the ministry national Agromet counterpart had been sent to abroad for getting knowledge in the Agromet field.
- 4) Agromet Project has some 102 Observers paid through incentives, Four national MAIL/AMA counterpart and 3 USGS Agro meteorological staff.
- 5) Agromet Project currently prepares weekly reports, monthly Agromet bulletins and Seasonal Bulletins based on Ground and Satellites observation., water balance model and rainfall probabilities and so on, with updated Agrometeorological situation analysis and graphs, maps etc. the bulletin is transmitted to key players in English and dari, the Agromet project has also produced papers for technical meeting, press releases and special newsflashes throughout the agricultural year.
- 6) The Agromet project is working closely with the united States Geological Survey (USGS), regular data and analysis are also transmitted regularly to over 1150 local and international users around the country and outside the country as well.
- 7) In general, the Agromet Project provides timely information and data related to the impact of climate on agriculture and food security to the decision makers in the government and to the aid community.



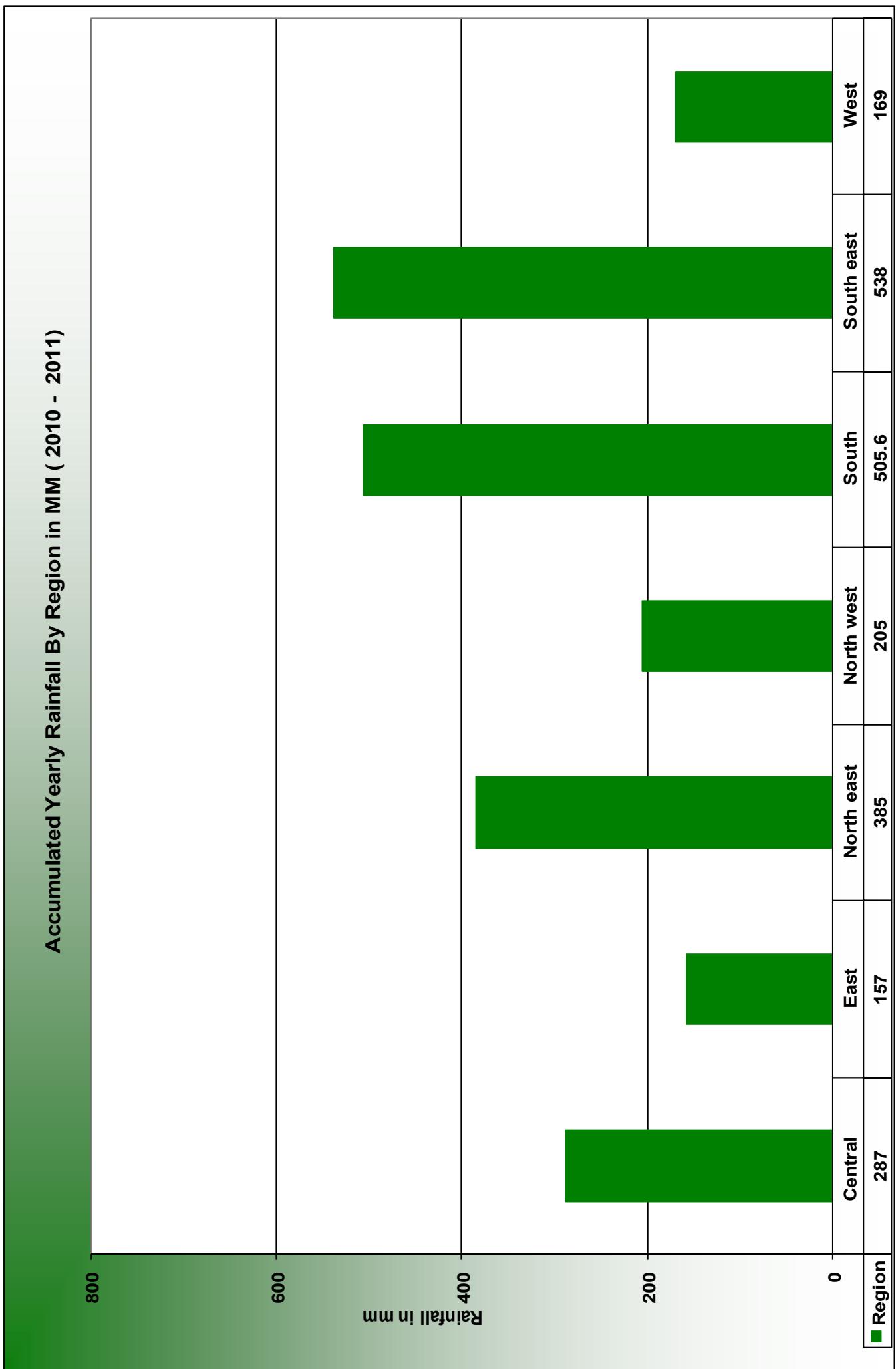
Ministry of Agriculture, Irrigation and Live Stock and Agromet Project of (USGS)



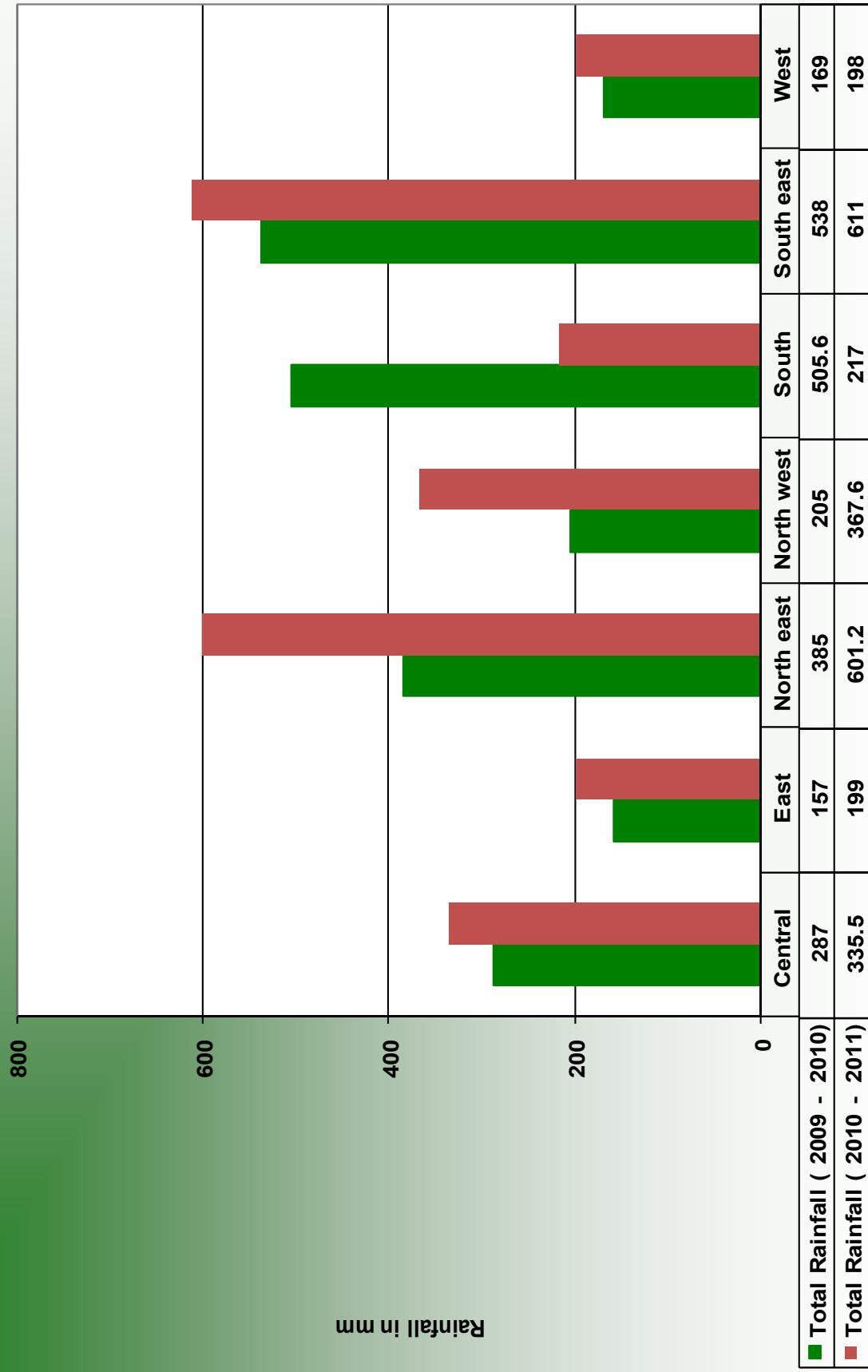
Length of Rainfall Season in Dekads by Region (2010 - 2011) Compared to (2009 - 2010)

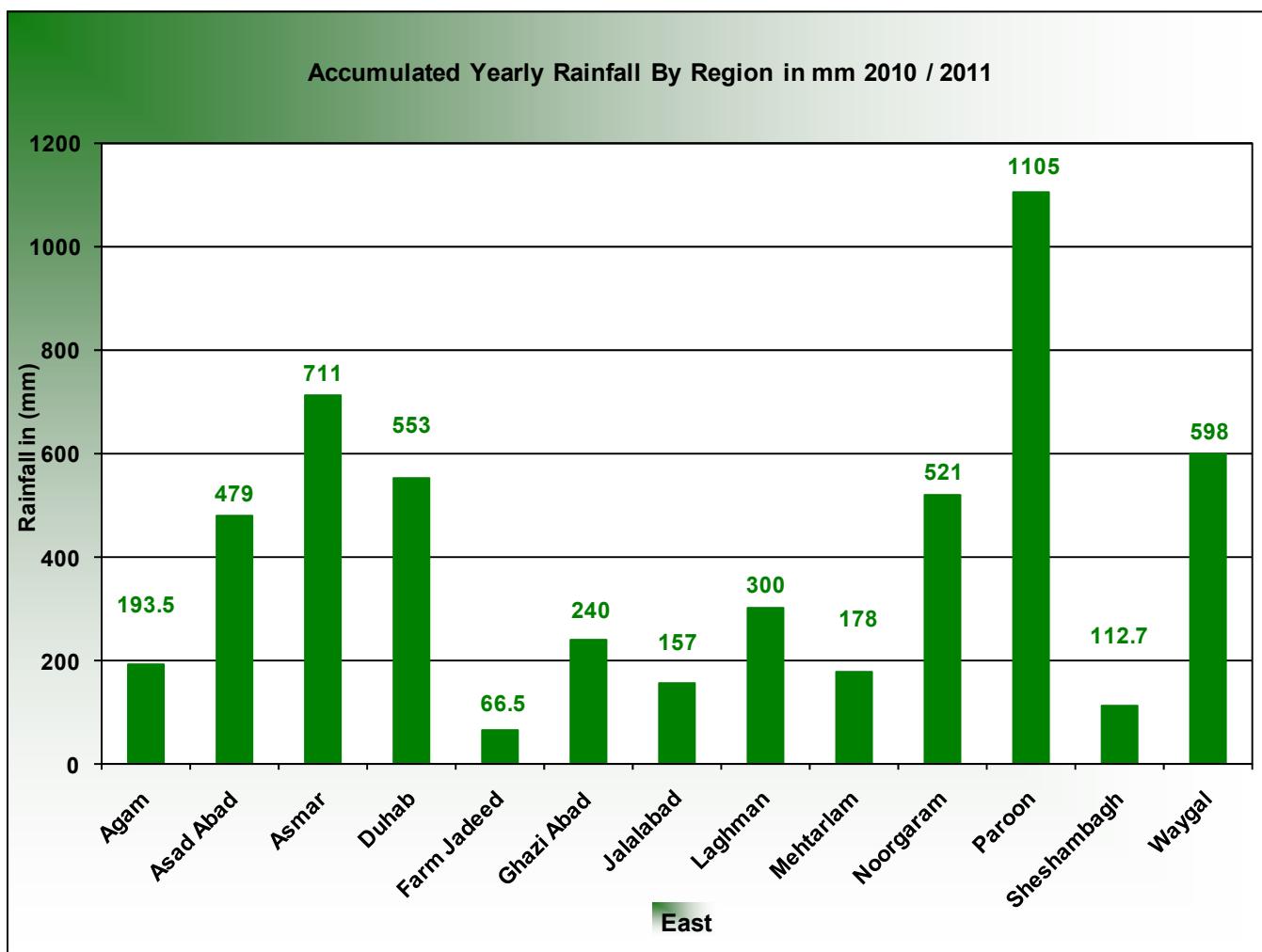
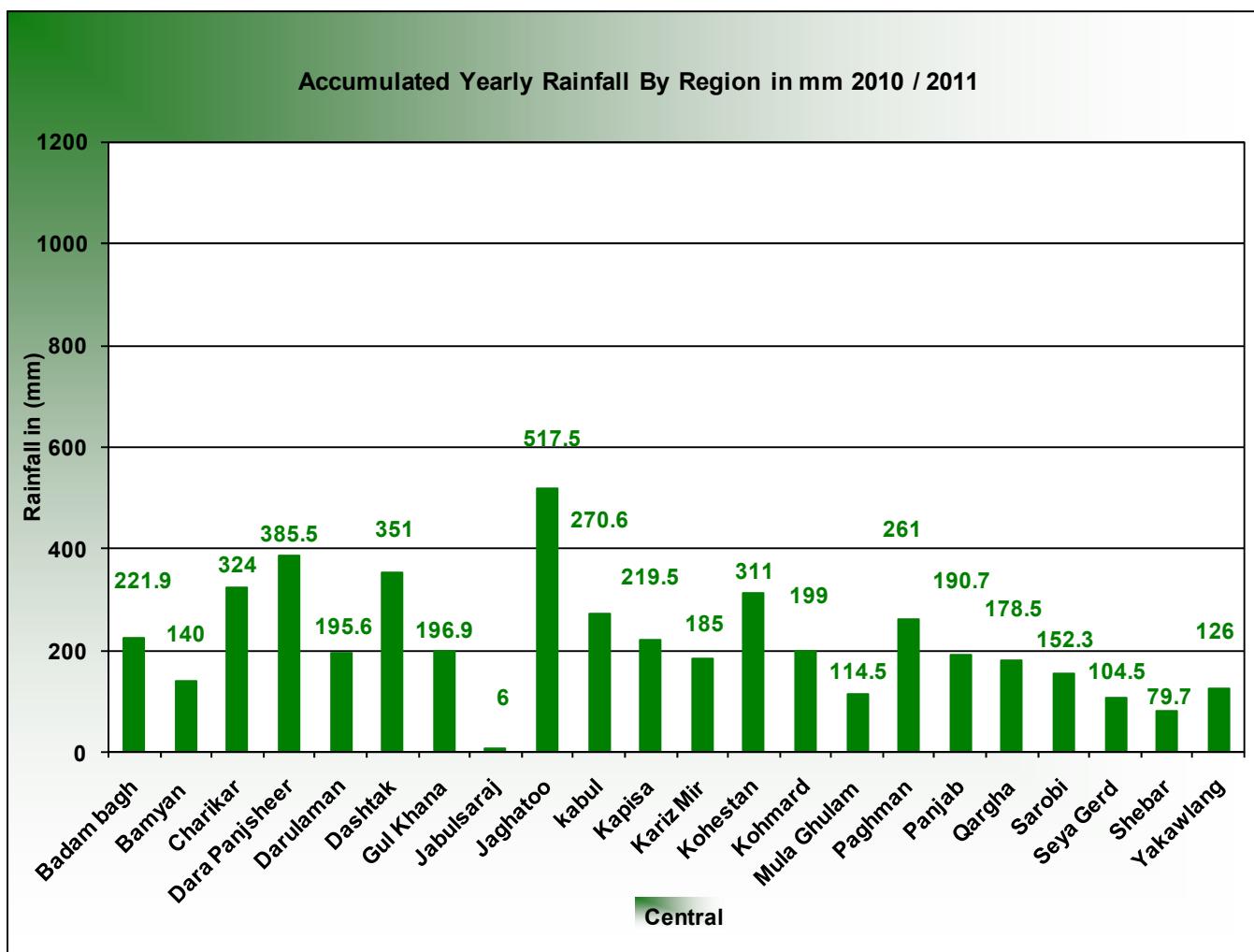


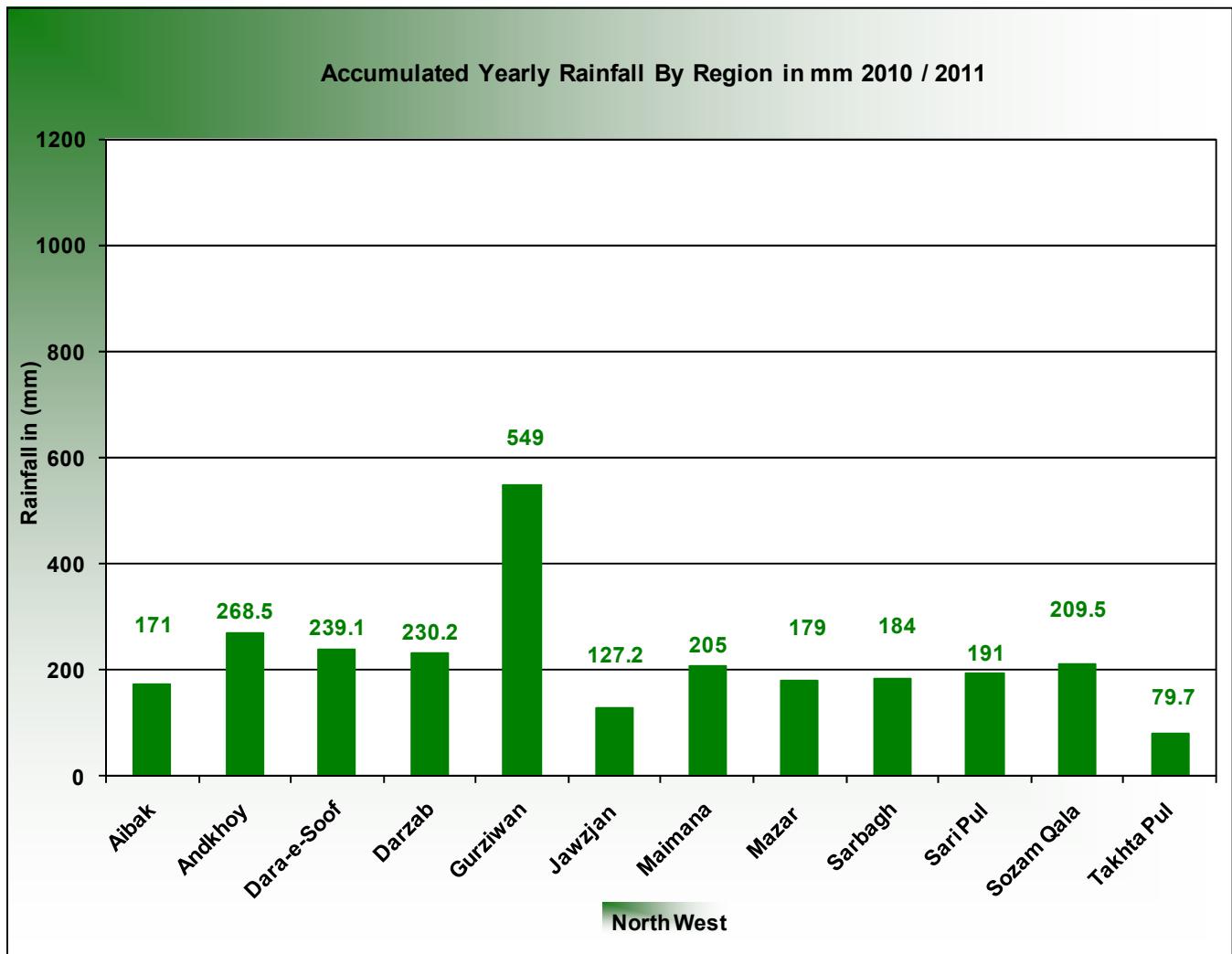
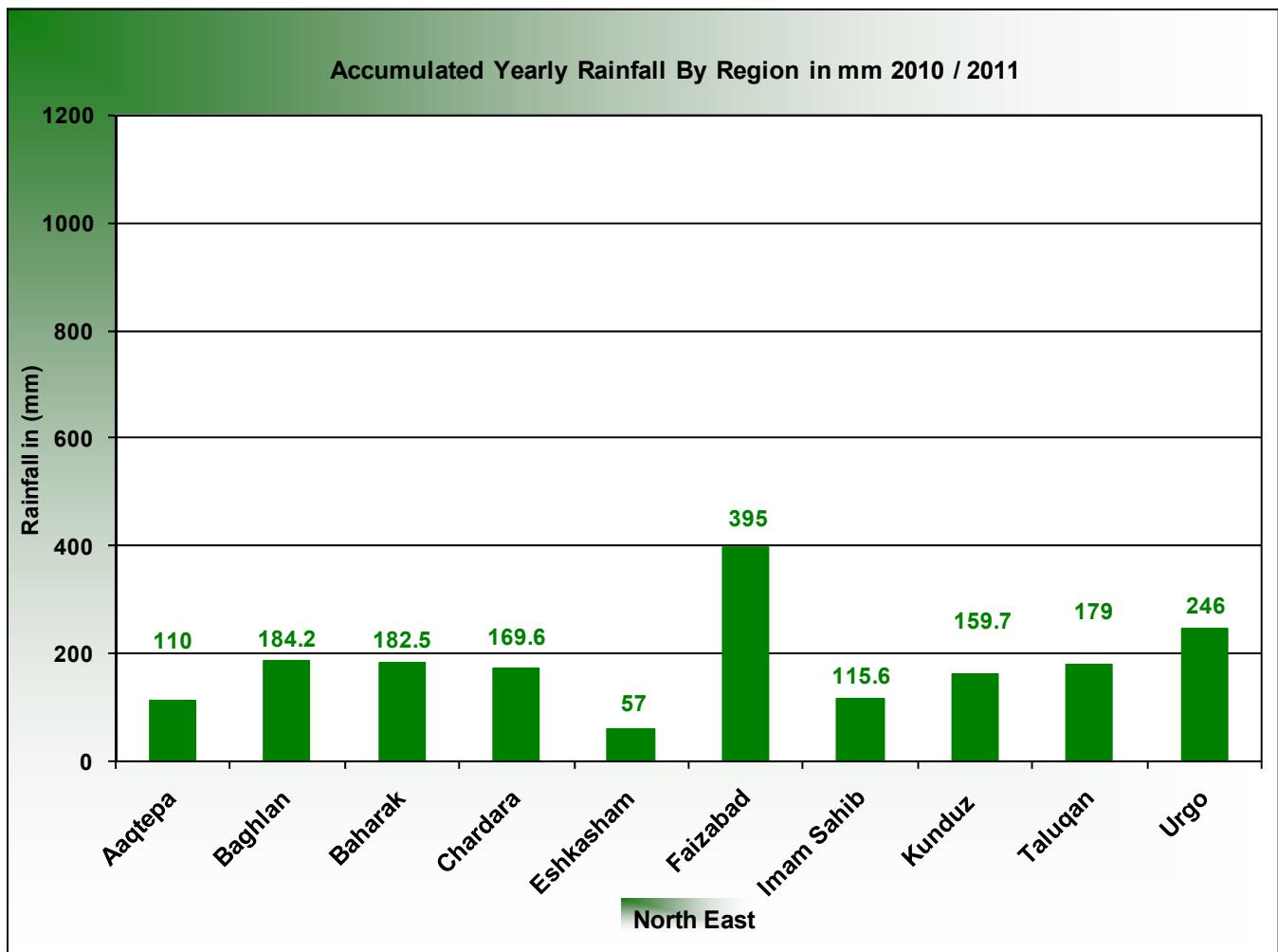
Average recorded Rainfall (mm) By Regions (2010 - 2011) Season													
Region	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Yearly
Central	27	0	0	1	5	118	35	61	10	0	4	26	287
East	16	0	13	4	1	34	33	28	1	2	0	25	157
North east	15	0	0	4	77	74	78	103	29	15	0	0	395
North west	0	8	3	4	33.3	60.5	50.3	45	32	3	0	0	239.1
South	0	0	0	0	5.2	370.9	97	32.5	0	0	0	0	505.6
South east	0	0	3	0	0	79	22	89	23	74	132	116	538
West	0	0	0	0	26	80.5	34.3	7	15.2	0	0	0	163
Minimum	0	0	0	0	0	34	22	7	0	0	0	0	157
Maximum	27	8	13	4	77	370.9	97	103	32	74	132	116	538
Average	8.3	1.1	2.7	1.9	21.1	116.7	49.9	52.2	15.7	13.4	19.4	23.9	326.4

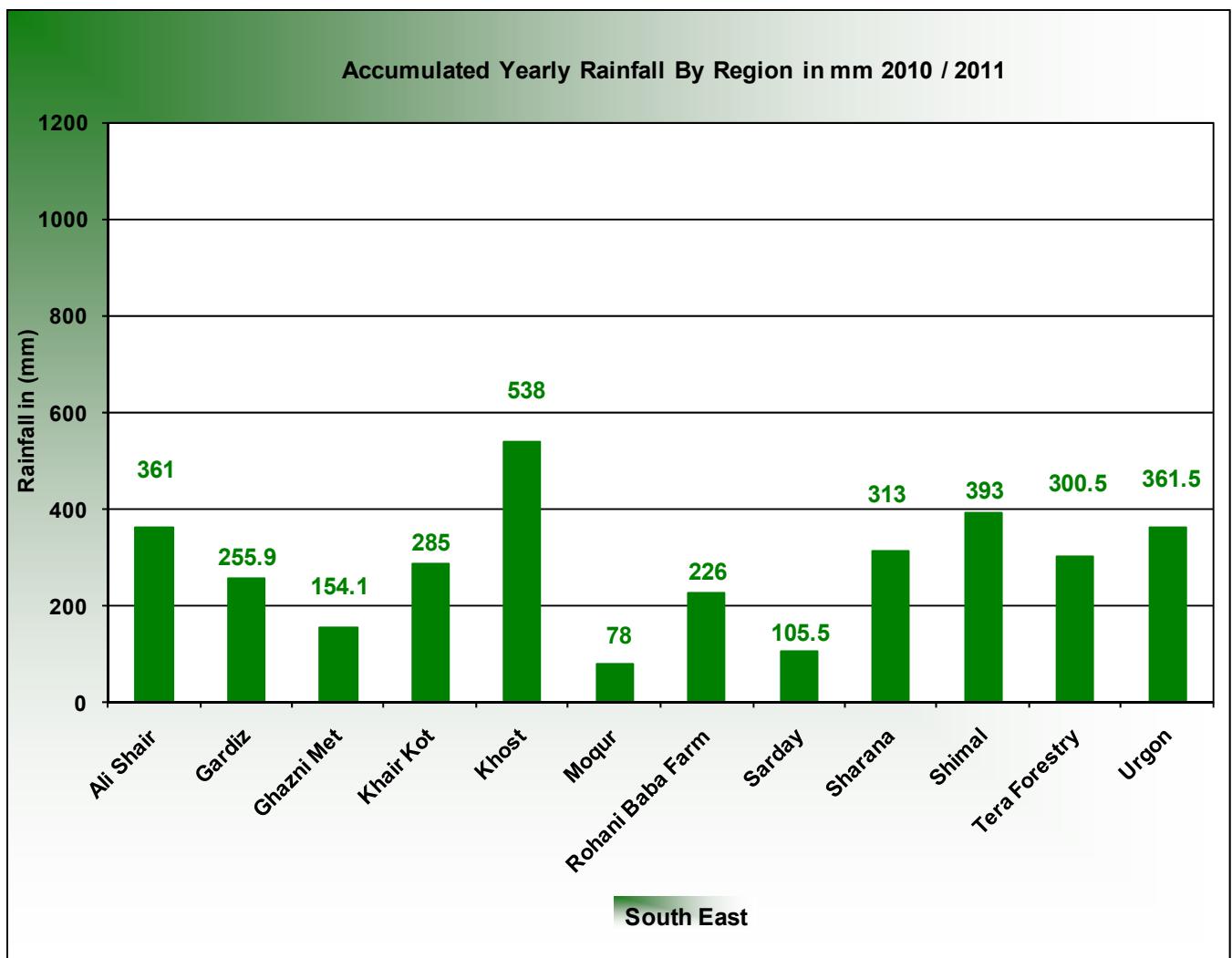
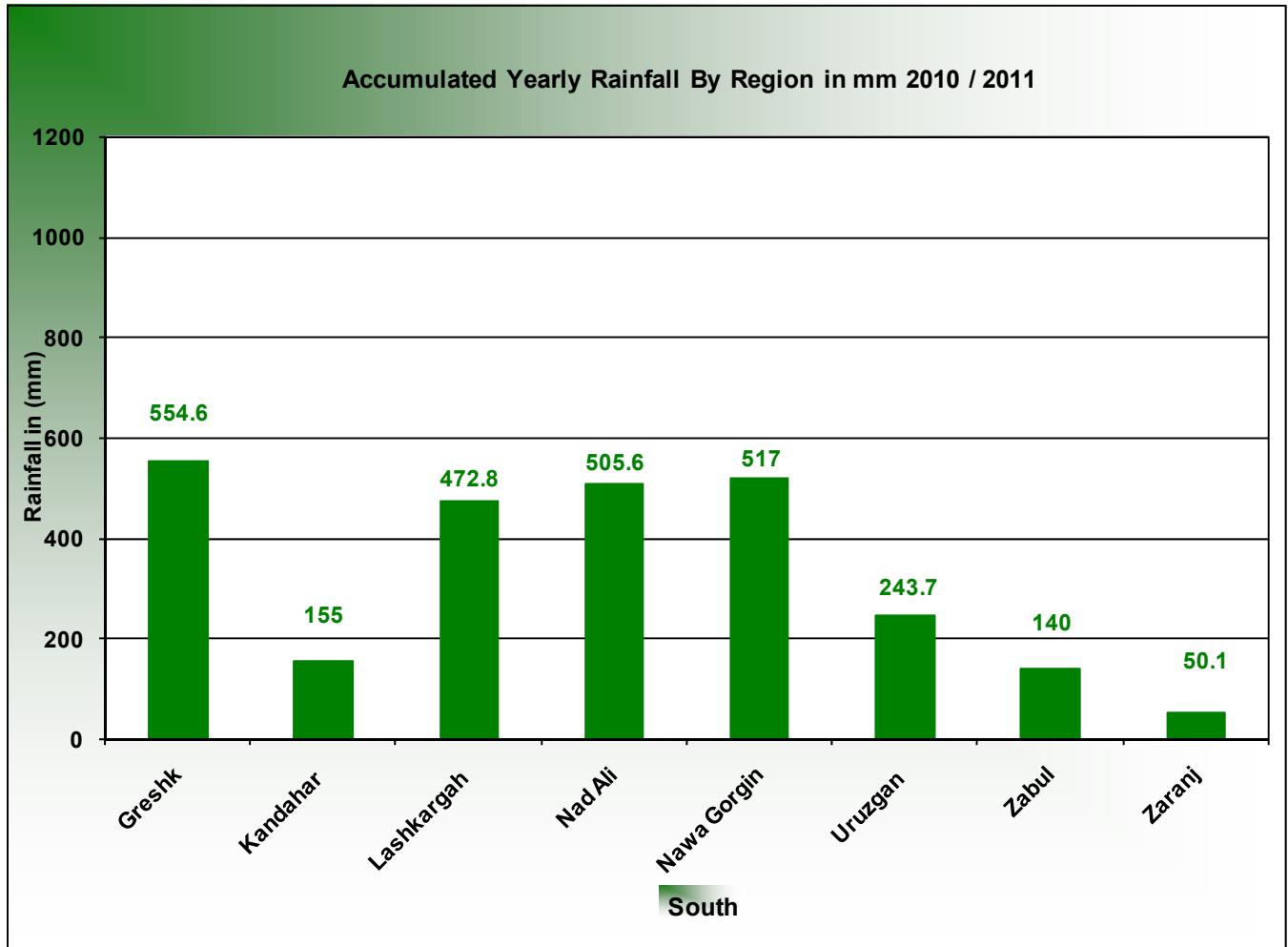


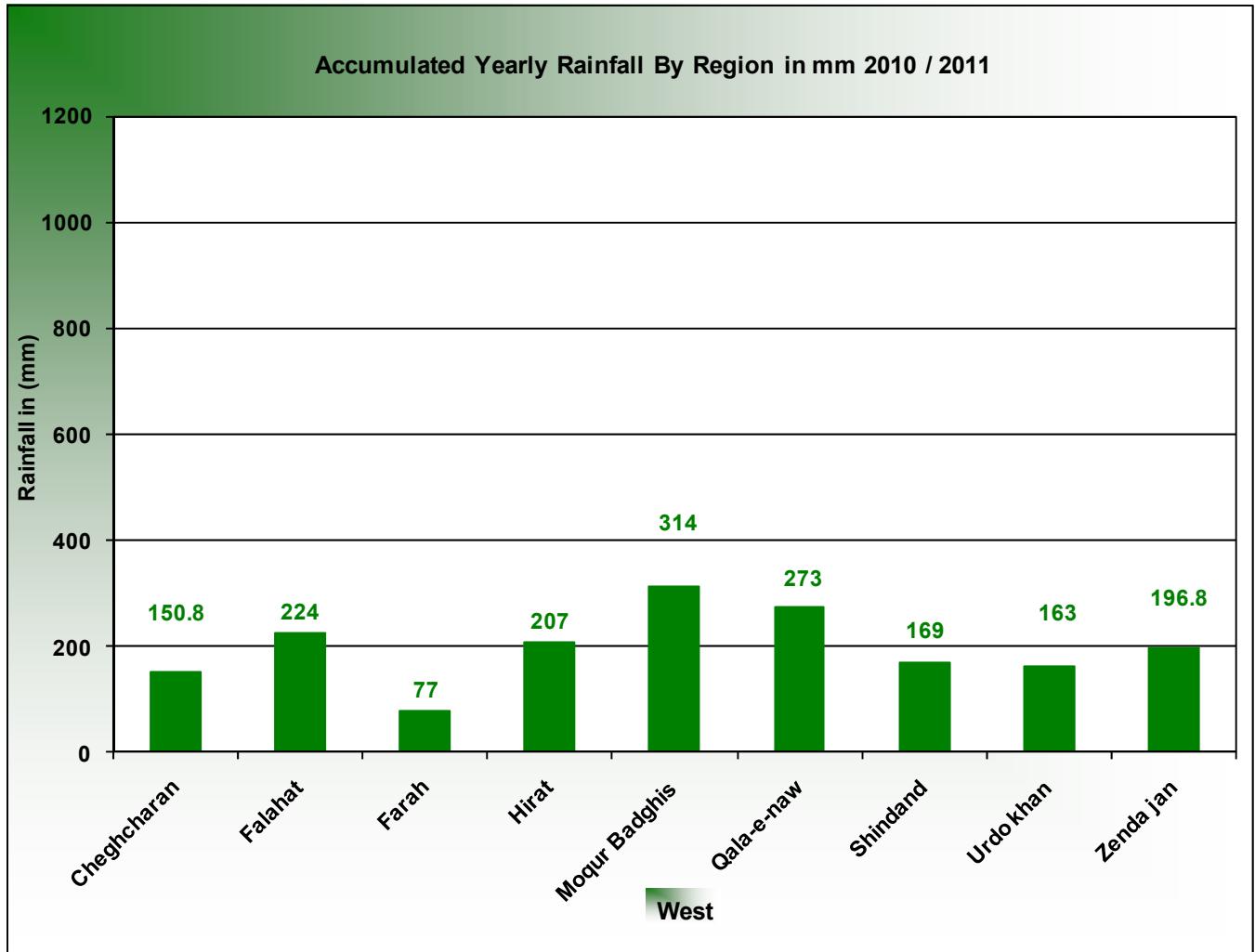
Accumulated Yearly Rainfall By Region in MM (2010 - 2011)







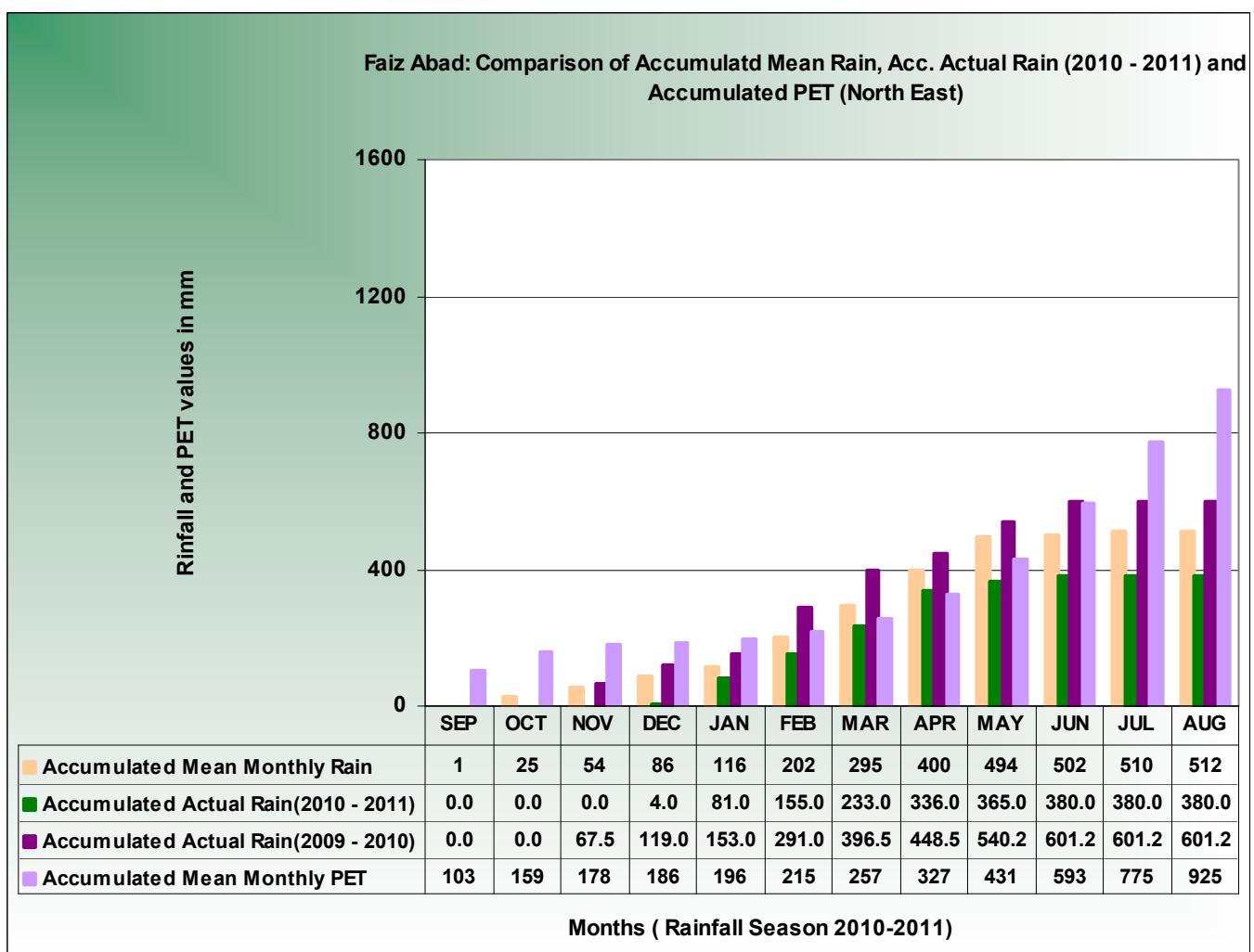
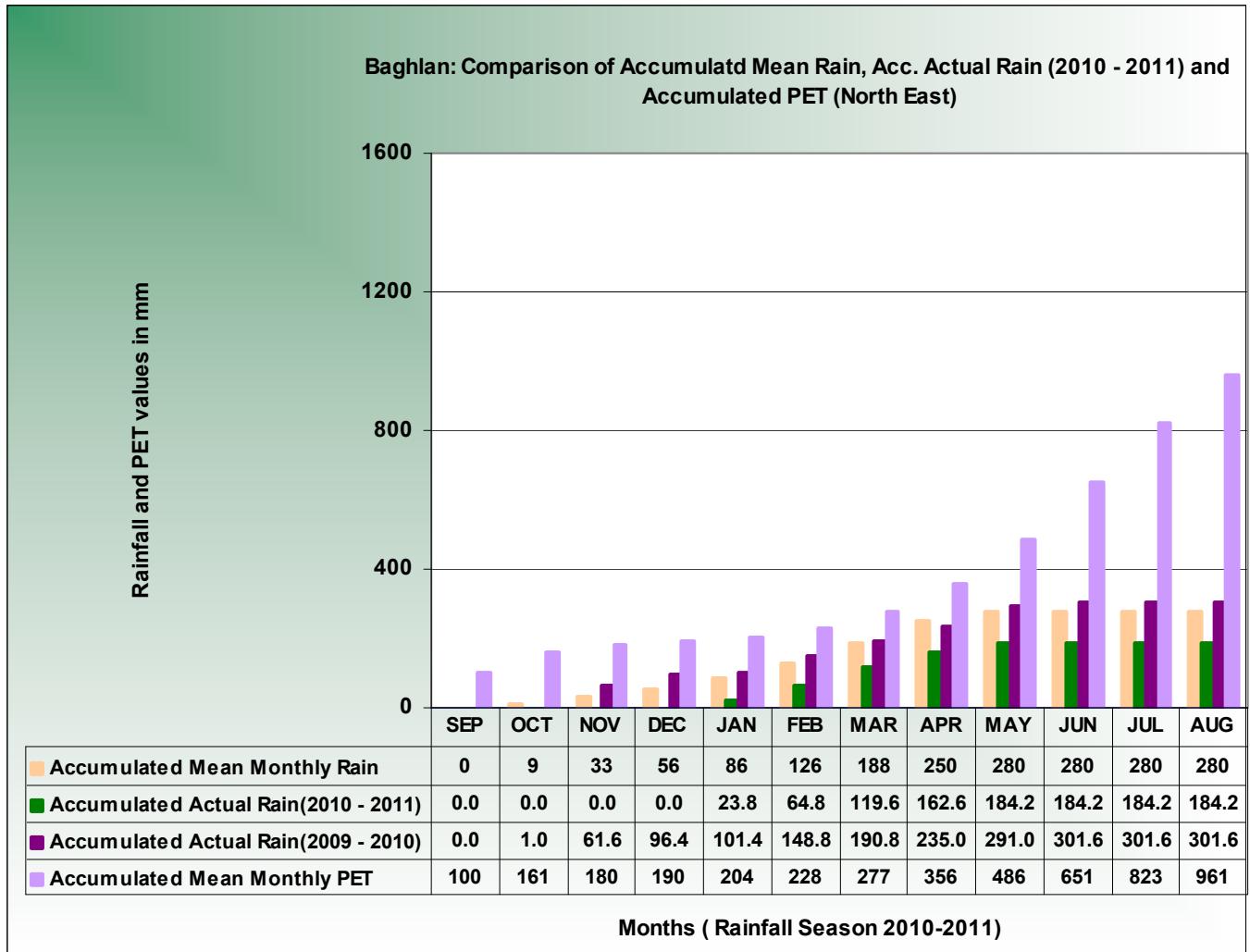




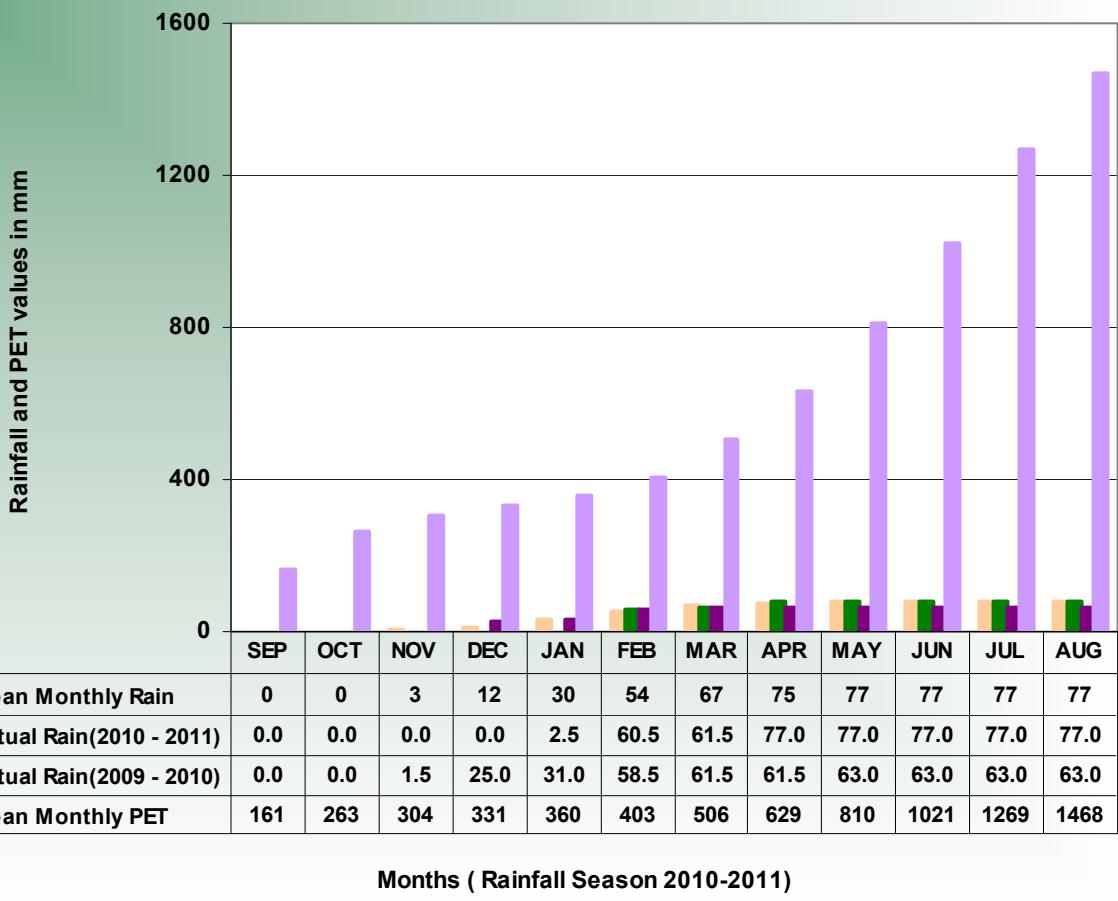
Accumulated Rainfall (mm) For the Season (2010 - 2011)

Compared with:

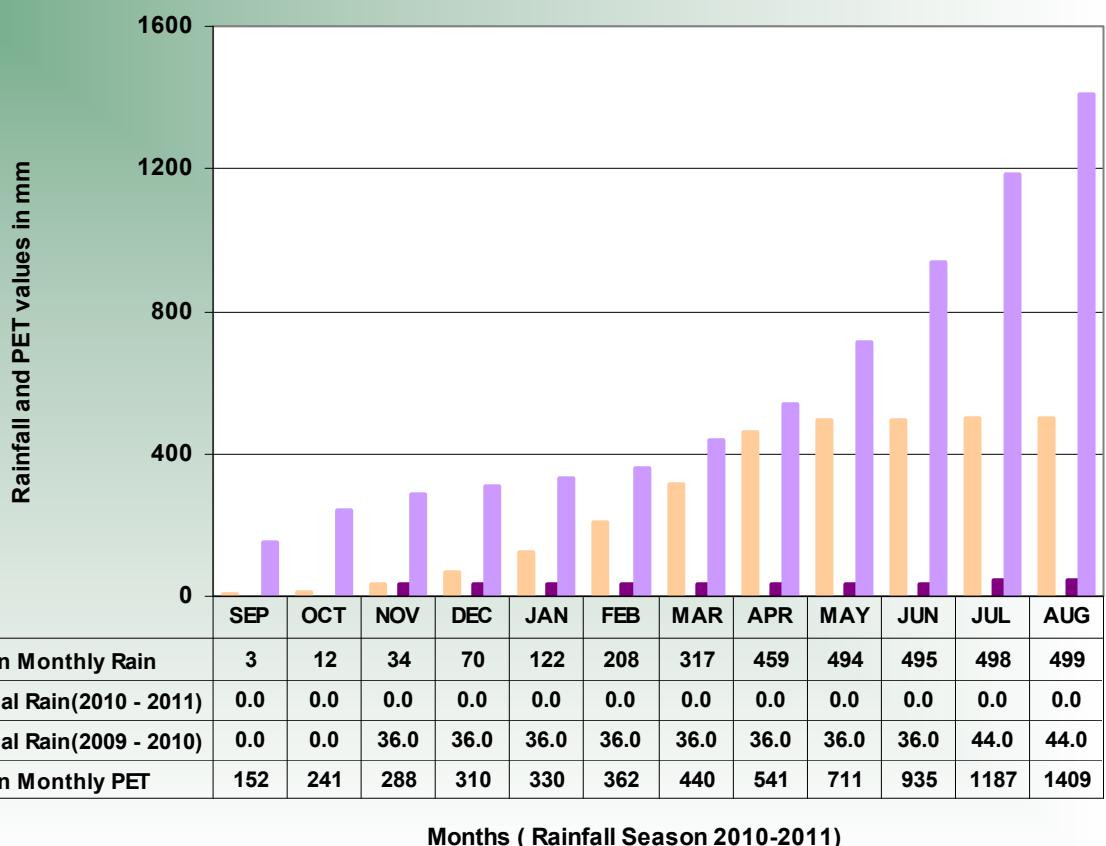
- Last Year
- Potential Evapotranspiration (PET)
- Long Term Average

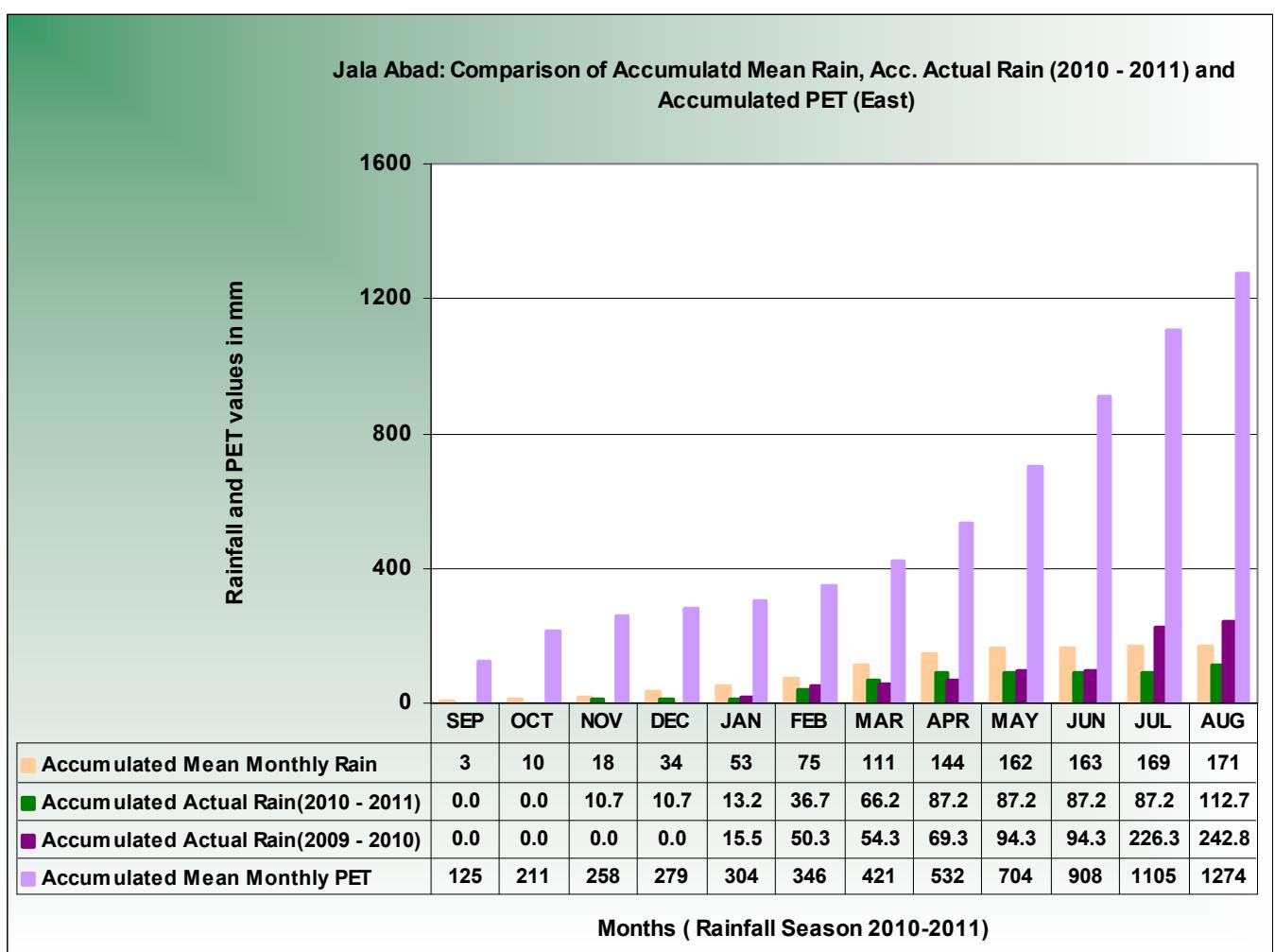
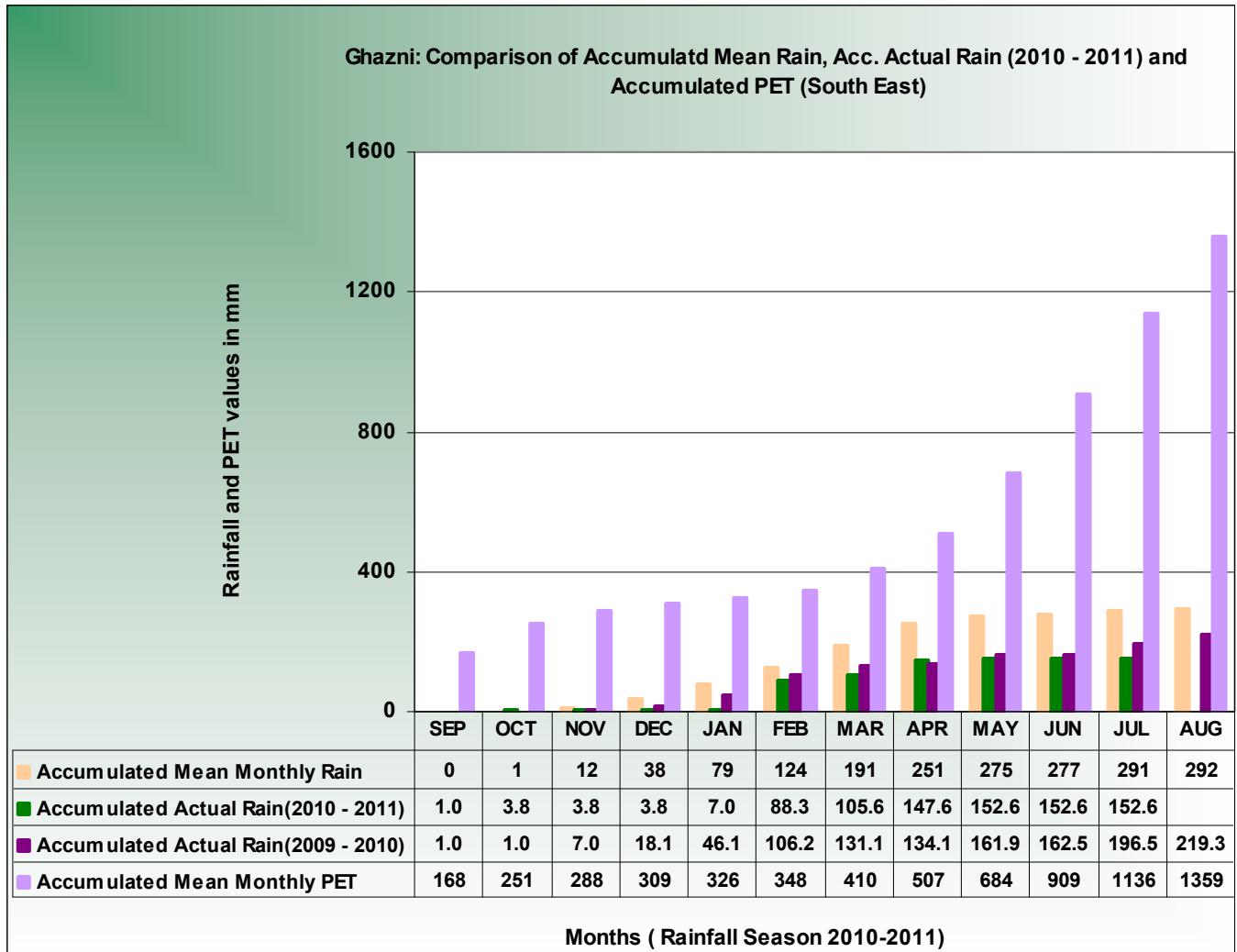


Farah: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (West)

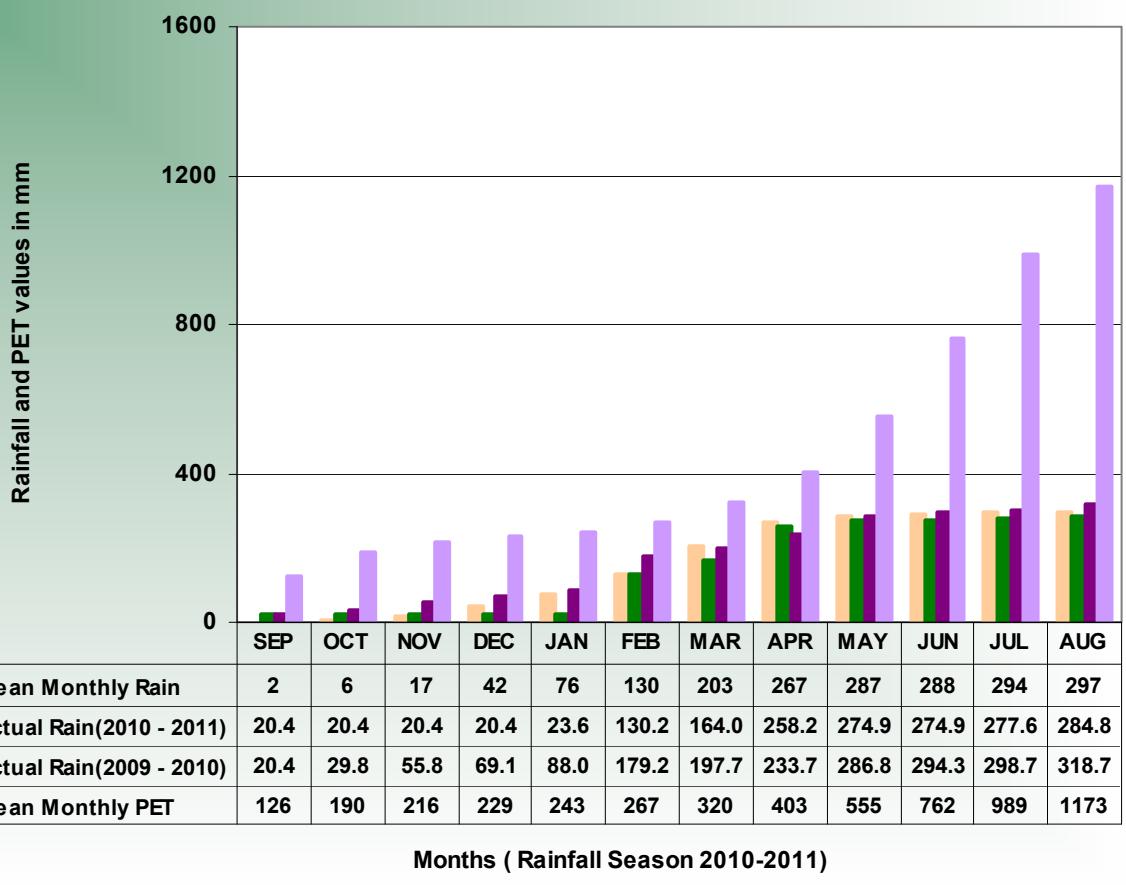


Jabul Seraj: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (Central)

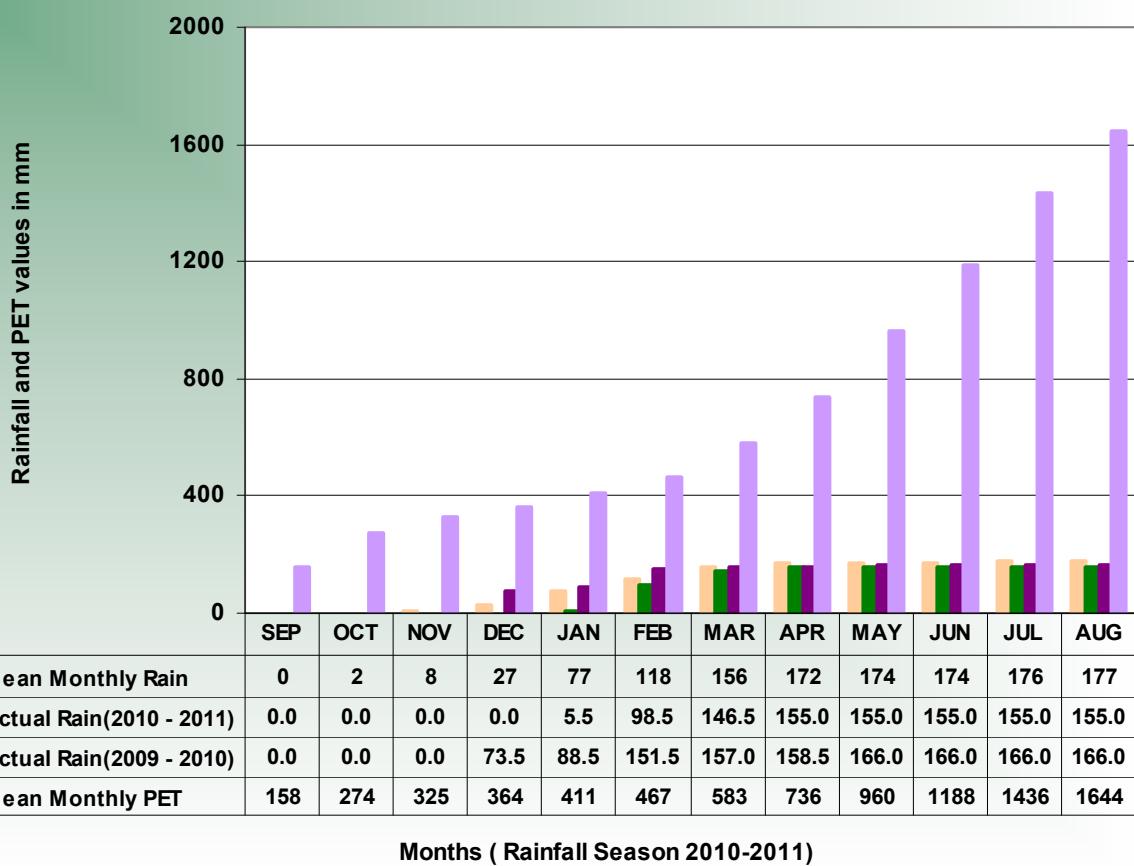


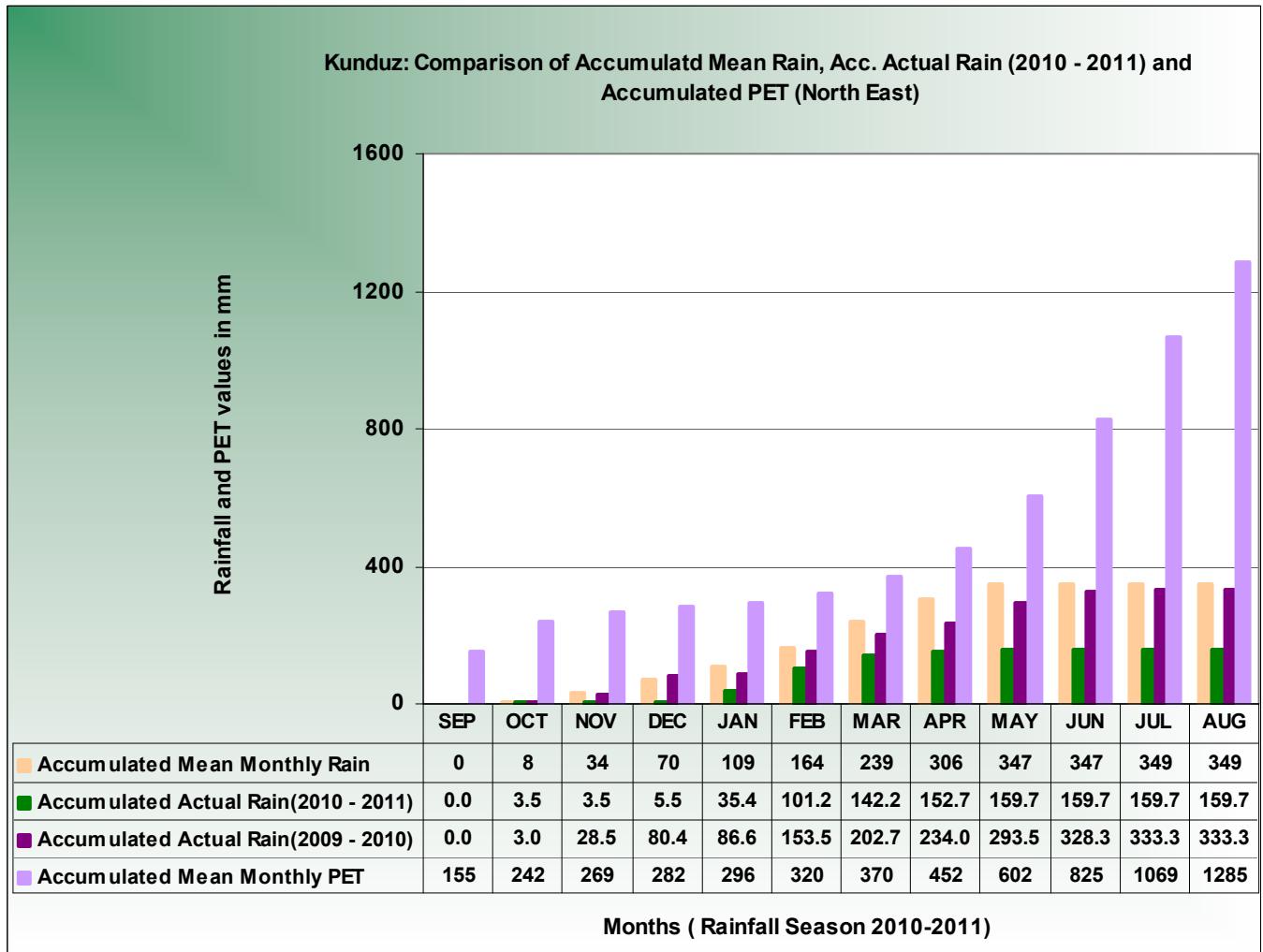
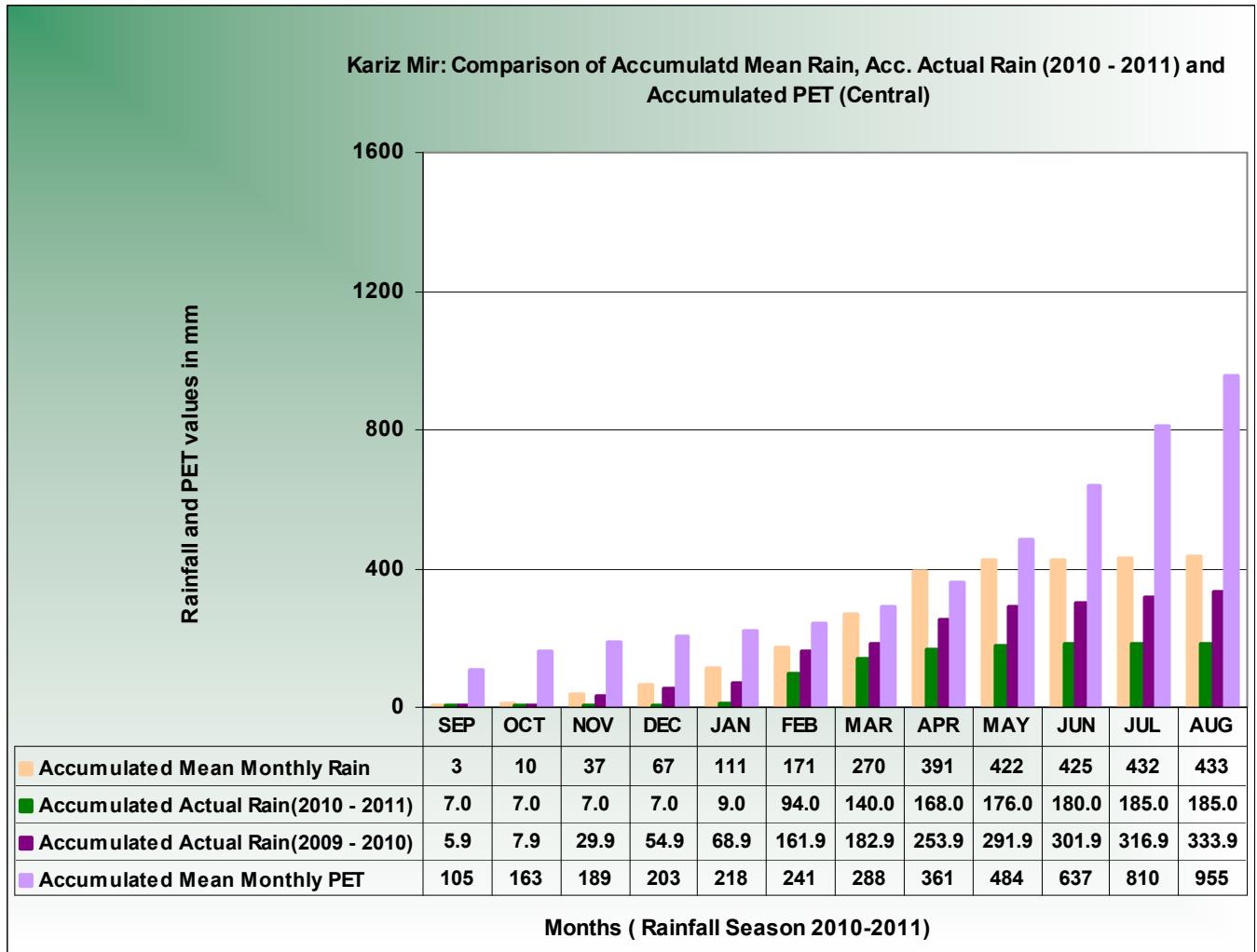


Kabul: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (Central)

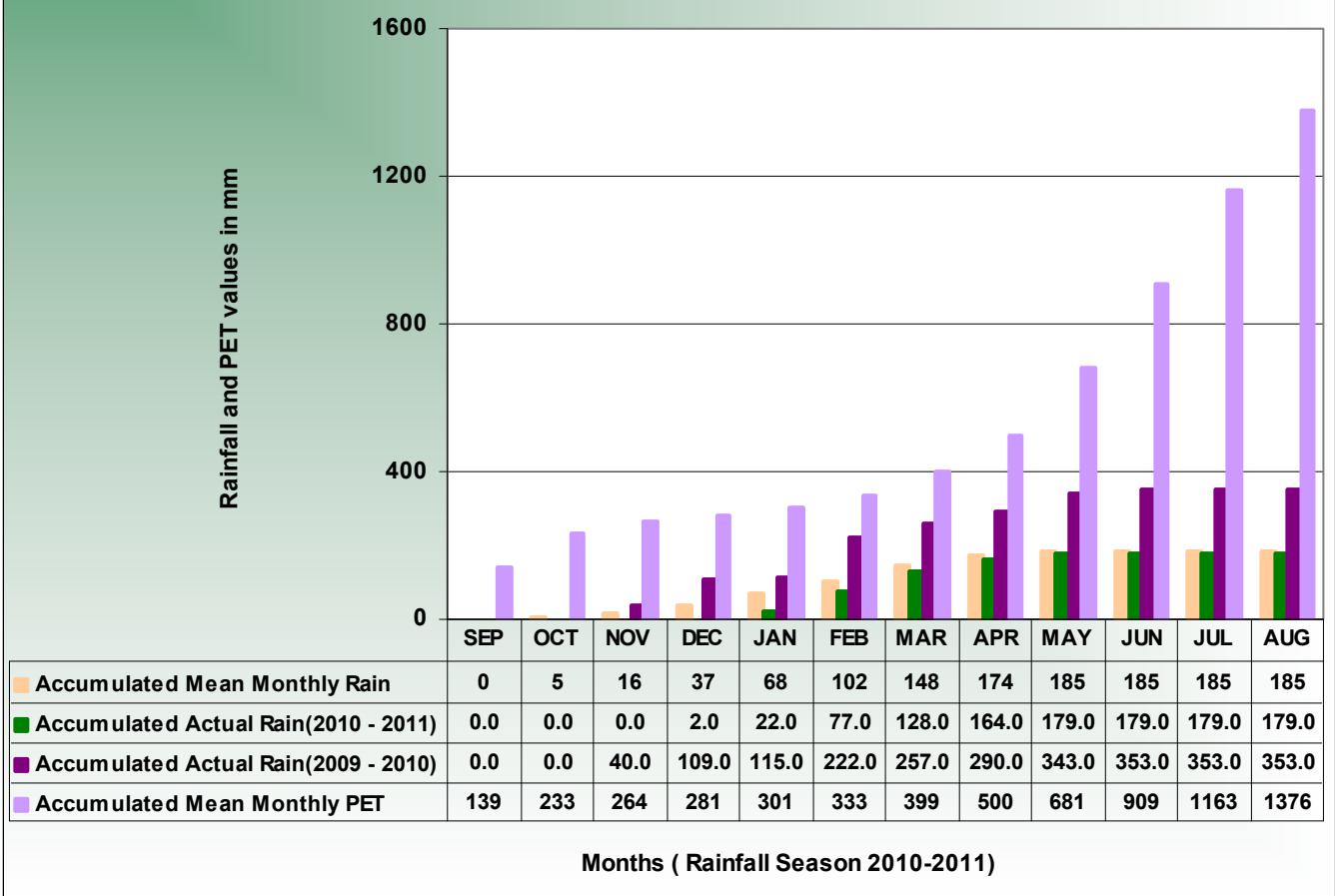


Kandahar: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (South)

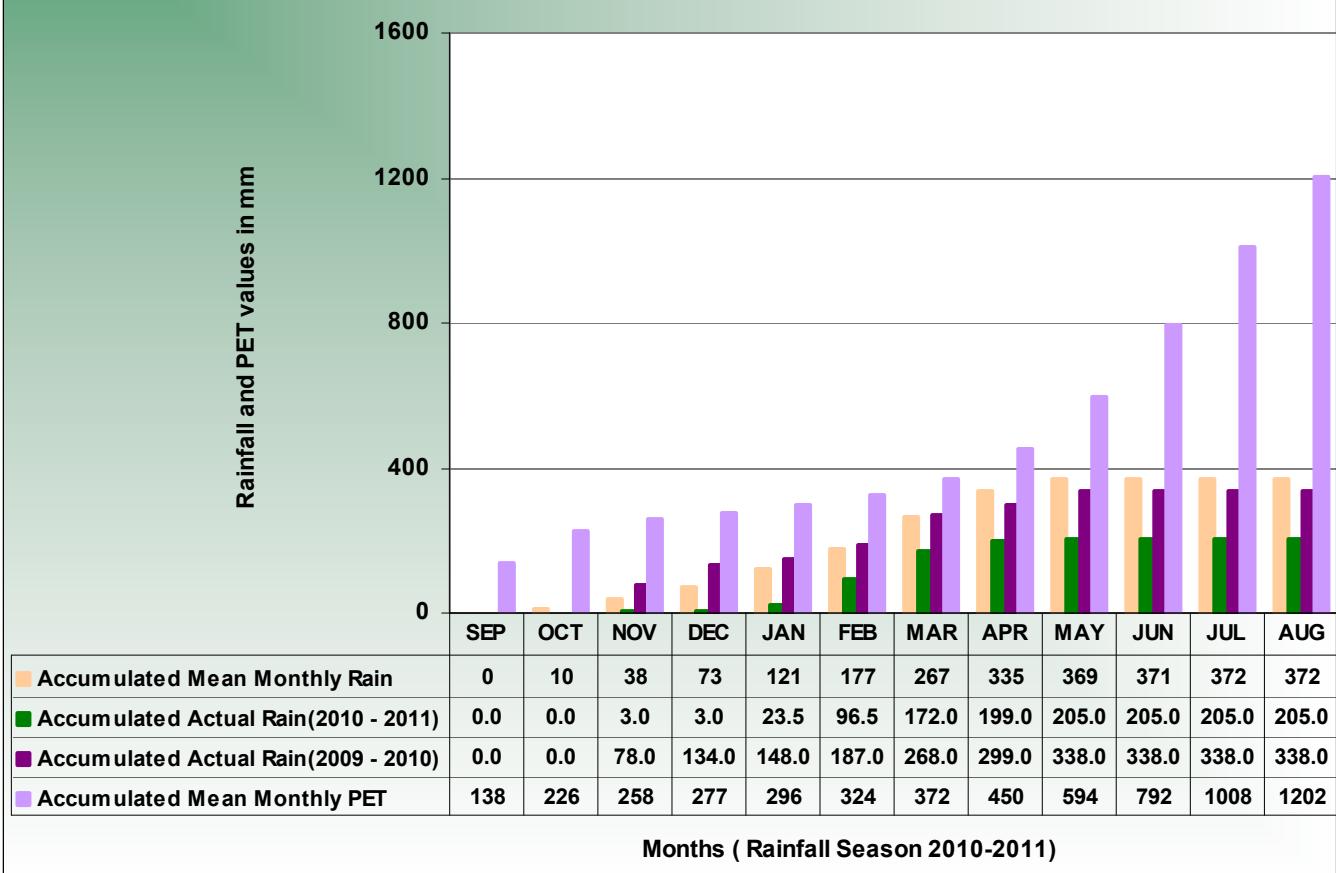


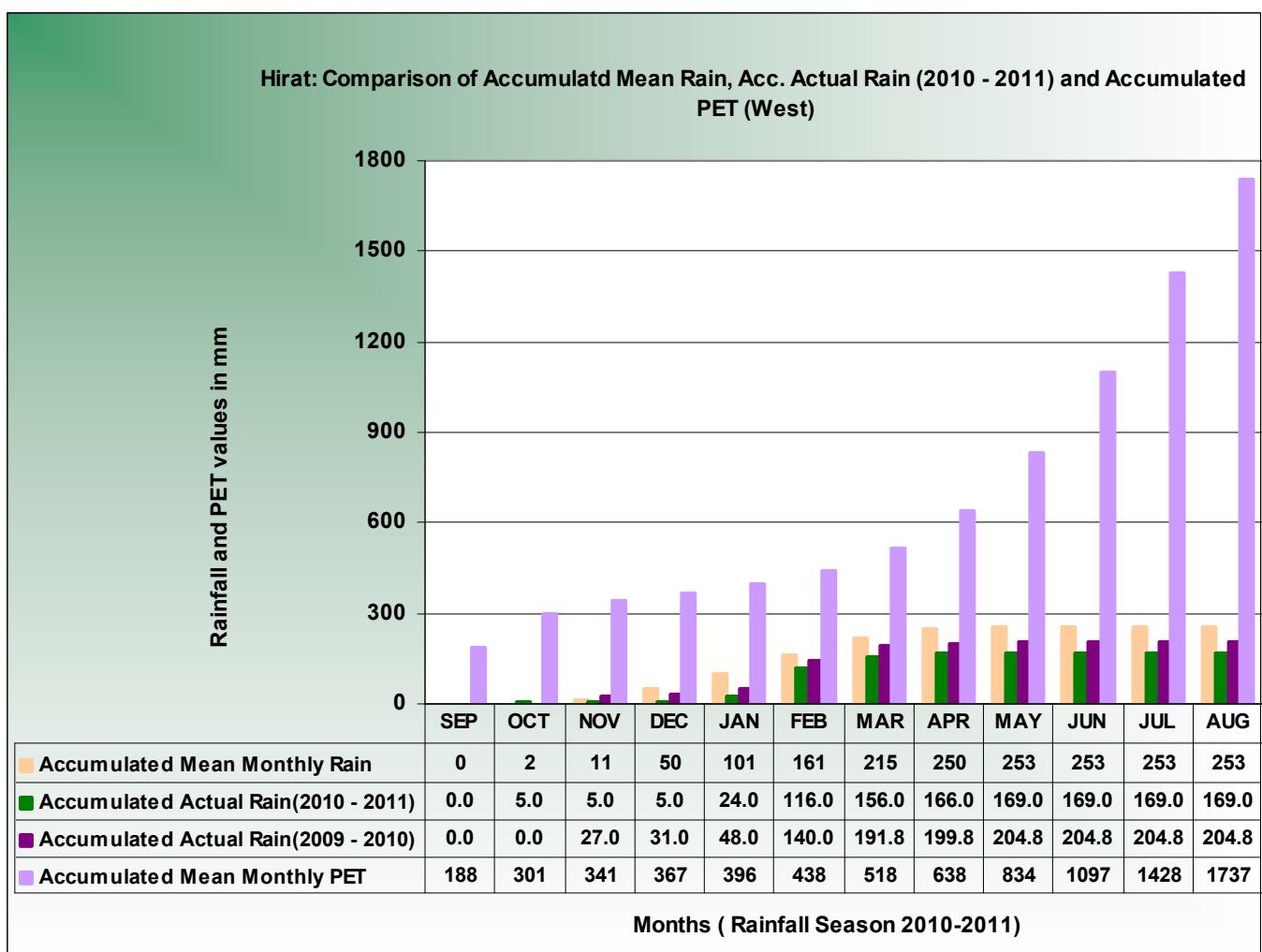
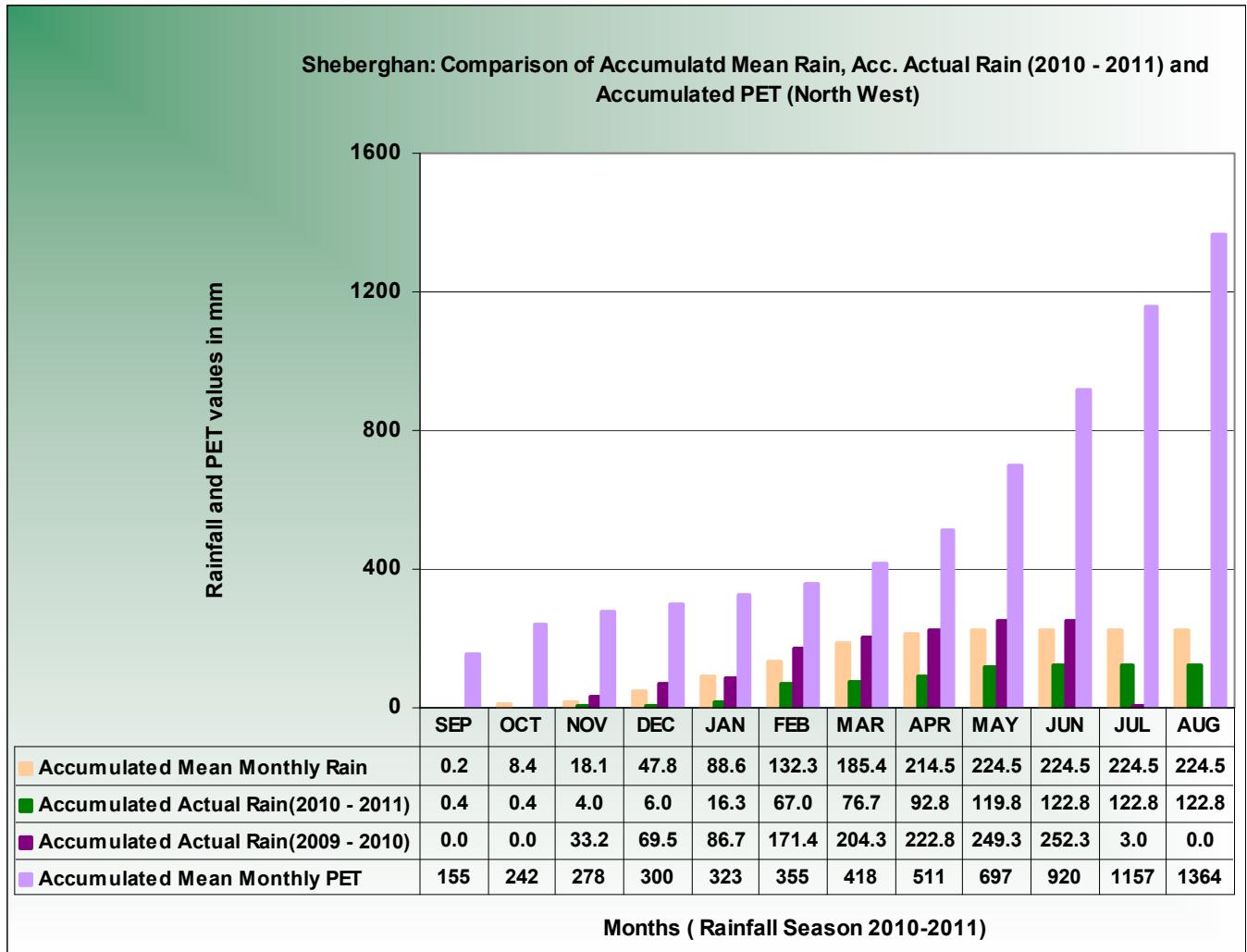


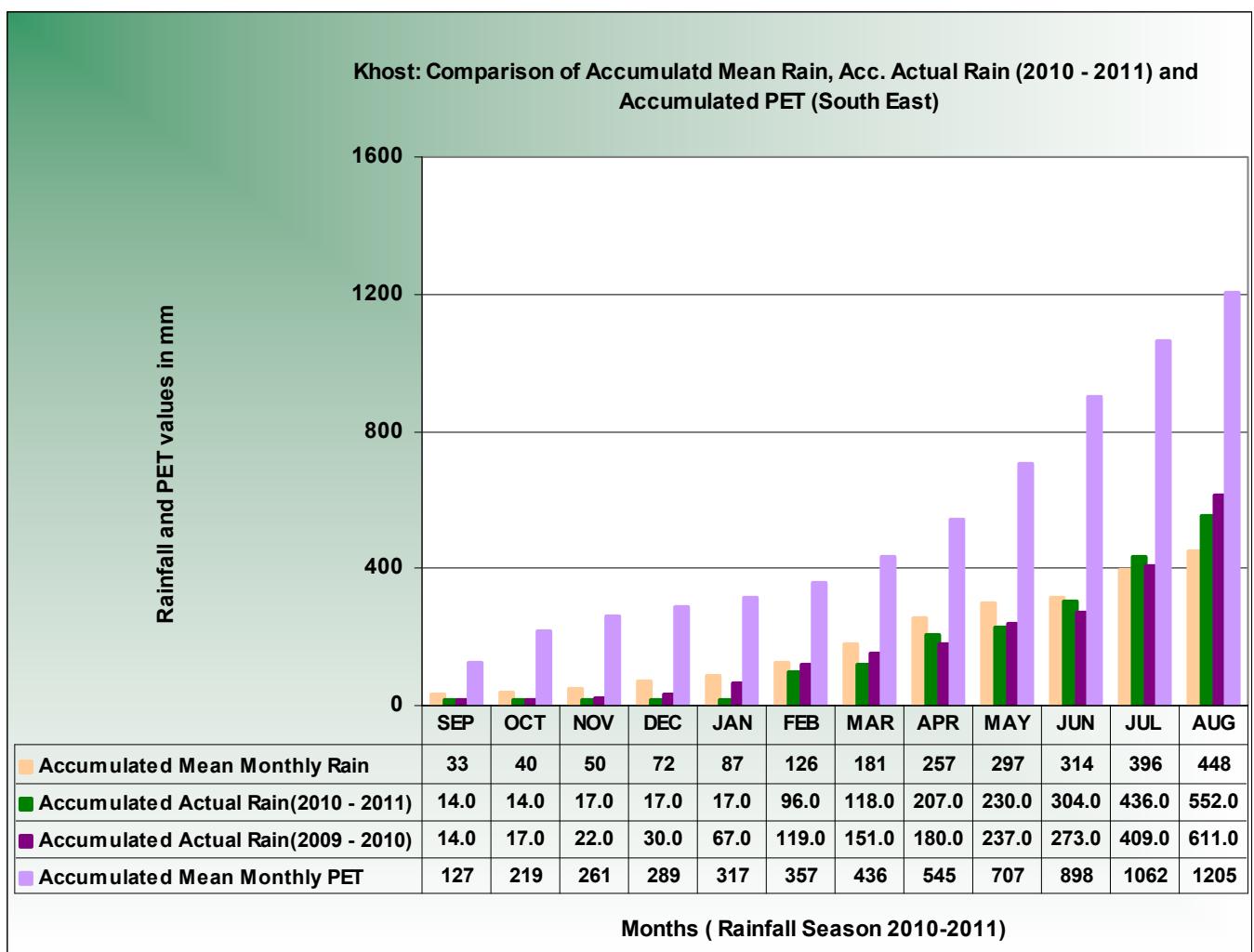
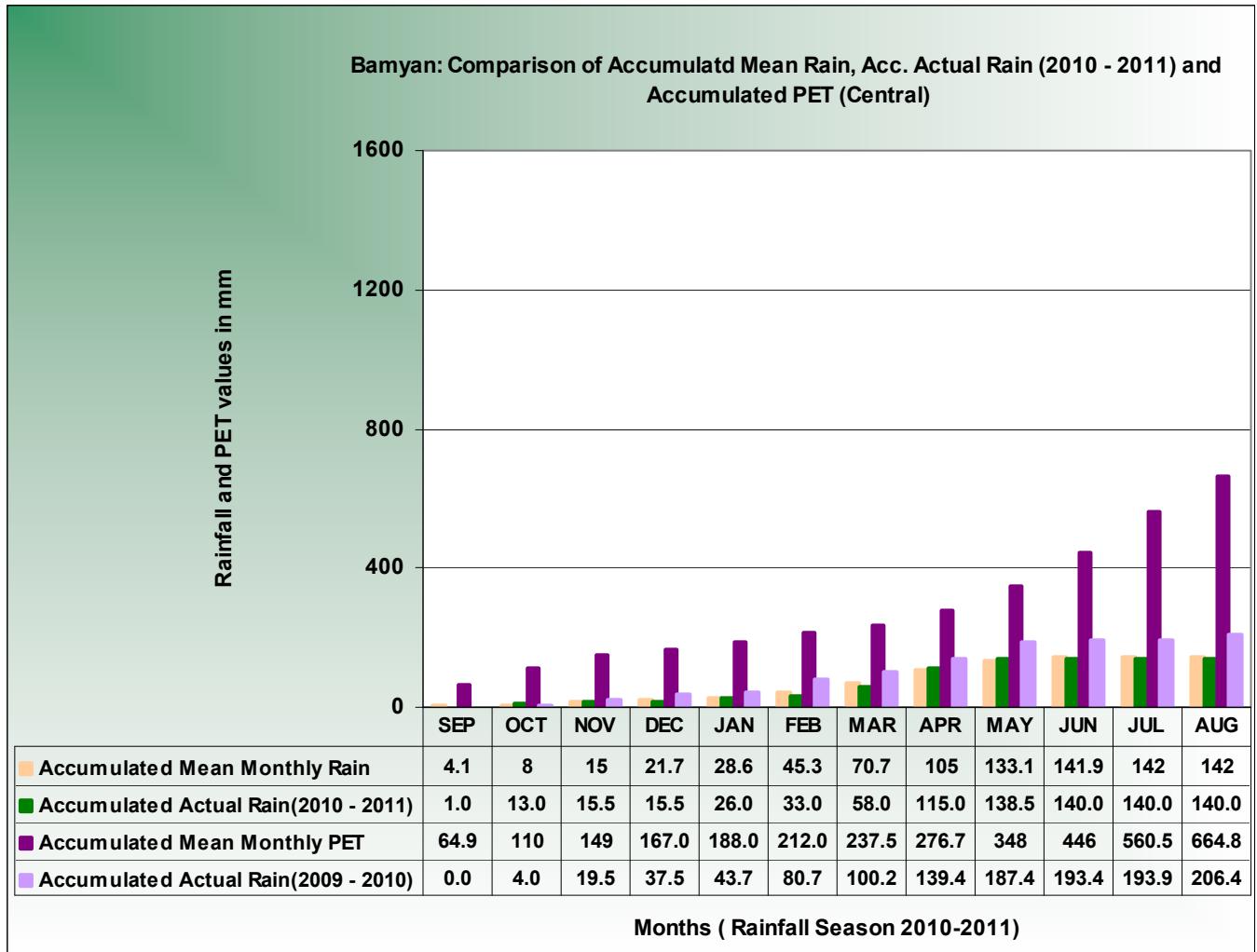
Mazar: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (North West)



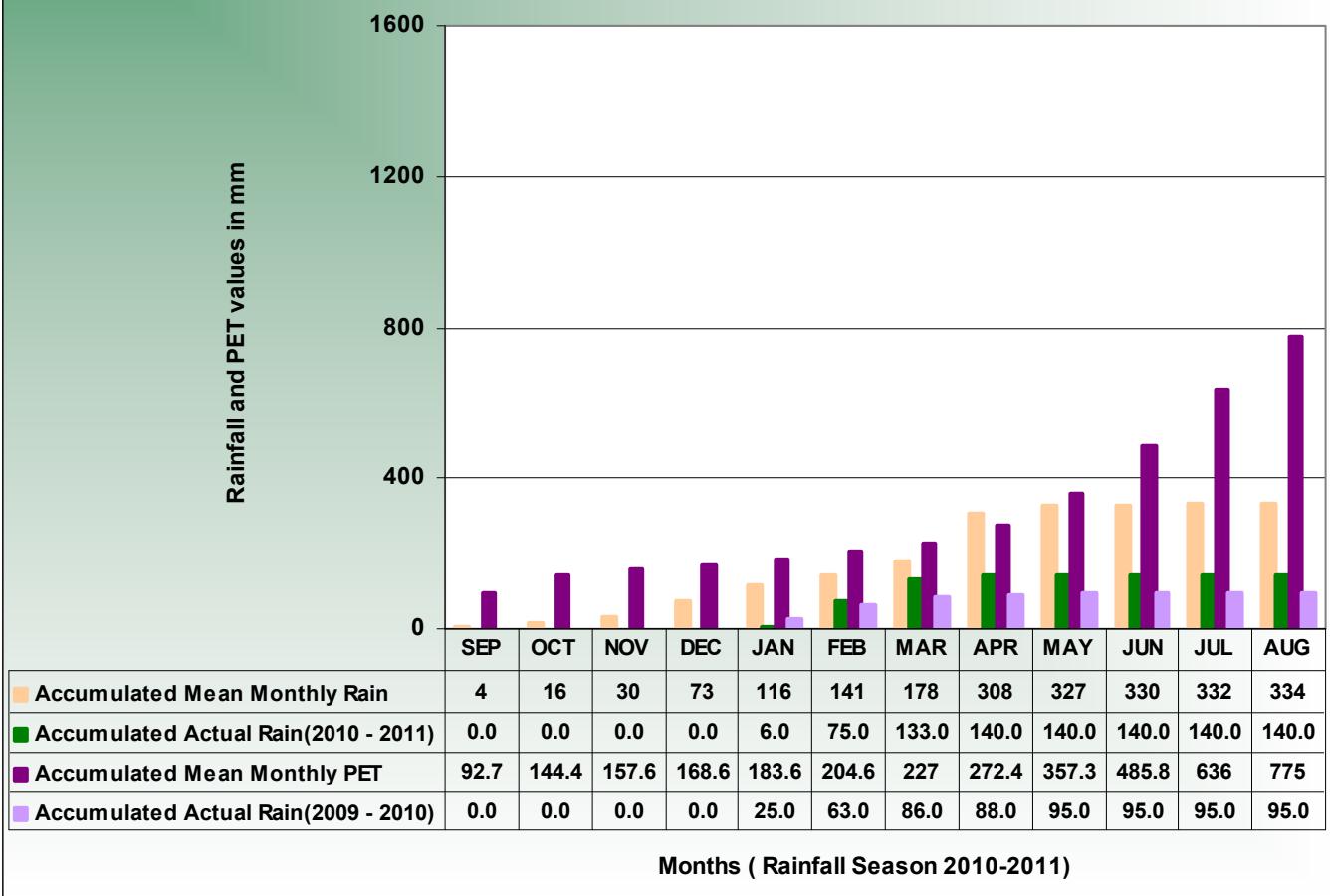
Maimana: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (North West)



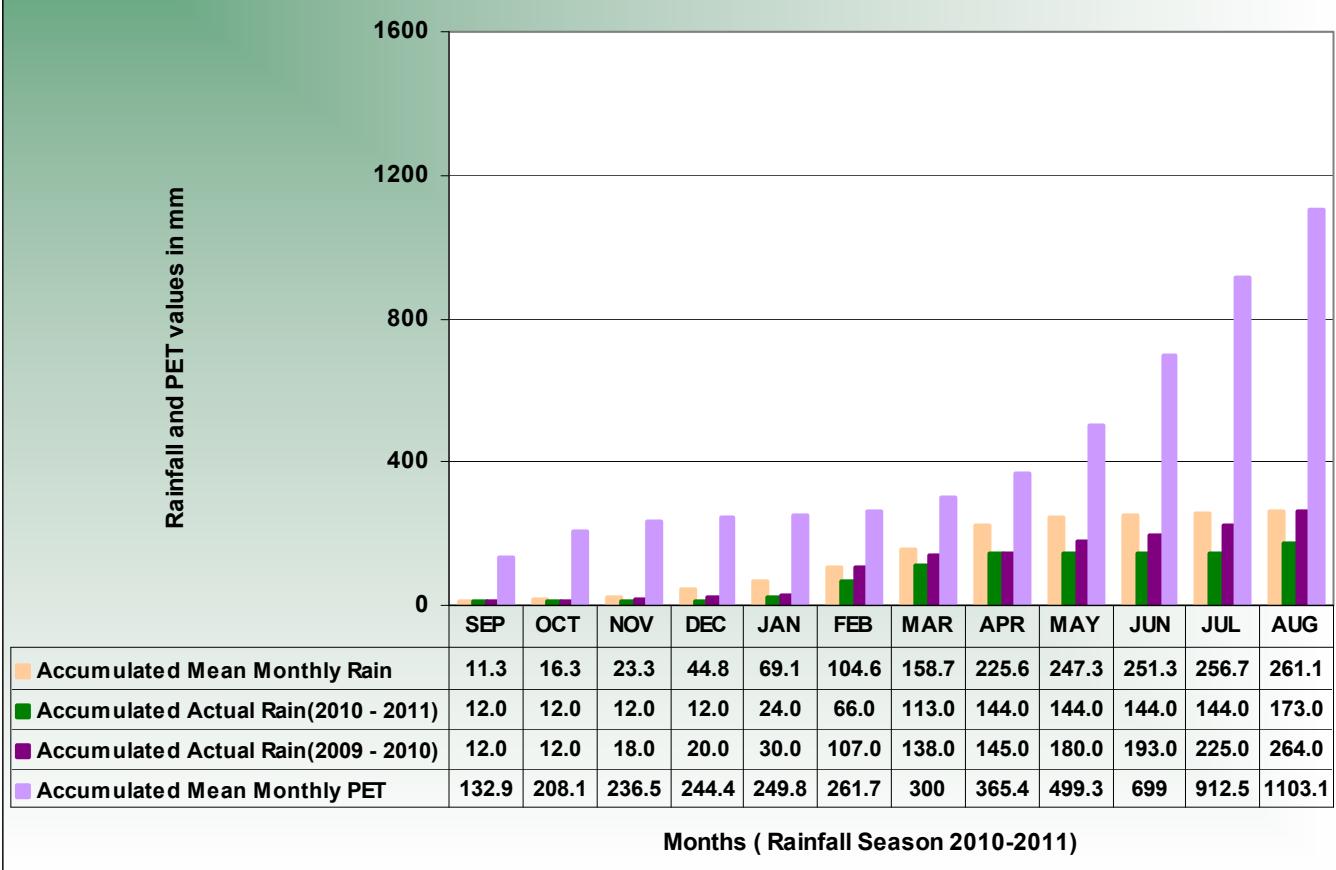




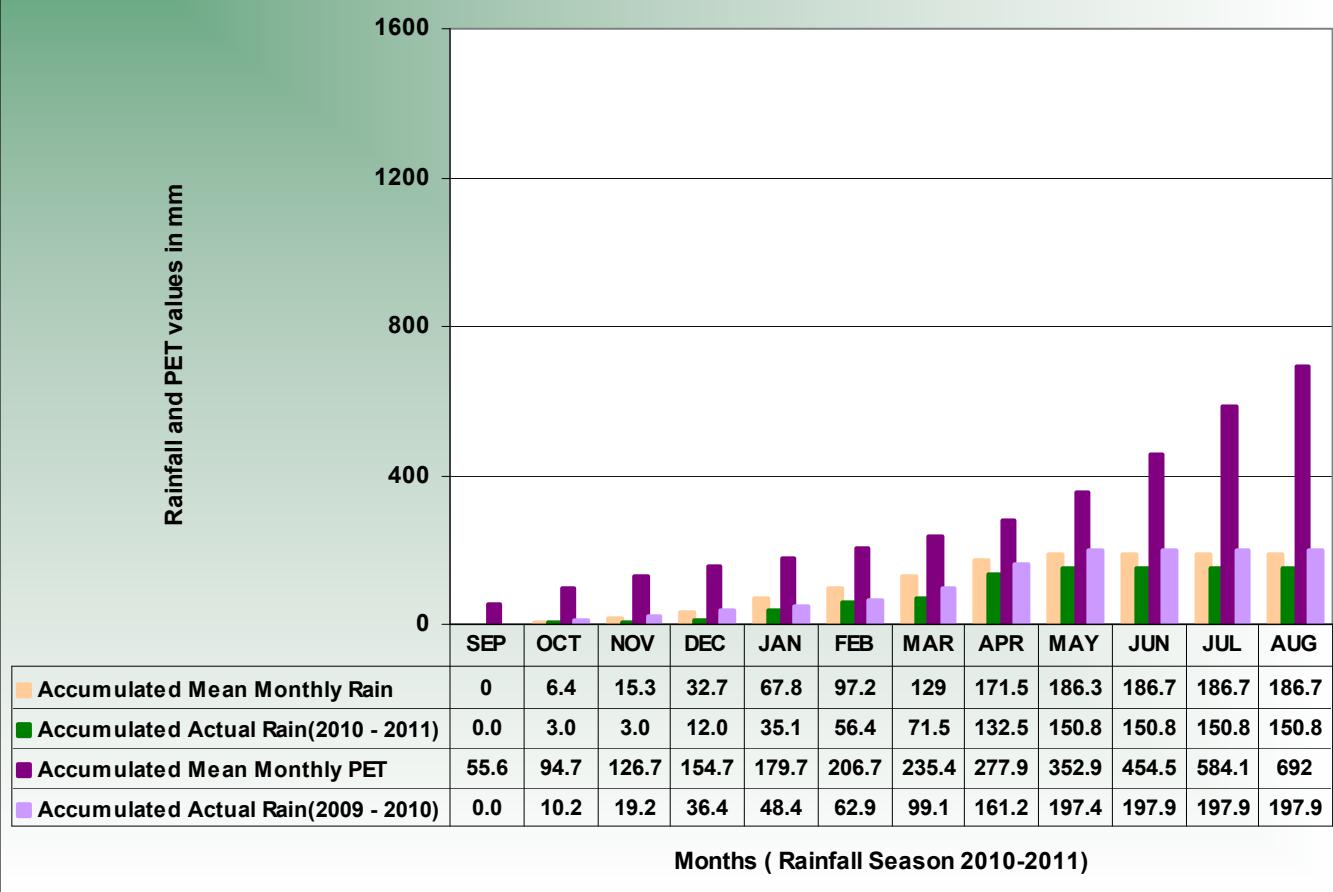
Qalat: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (South West)



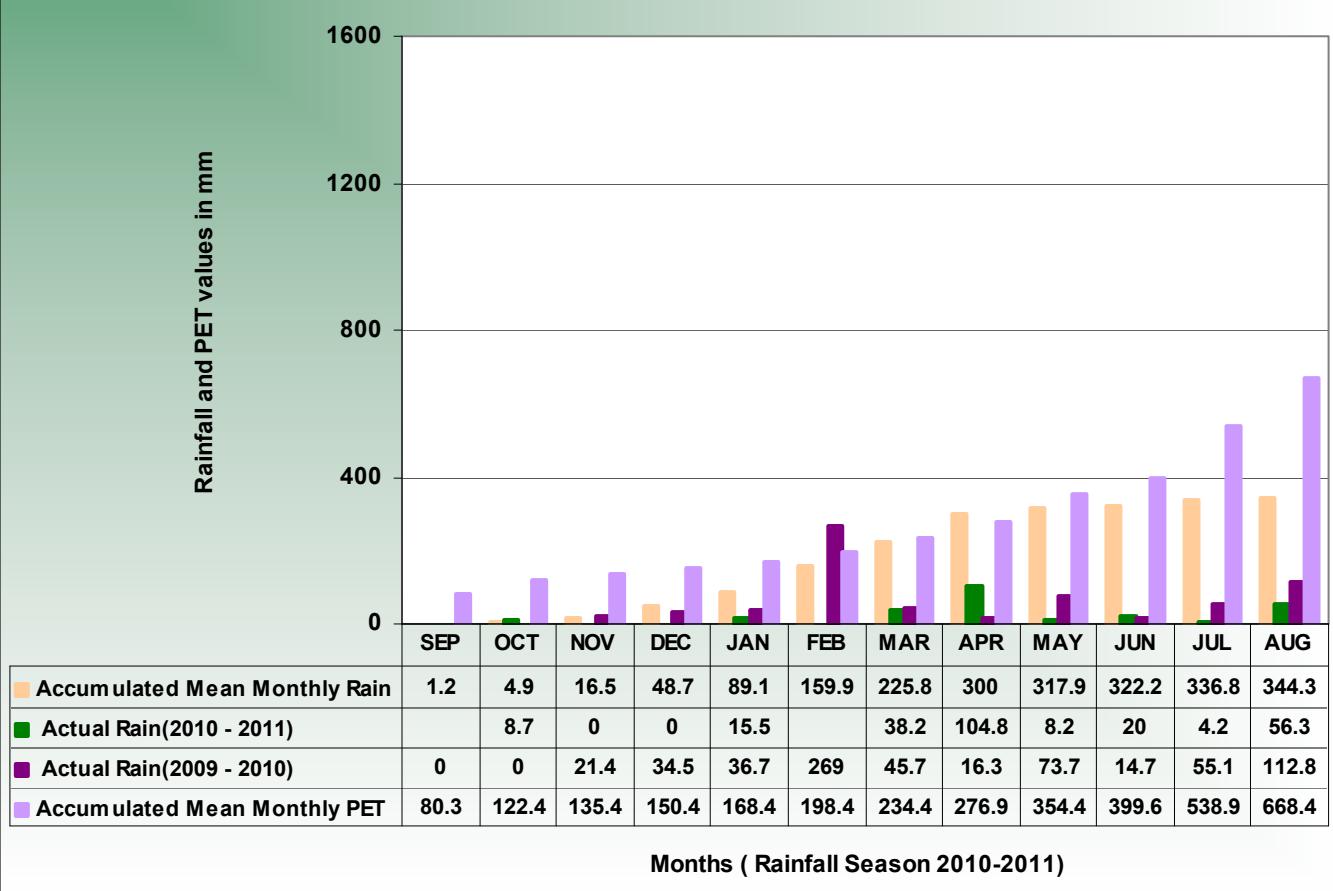
Laghman: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (East)



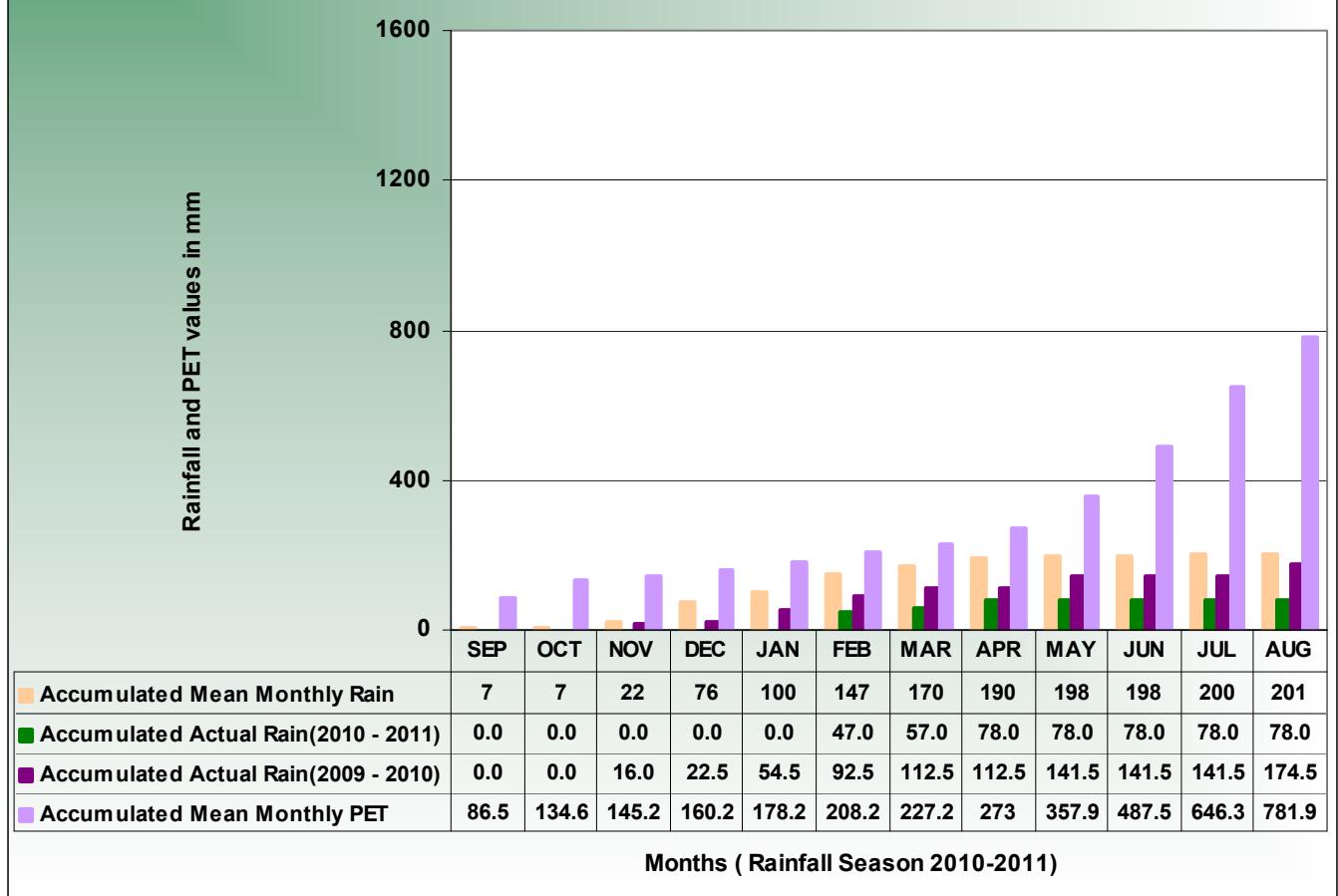
Cheghcharan: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (West)



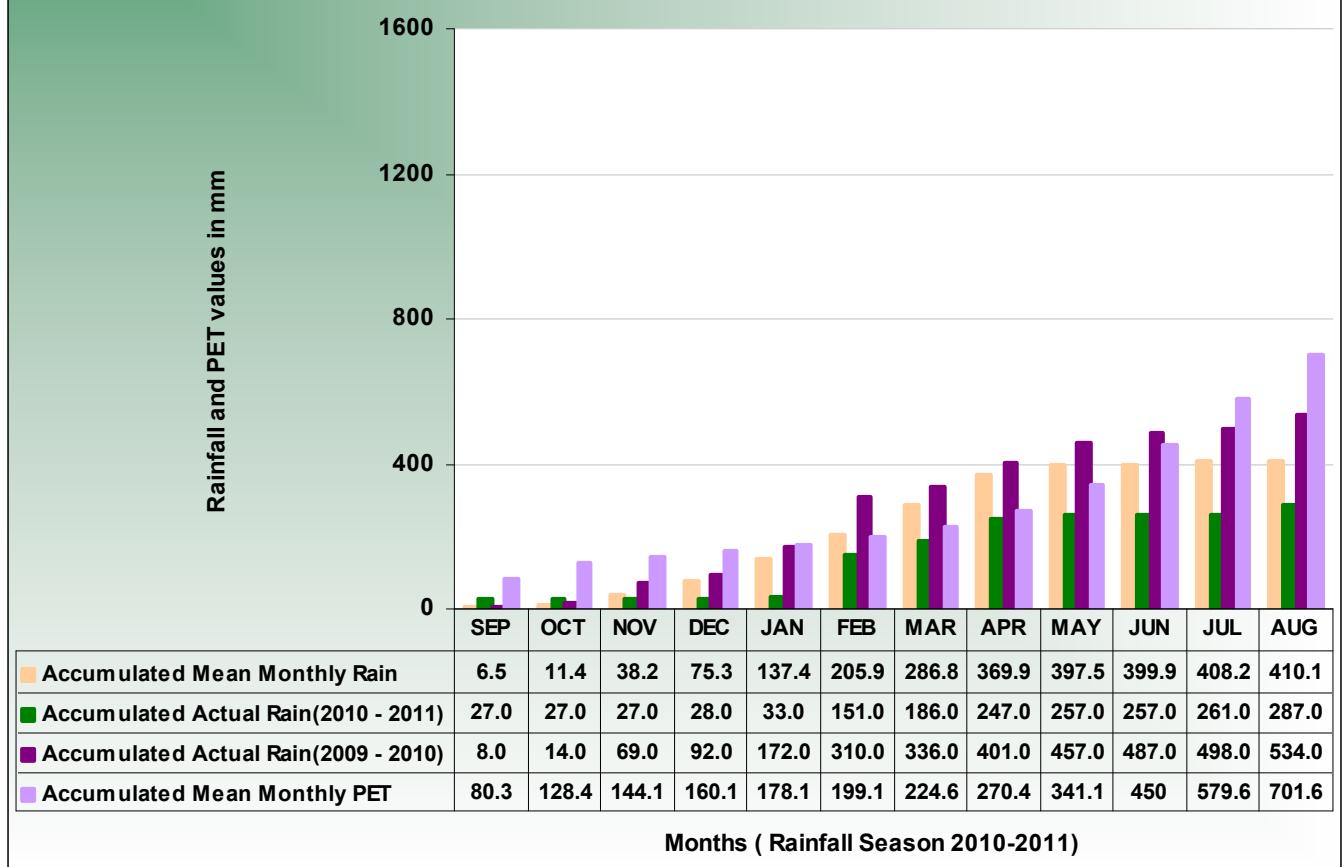
Gardiz: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (South East)



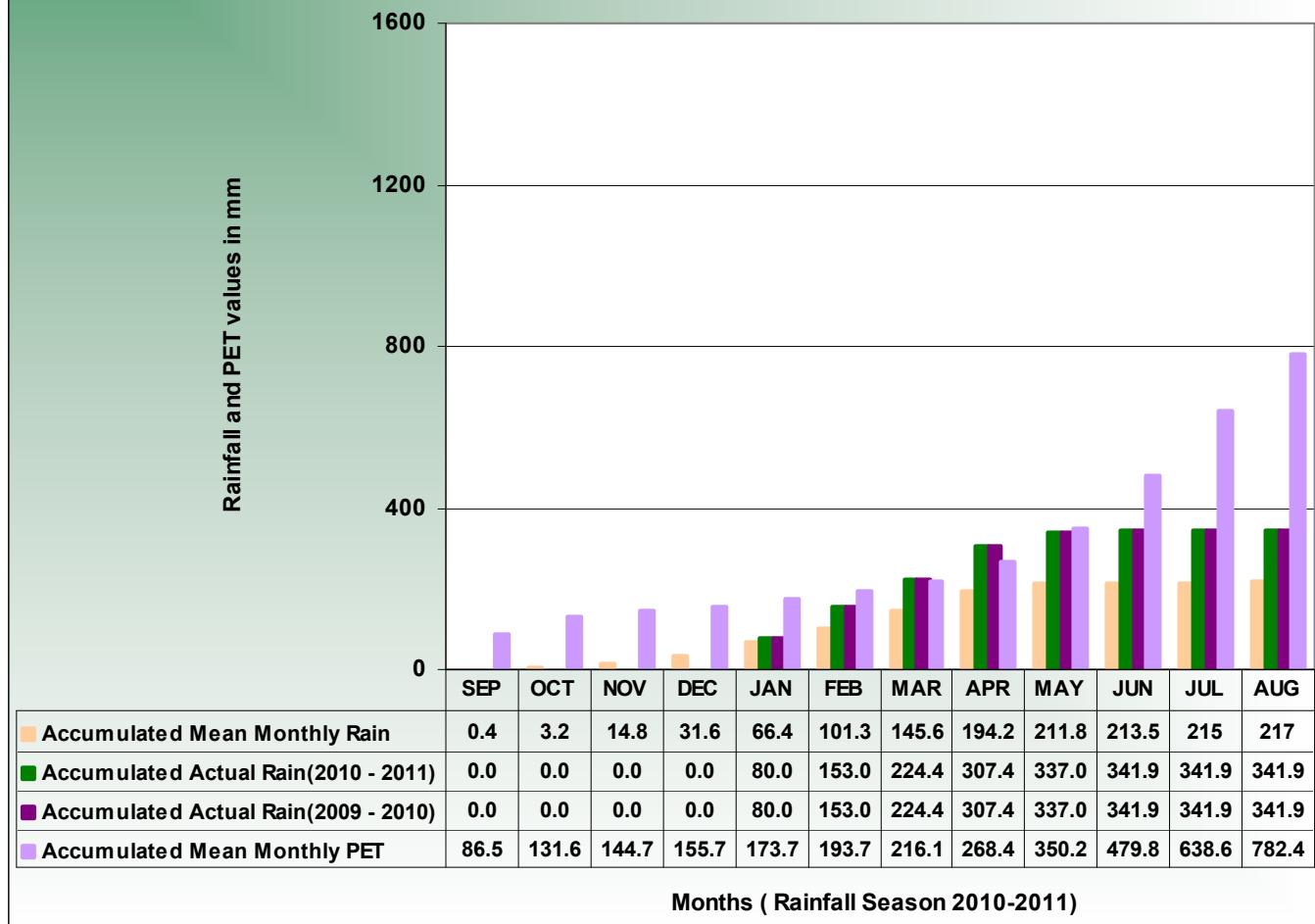
Muquer: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (South East)



Paghman: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (Central)

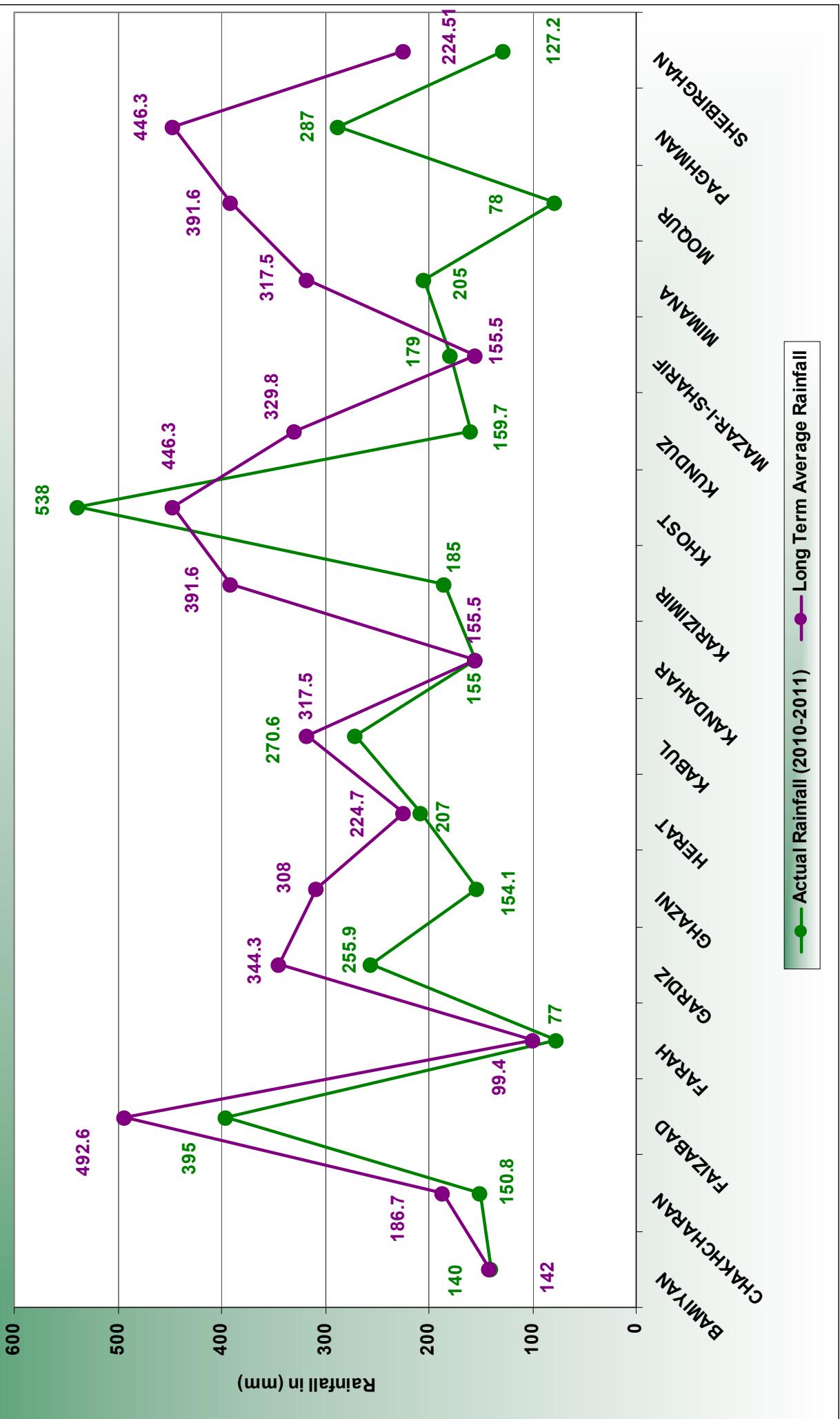


Logar: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2010 - 2011) and Accumulated PET (Central)

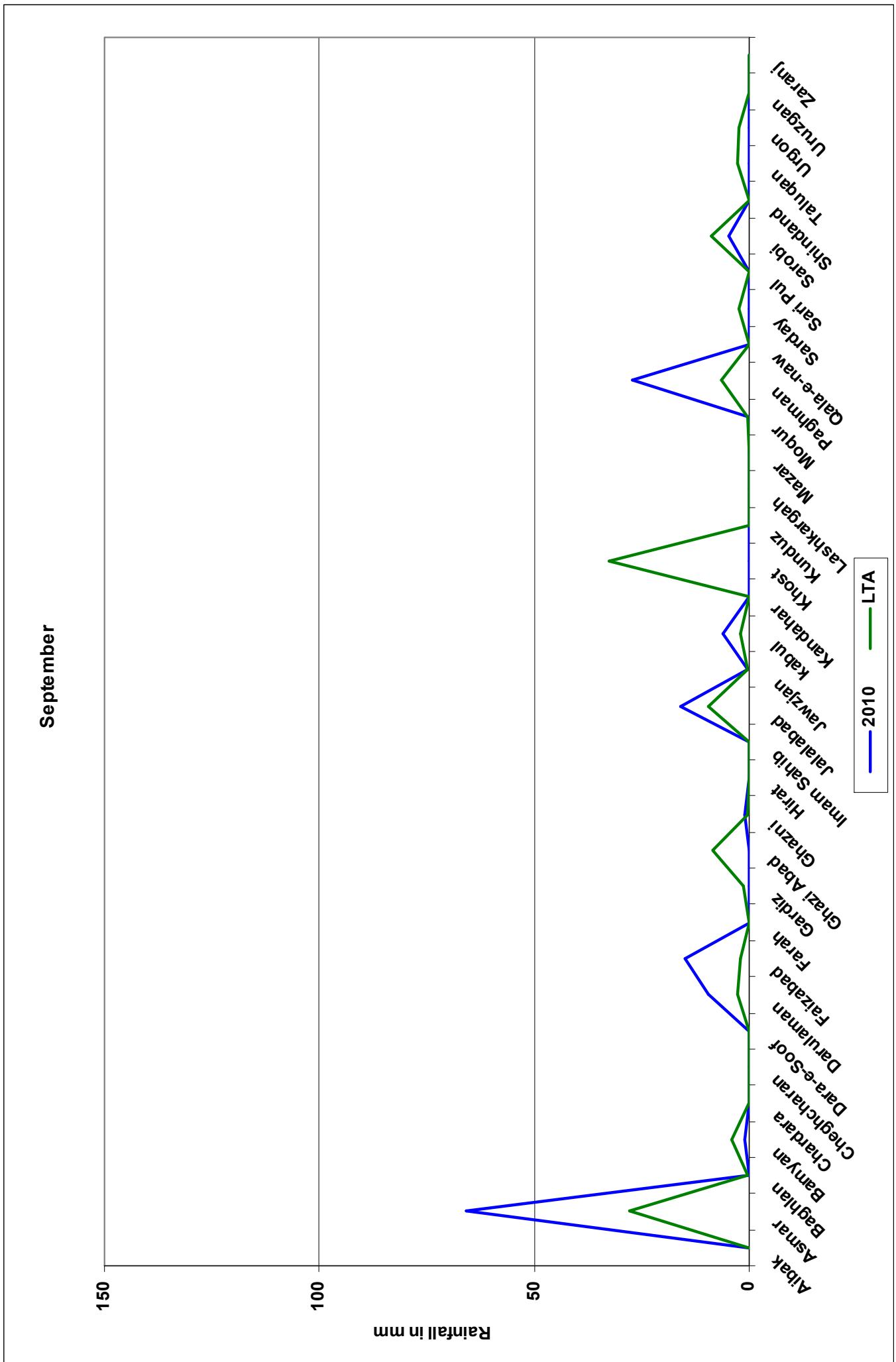


Seasonal Rainfall (mm) (2010- 2011)
Compared to
Long-Term Average

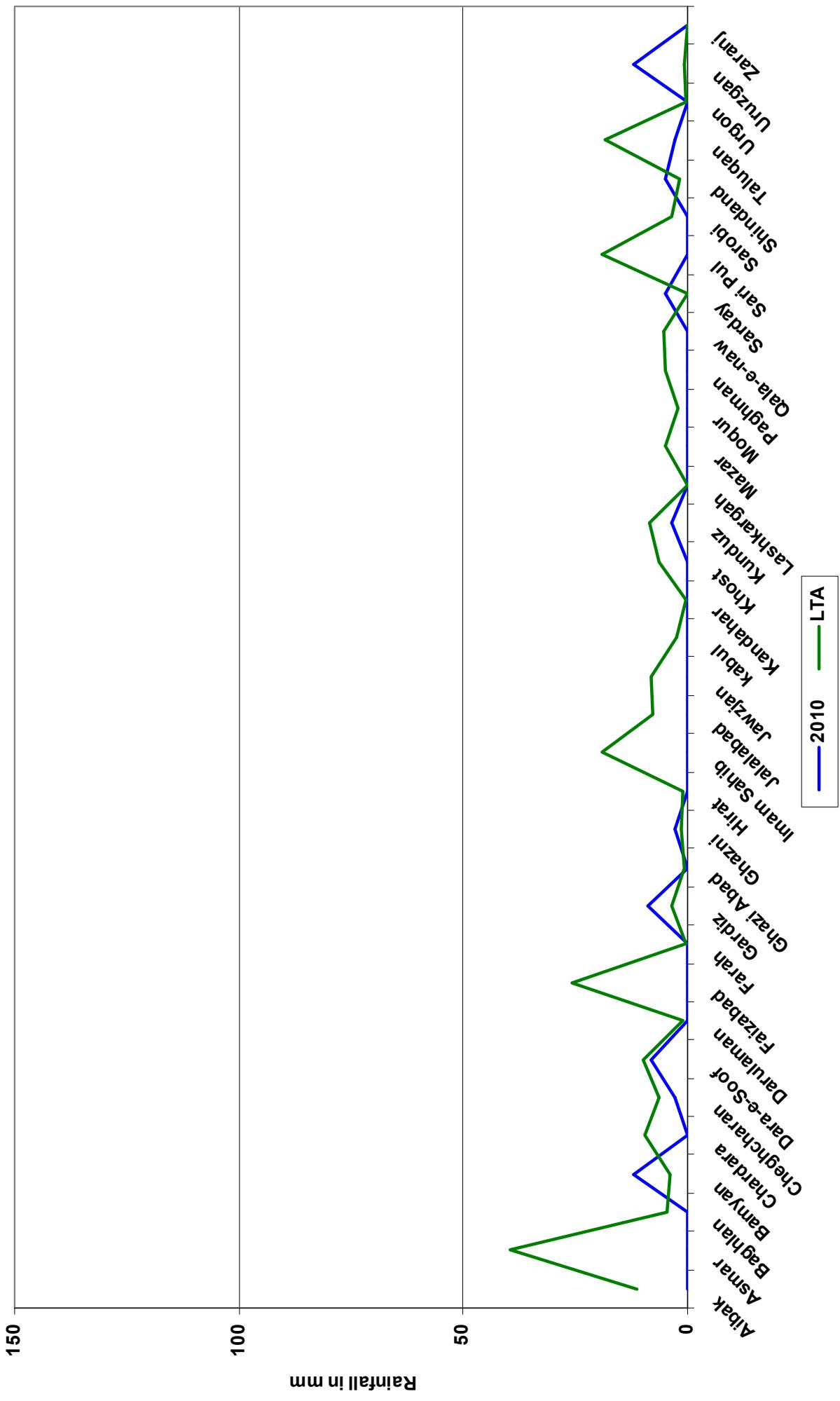
Comparison of Actual Yearly Rainfall (2010 - 2011) with Long Term Average

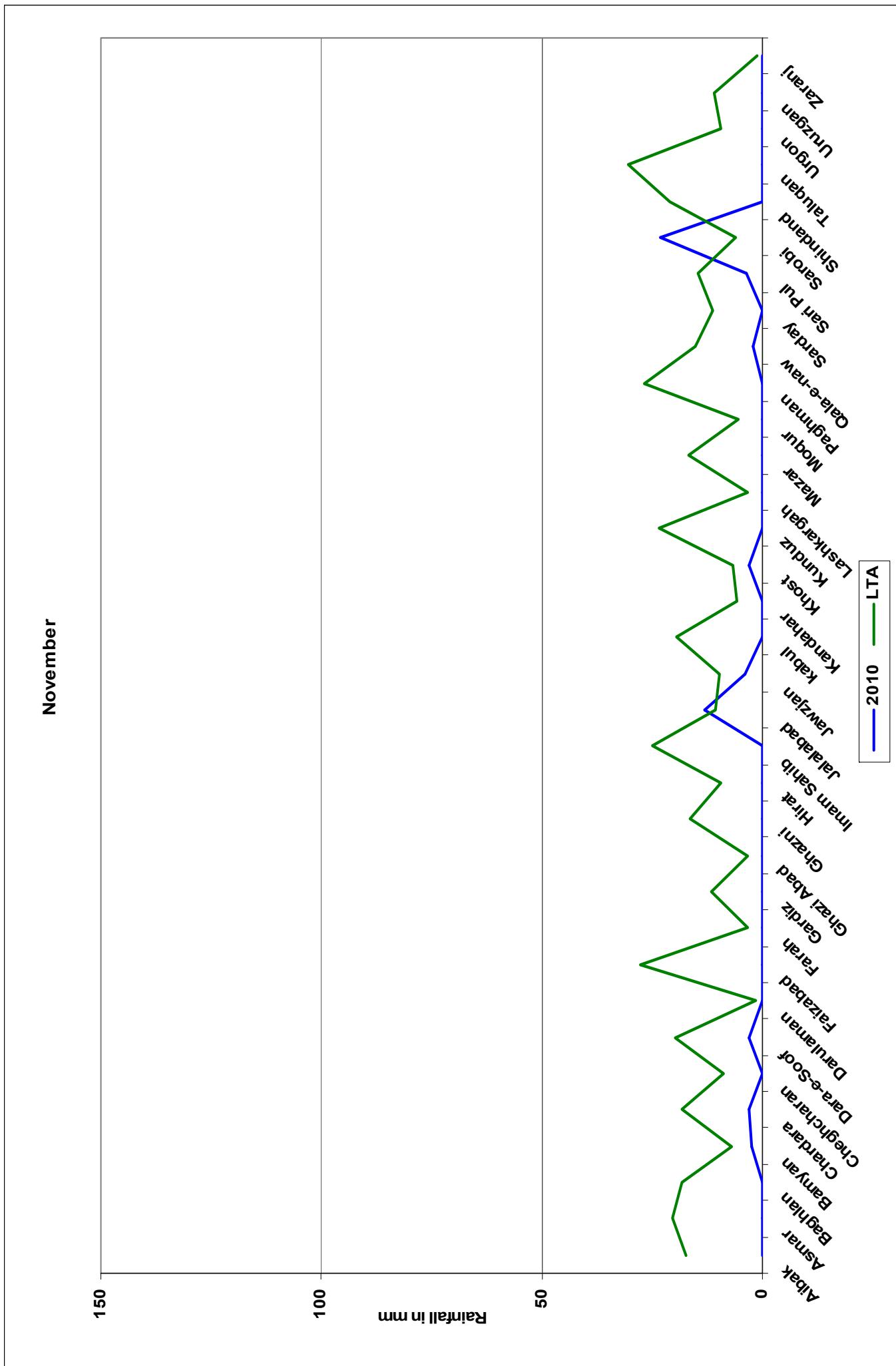


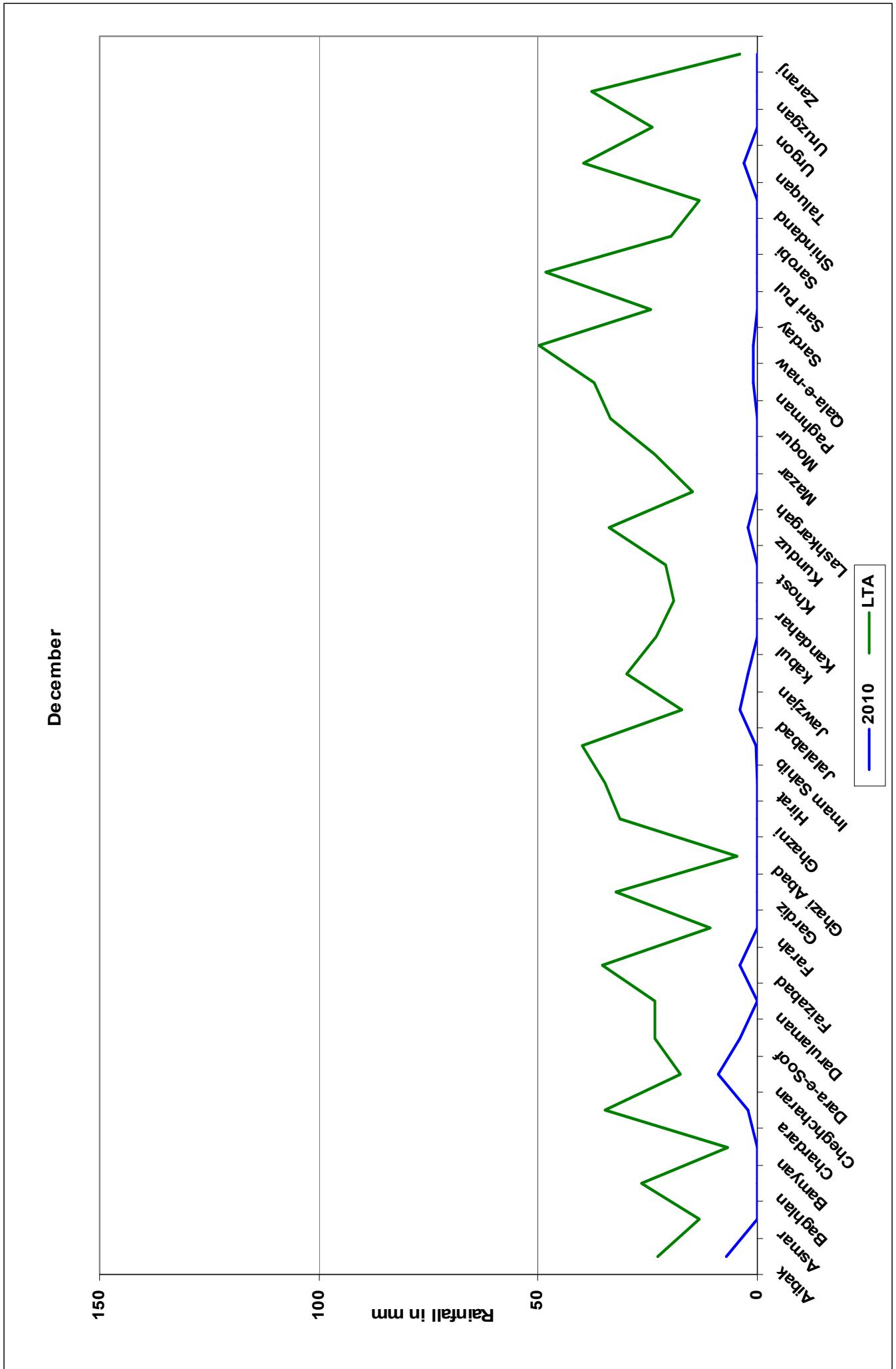
Monthly Rainfall Comparison With Long Term Average

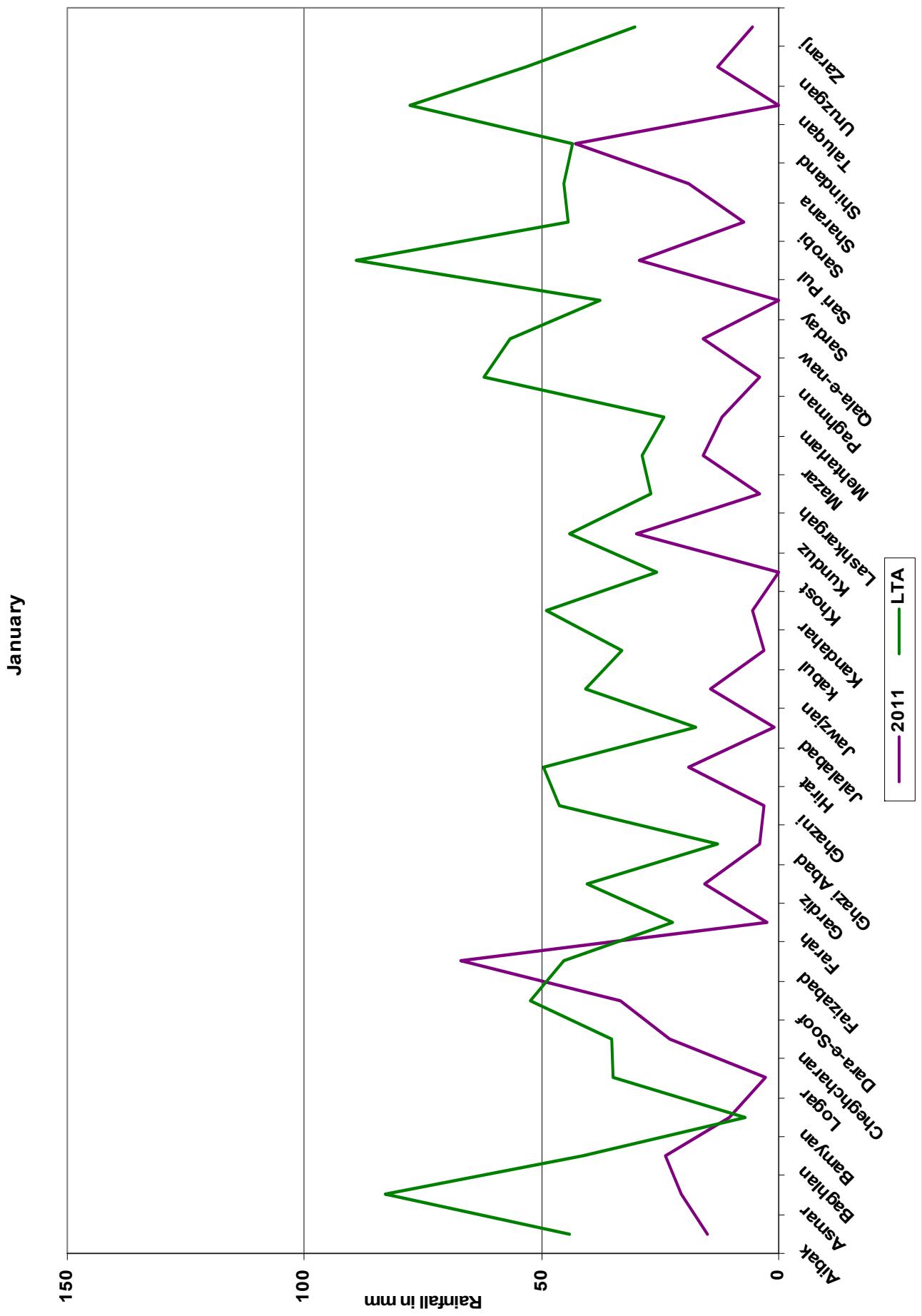


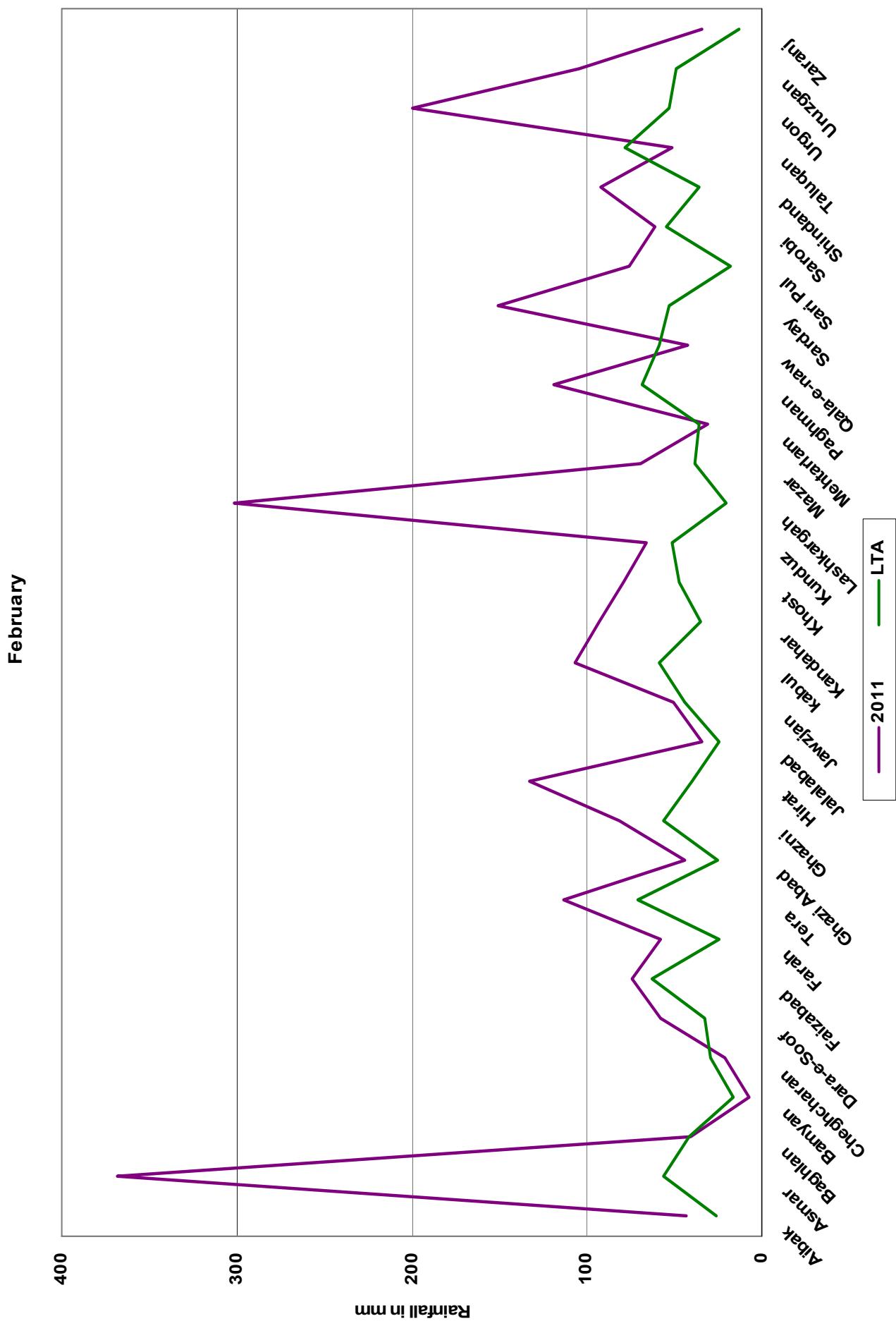
October

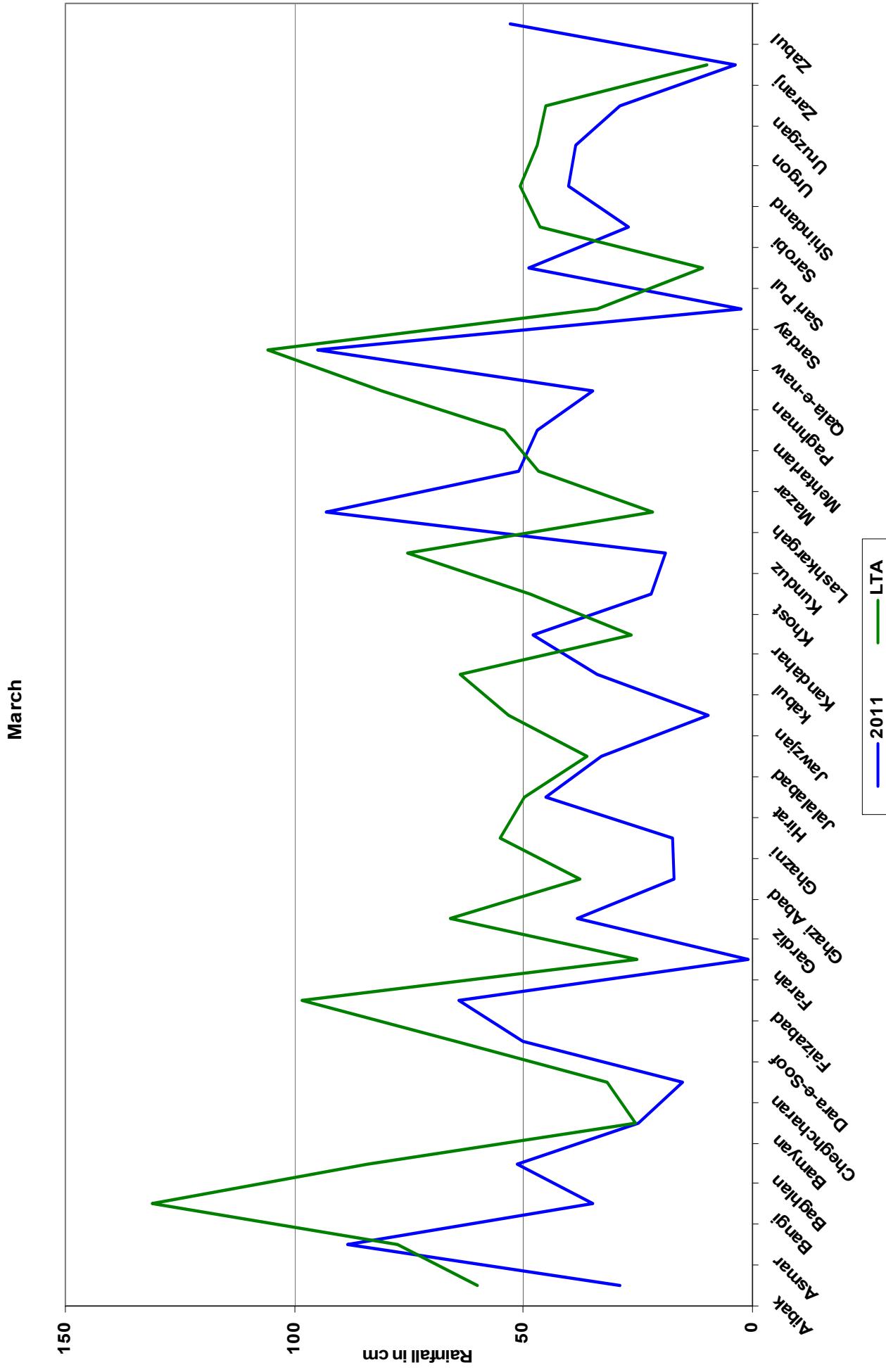


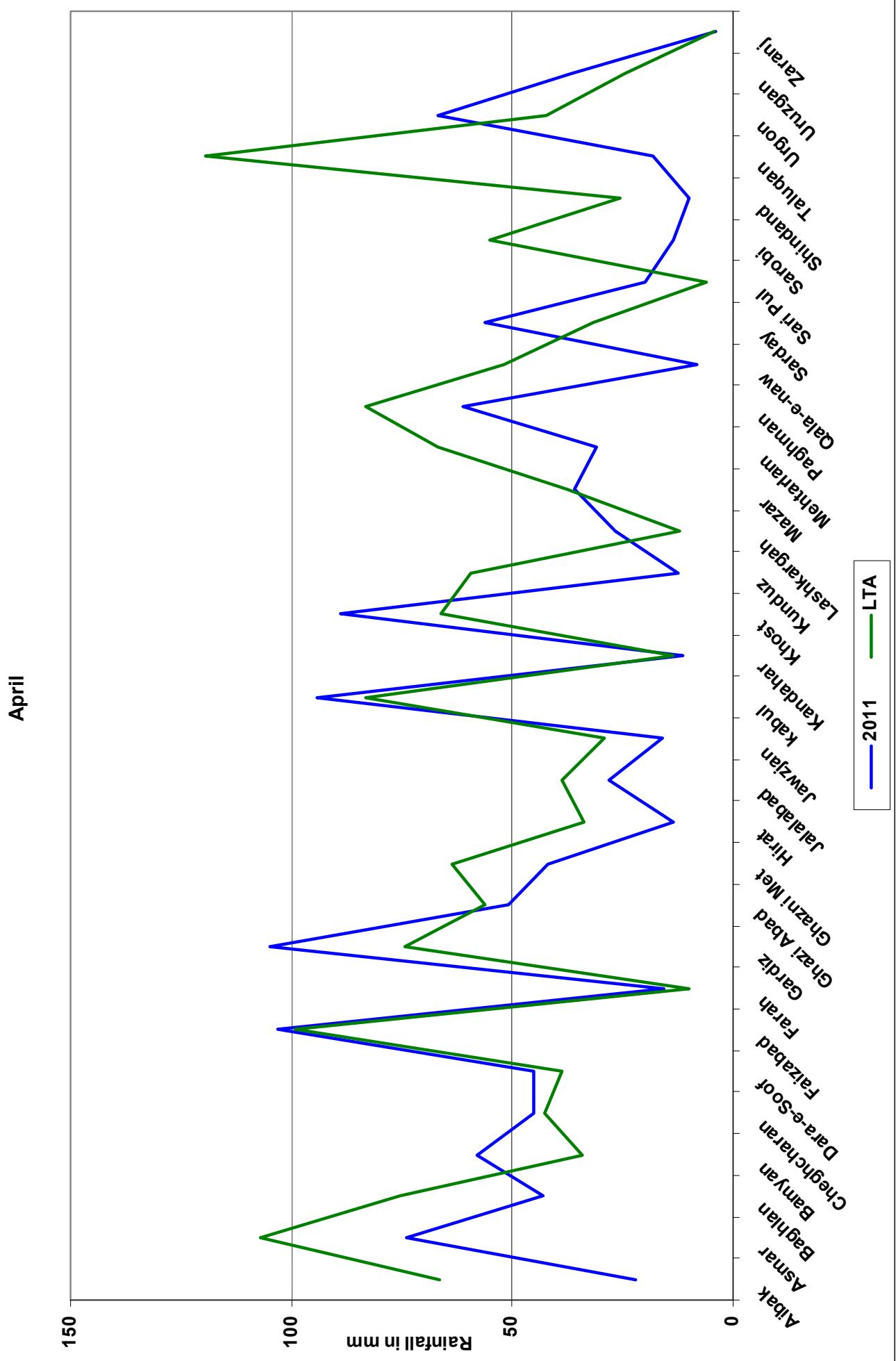


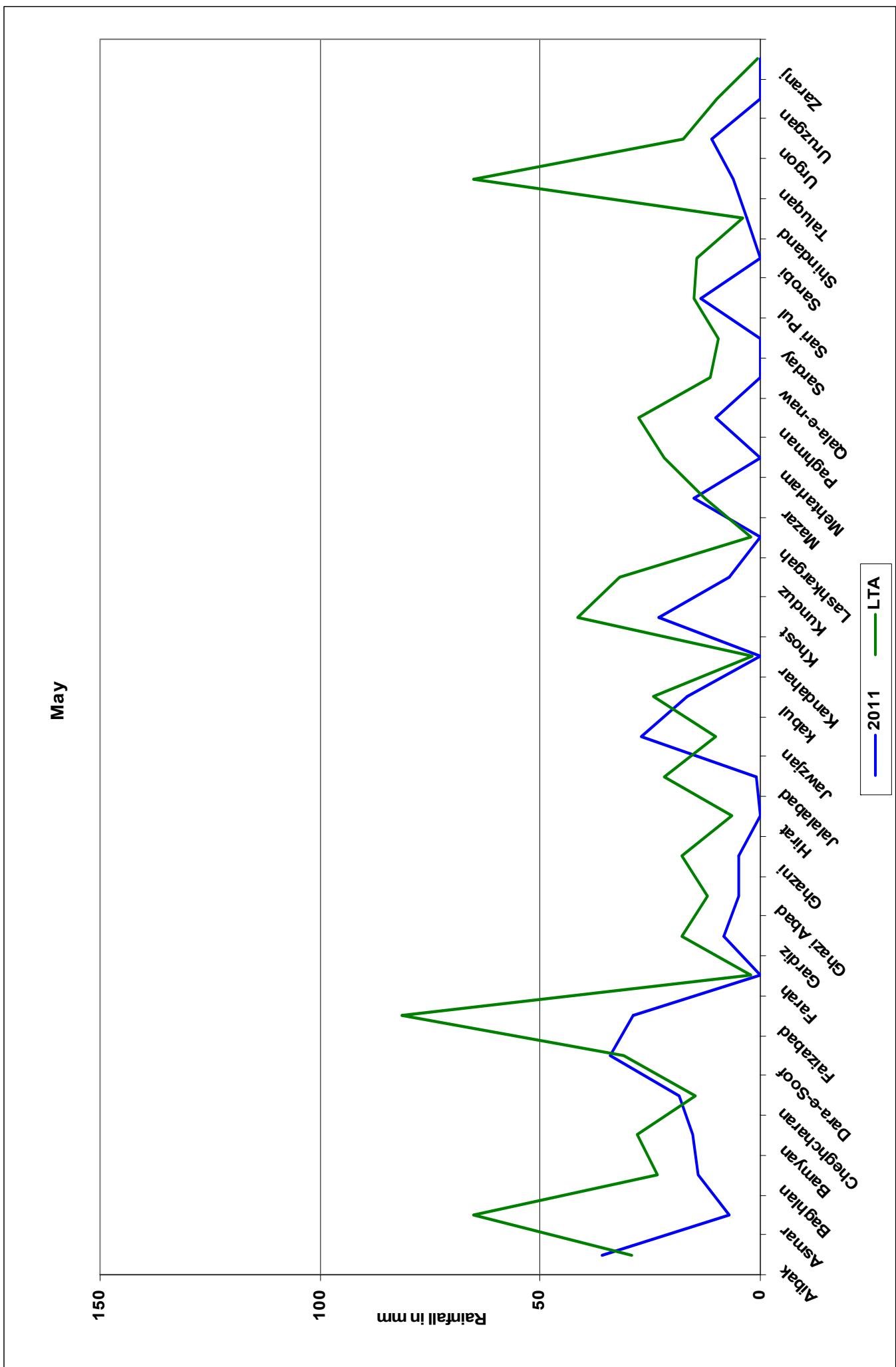


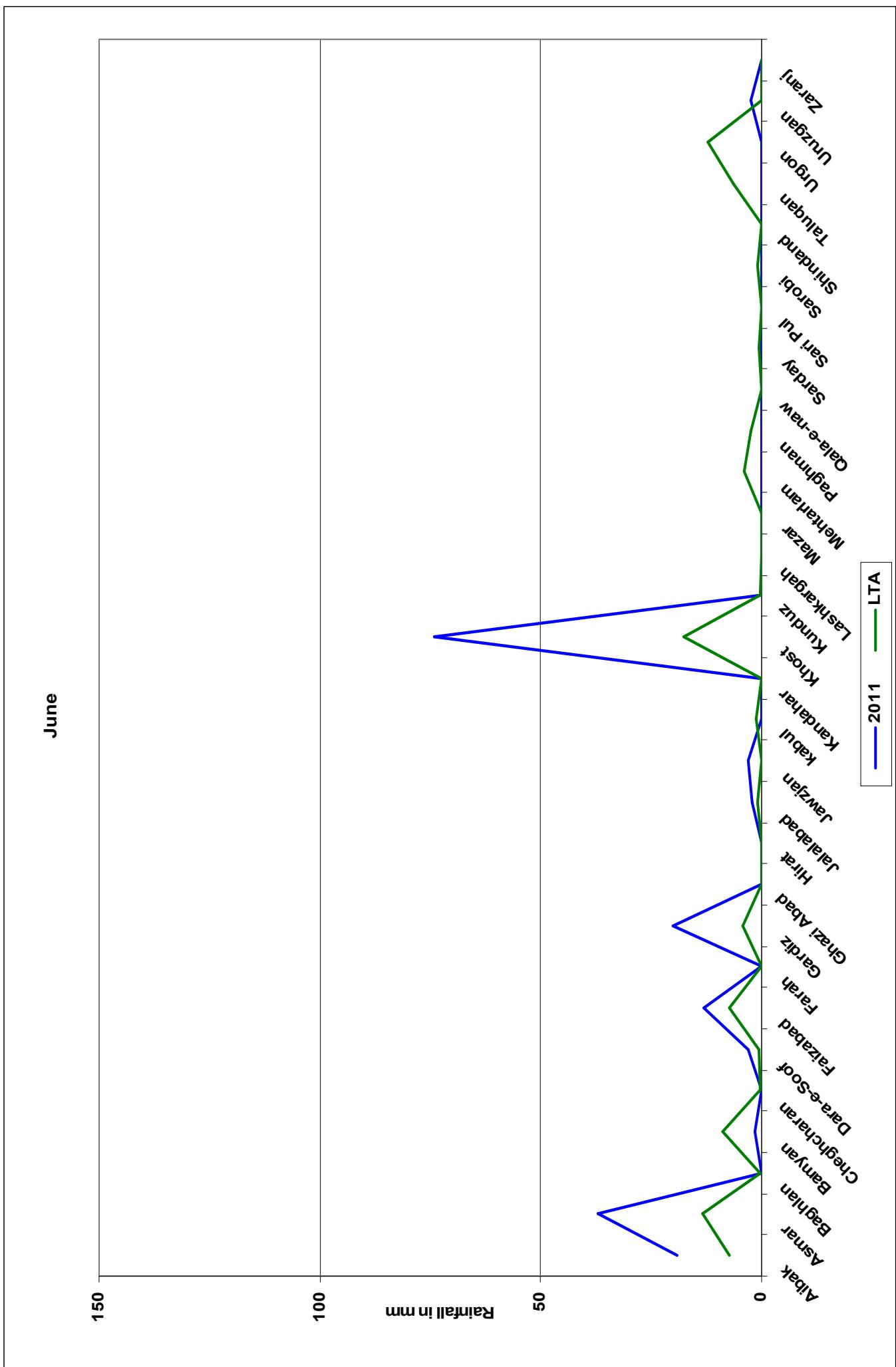


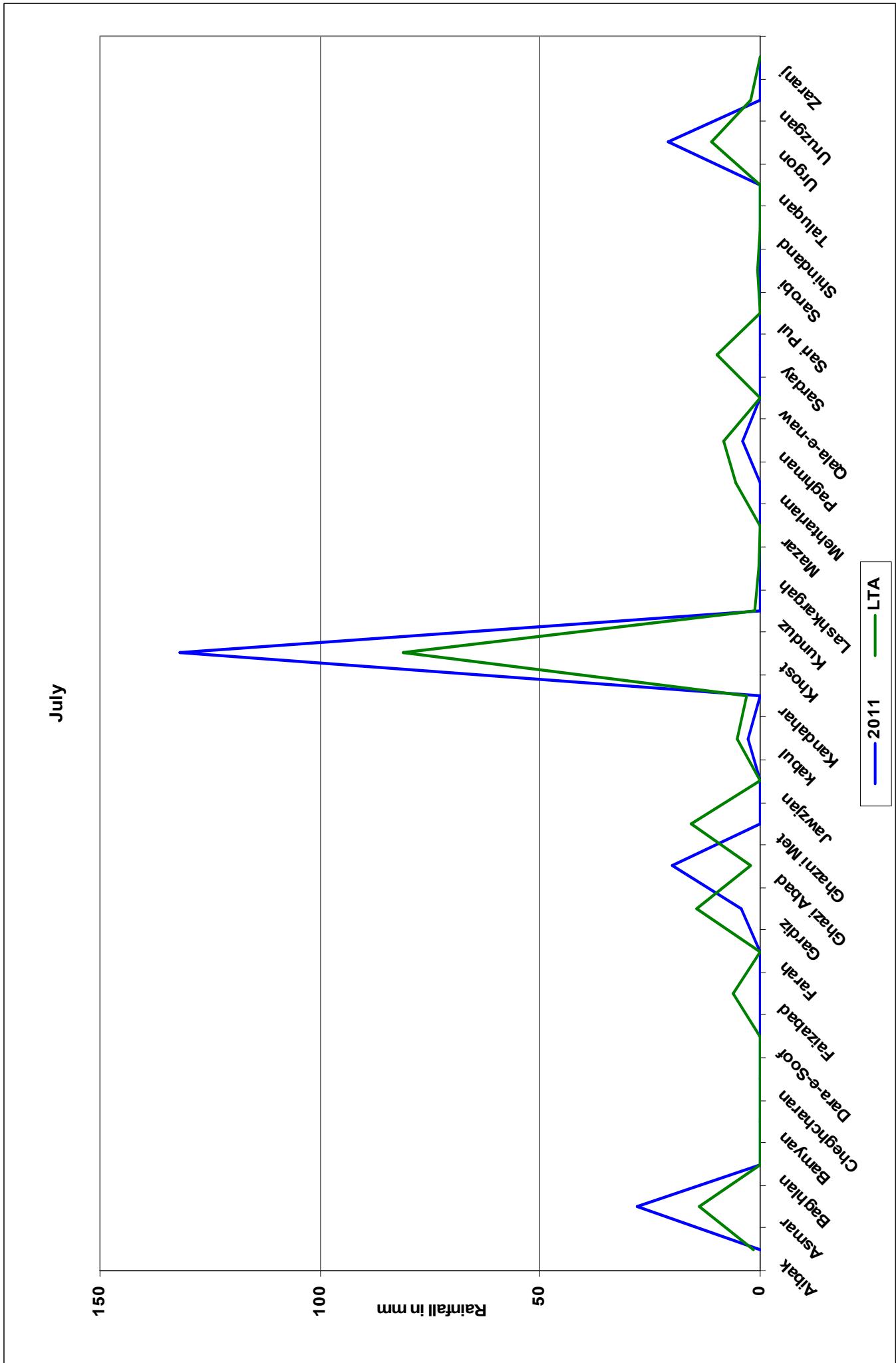


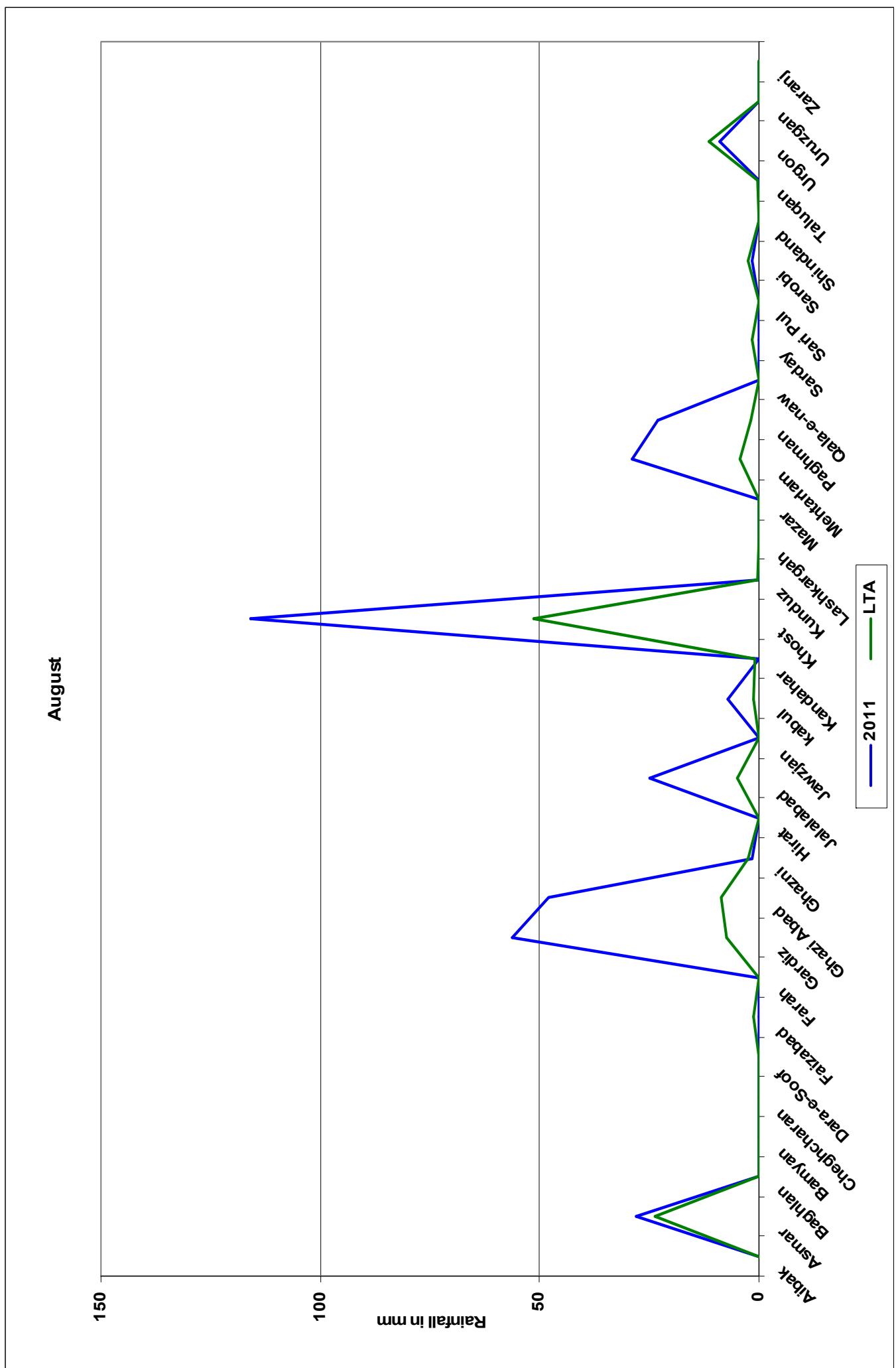










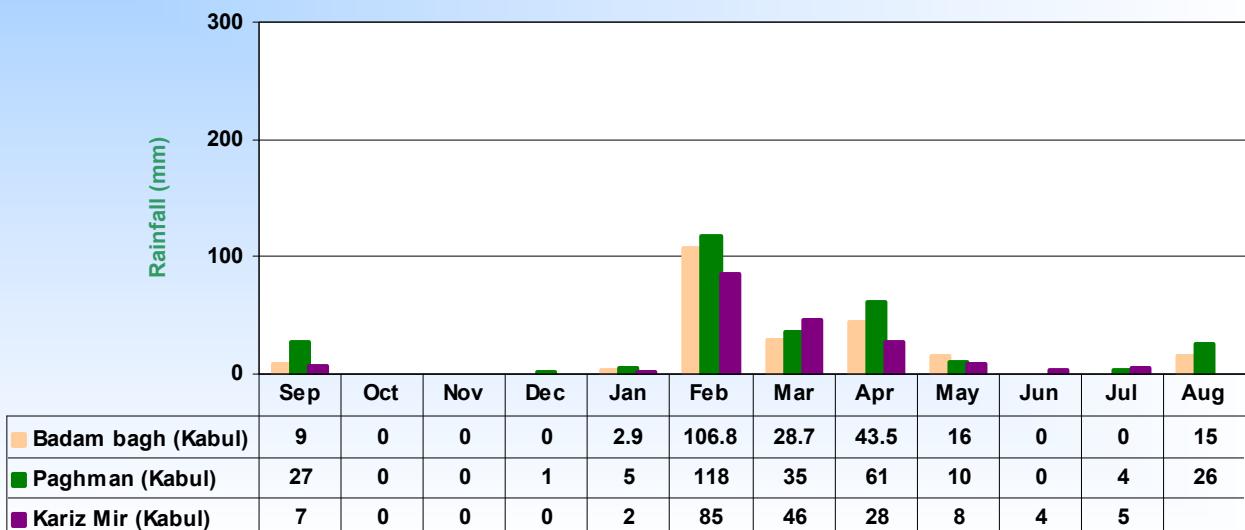


Dekadal Rainfall (mm) Graphs for
Season (2010-2011)
By Region

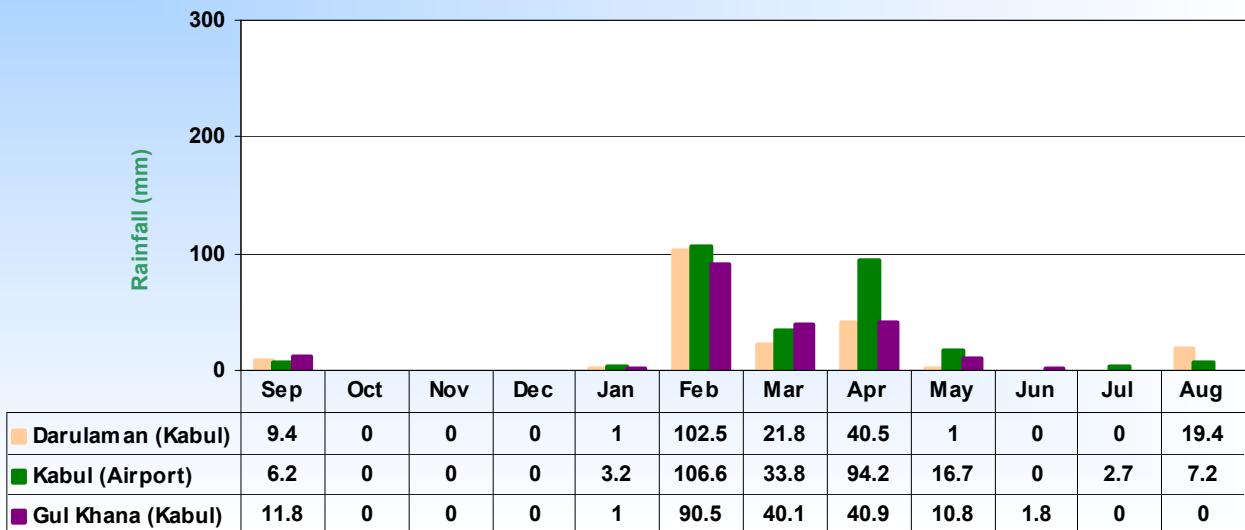
Dekadal Rainfall Graphs by Region

Capital Region

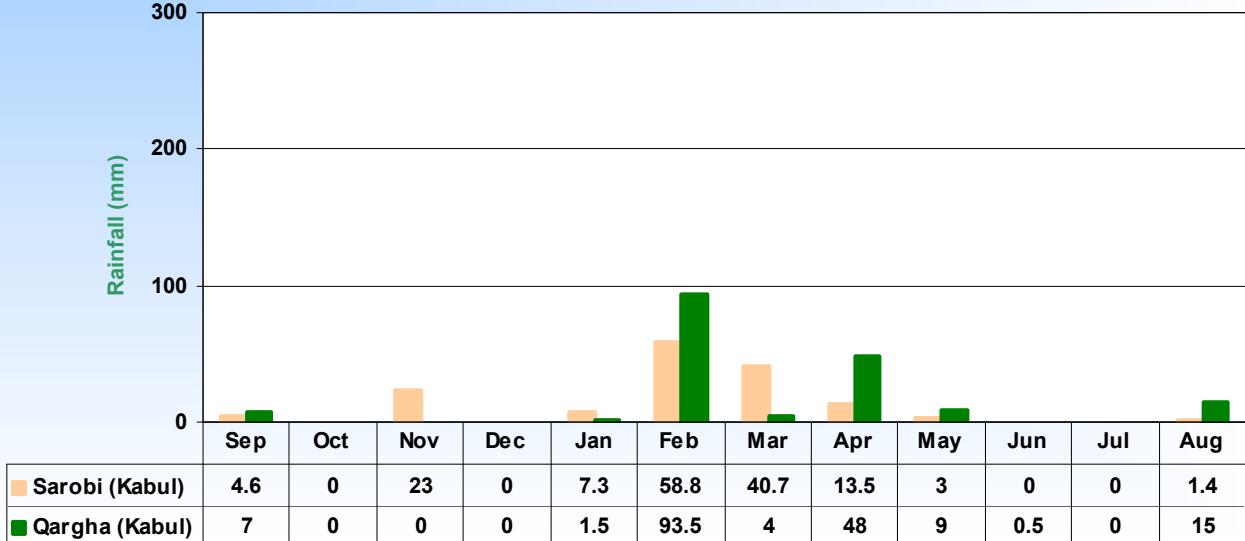
Kabul Monthly Rainfall (2010/2011)



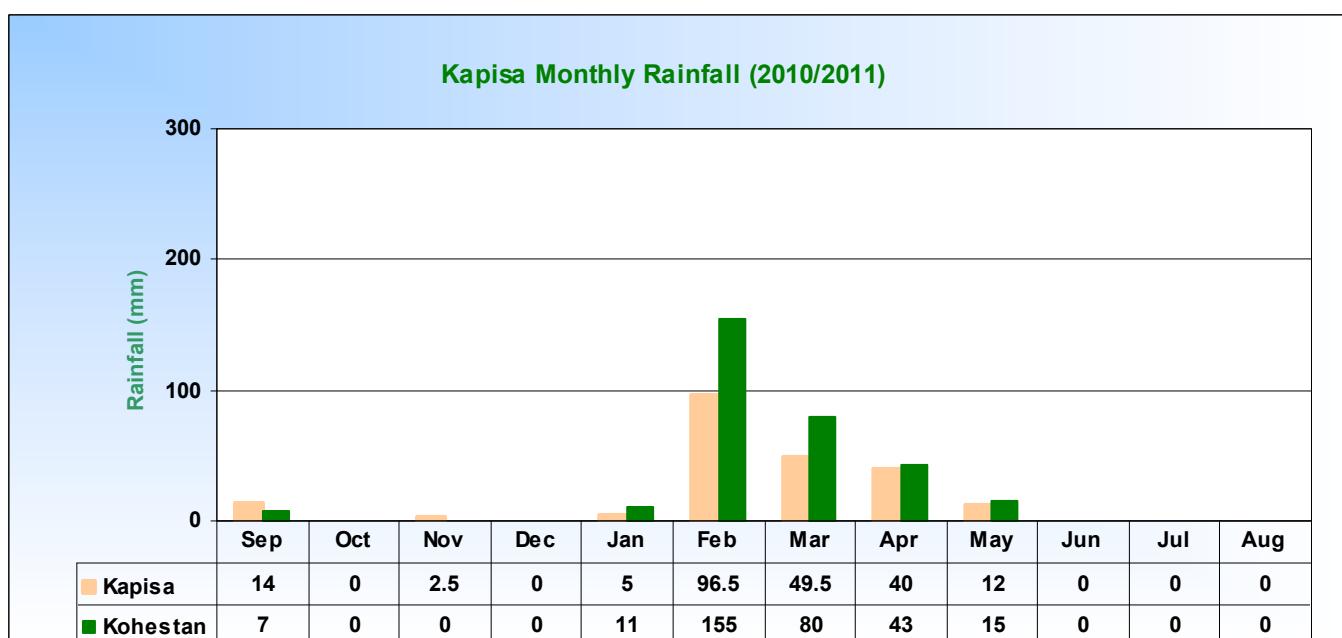
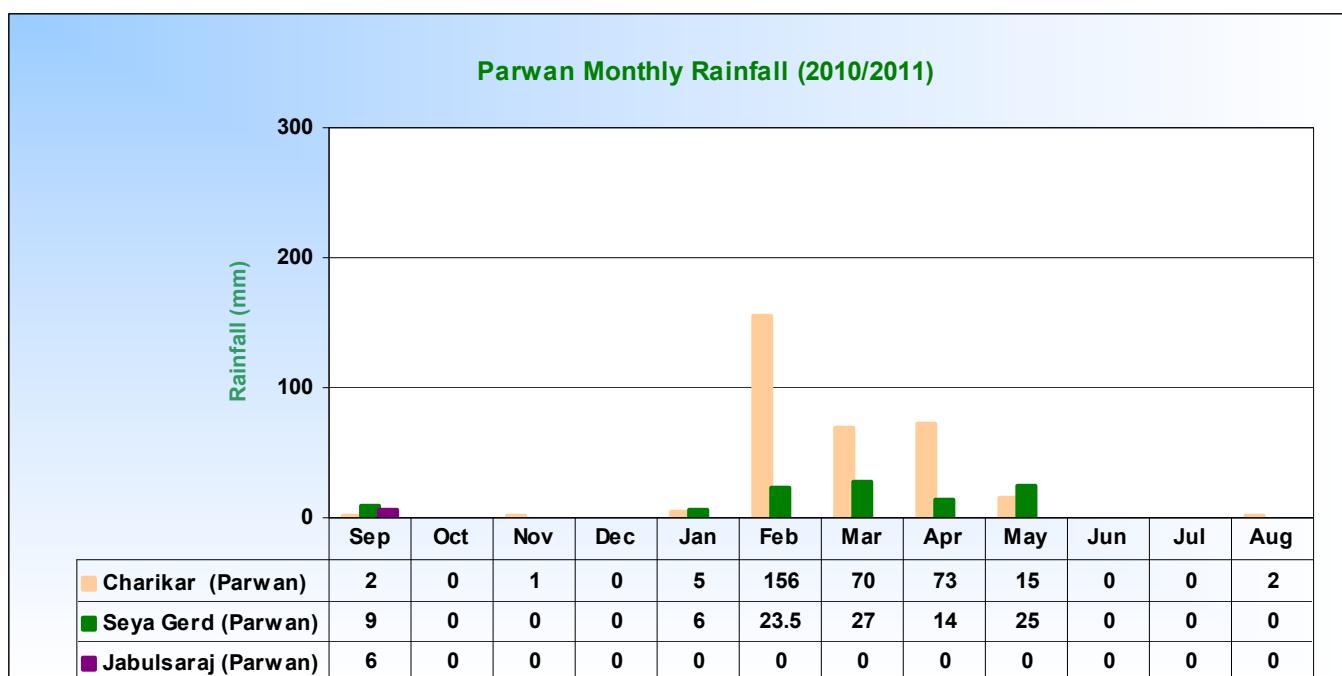
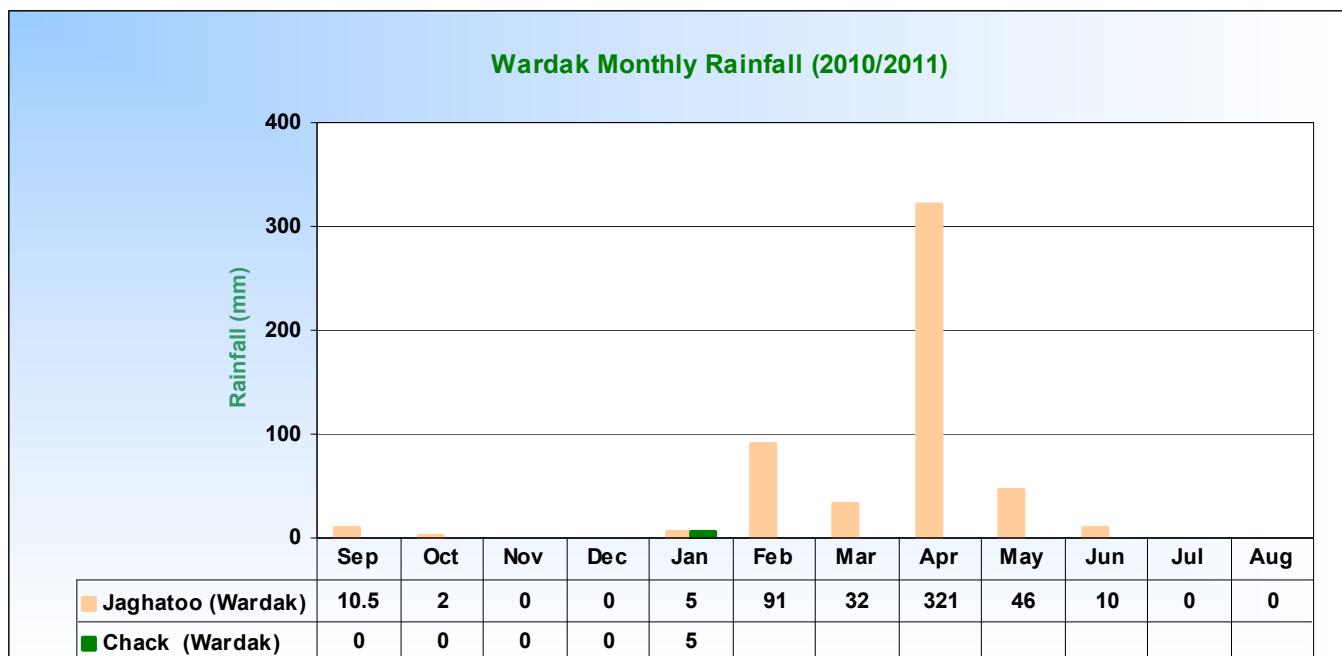
Kabul Monthly Rainfall (2010/2011)



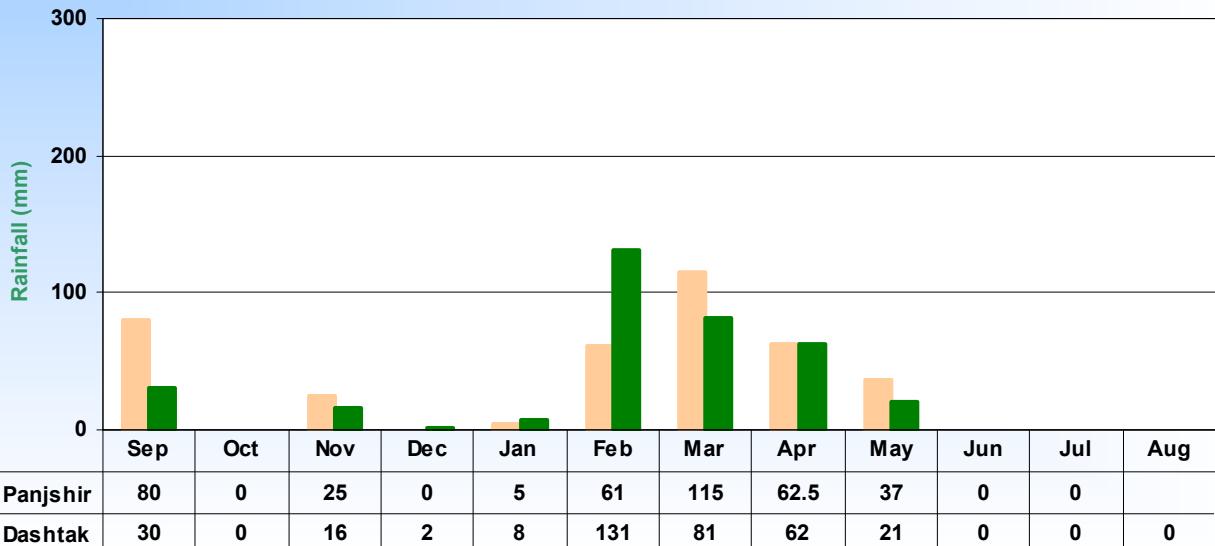
Kabul Monthly Rainfall (2010/2011)



Capital Region

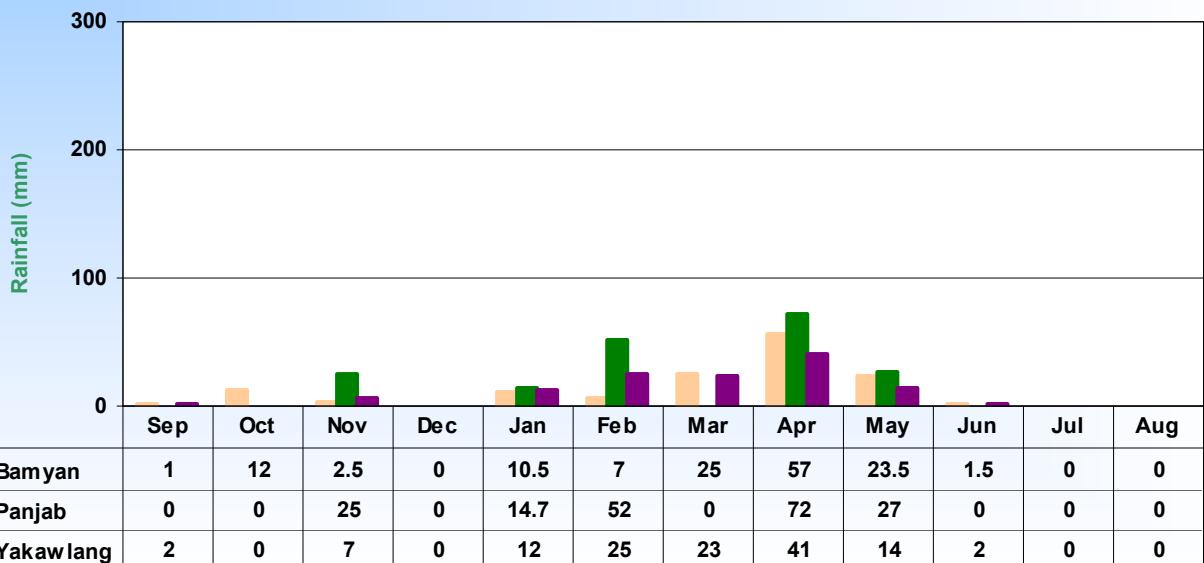


Panjshir Monthly Rainfall (2010/2011)

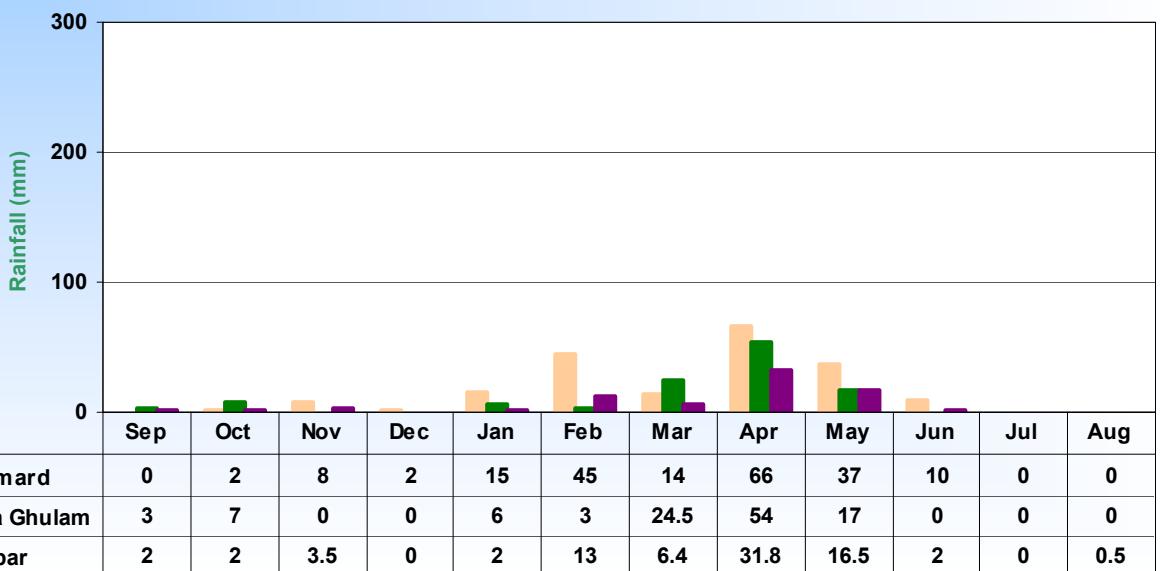


Central Highland Region

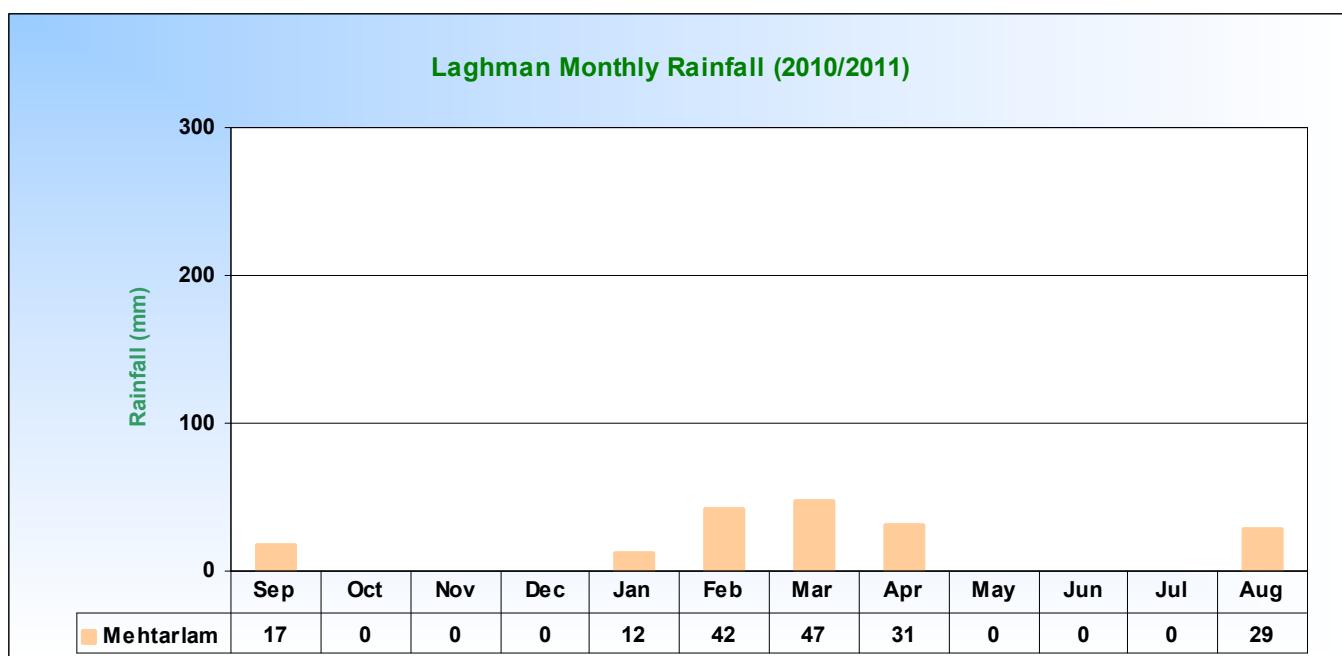
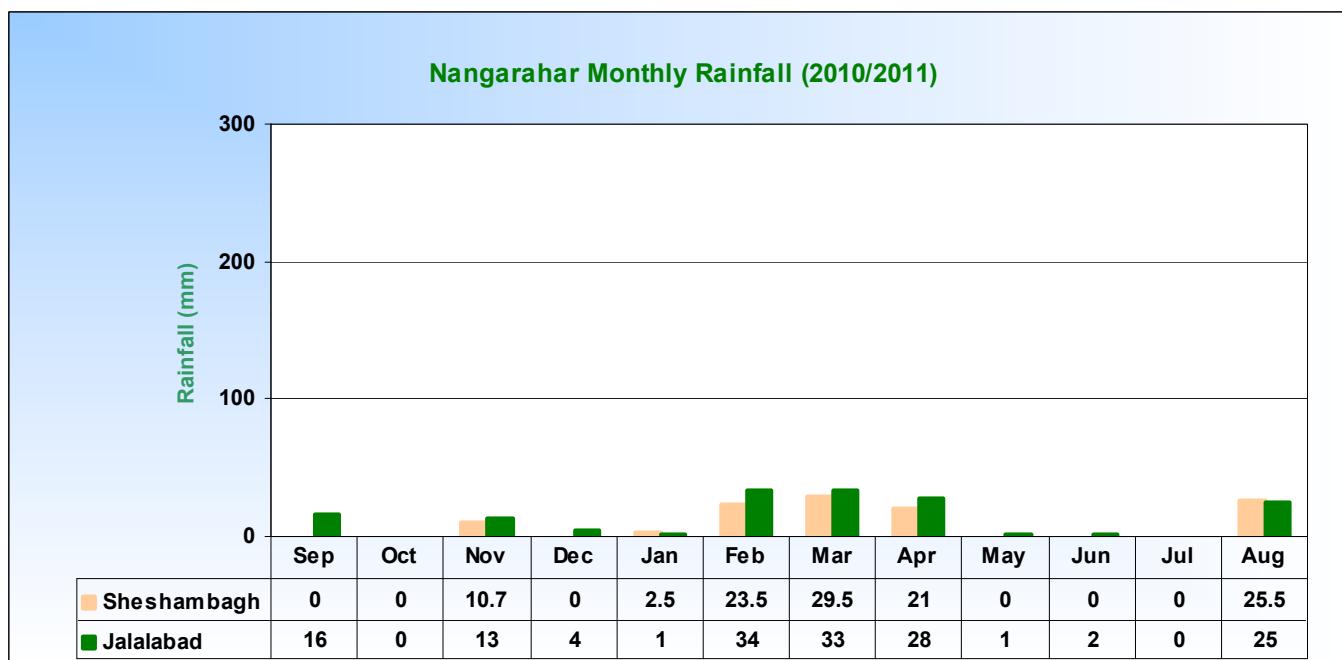
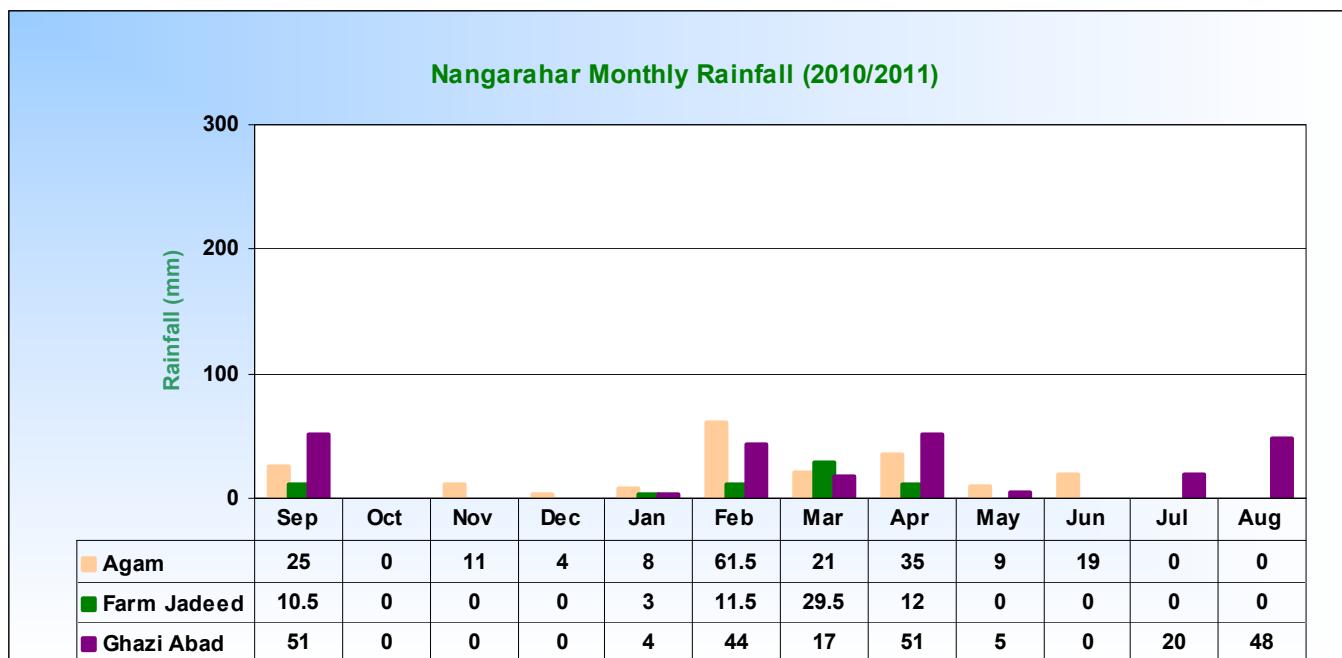
Bamyan Monthly Rainfall (2010/2011)



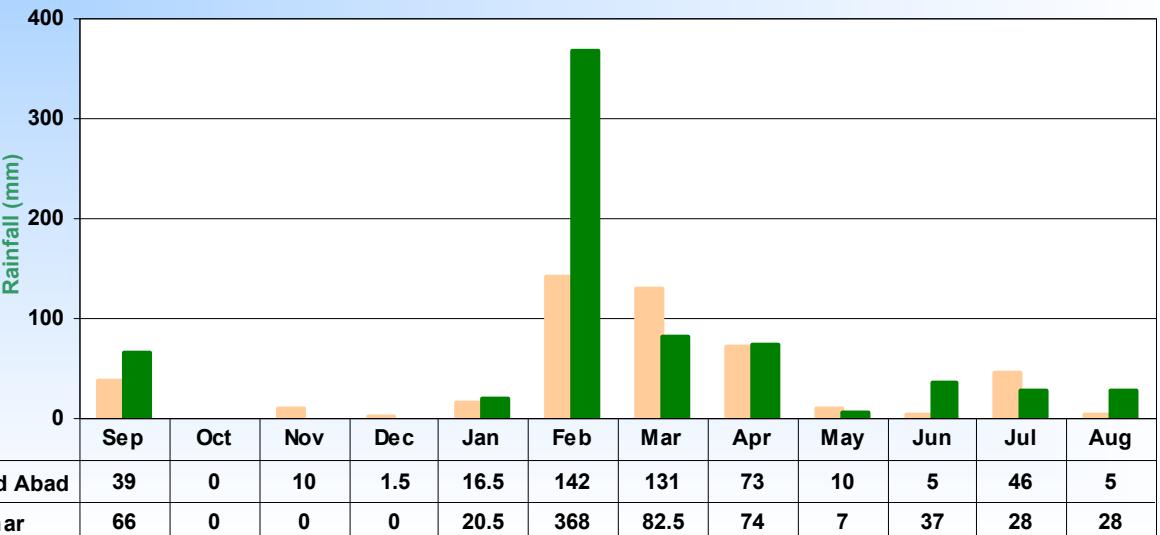
Bamyan Monthly Rainfall (2010/2011)



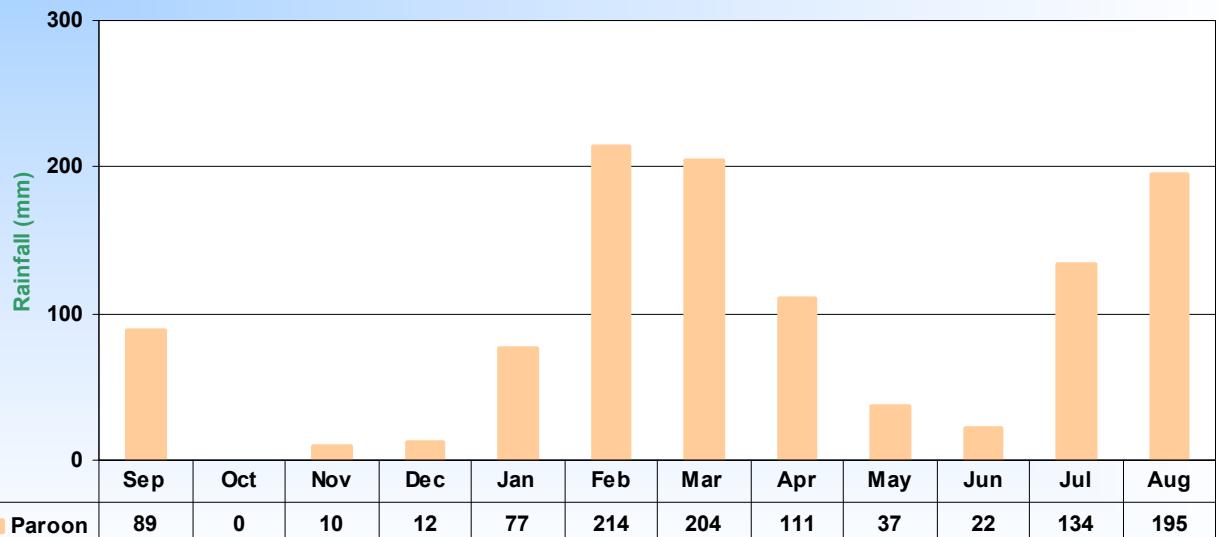
Eastern Region



Kunar Monthly Rainfall (2010/2011)

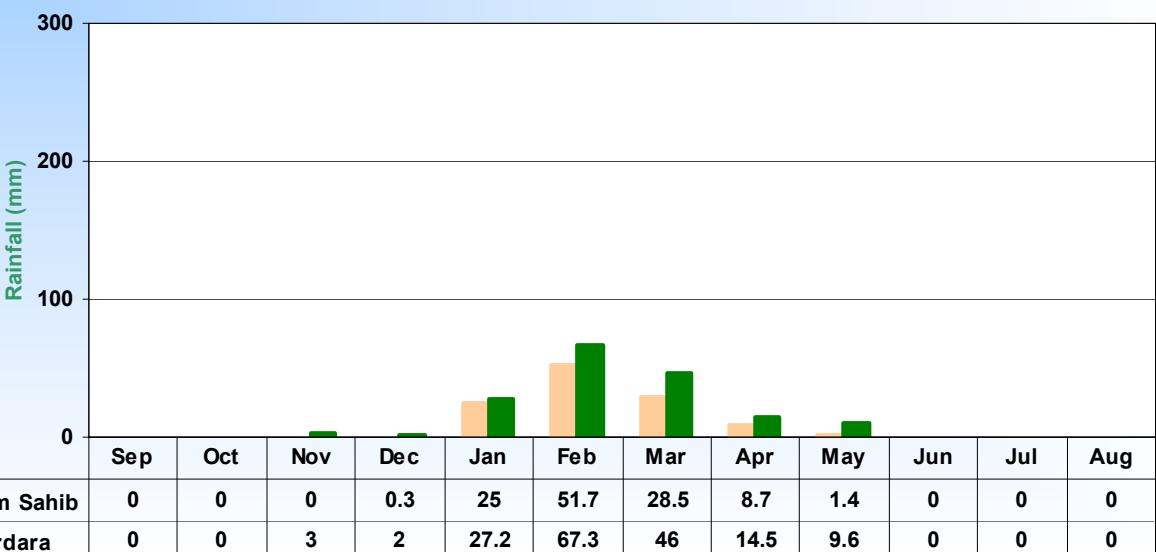


Nooristan Monthly Rainfall (2010/2011)

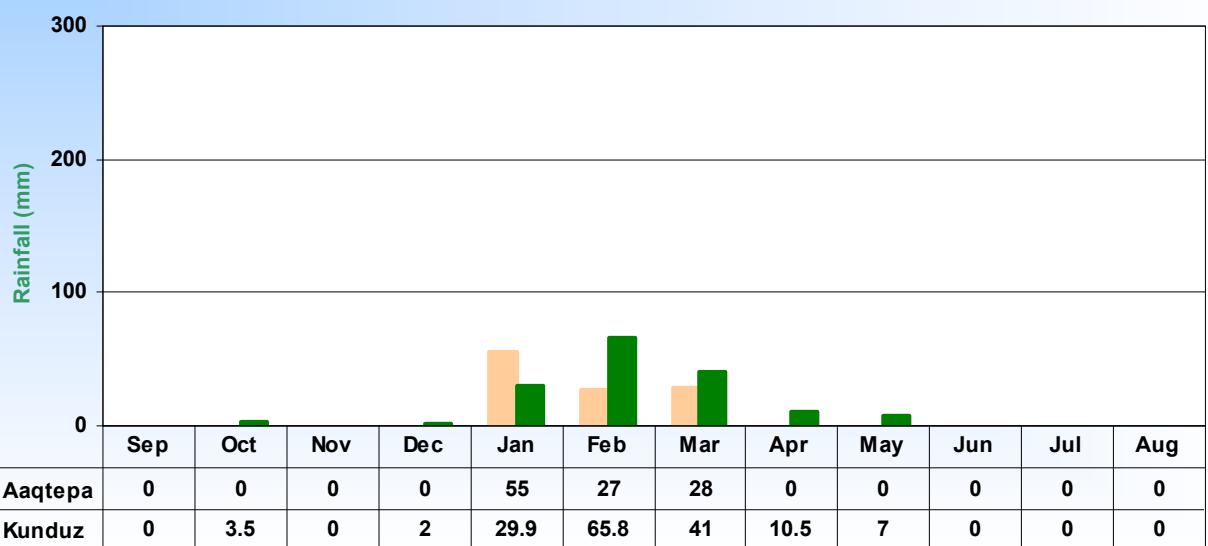


North East Region

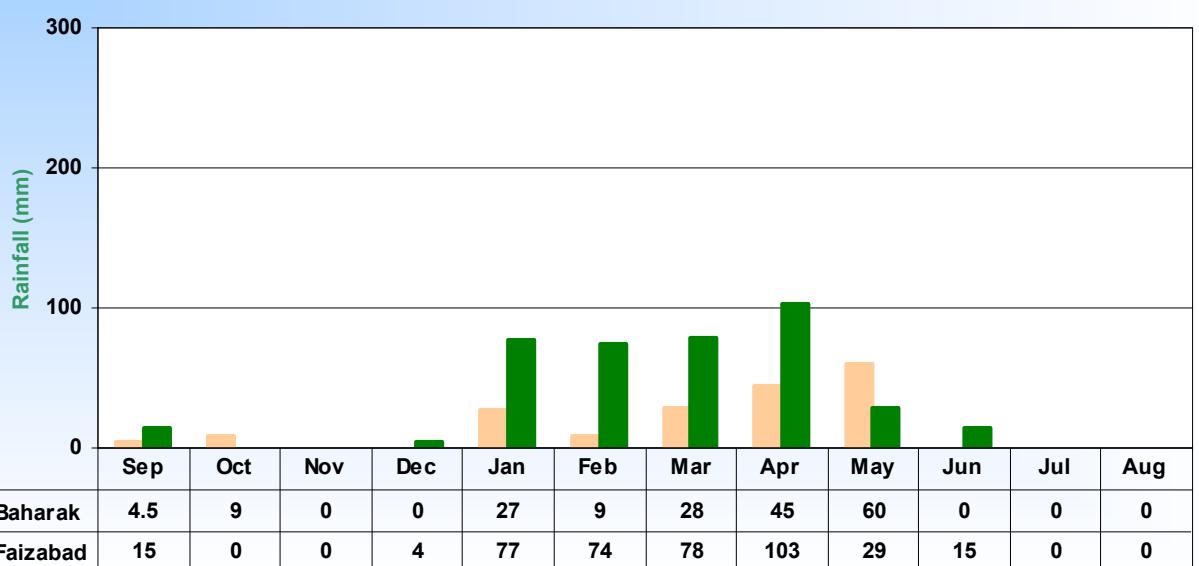
Kunduz Monthly Rainfall (2010/2011)



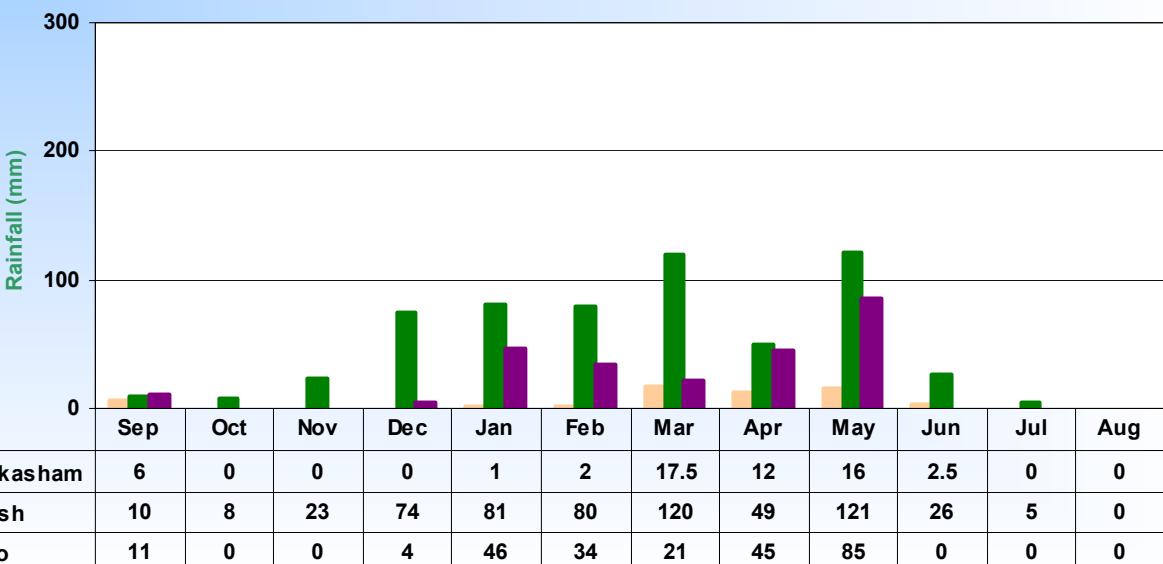
Kunduz Monthly Rainfall (2010/2011)



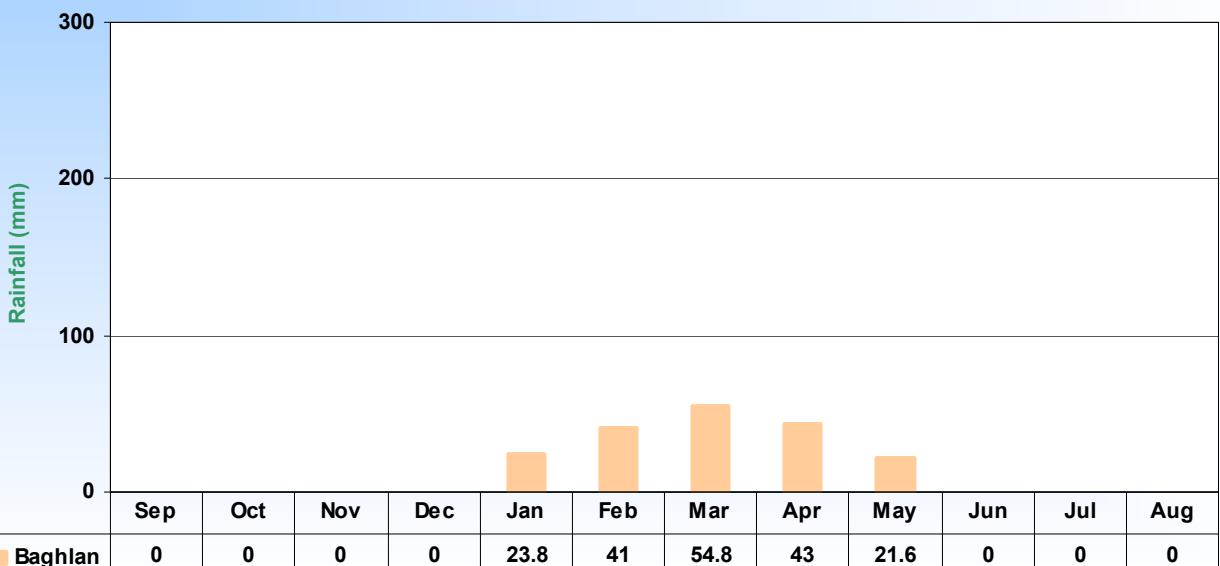
Badakhshan Monthly Rainfall (2010/2011)



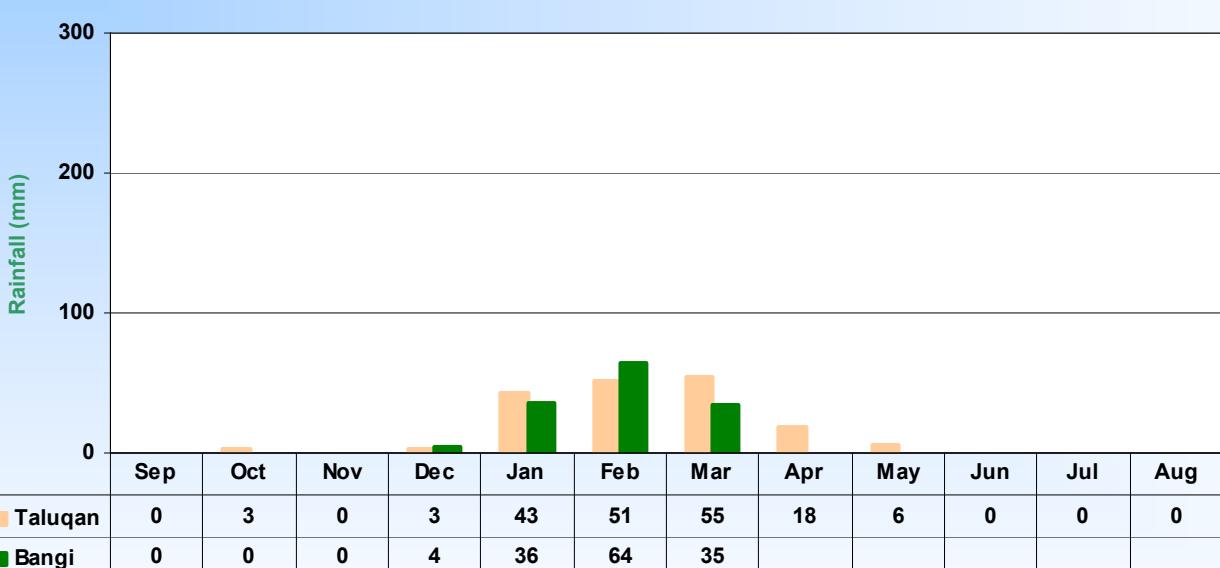
Badakhshan Monthly Rainfall (2010/2011)



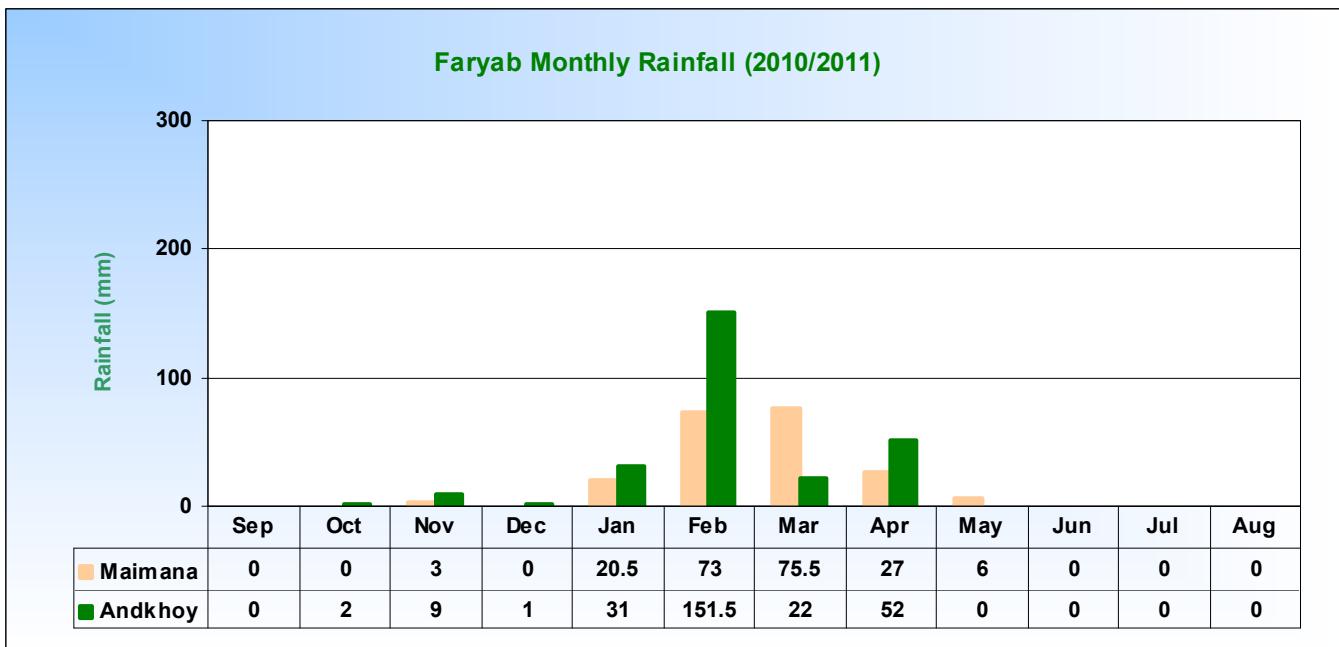
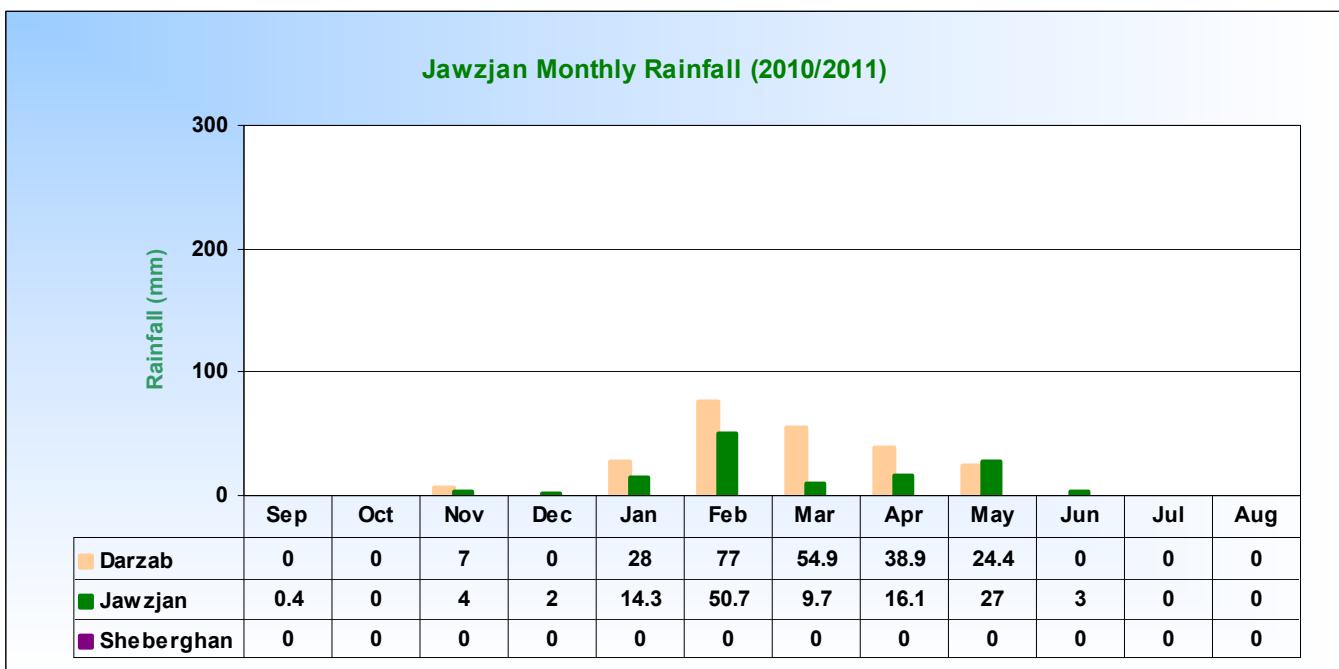
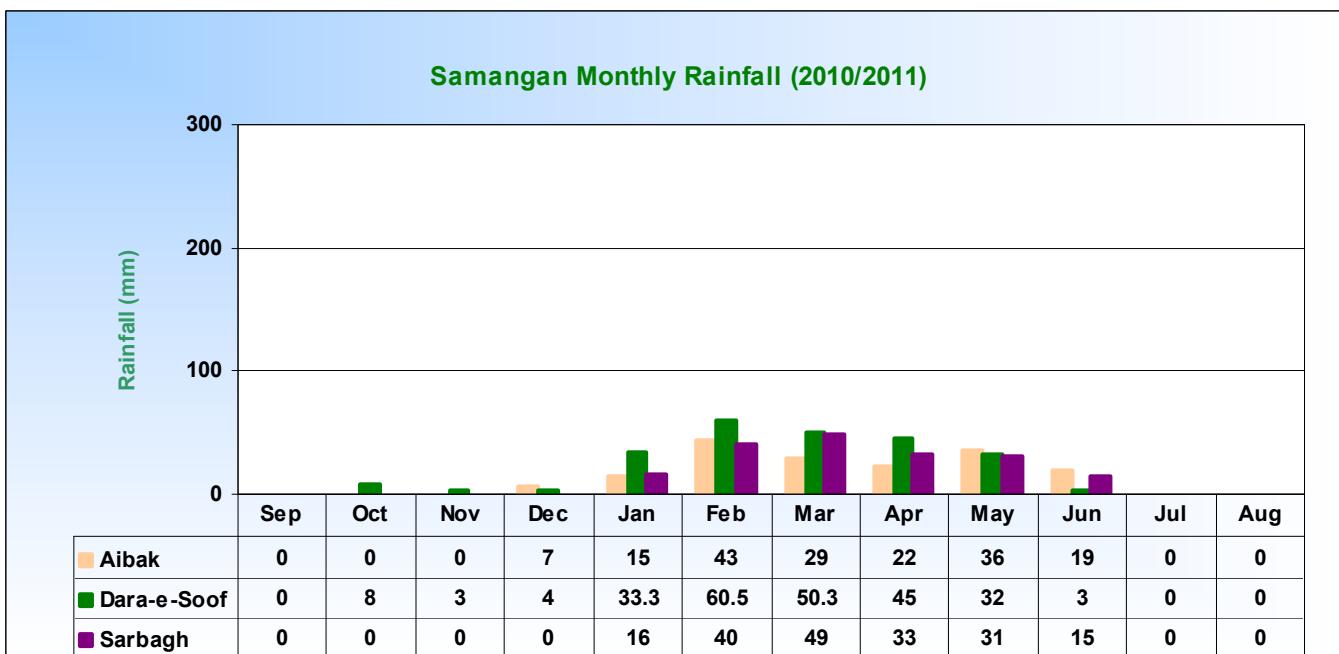
Baghlan Monthly Rainfall (2010/2011)



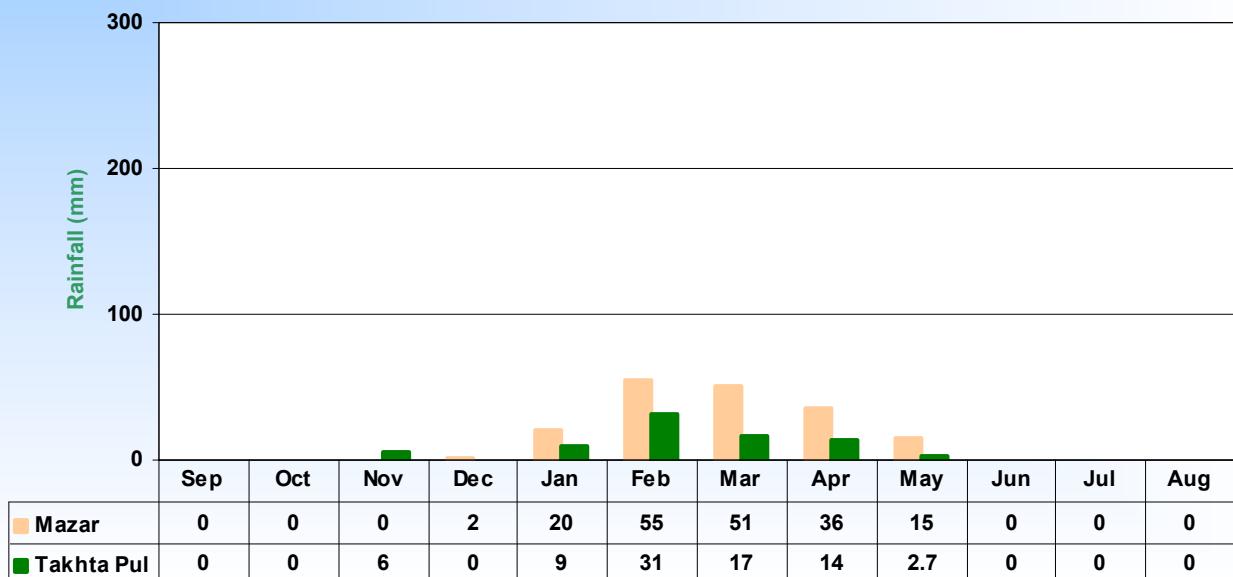
Takhar Monthly Rainfall (2010/2011)



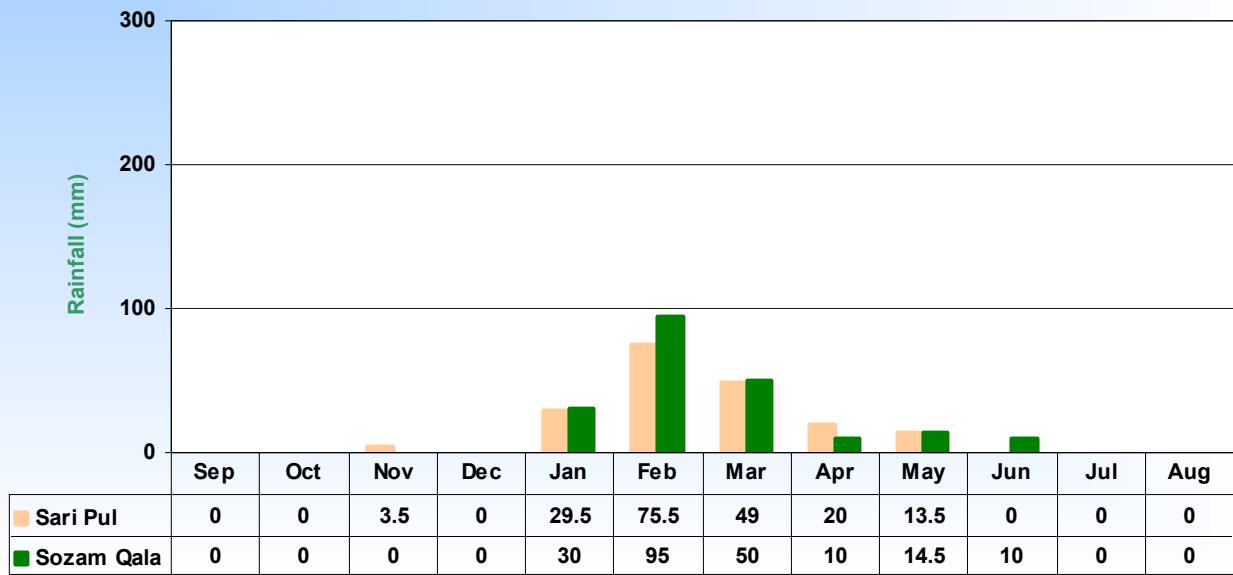
Northern Region



Balkh Monthly Rainfall (2010/2011)

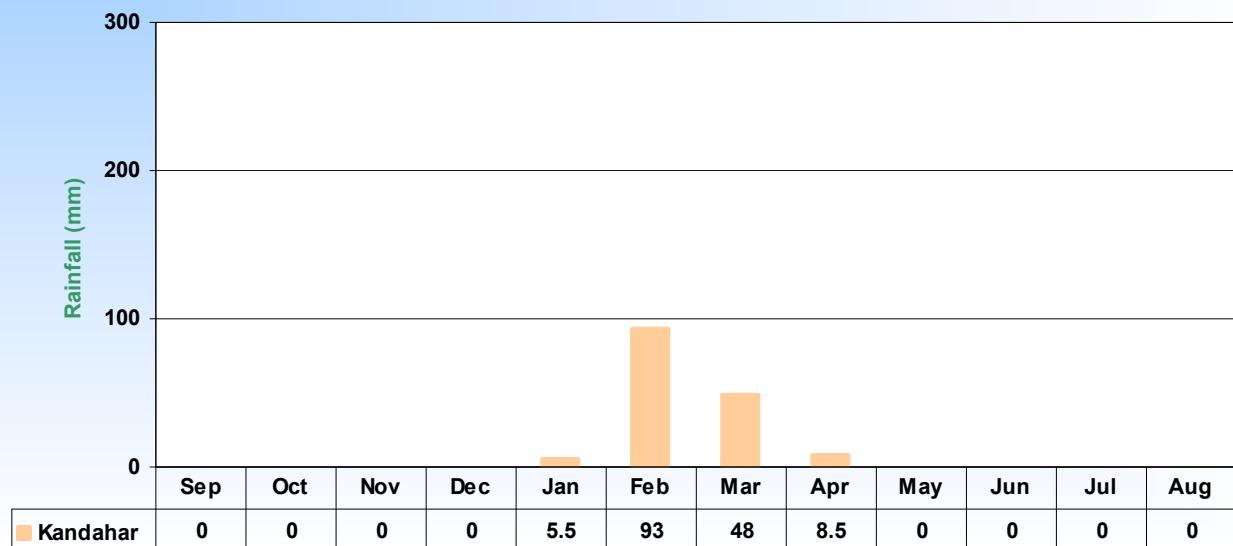


Sari Pul Monthly Rainfall (2010/2011)

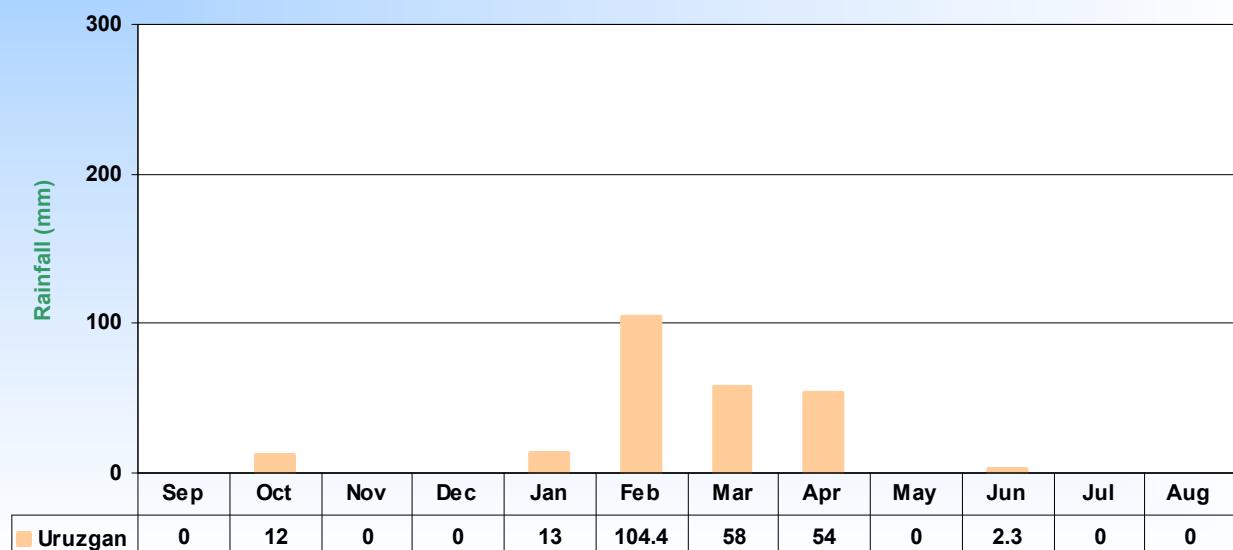


Southern Region

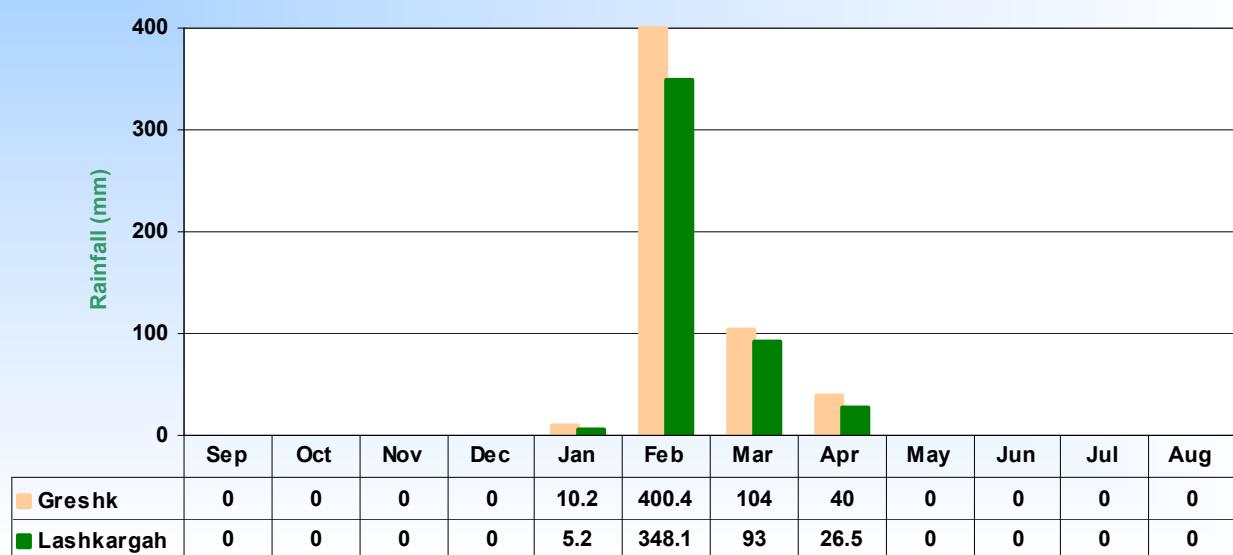
Kandahar Monthly Rainfall (2010/2011)



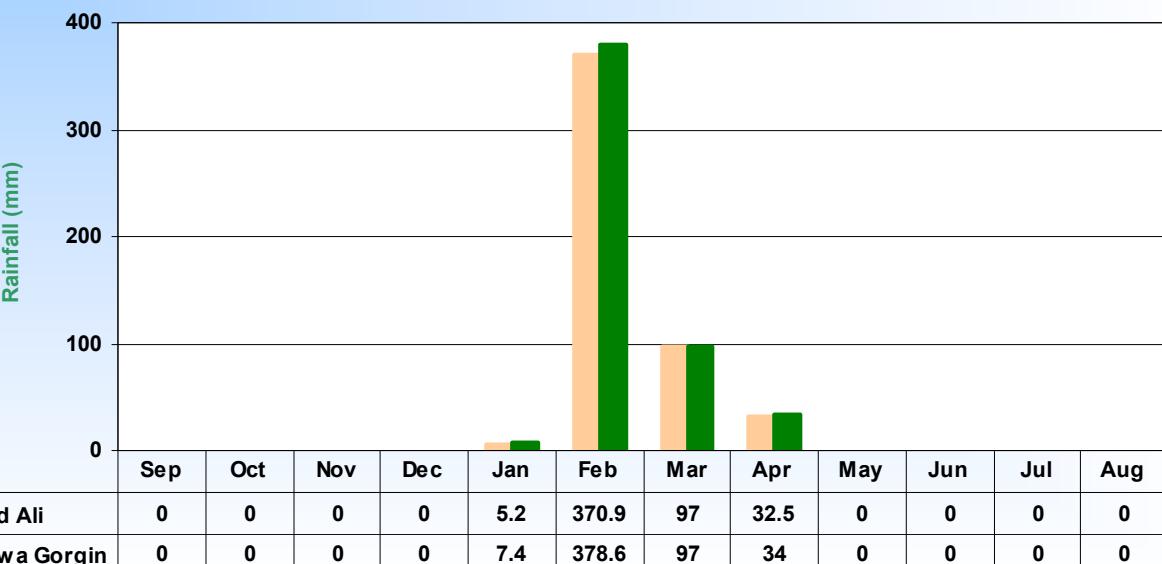
Uruzgan Monthly Rainfall (2010/2011)



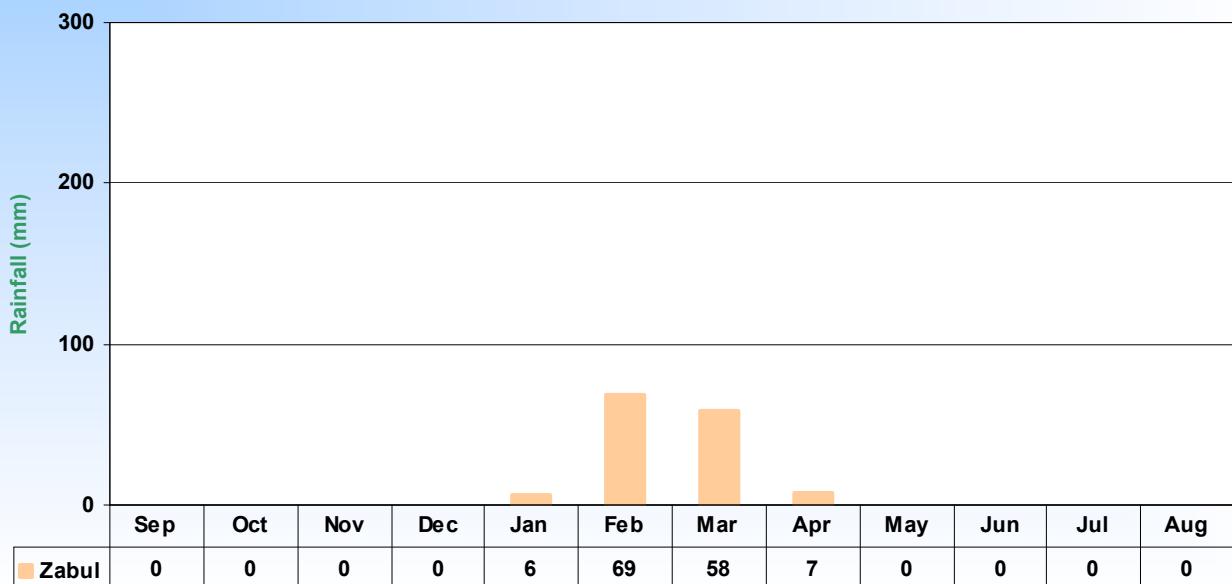
Hilmand Monthly Rainfall (2010/2011)



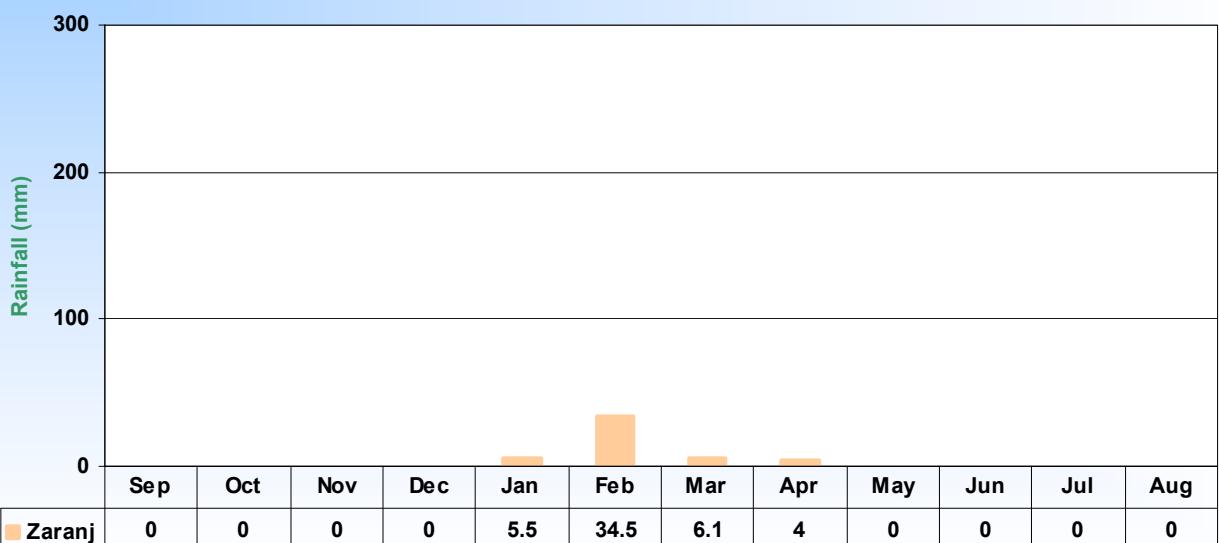
Hilmand Monthly Rainfall (2010/2011)



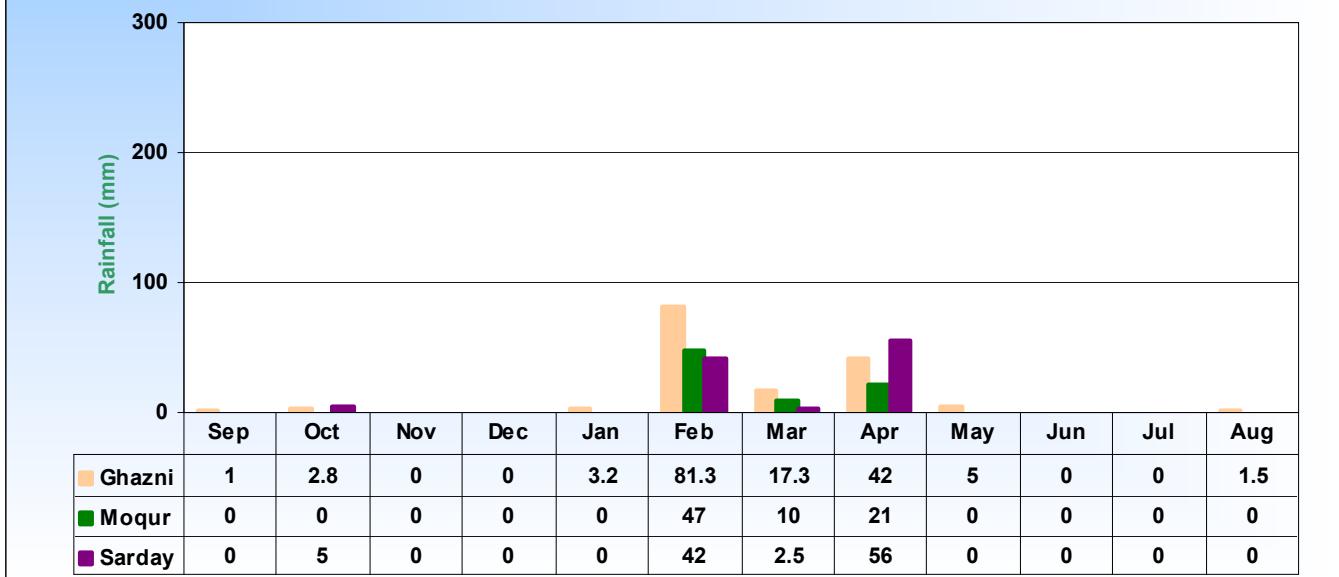
Zabul Monthly Rainfall (2010/2011)



Nimroz Monthly Rainfall (2010/2011)

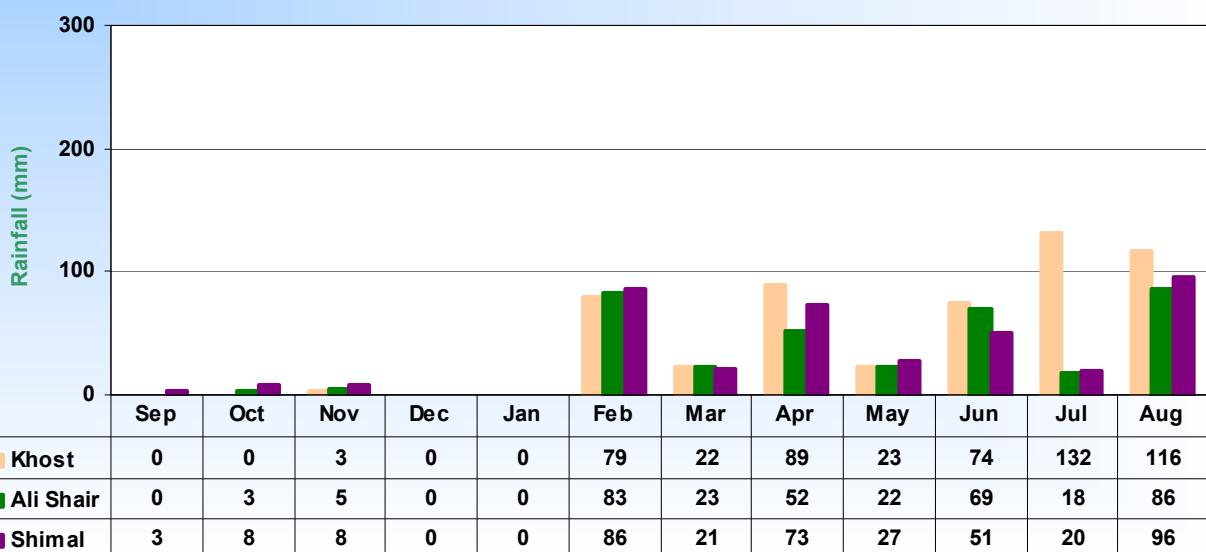


Ghazni Monthly Rainfall (2010/2011)

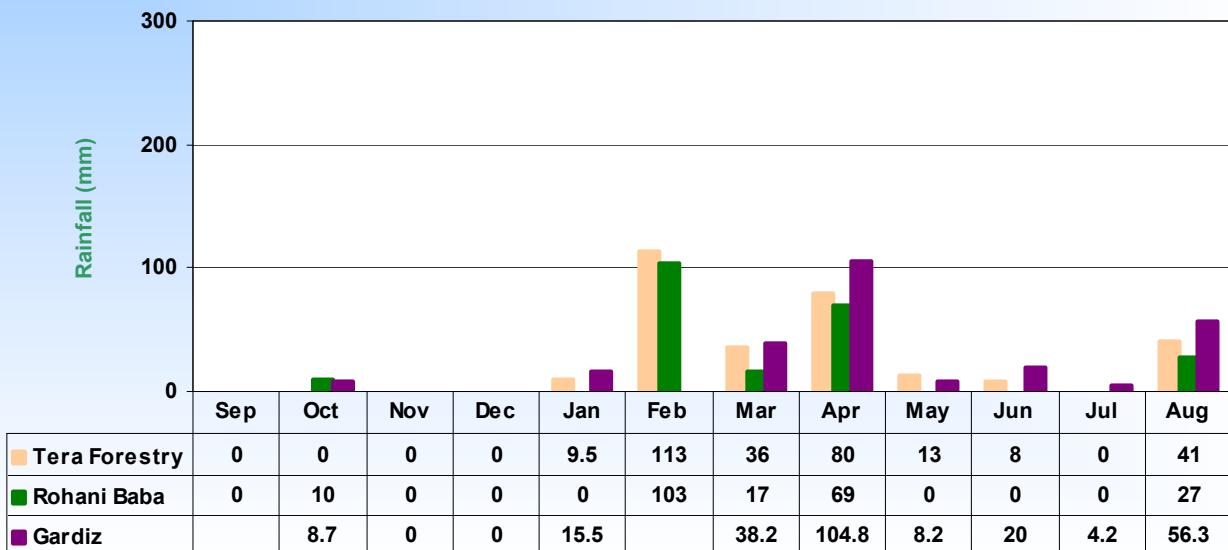


South East Region

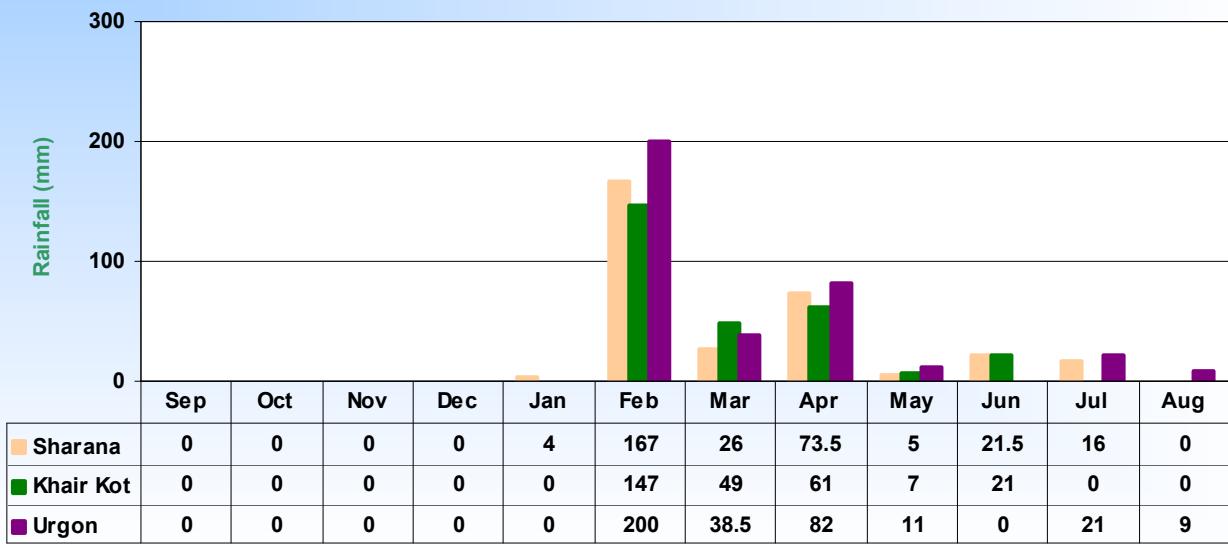
Khost Monthly Rainfall (2010/2011)



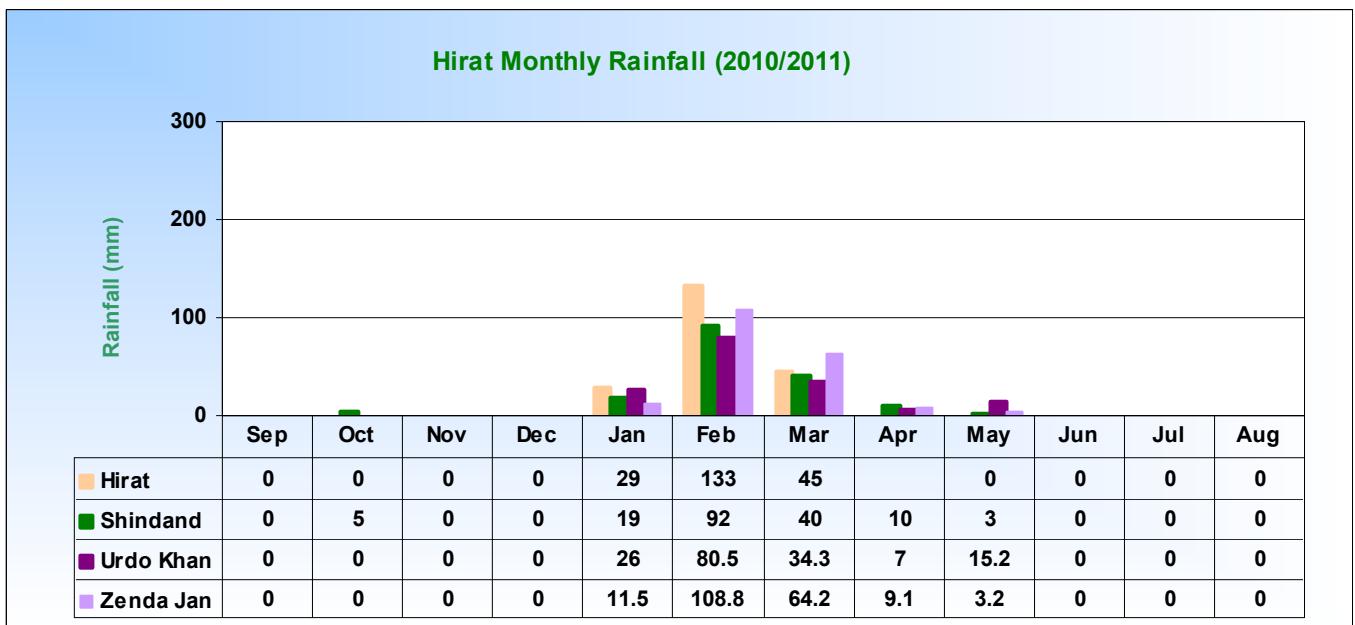
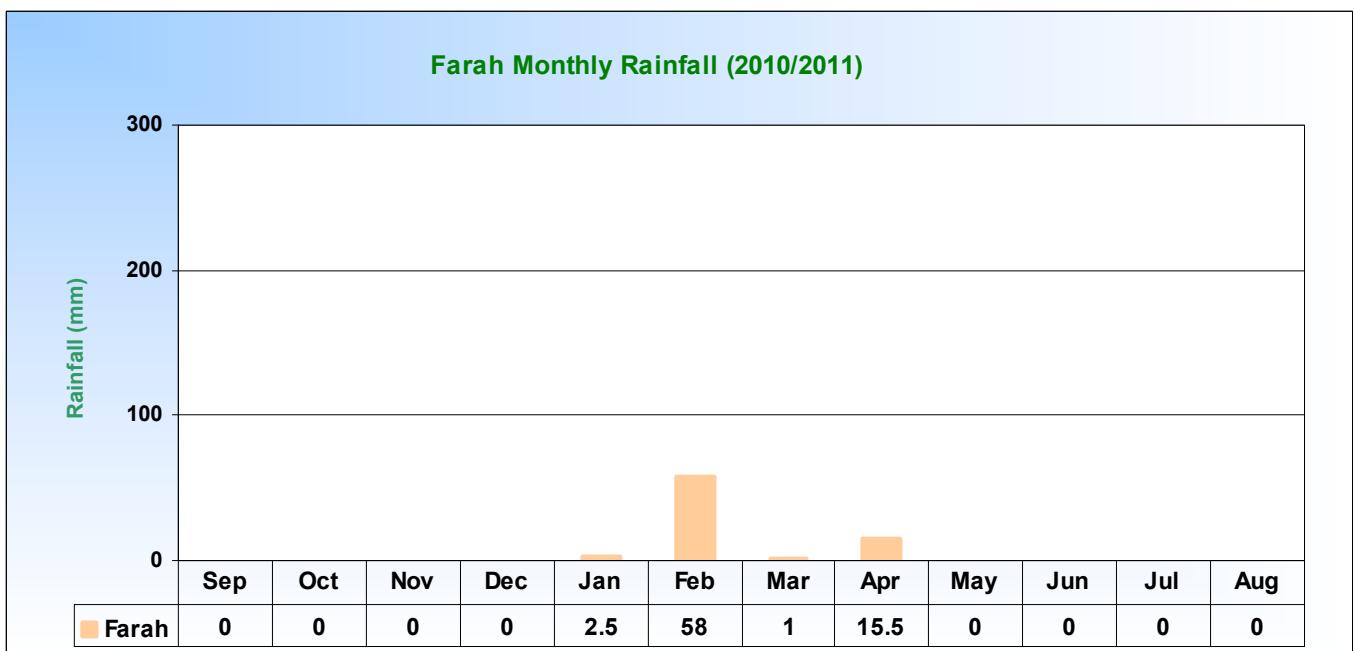
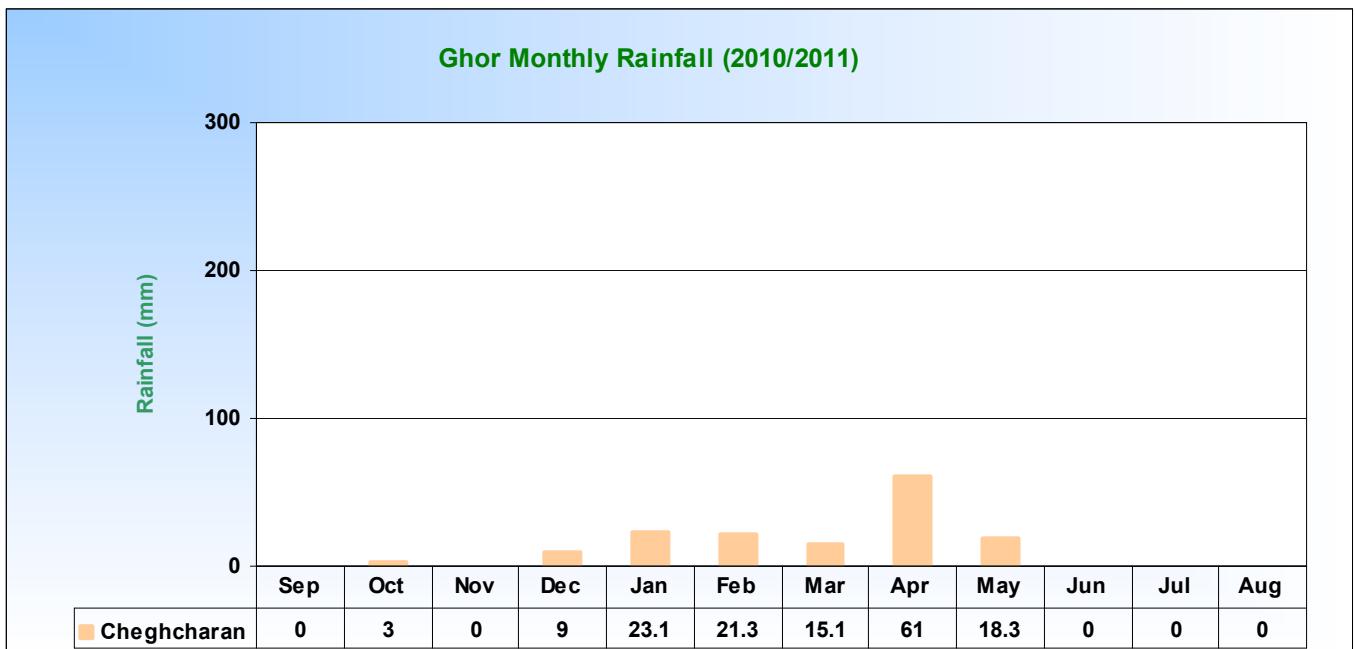
Paktya Monthly Rainfall (2010/2011)



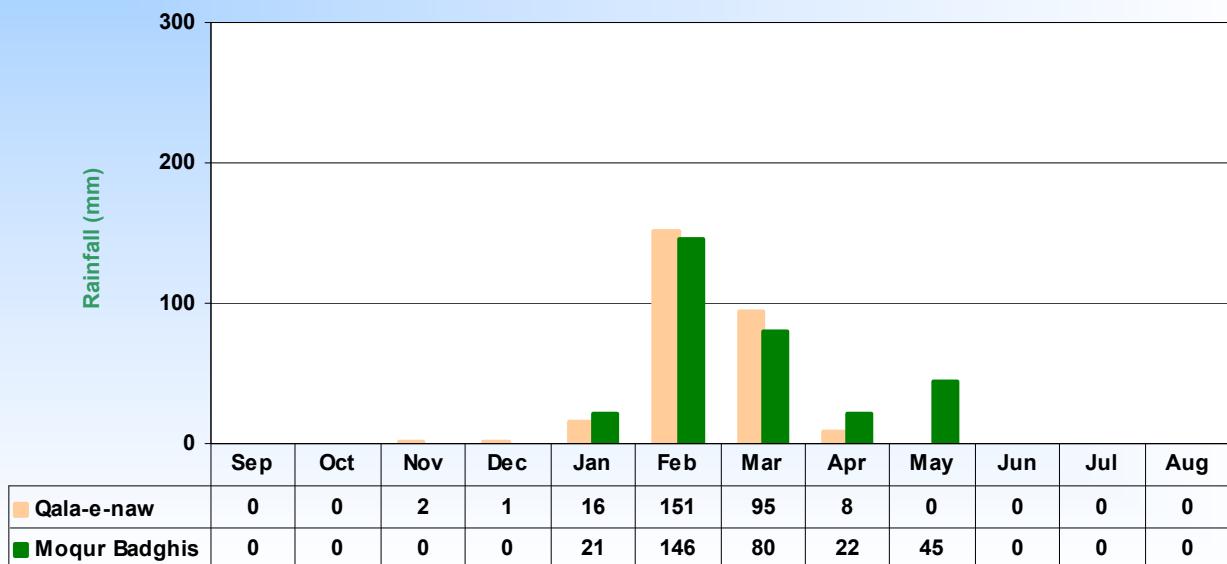
Paktika Monthly Rainfall (2010/2011)



Western Region

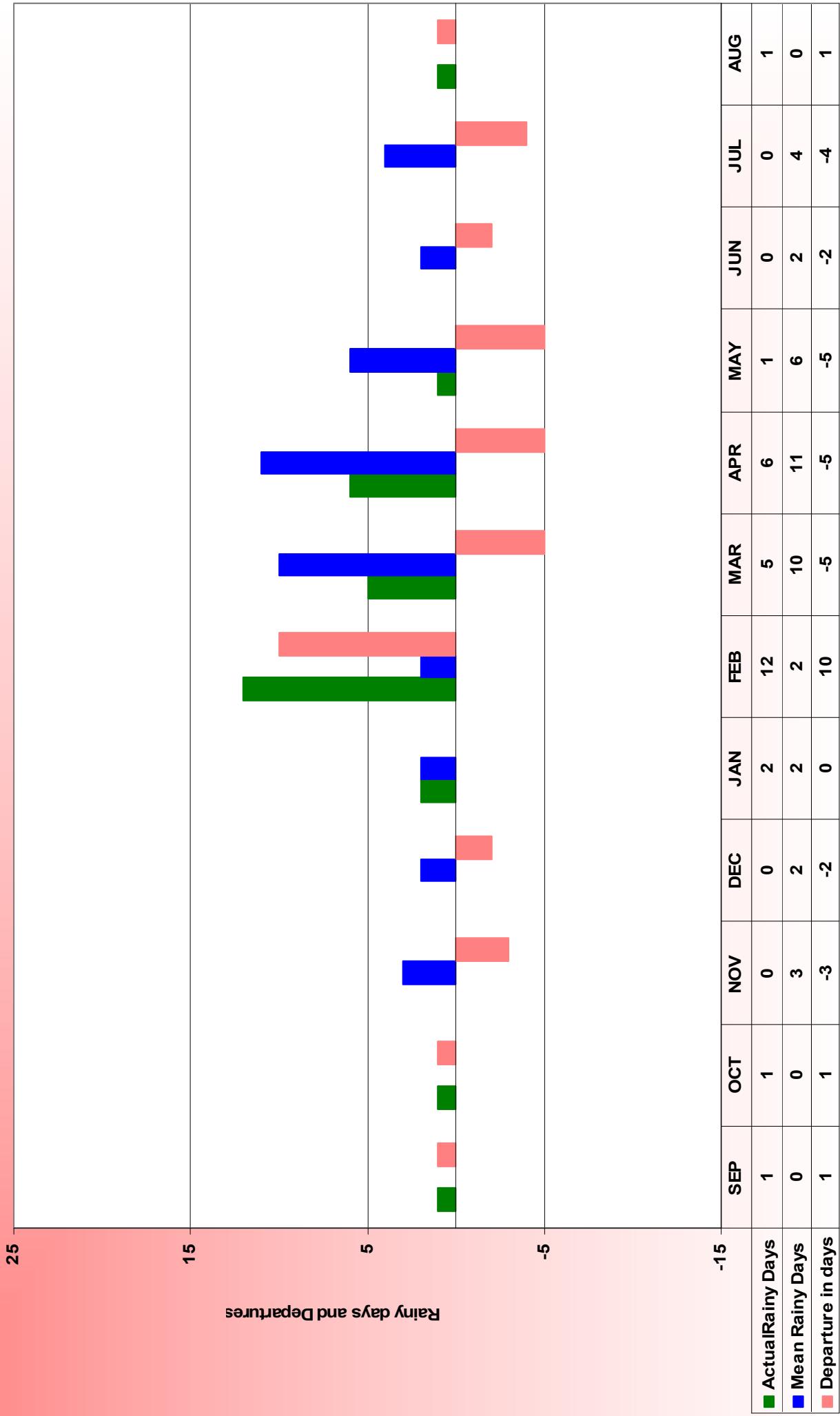


Badghis Monthly Rainfall (2010/2011)

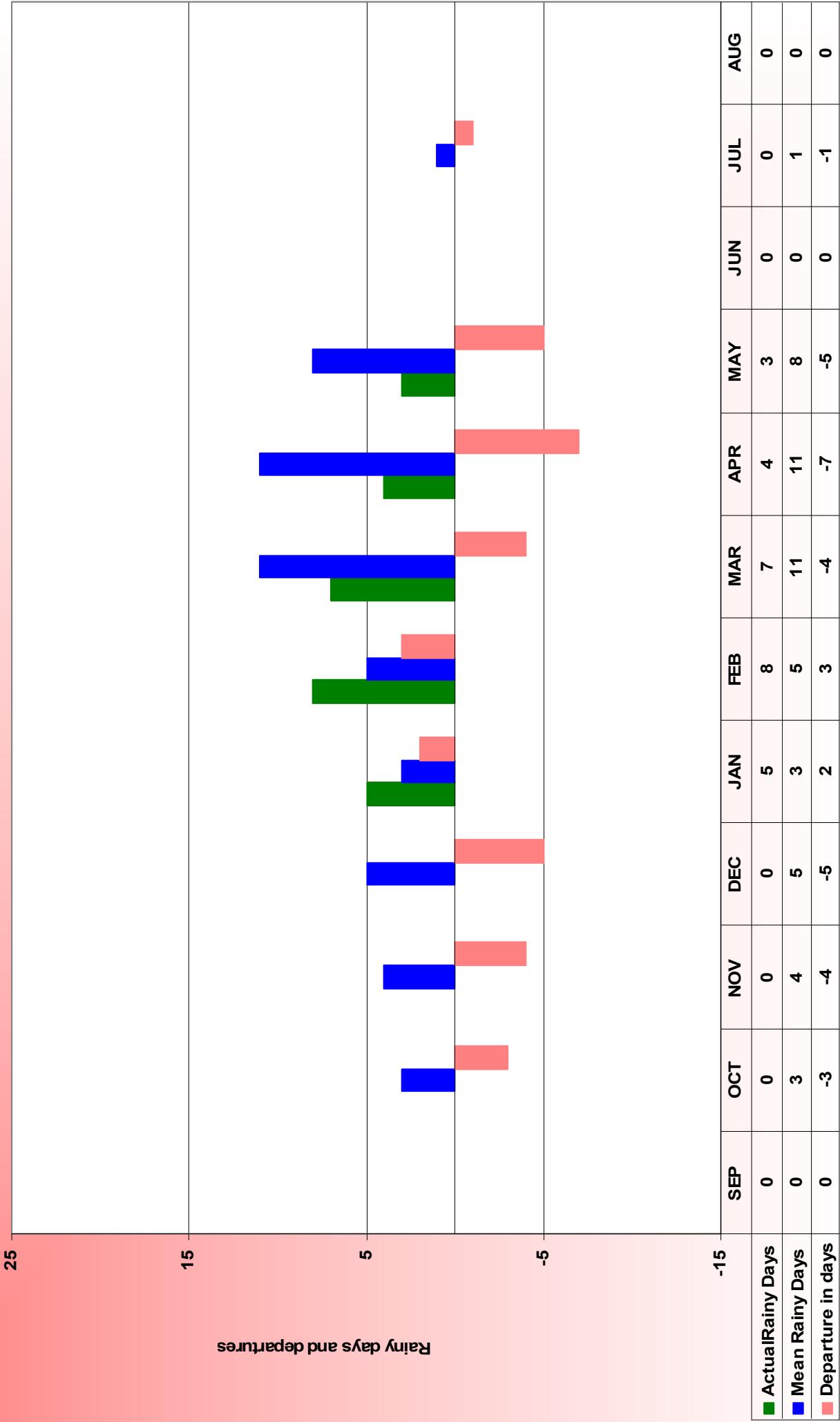


Rainy Days
Compared with
Long Term Average and Departure
Season (2010- 2011)

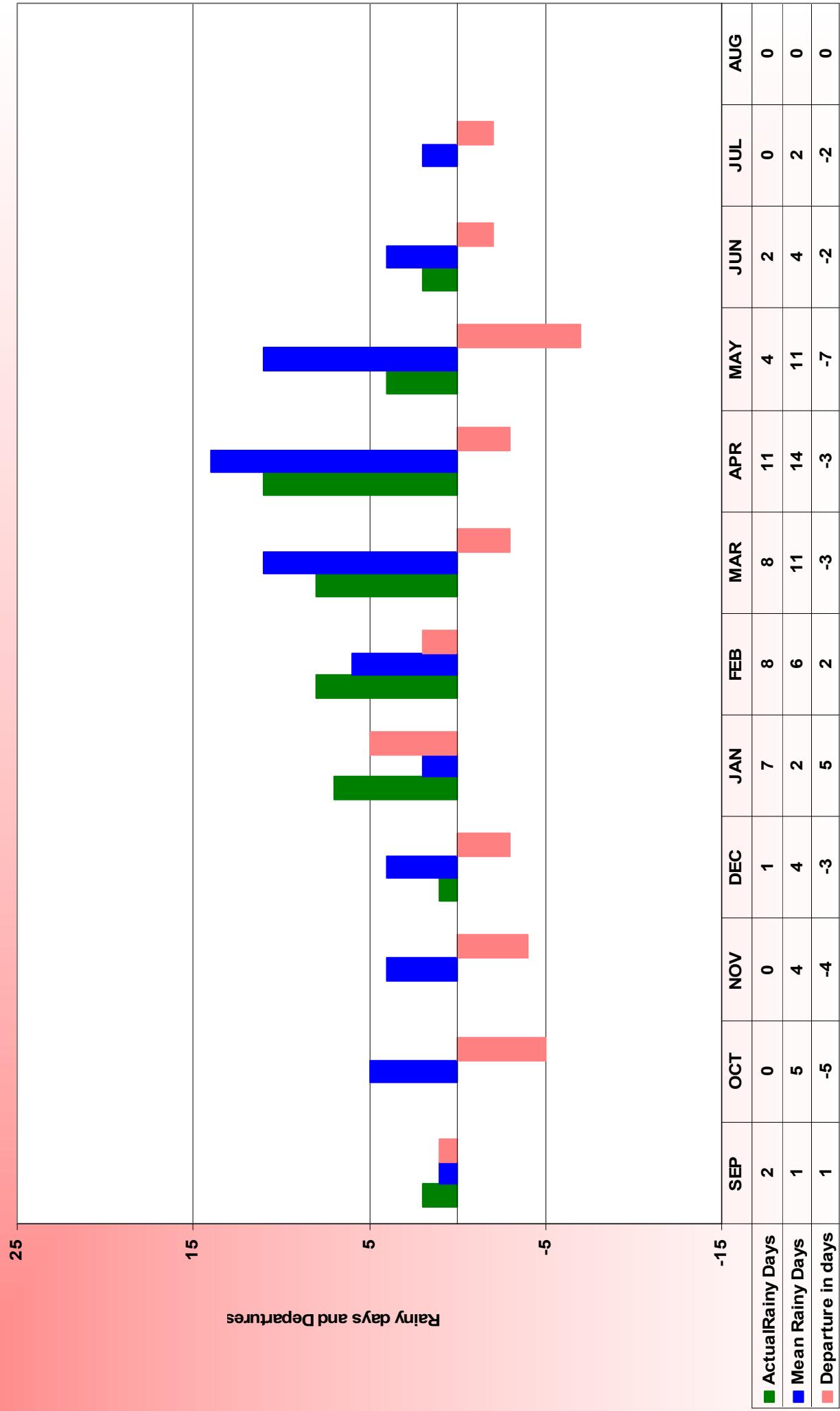
Ghazni Rainy Days Season (2010 - 2011) Compared to the Long-Term Average and Departures



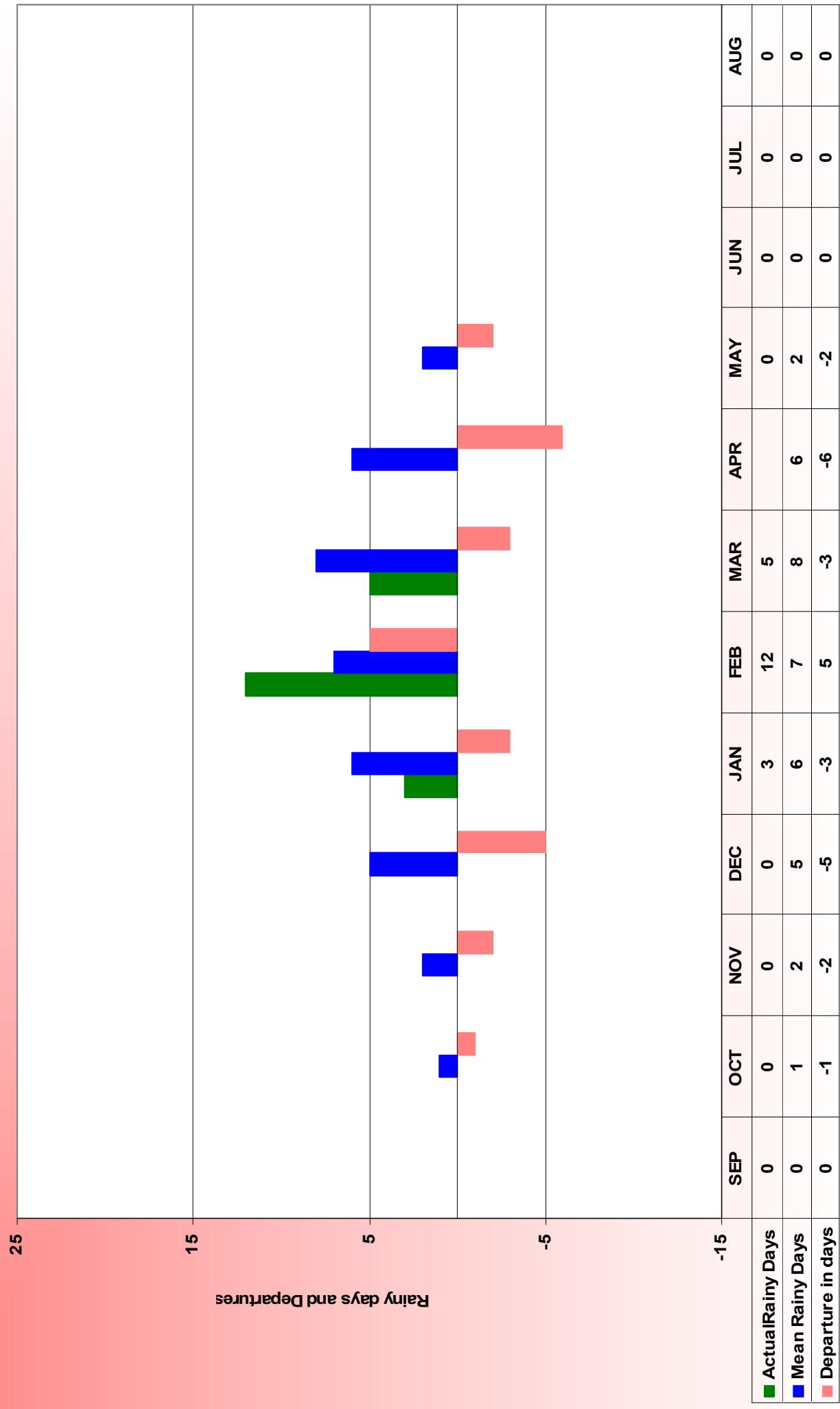
Baghlan Rainy Days Season (2010 - 2011) Compared to the Long-Term Average and Departure



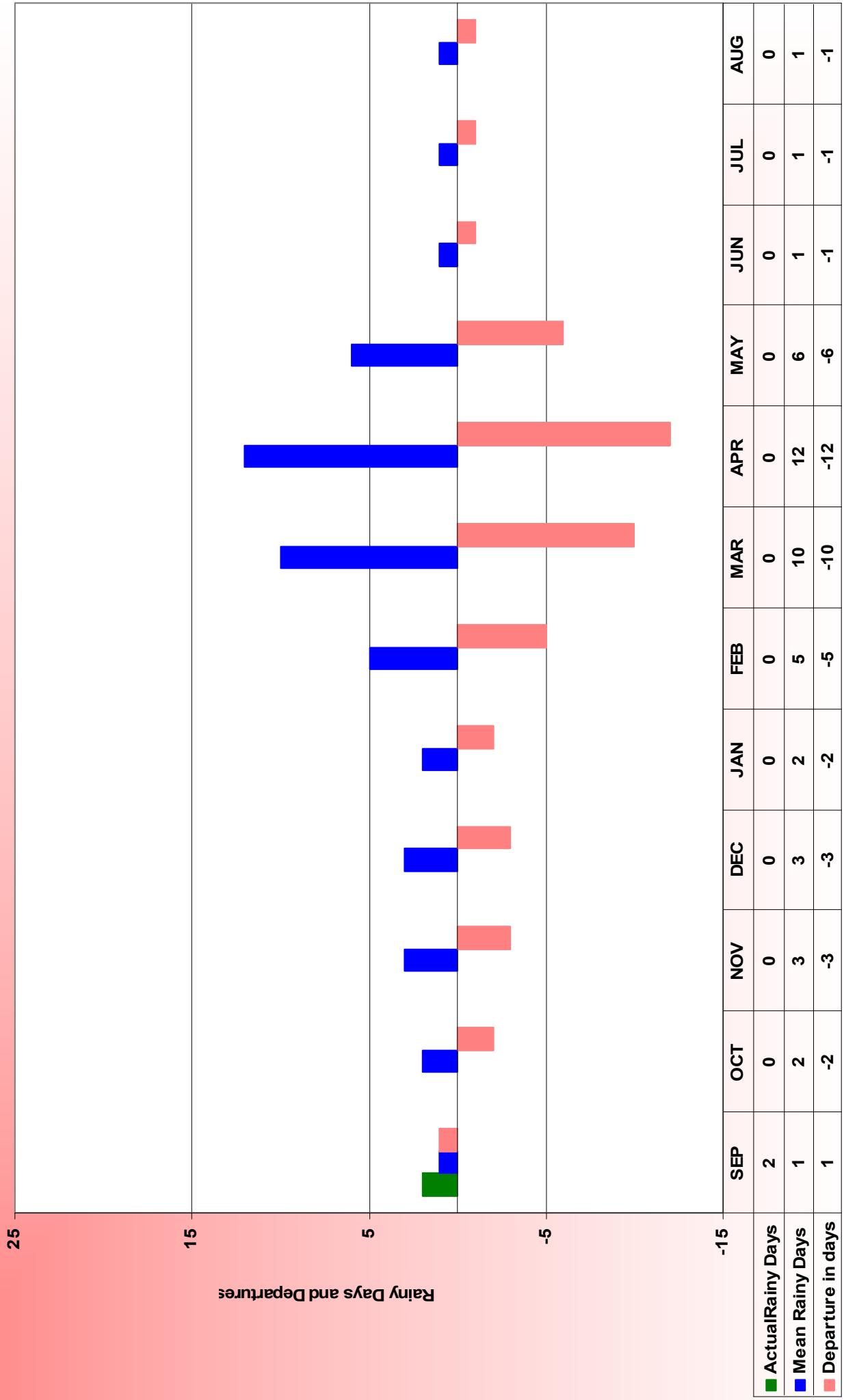
Faizabad Rainy Days Season (2010 - 2011) Compared to the Long-Term Average and Departure



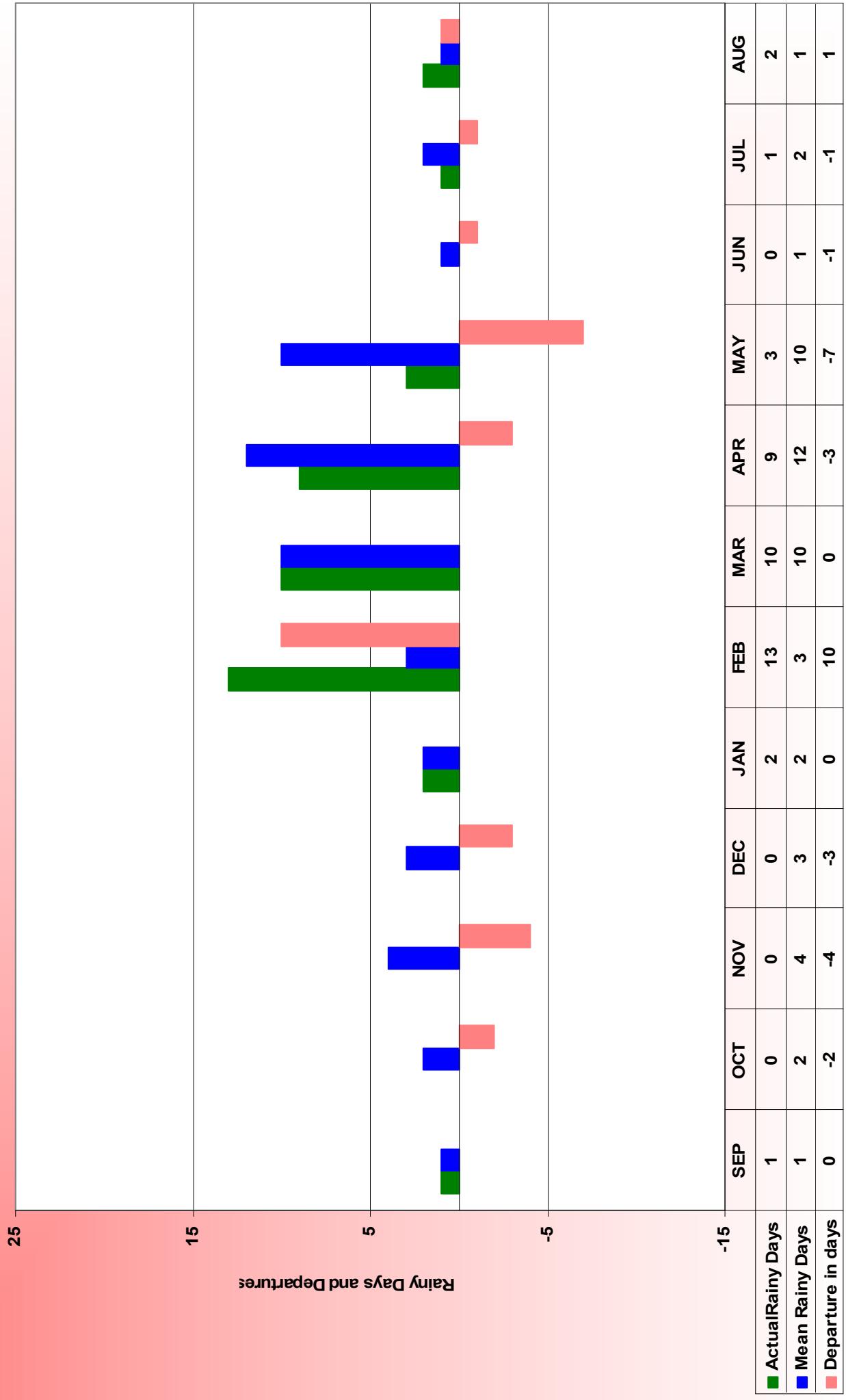
Hirat Rainy Days Season (2010 - 2011) Compared to the Long-Term Average and Departure



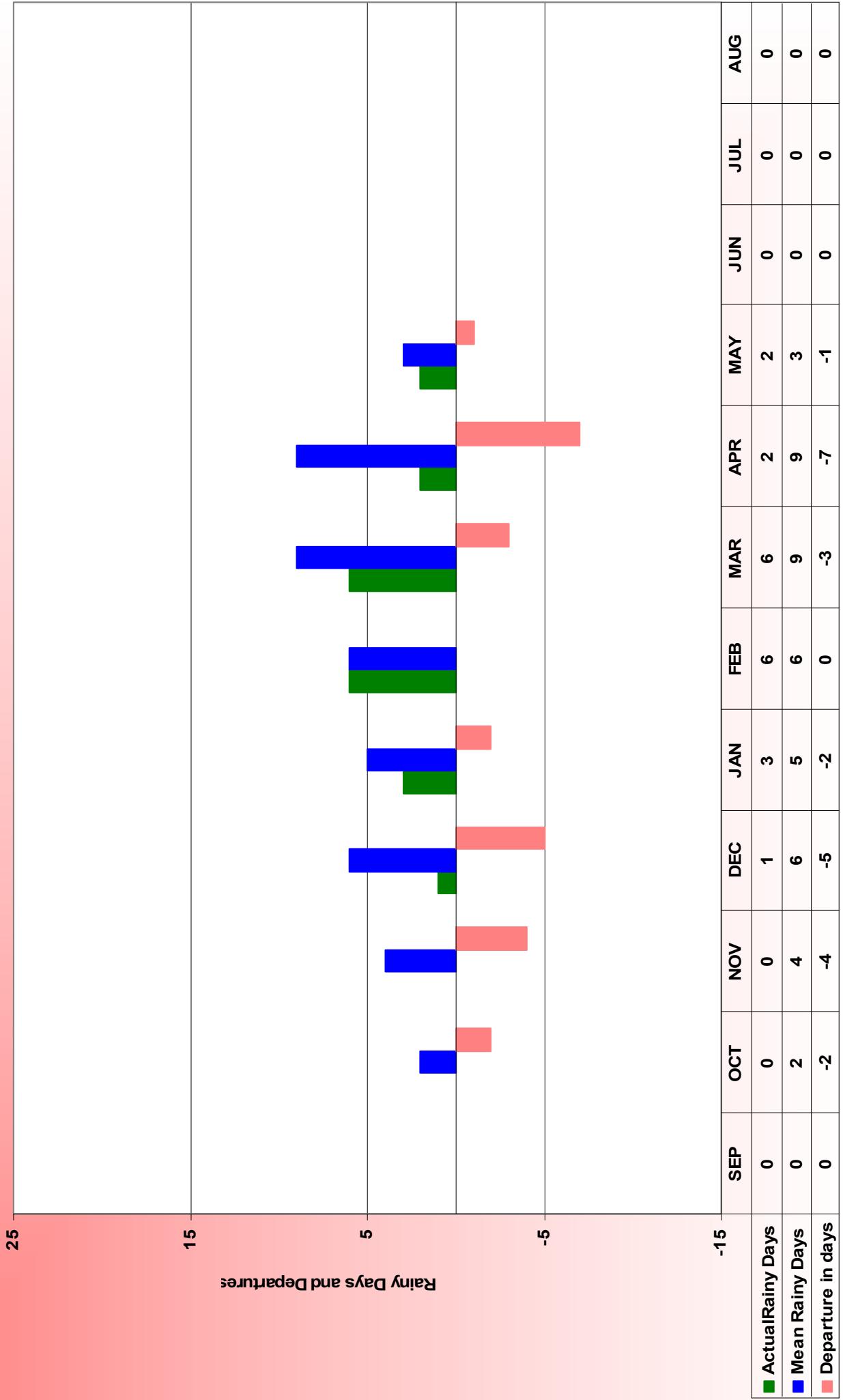
Jabulseraj Rainy Days Season (2010 - 2011) Compared to the Long-Term Average and Departure



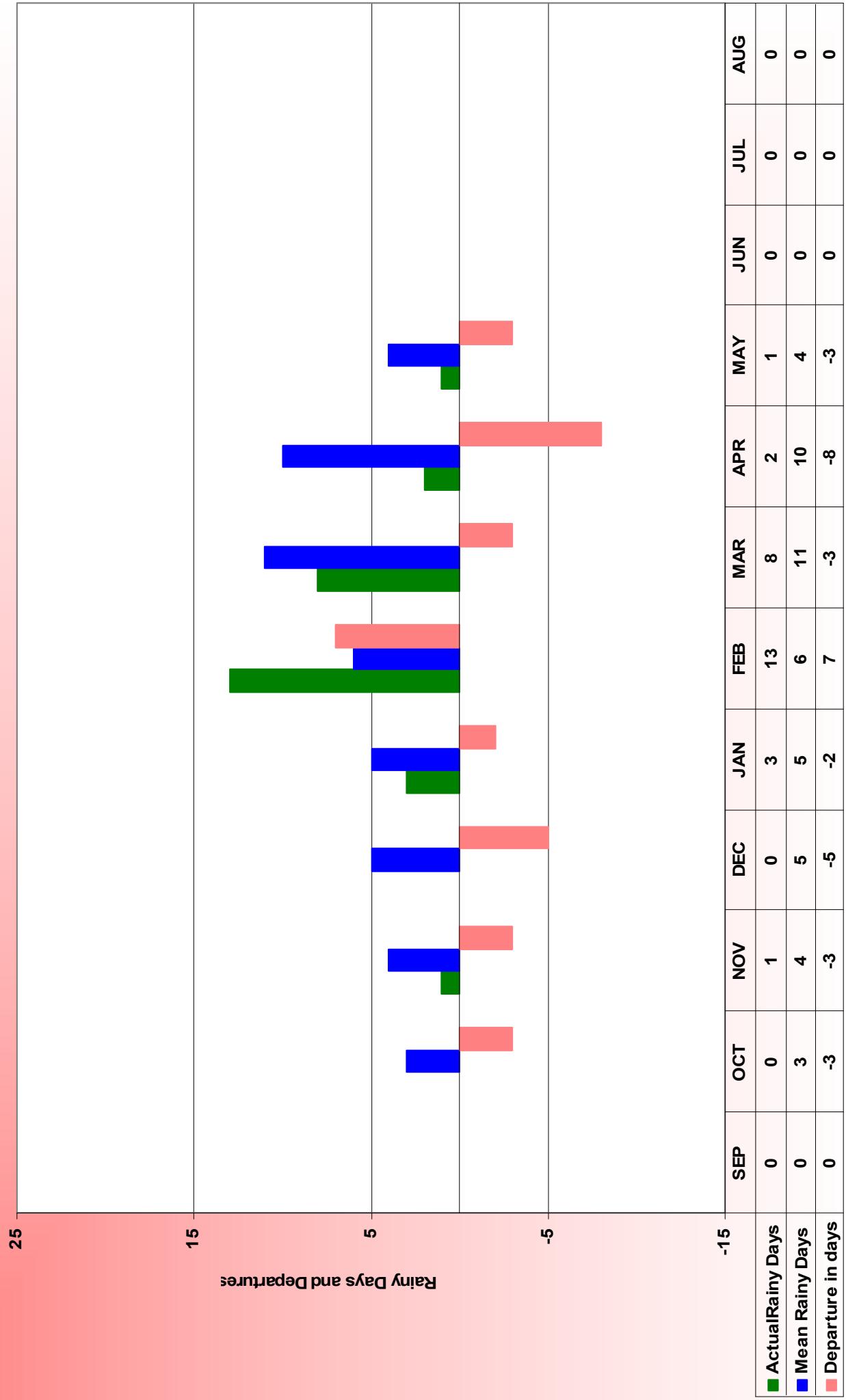
Kabul Rainy Days Season (2010 - 2011) Comparison to the Long-Term Average and Departure



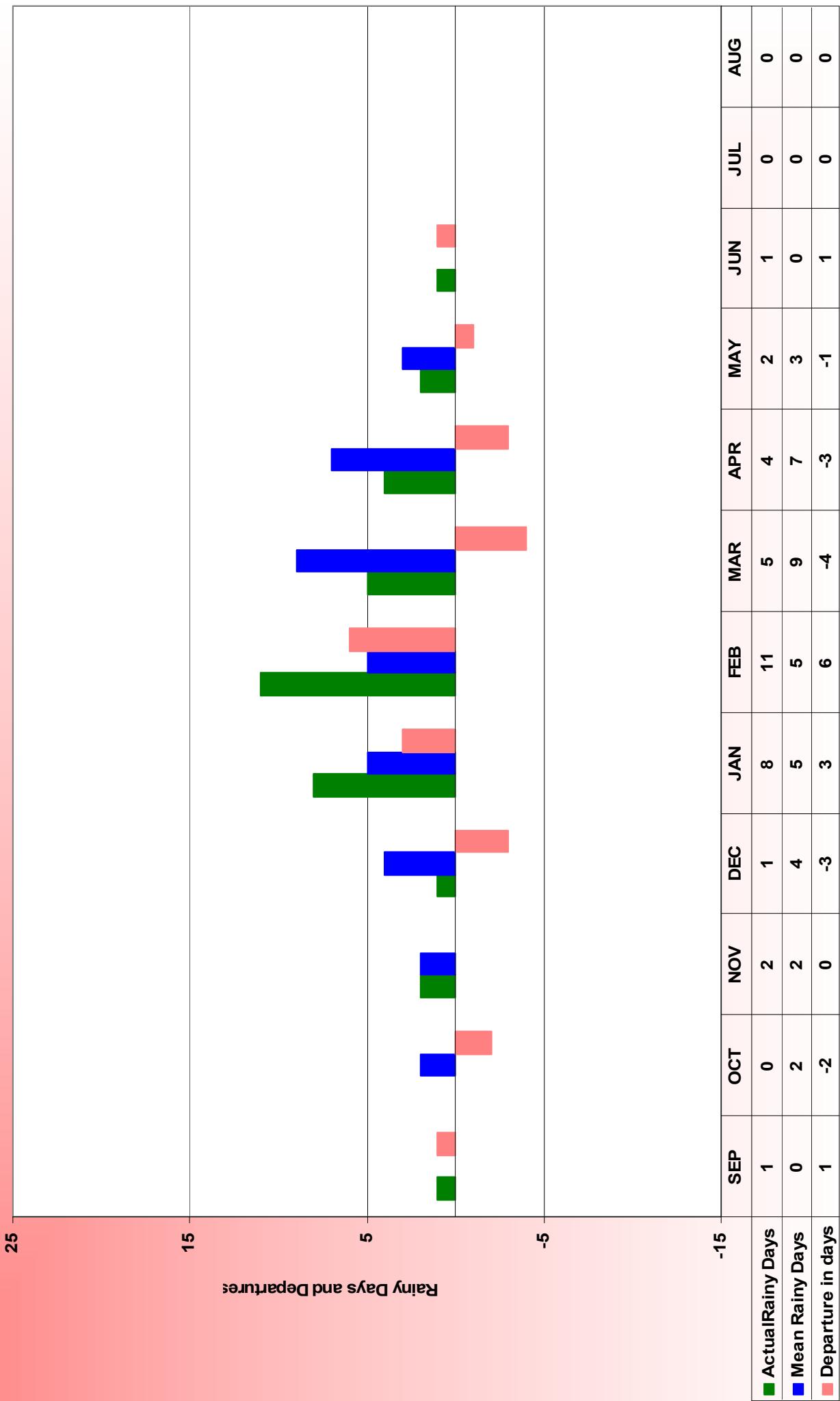
Mazarisharif Rainy Days Season (2010 - 2011) Compared to the Long-Term Average and Departure



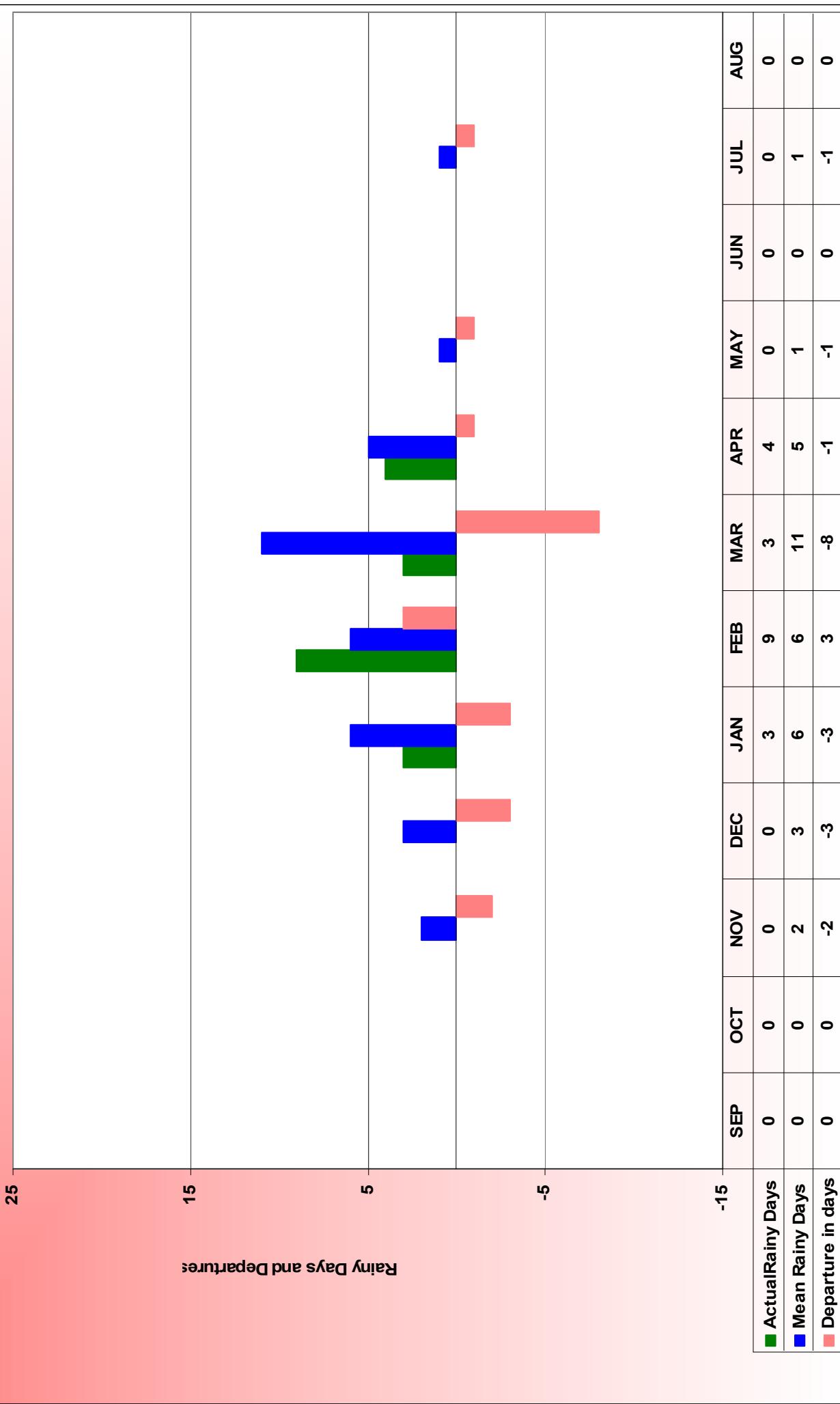
Miamana Rainy Days Season (2010 - 2011) Compared to the Long-Term Average and Departure



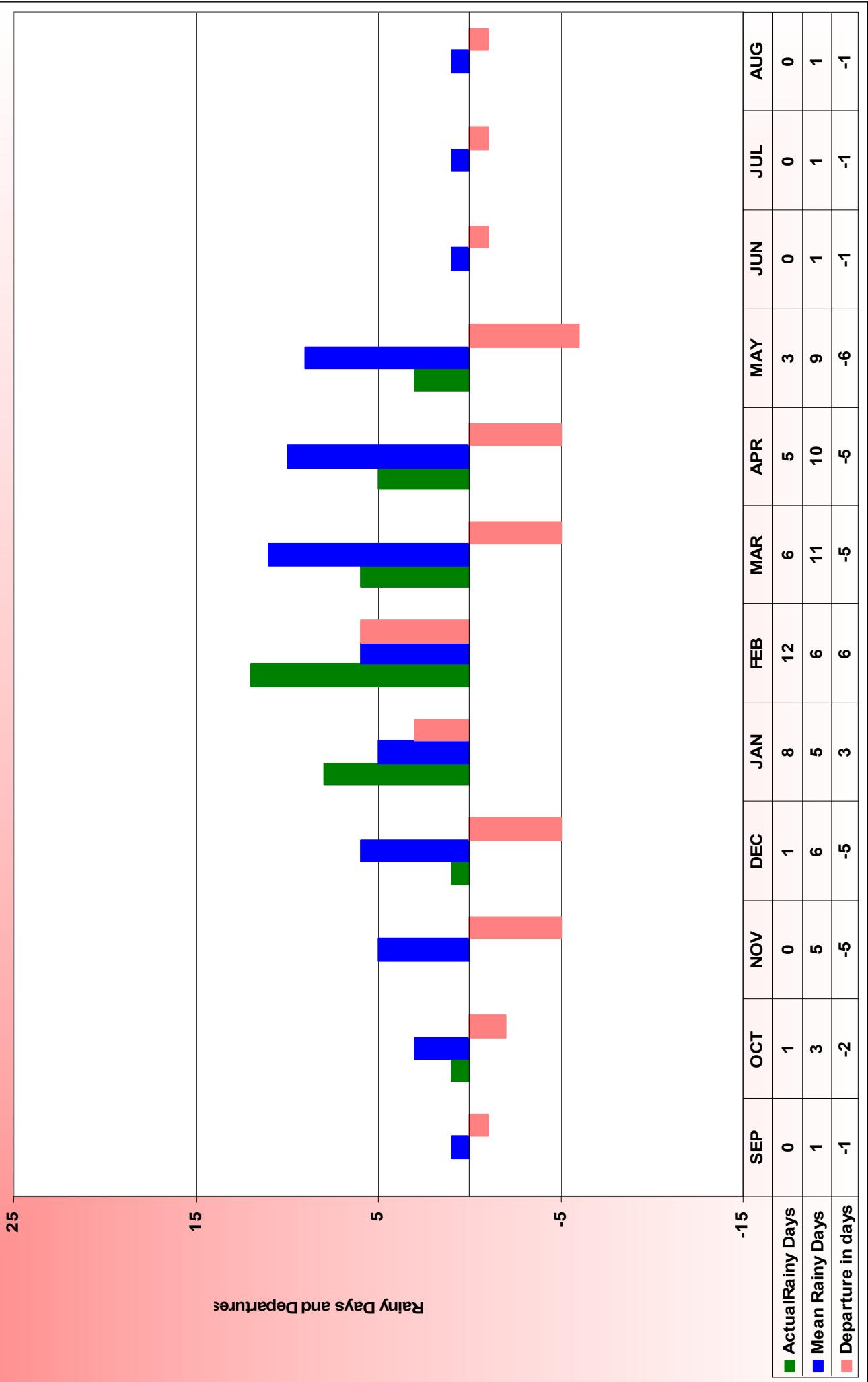
Jawzjan Rainy Days Season (2010 - 2011) Compared to the Long-Term Average and Departure



Kandahar Rainy Days Season (2010 - 2011) Compared to the Long-Term Average and Departure

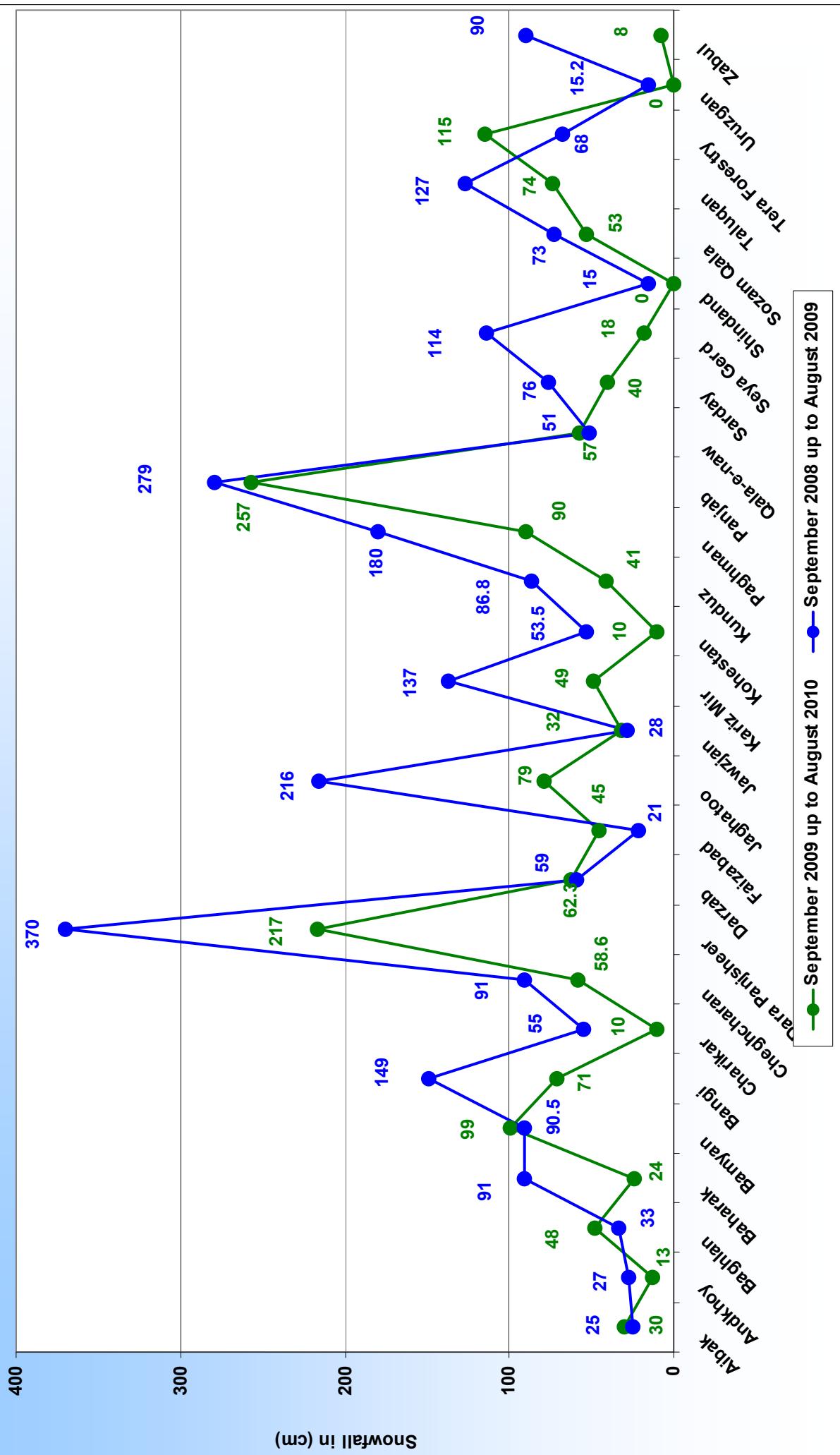


Kunduz Rainy Days Season (2010 - 2011) Compared to the Long-Term Average and Departure



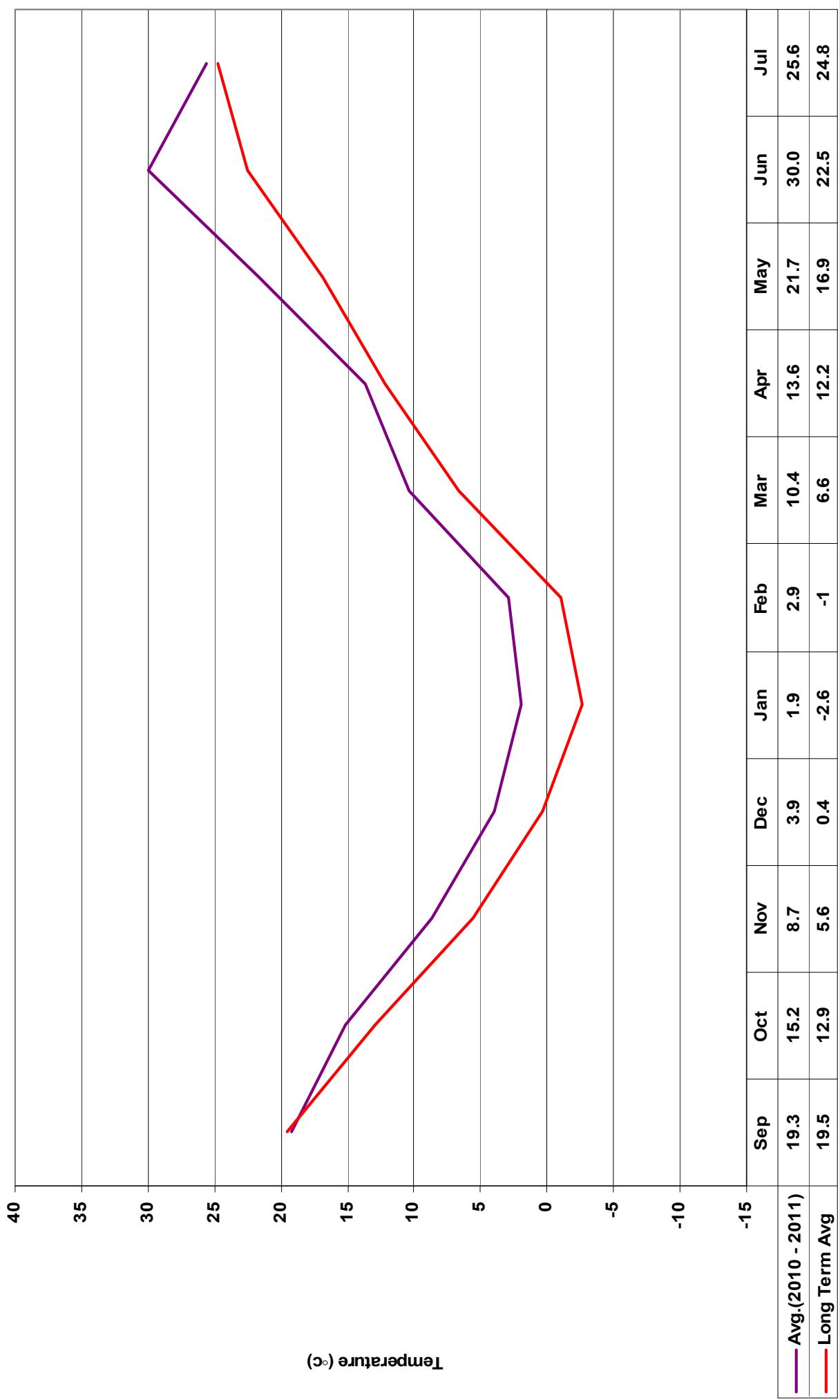
**Snowfall (cm) Current Year
Compared with
Last Year
Agricultural Season (2010- 2011)**

Comparison of Snowfall (cm) (2009 - 2010) with (2008 - 2009)

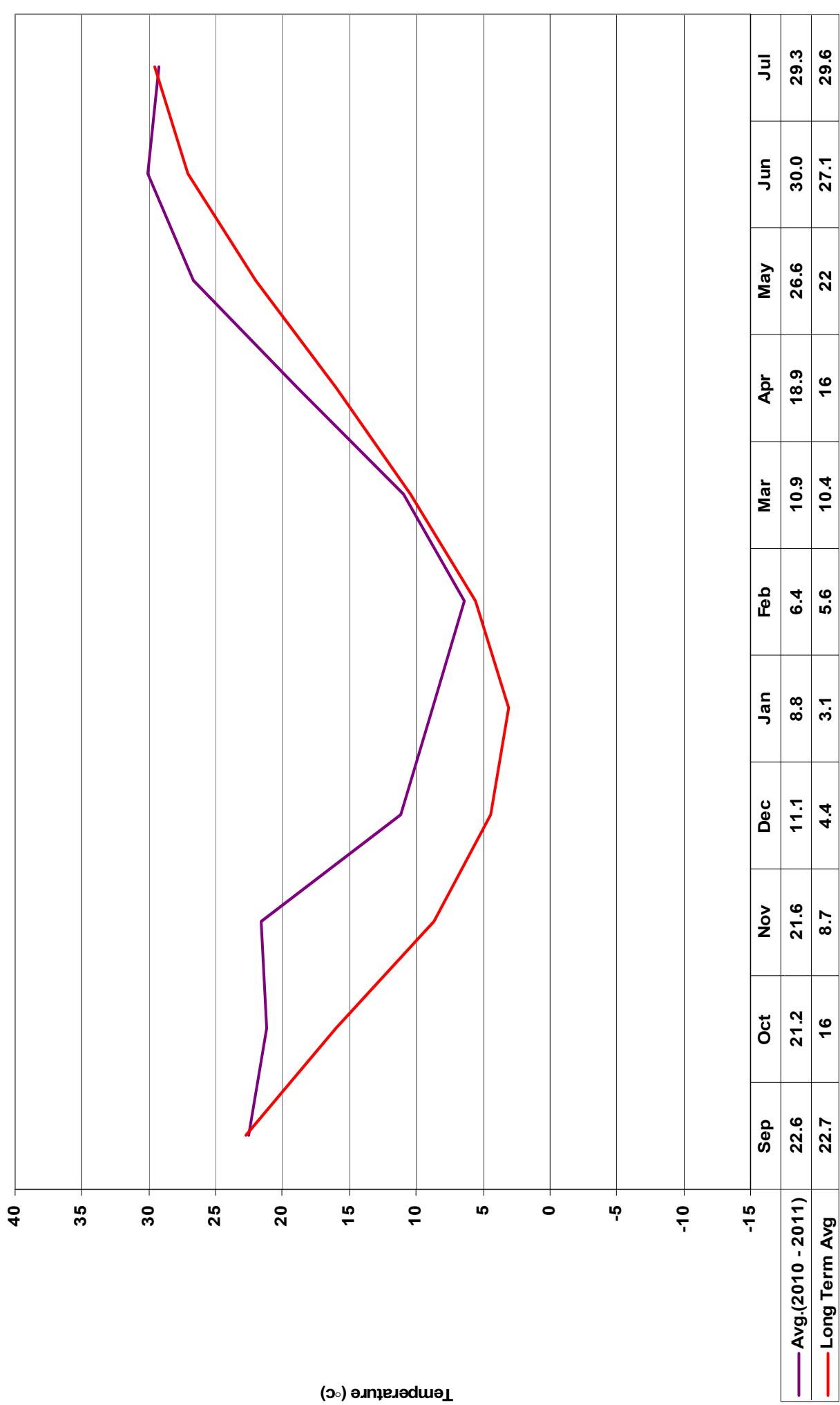


Average Temperature (2010-2011)
Compared with
Long Term Average

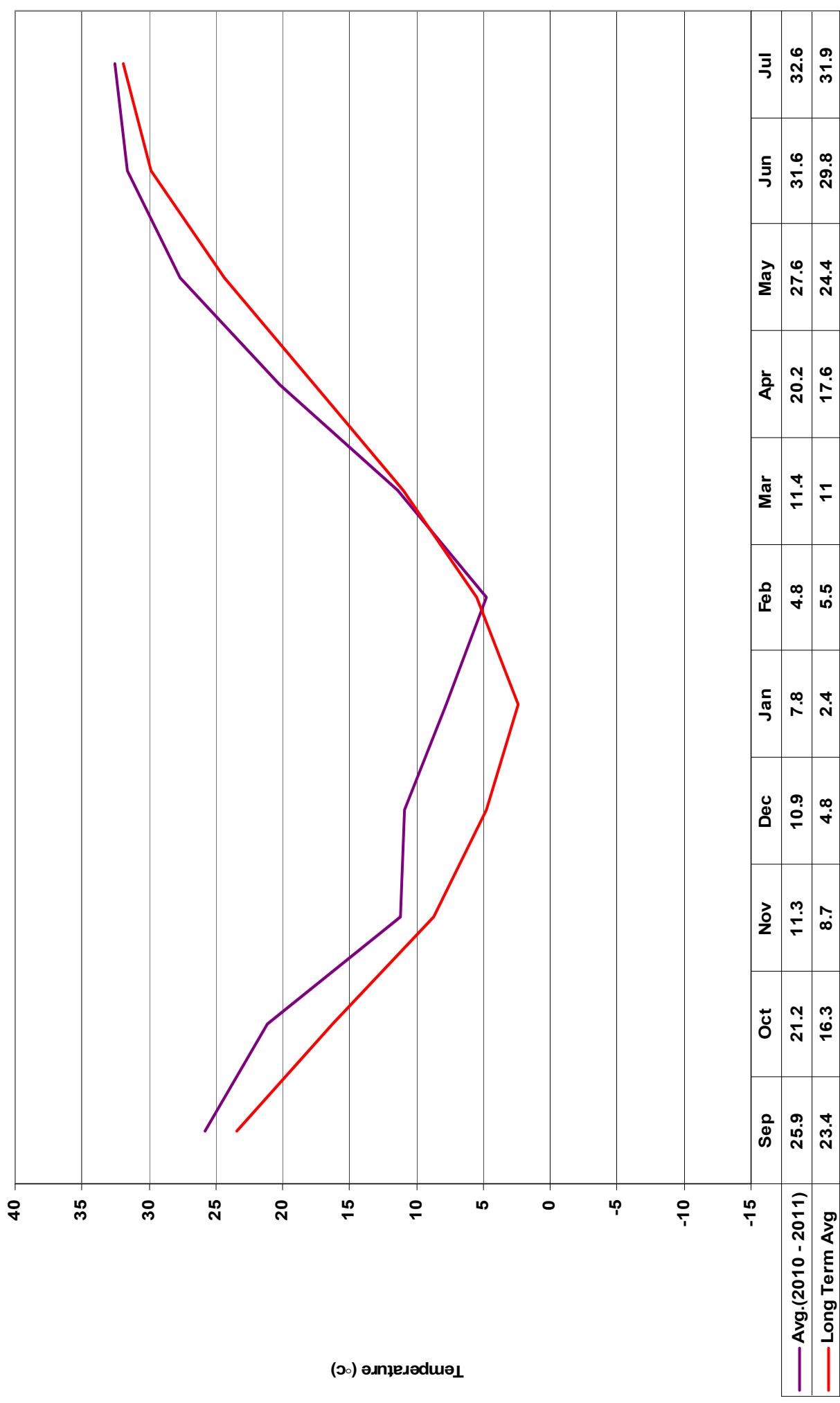
Kabul Average Temperature (2010 - 2011) Compared to the Long Term Average



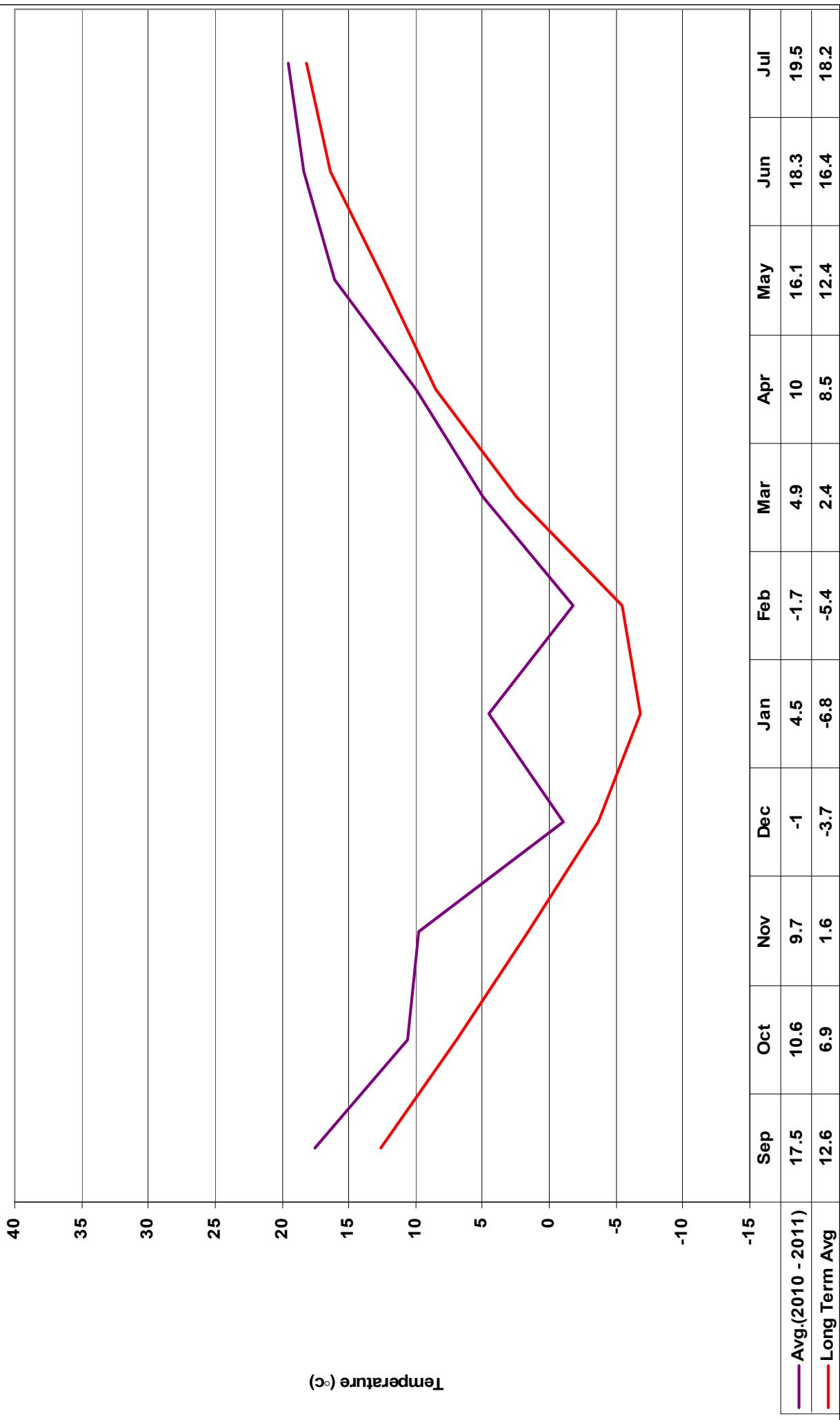
Hirat Average Temperature (2010 - 2011) Compared to the Long Term Average



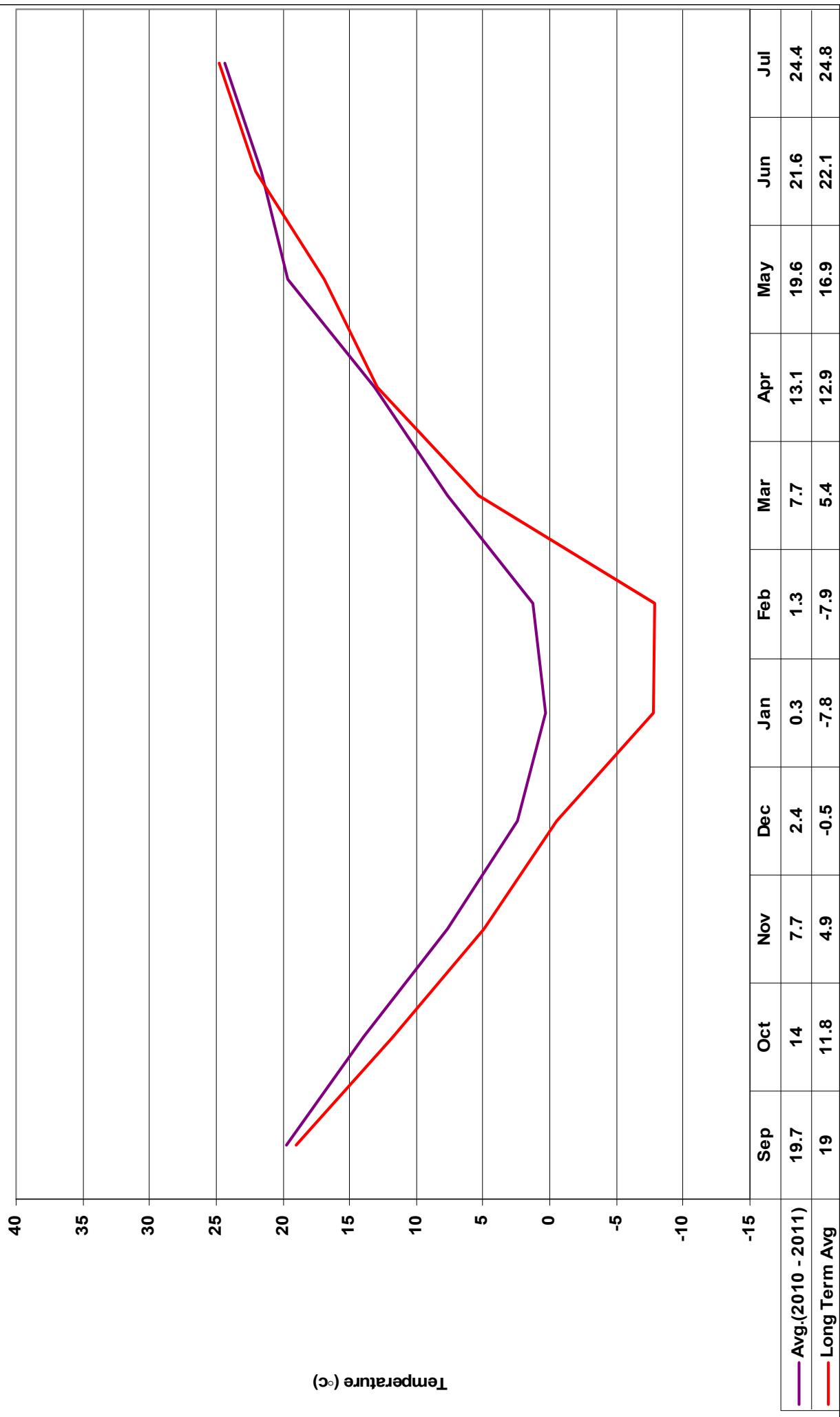
Mazar-i-Sharif Average Temperature (2010 - 2011) Compared to the Long Term Average



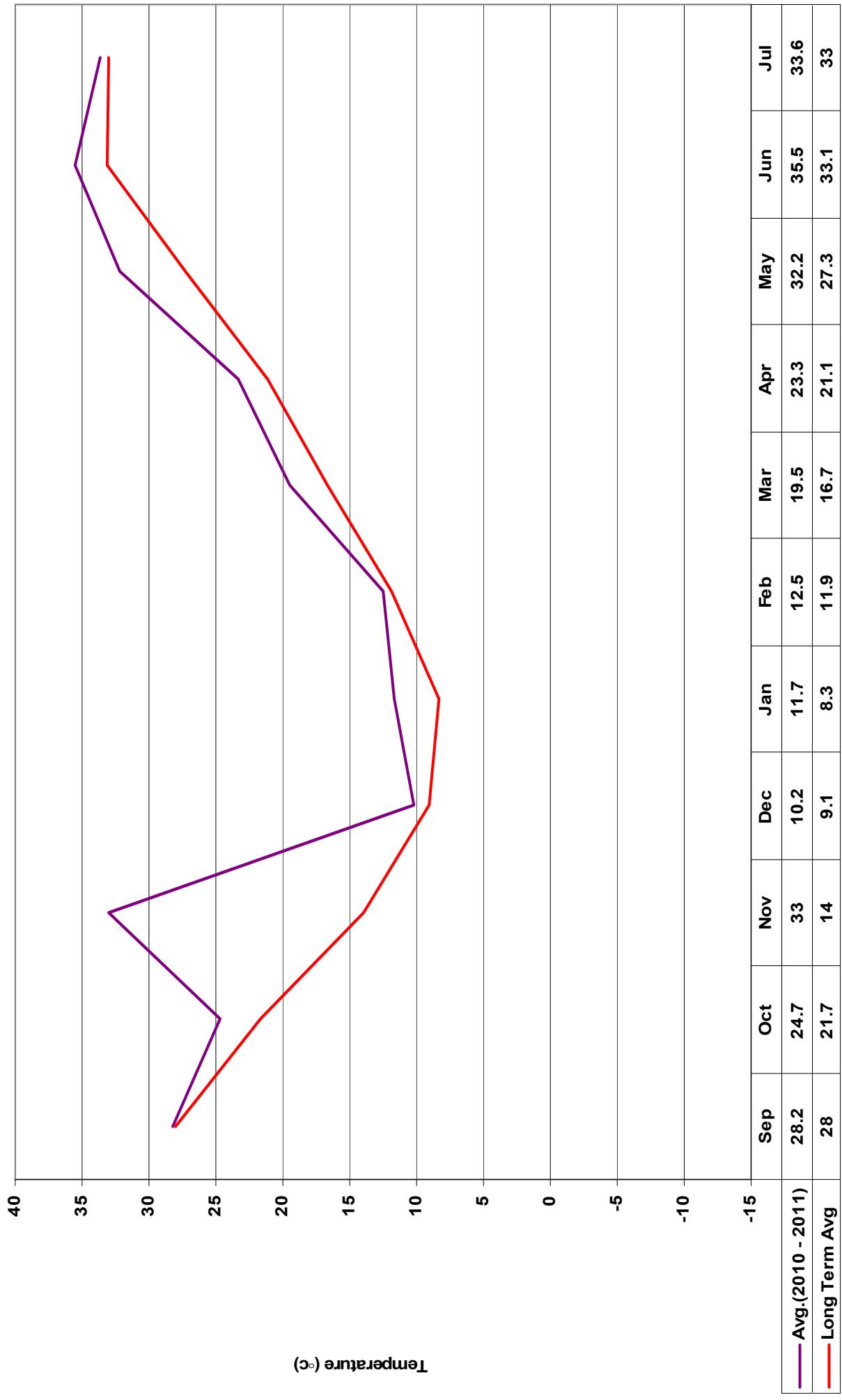
Bamyan Average Temperature (2010 - 2011) Compared to the Long Term Average



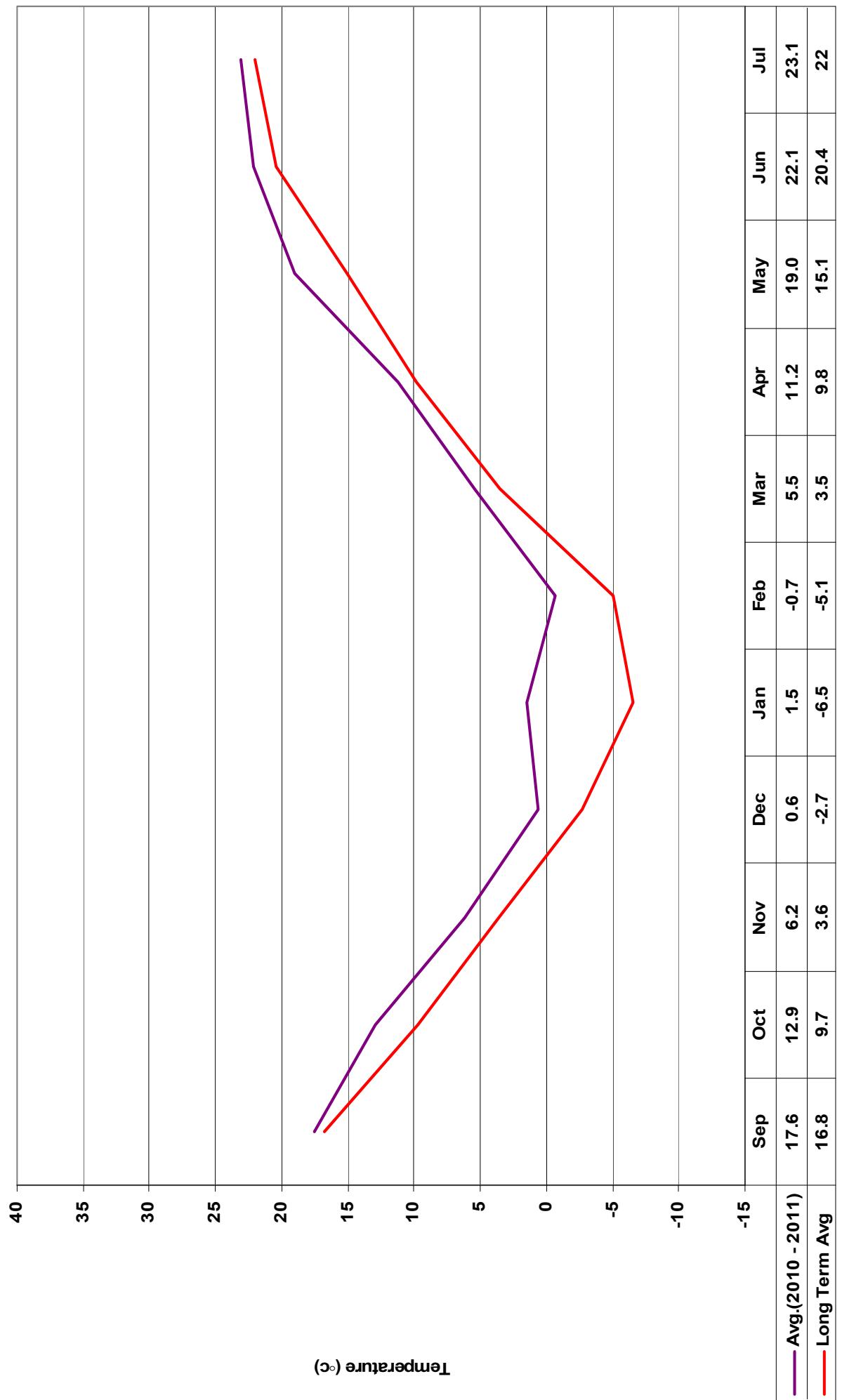
Logar Average Temperature (2010 - 2011) Compared to the Long Term Average



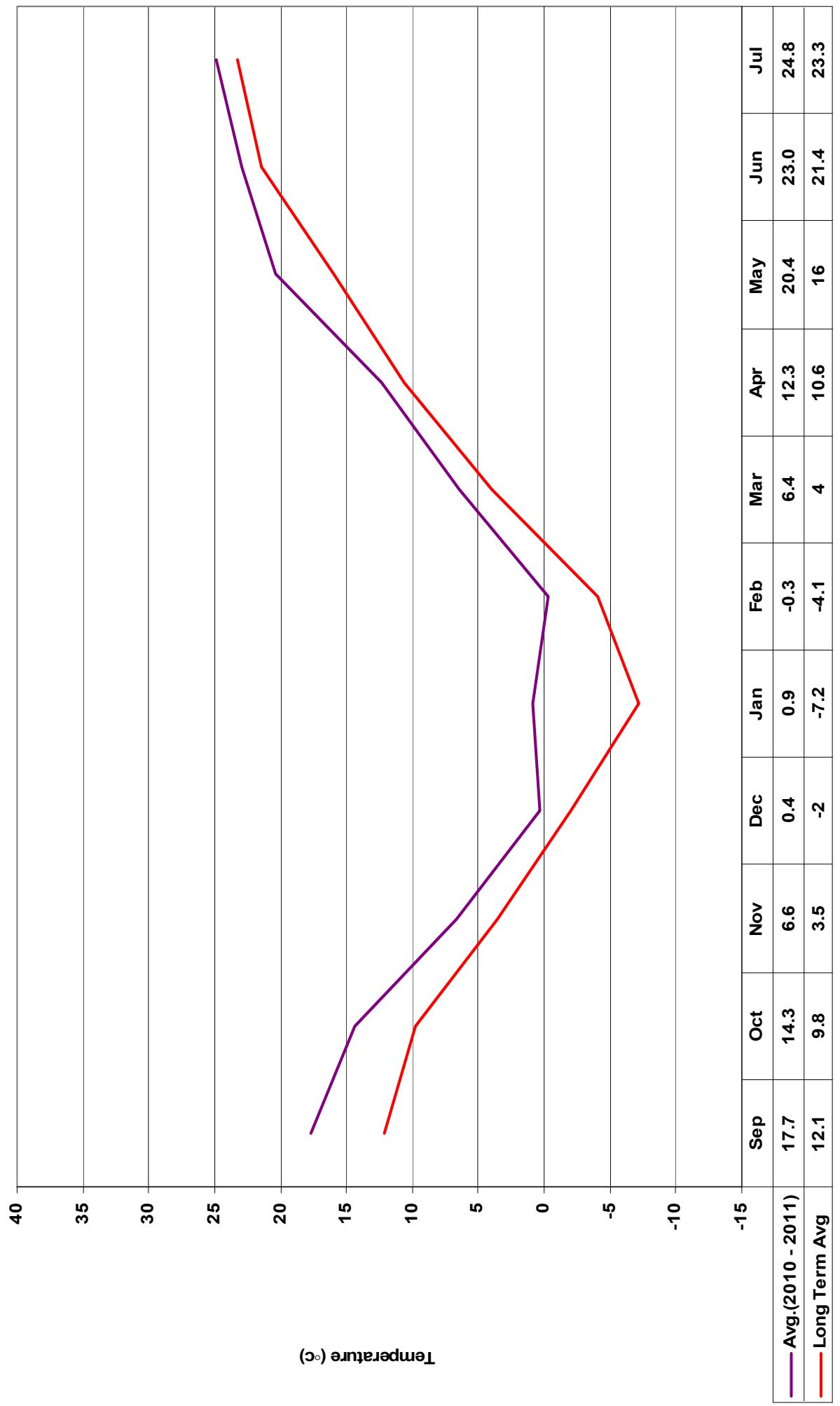
Jalalabad Average Temperature (2010 - 2011) Compared to the Long Term Average



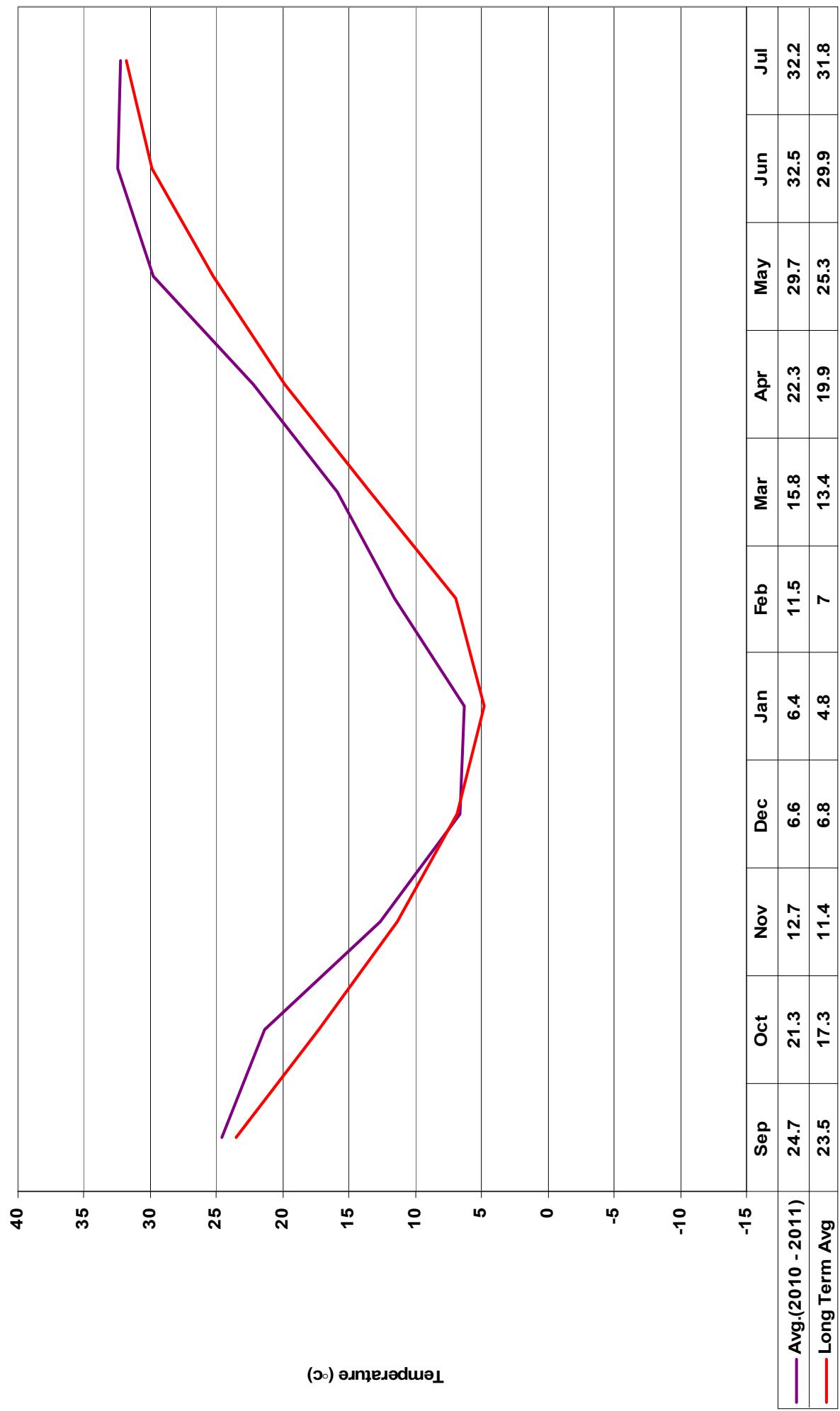
Gardiz Average Temperature (2010 - 2011) Compared to the Long Term Average



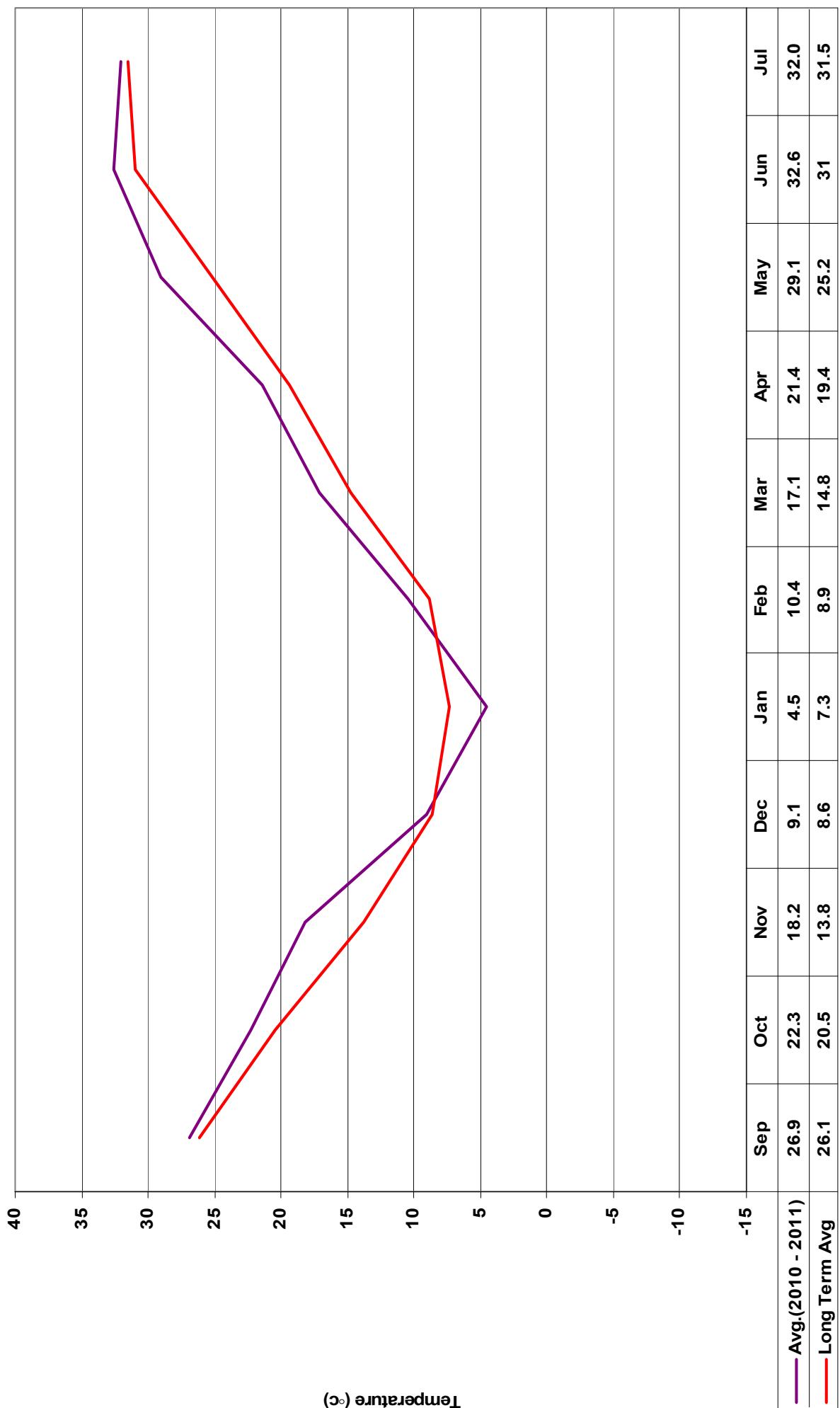
Ghazni Average Temperature (2010 - 2011) Compared to the Long Term Average



Kandahar Average Temperature (2010 - 2011) Compared to the Long Term Average



Laghman Average Temperature (2010 - 2011) Compared to the Long Term Average



Frost Days
Compared with
Last Year and Long Term Average
Agricultural Season (2010 - 2011)

Afghanistan - Yearly Number of Frost Days (2010 - 2011)

