

Annex 1:

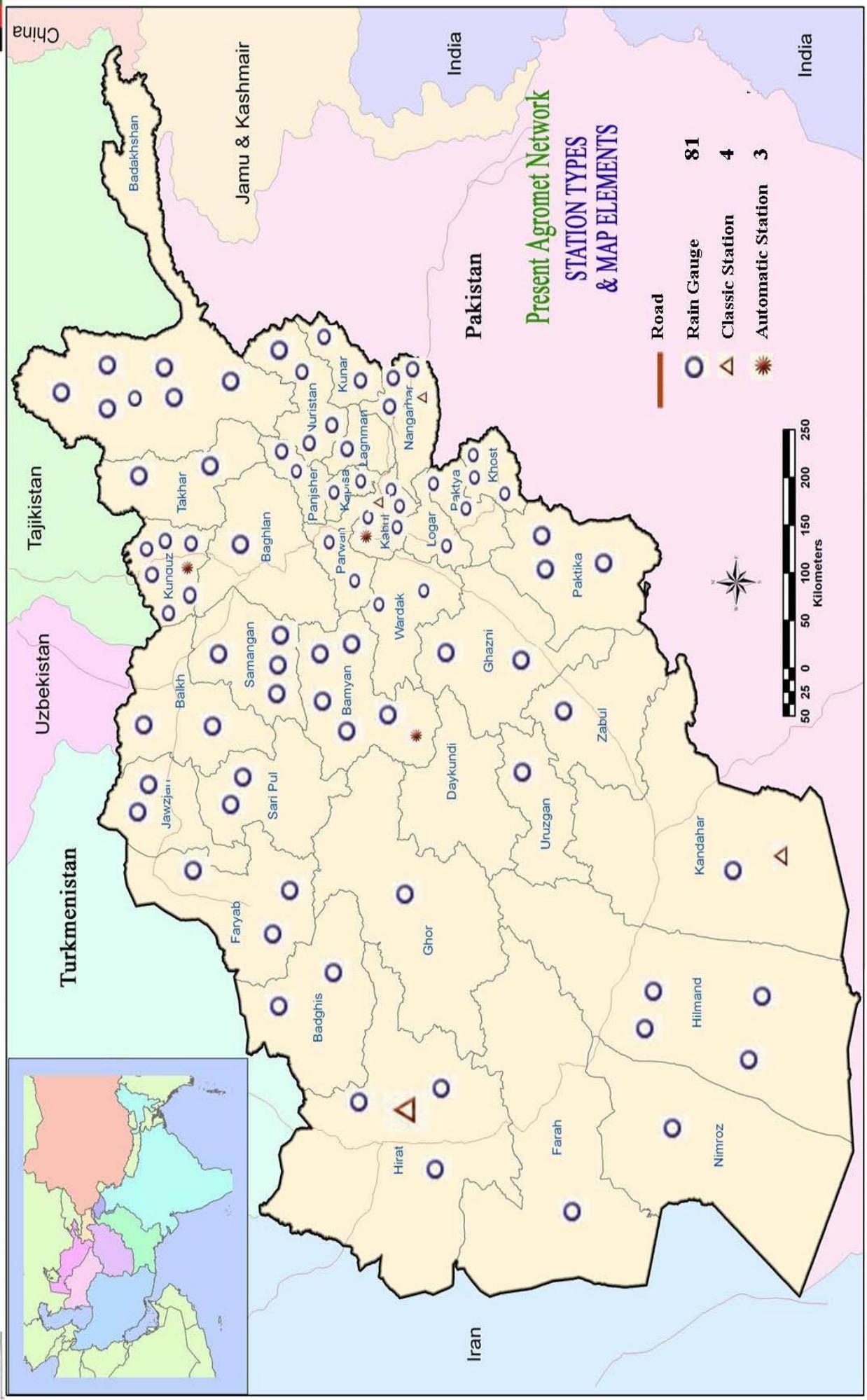
Agromet Network Agromet Project Situation

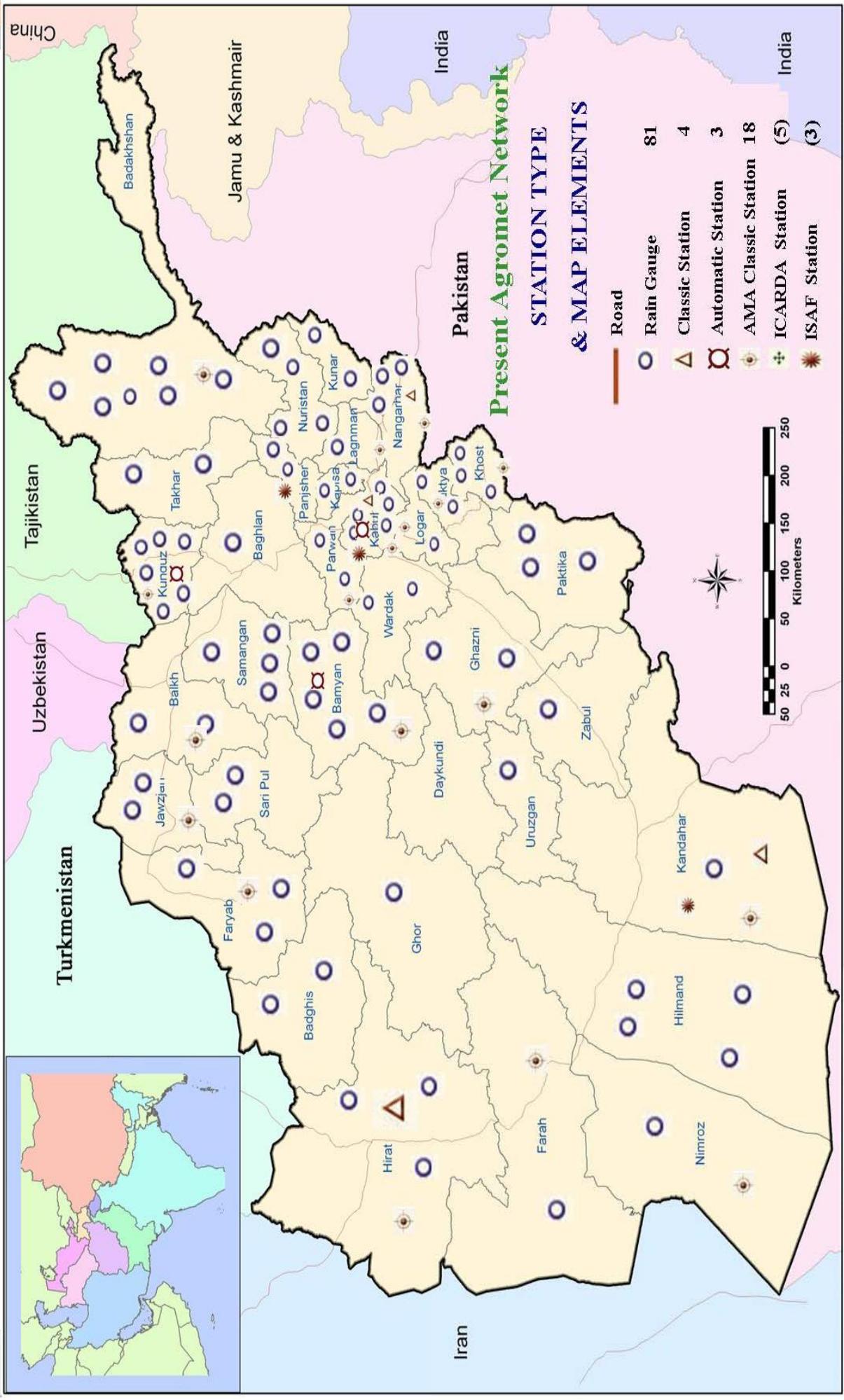
A: Weather Stations

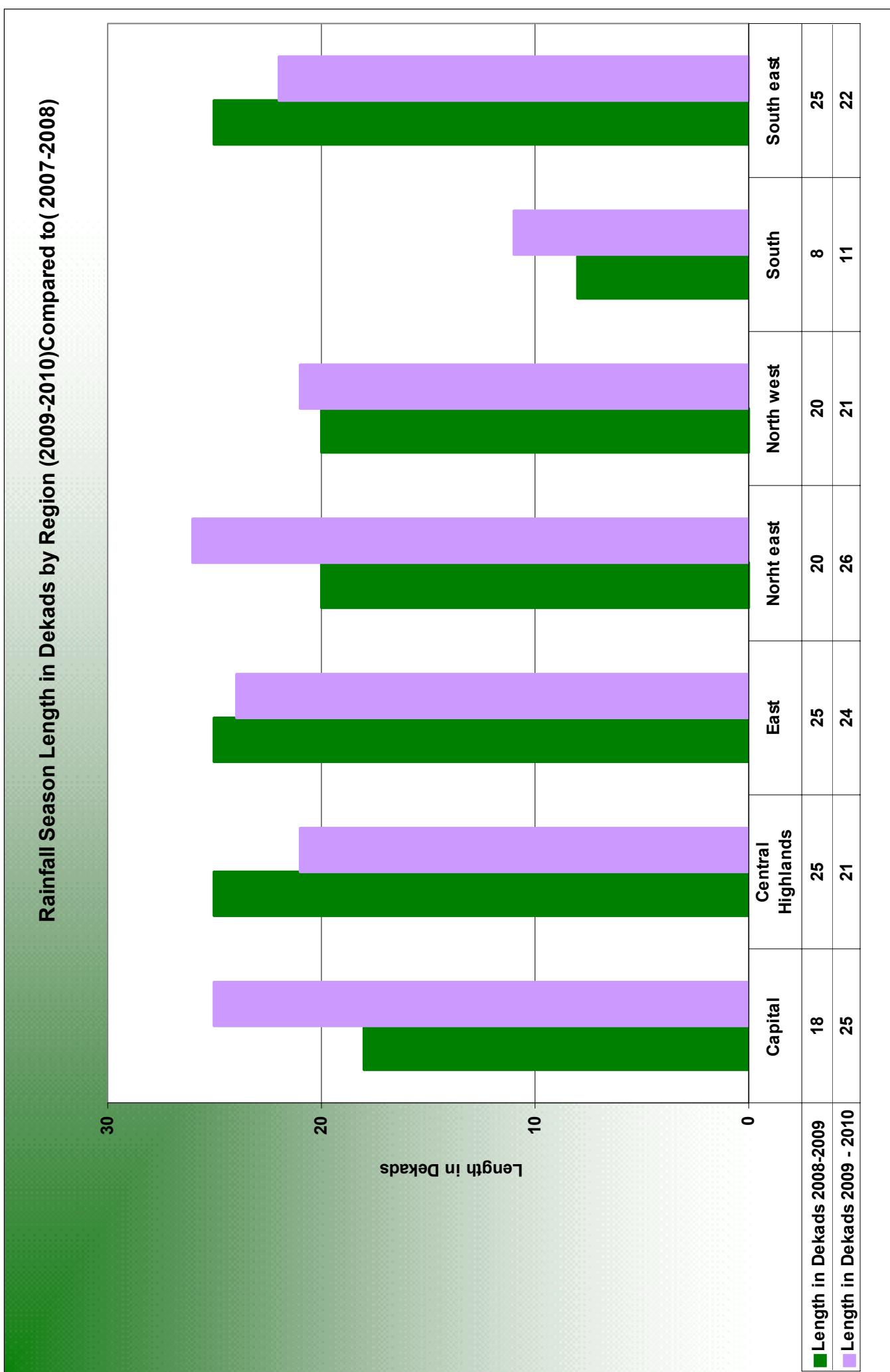
B: Crop Monitoring

MAIL/USGS Agromet Project: Status as of September 2010

- 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 87 sites. All 87 sites record rainfall and snowfall. In addition to rainfall and snowfall, 77 out of 87 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 6 years (taken from 89 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 90 Observers paid through incentives, five national MAIL/AMA counterpart and 3 USGSAgro 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.

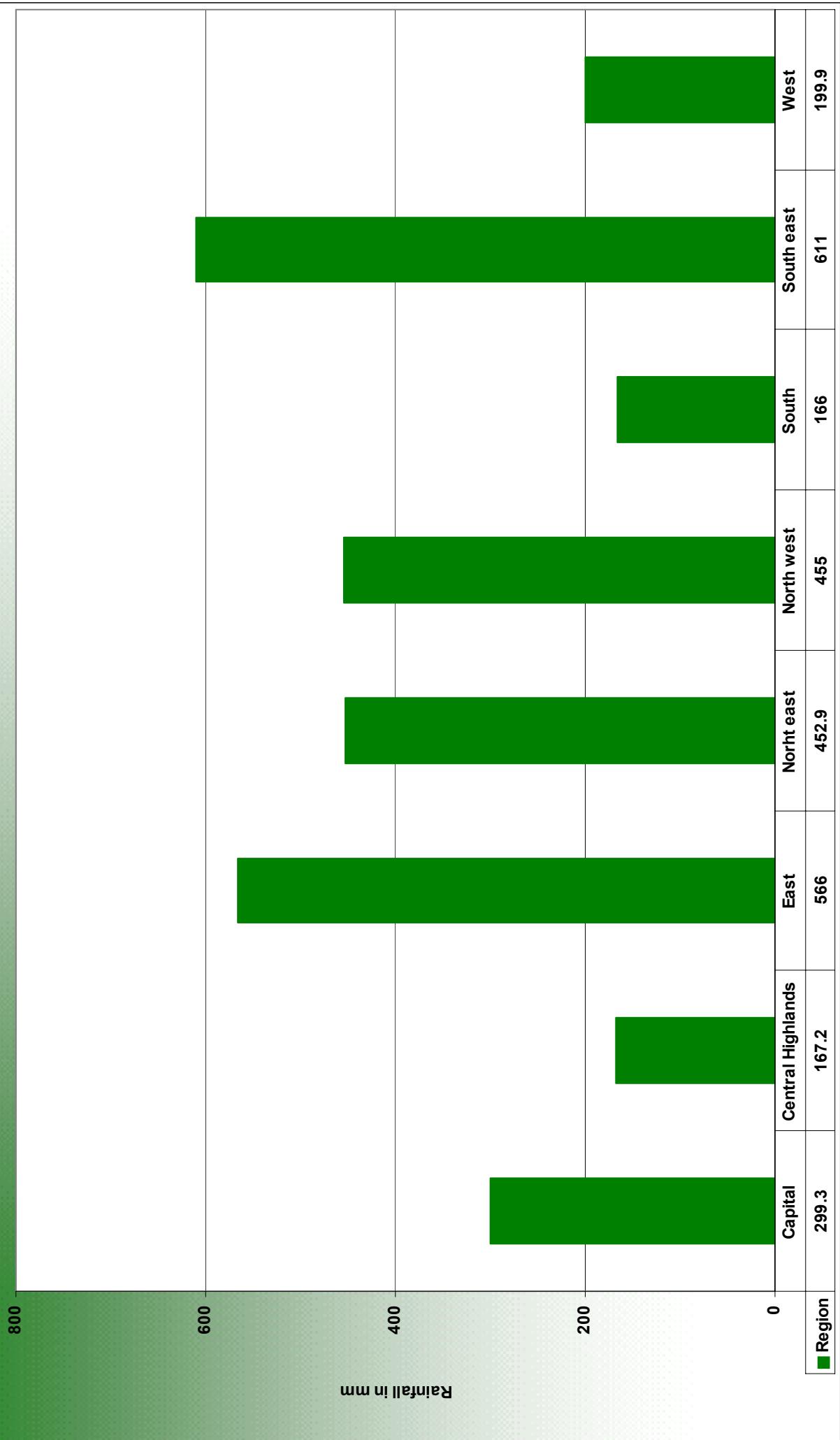


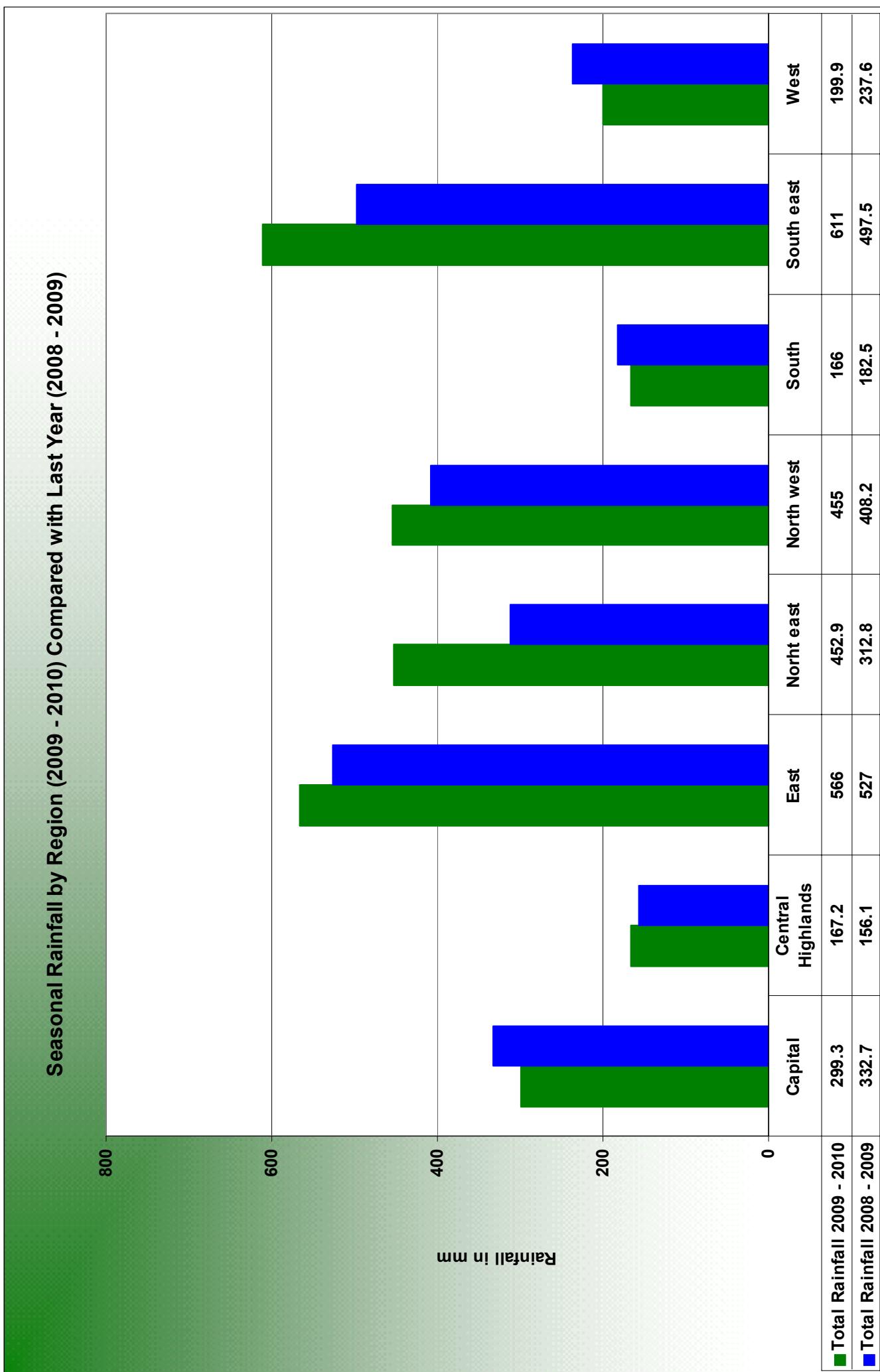




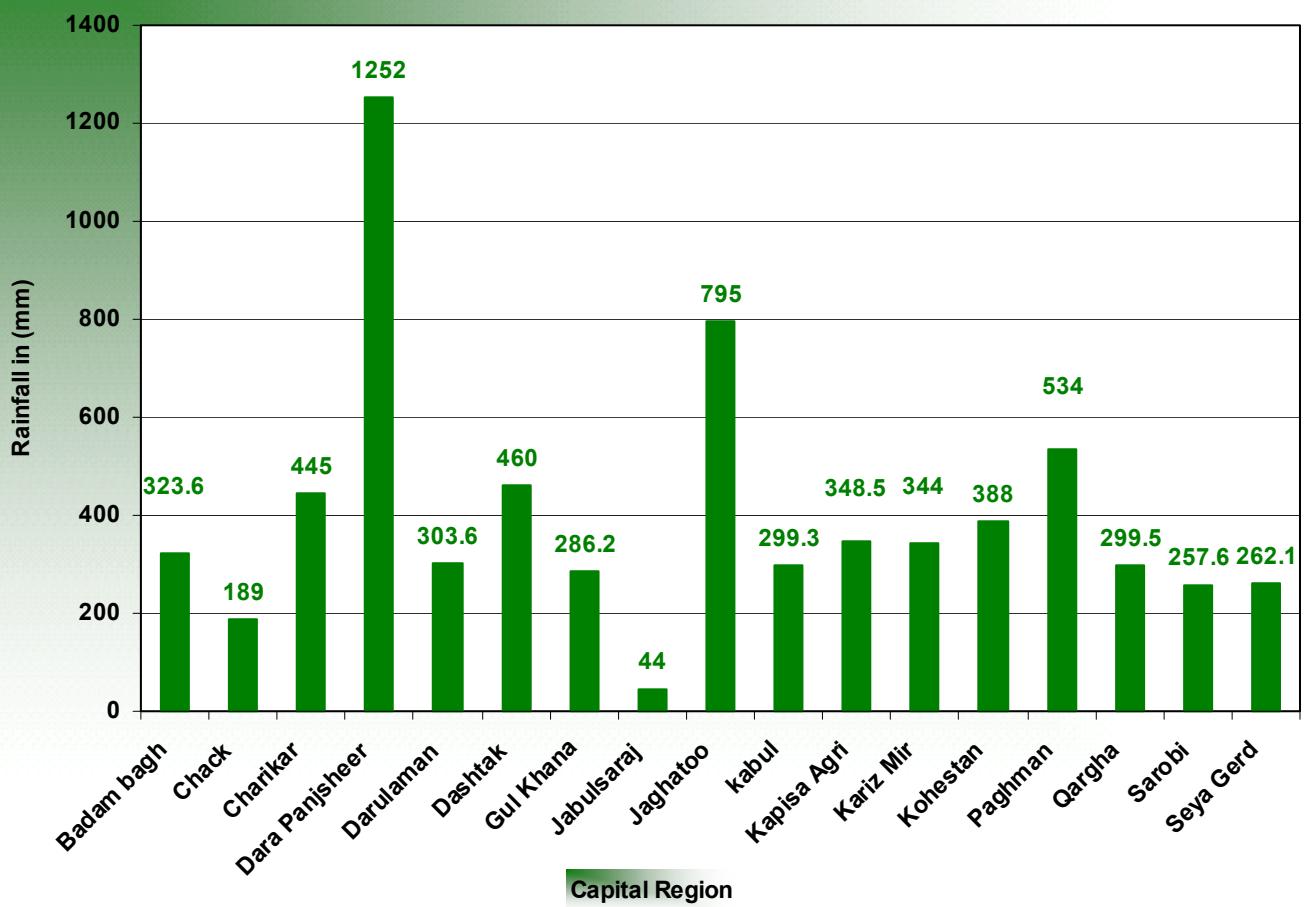
Average Recorded Rainfall (mm) By Regions - Afghanistan Season (2009 - 2010)													
Region	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Yearly Total
Capital	6.2	9.0	31.6	22.0	23.4	78.2	31.7	55.2	80.8	7.9	19.2	36.6	401.8
Central Highlands	5.2	5.4	19.1	13.9	8.7	53.4	11.9	47.6	112.7	13.9	3.1	15.9	310.9
East	37.1	4.0	27.1	13.7	32.7	73.6	23.8	48.7	55.4	21.0	88.9	49.3	475.0
North east	4.2	3.6	43.0	40.0	15.5	78.2	62.7	43.9	78.7	33.6	7.3	0.6	411.2
North west	0.0	1.1	47.4	49.0	12.2	69.1	48.4	49.1	60.8	9.8	2.2	0.0	349.0
South	0.0	0.0	0.9	64.3	25.3	62.1	5.2	16.4	3.7	0.0	0.0	0.0	177.8
South east	2.7	0.3	9.7	11.7	34.6	87.5	28.0	8.4	48.3	18.4	64.9	92.3	406.7
West	0.2	1.1	19.9	32.4	14.5	51.5	43.1	20.8	10.5	0.1	0.0	0.0	194.3
Minimum	0.0	0.0	0.9	11.7	8.7	51.5	5.2	8.4	3.7	0.0	0.0	0.0	90.1
Maximum	37.1	9.0	47.4	64.3	34.6	87.5	62.7	55.2	112.7	33.6	88.9	92.3	725.2
Average	6.9	3.1	24.8	30.9	20.9	69.2	31.8	36.3	56.4	13.1	23.2	24.3	340.8

Accumulated Yearly Rainfall By Region in mm (2009 - 2010)

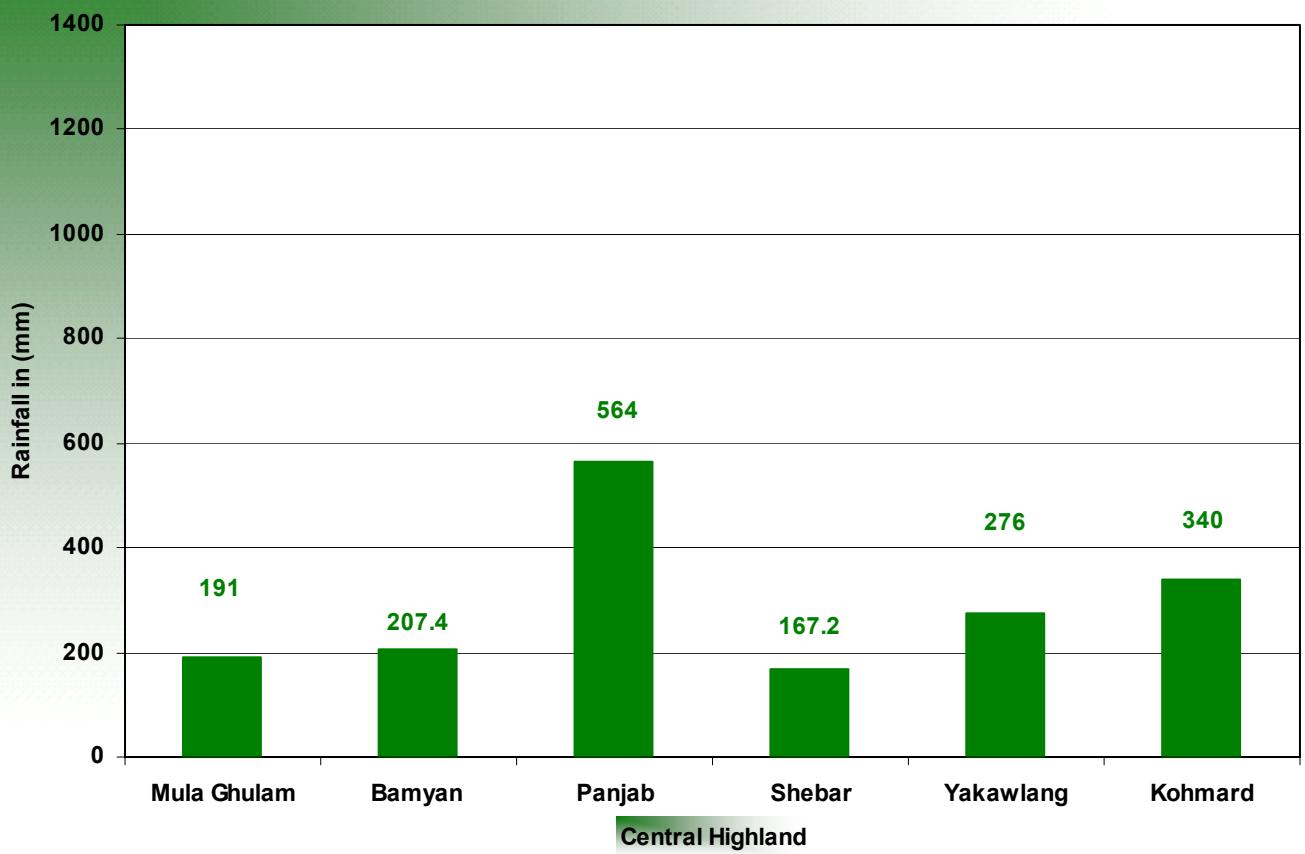


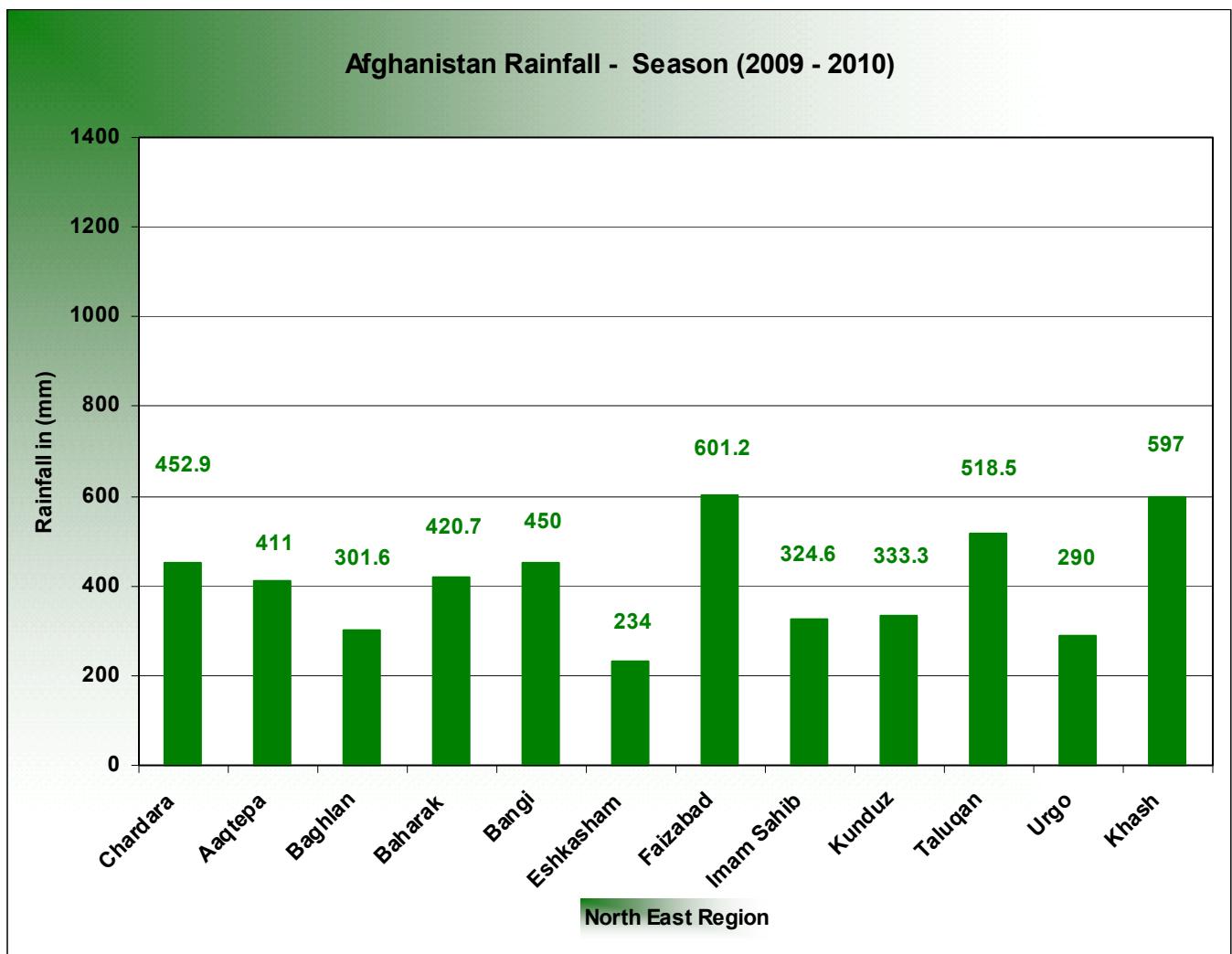
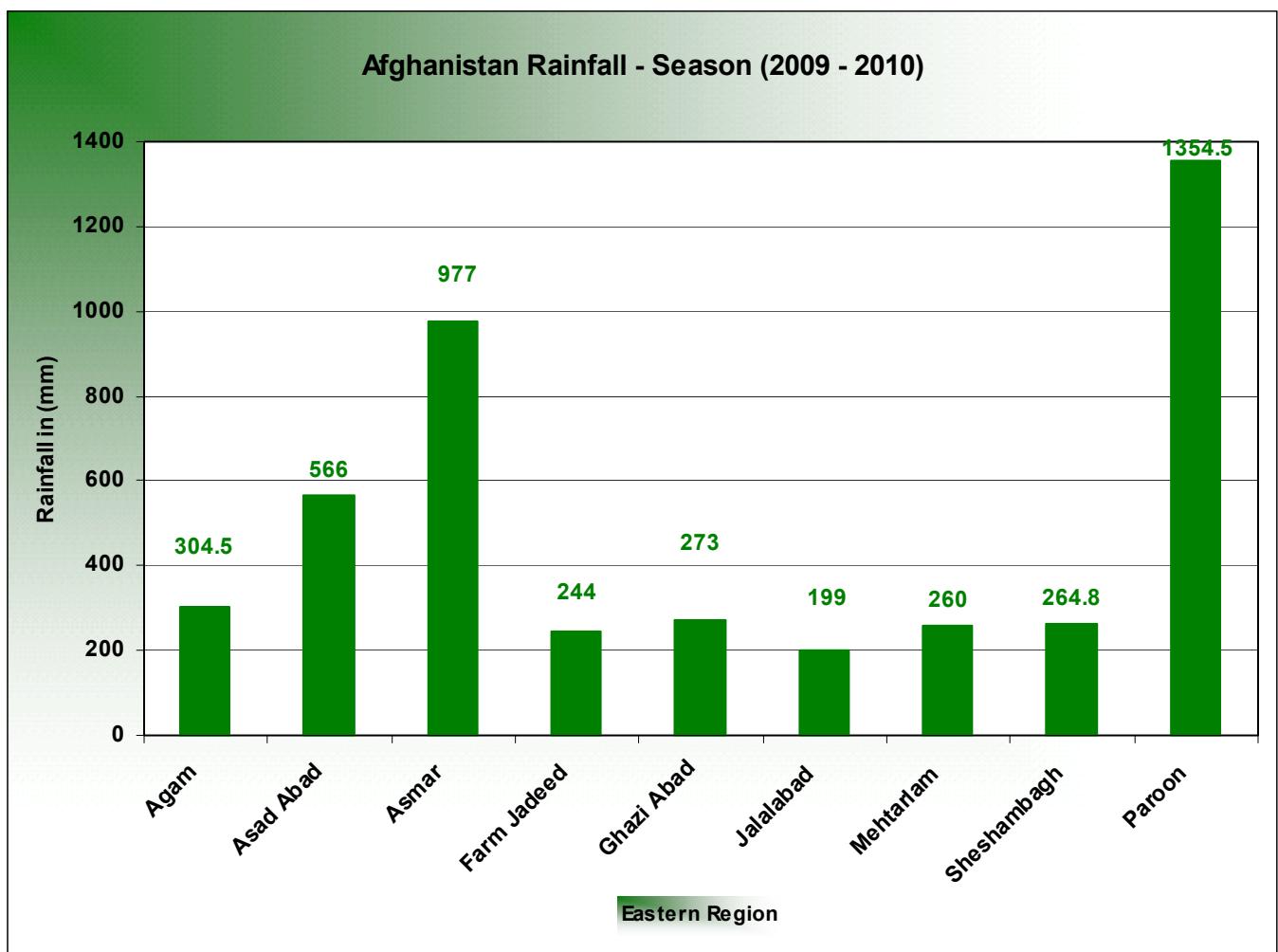


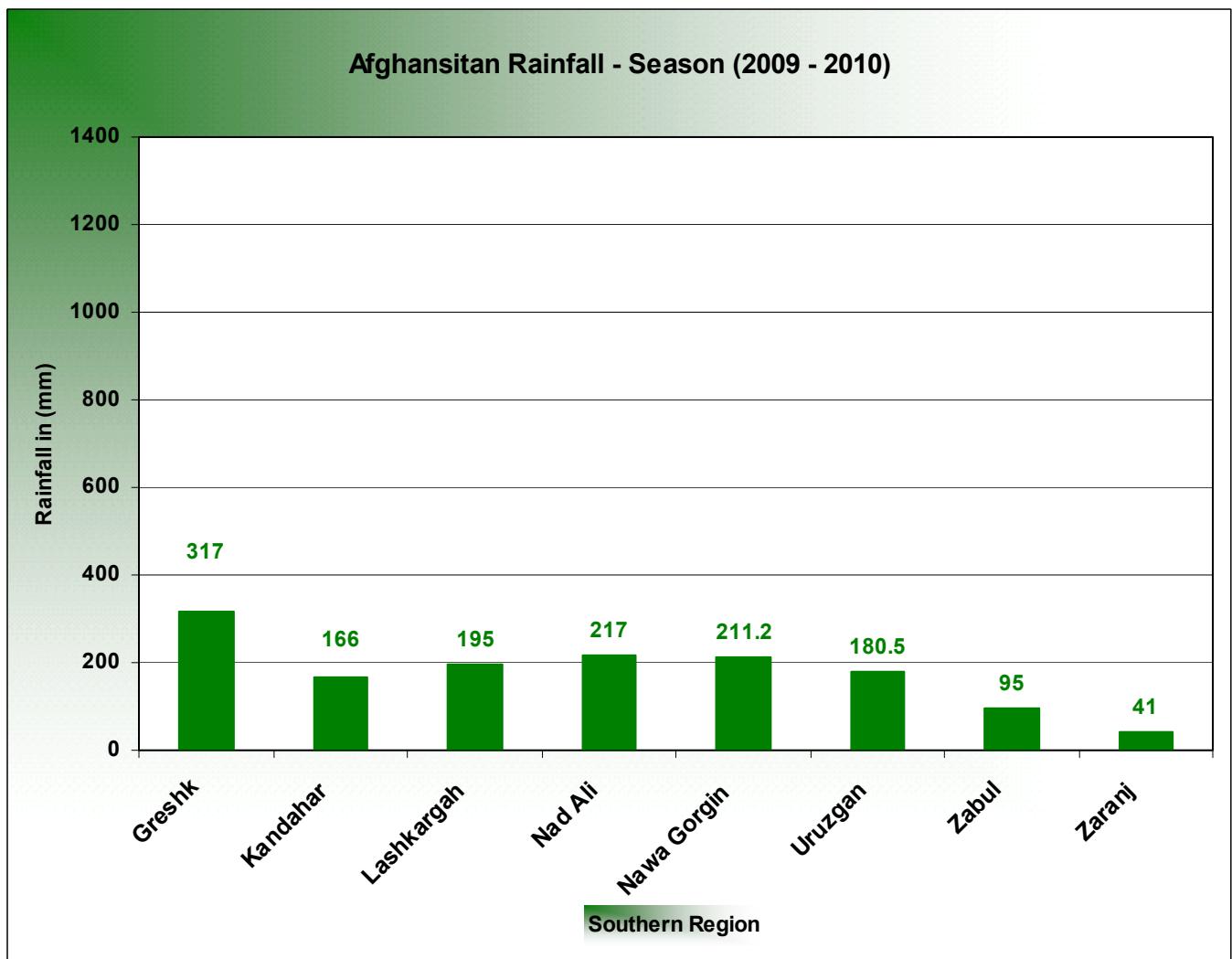
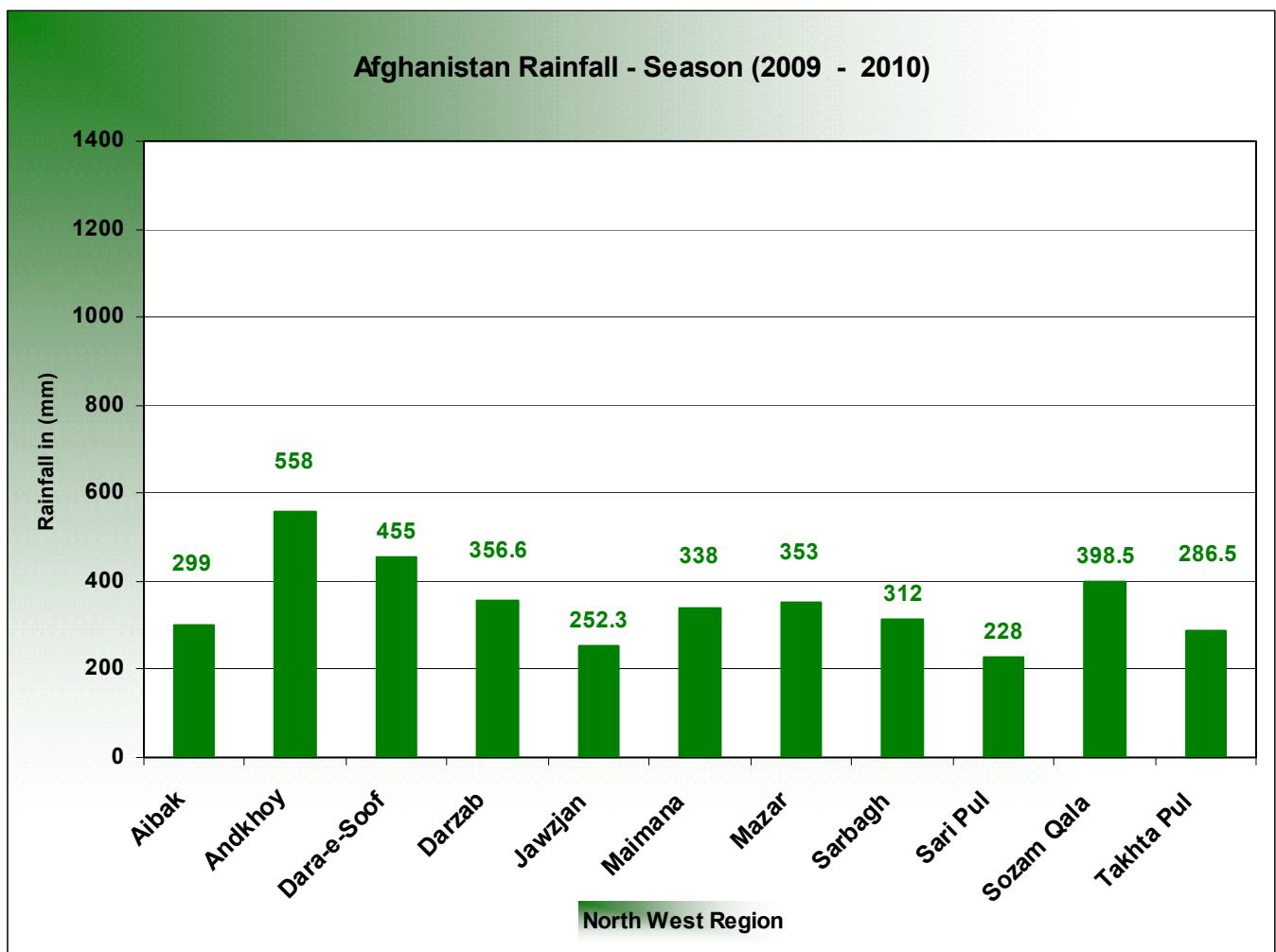
Afghanistan Rainfall - Season (2009 - 2010)

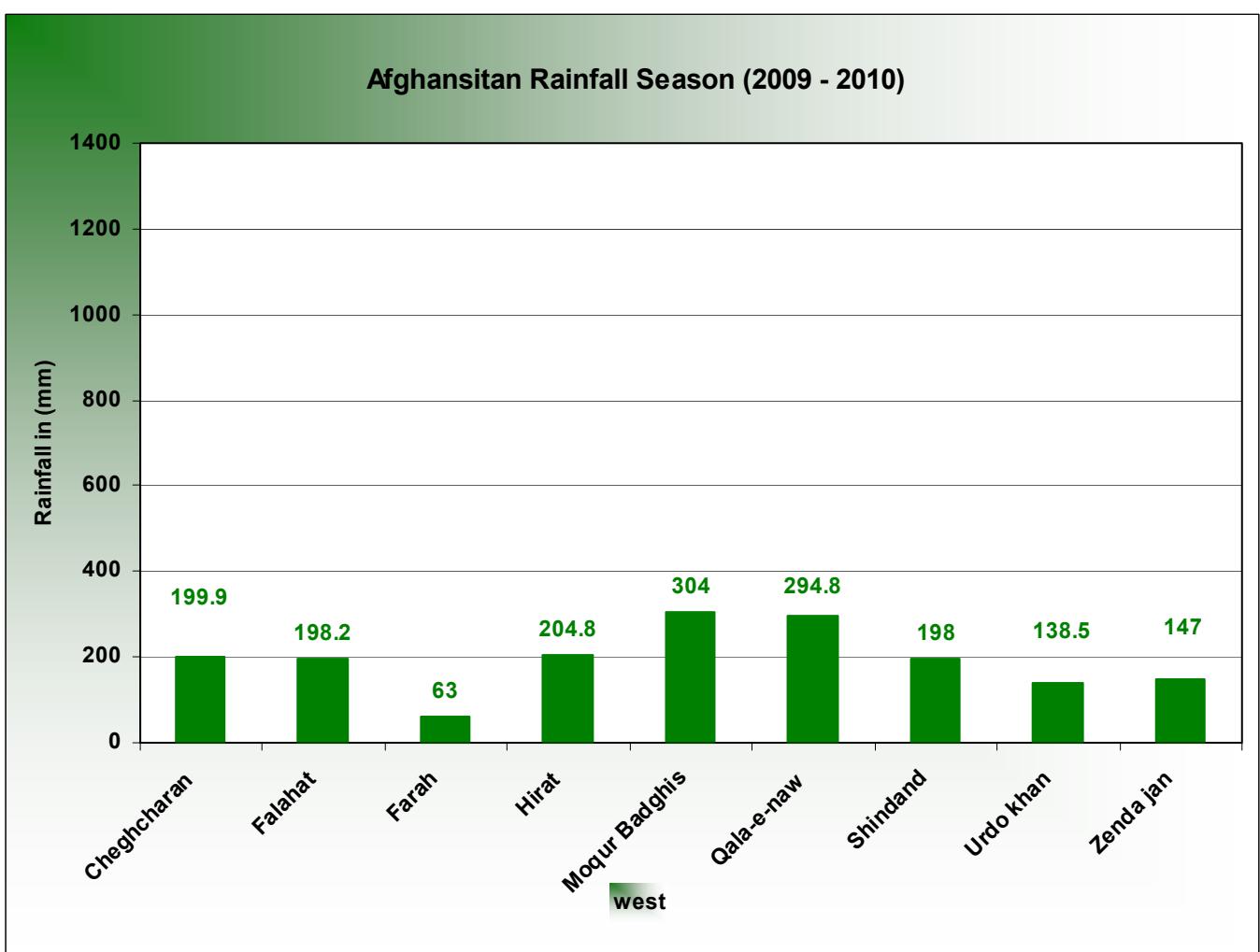
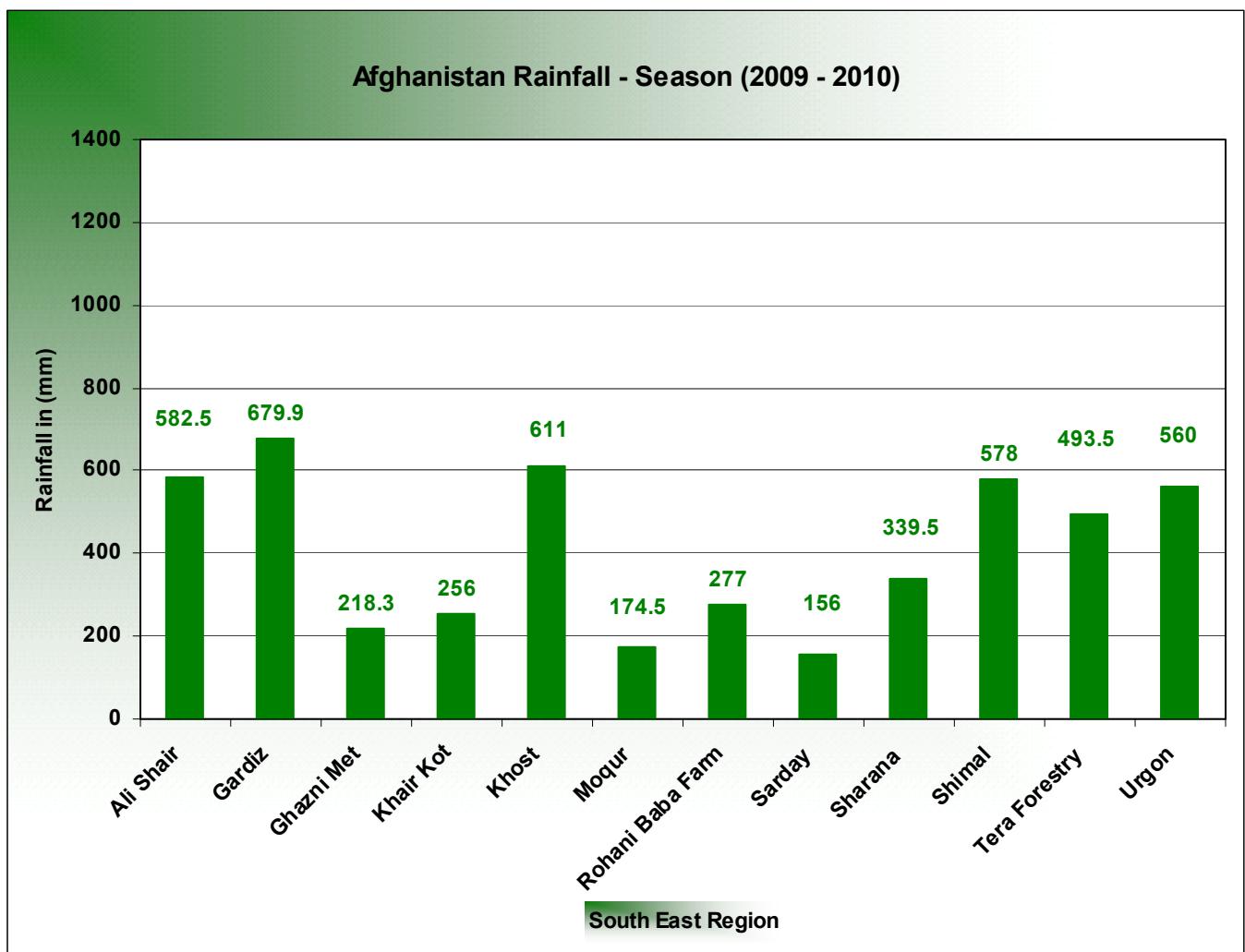


Afghanistan Rainfall - Season (2009 - 2010)





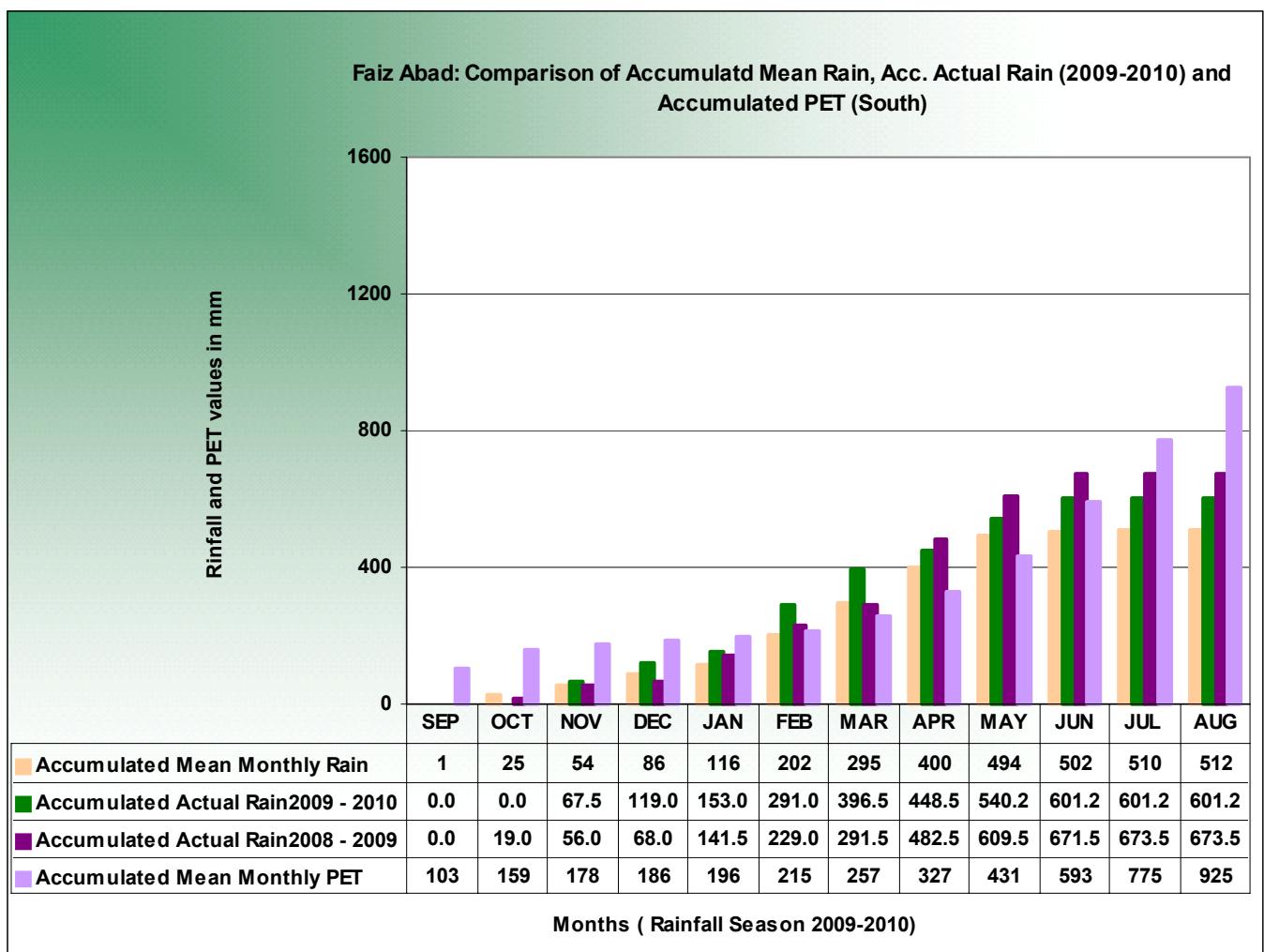
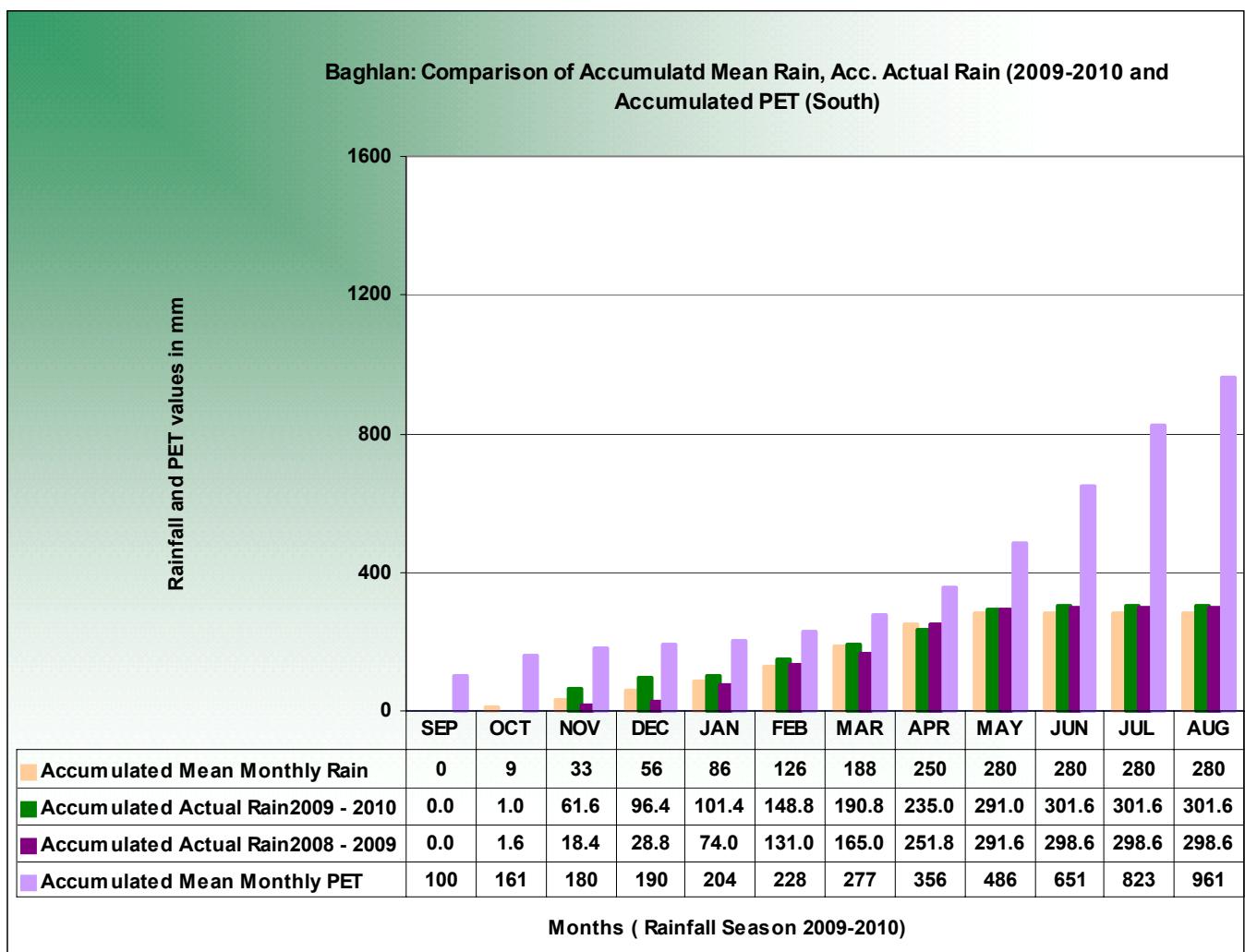




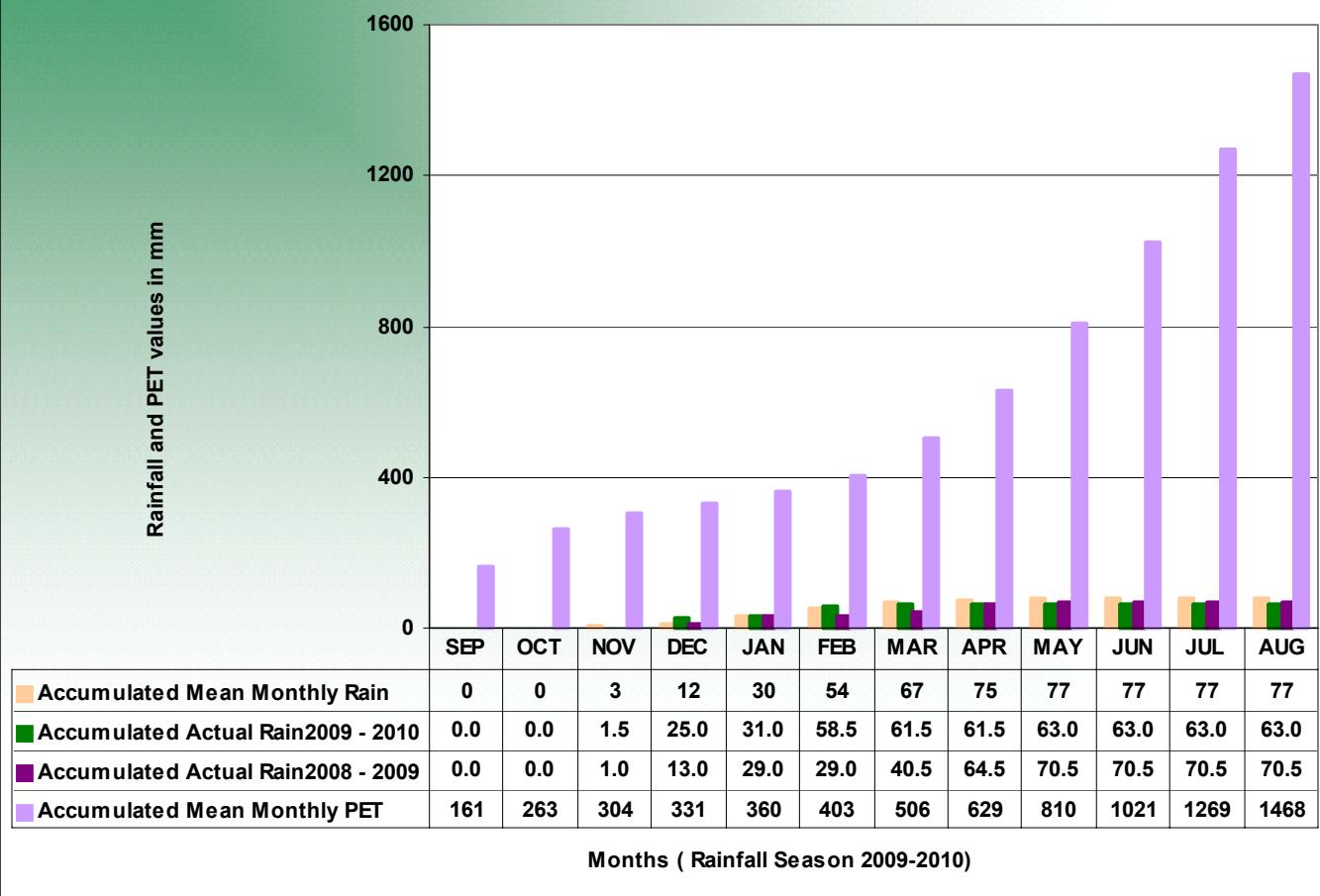
Accumulated Rainfall (mm) For the Season (2009 - 2010)

Compared with:

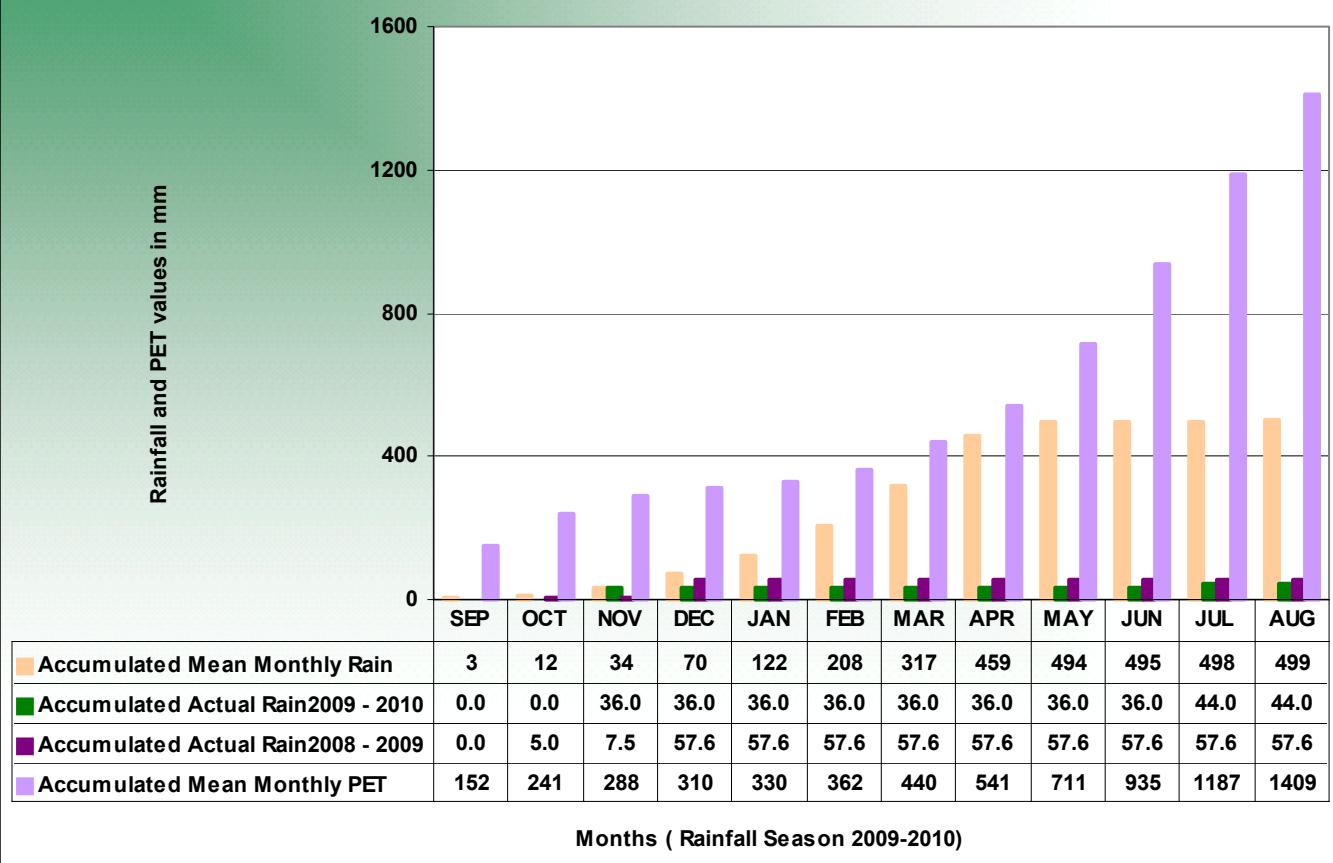
- Last Year
- Potential Evapotranspiration (PET)
- Long Term Average



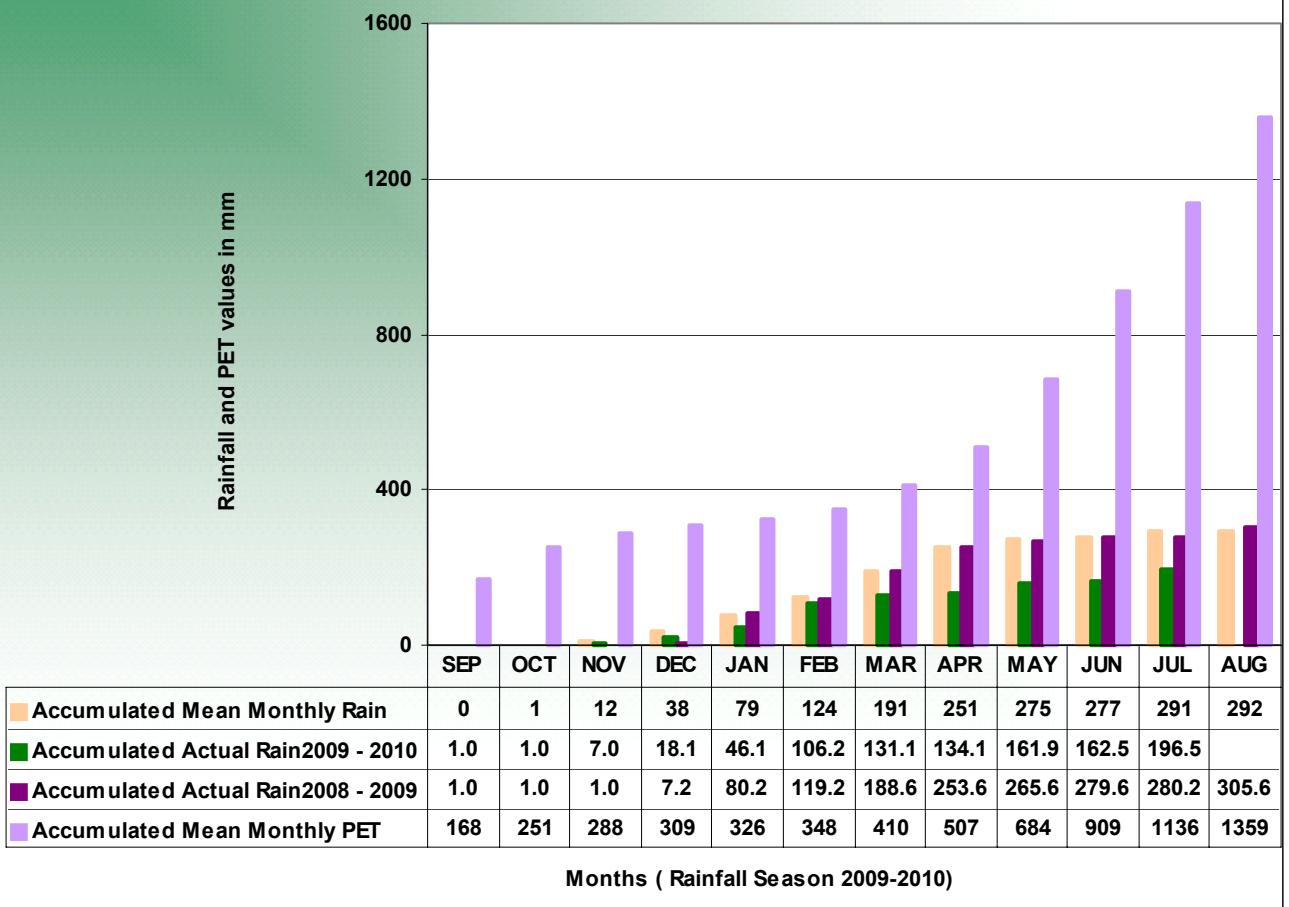
Farah: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



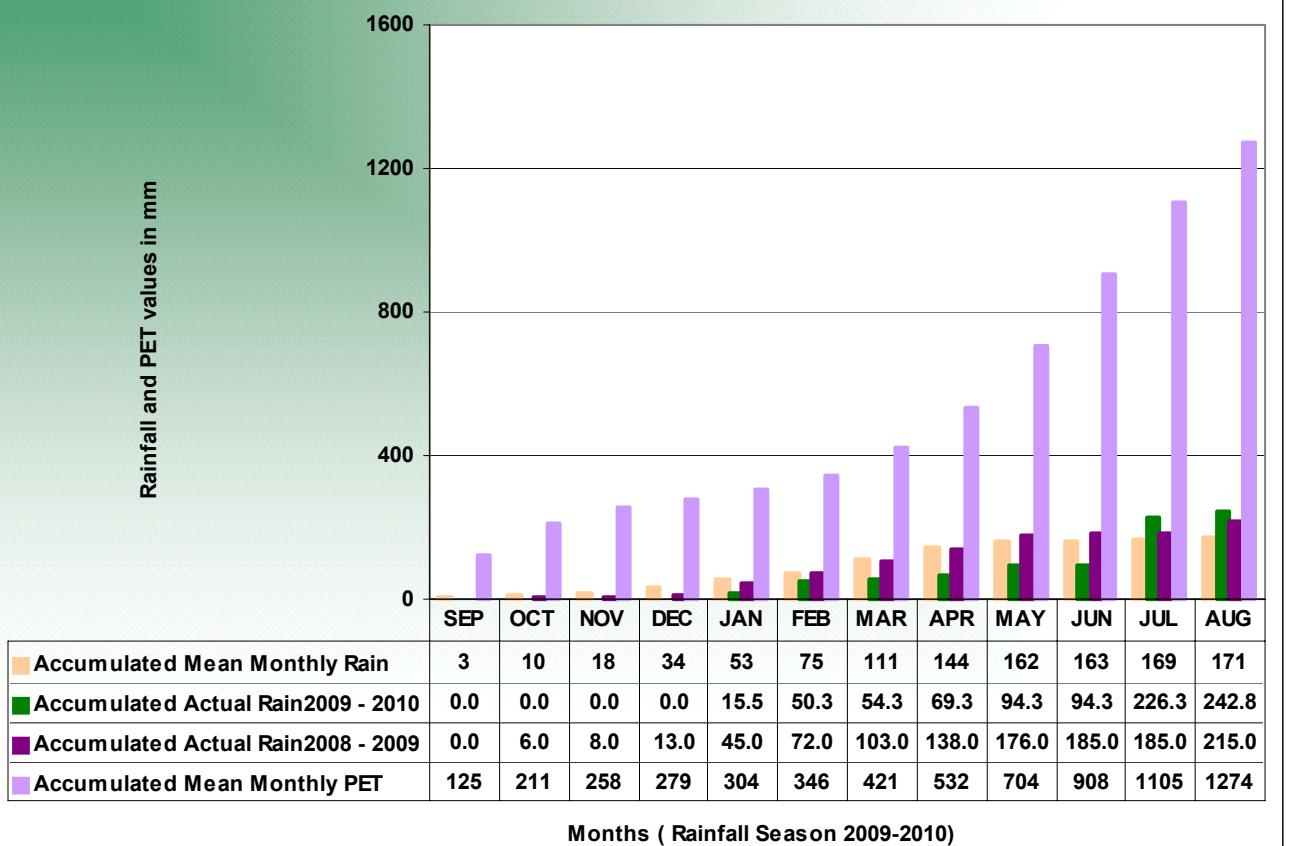
Jabul Seraj: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



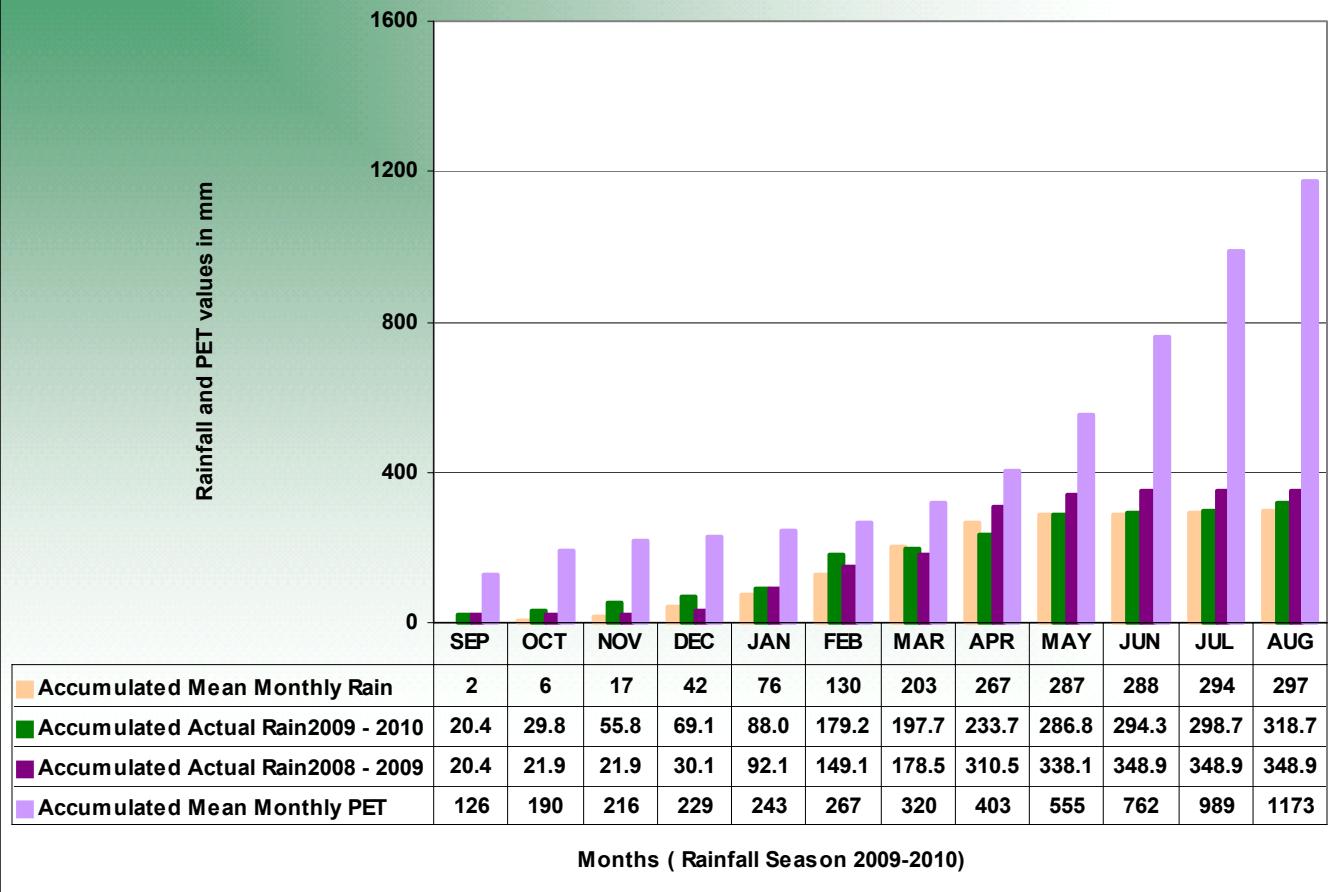
Ghazni: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



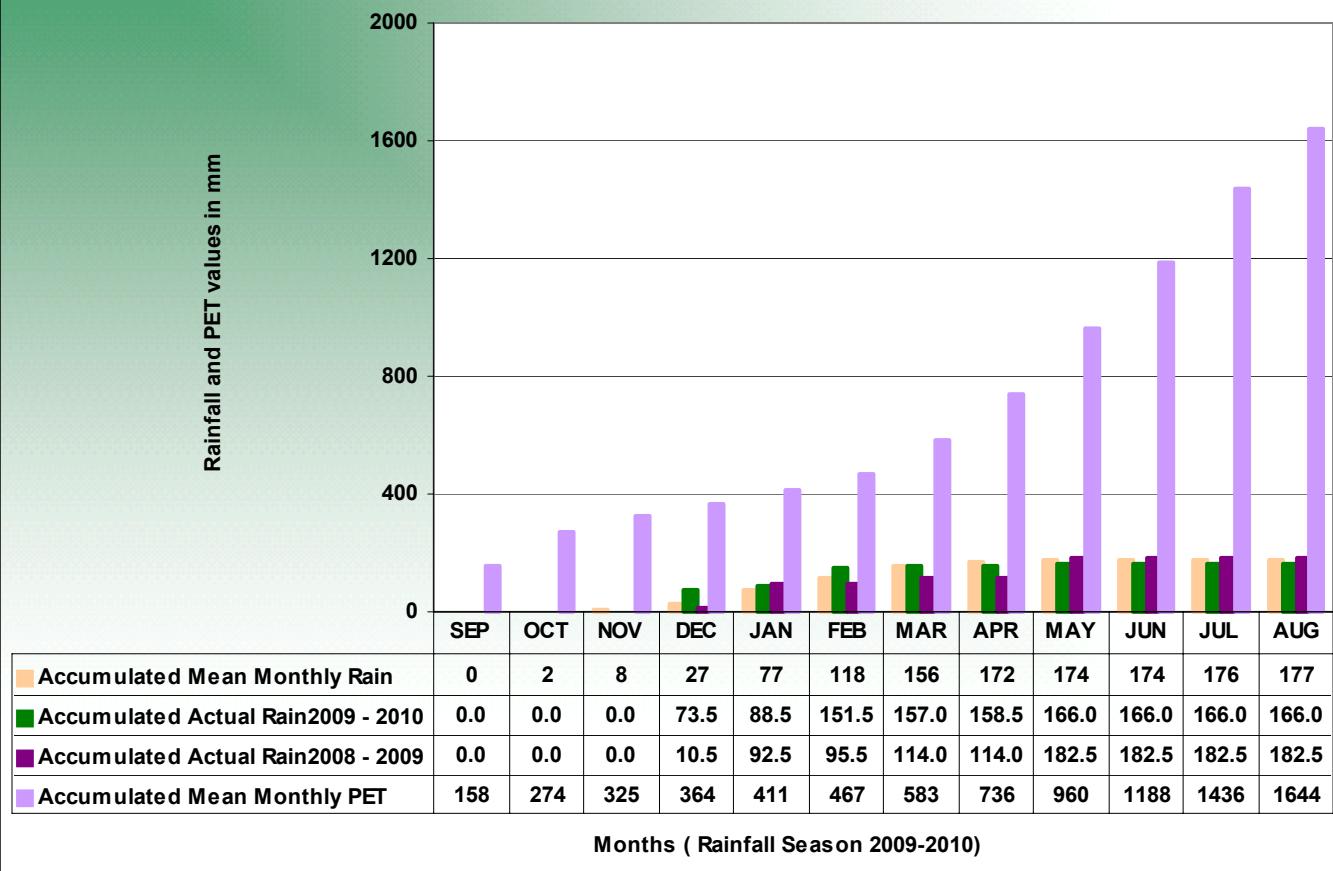
Jala Abad: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



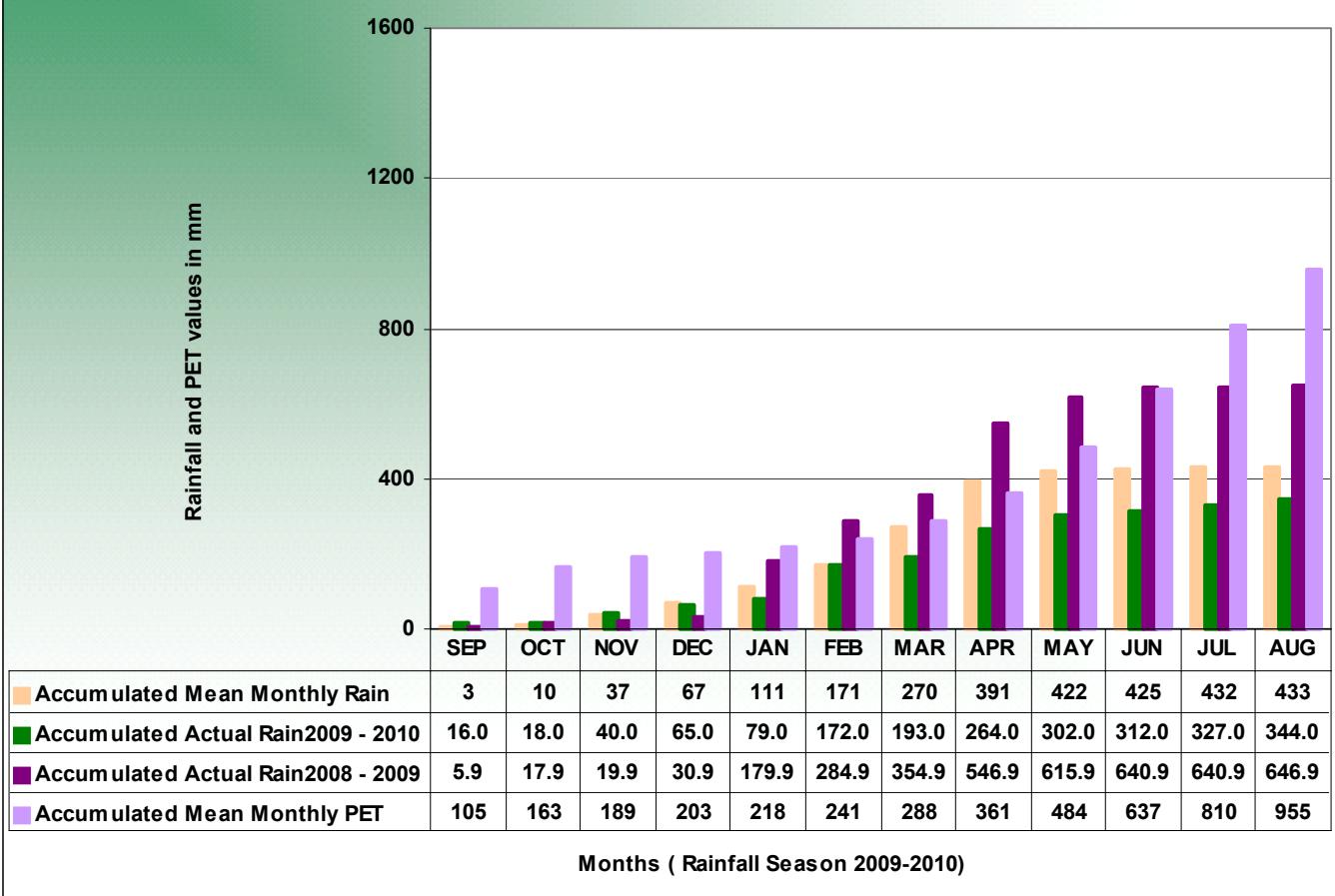
Kabul: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



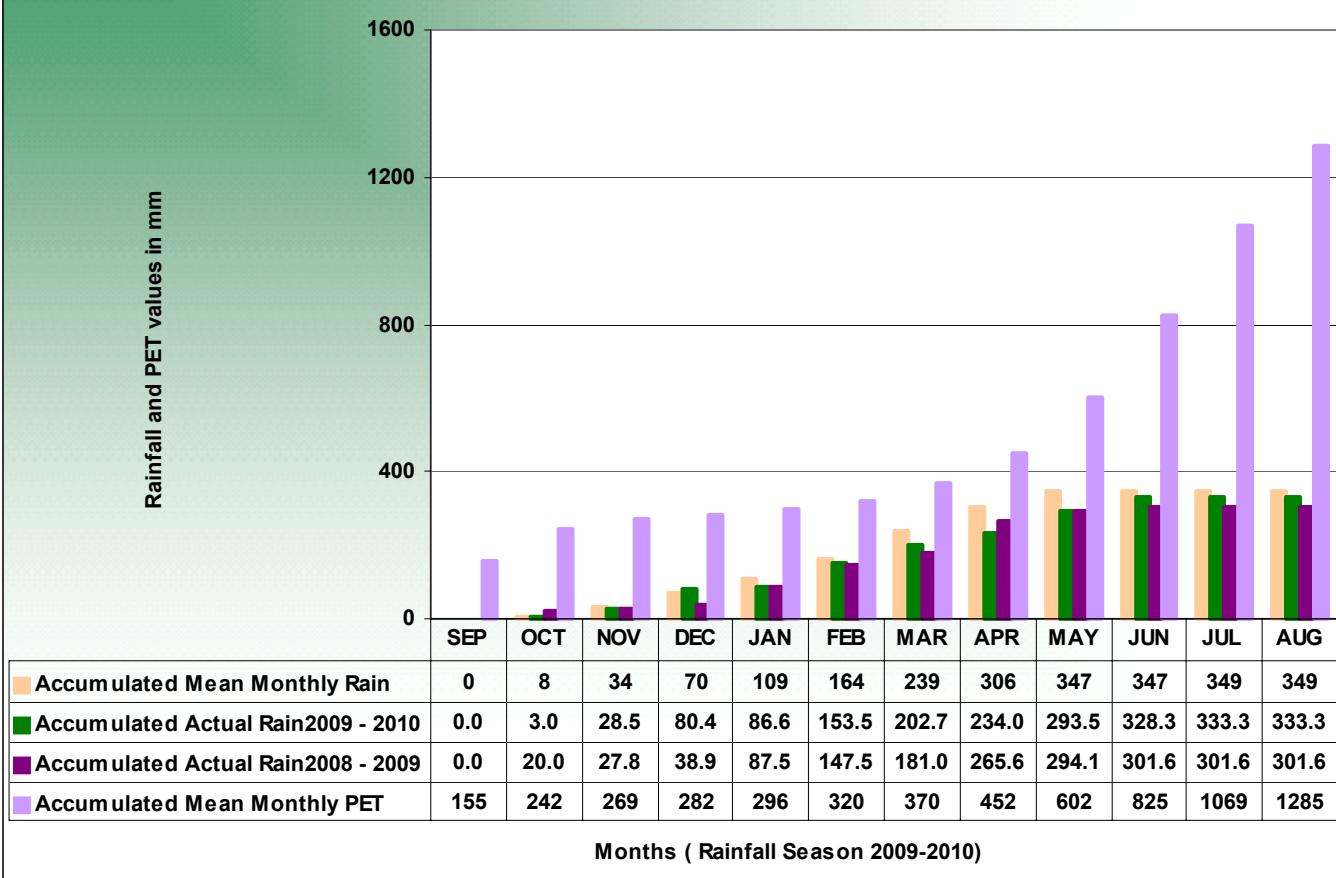
Kandahar: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



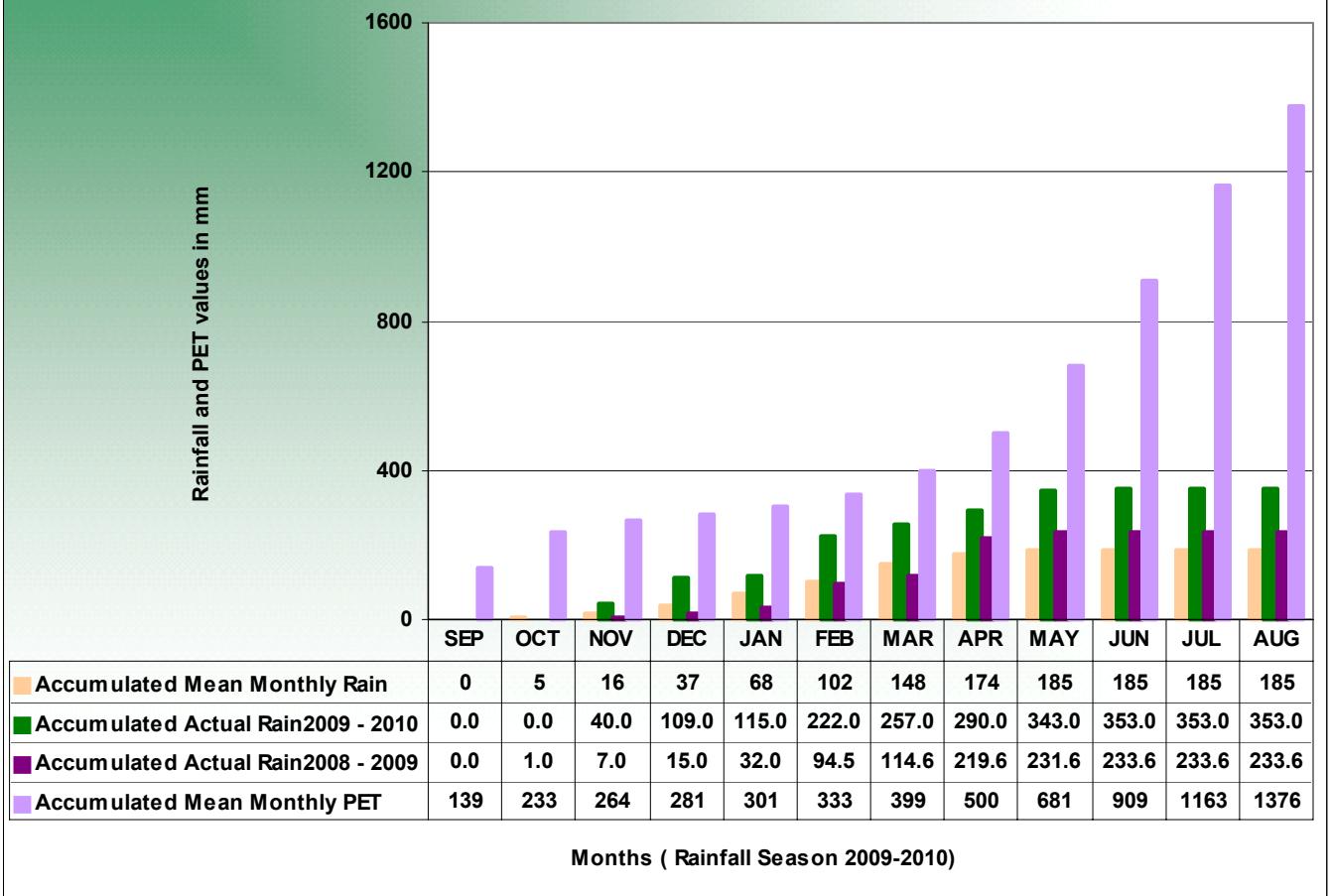
Kariz Mir: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



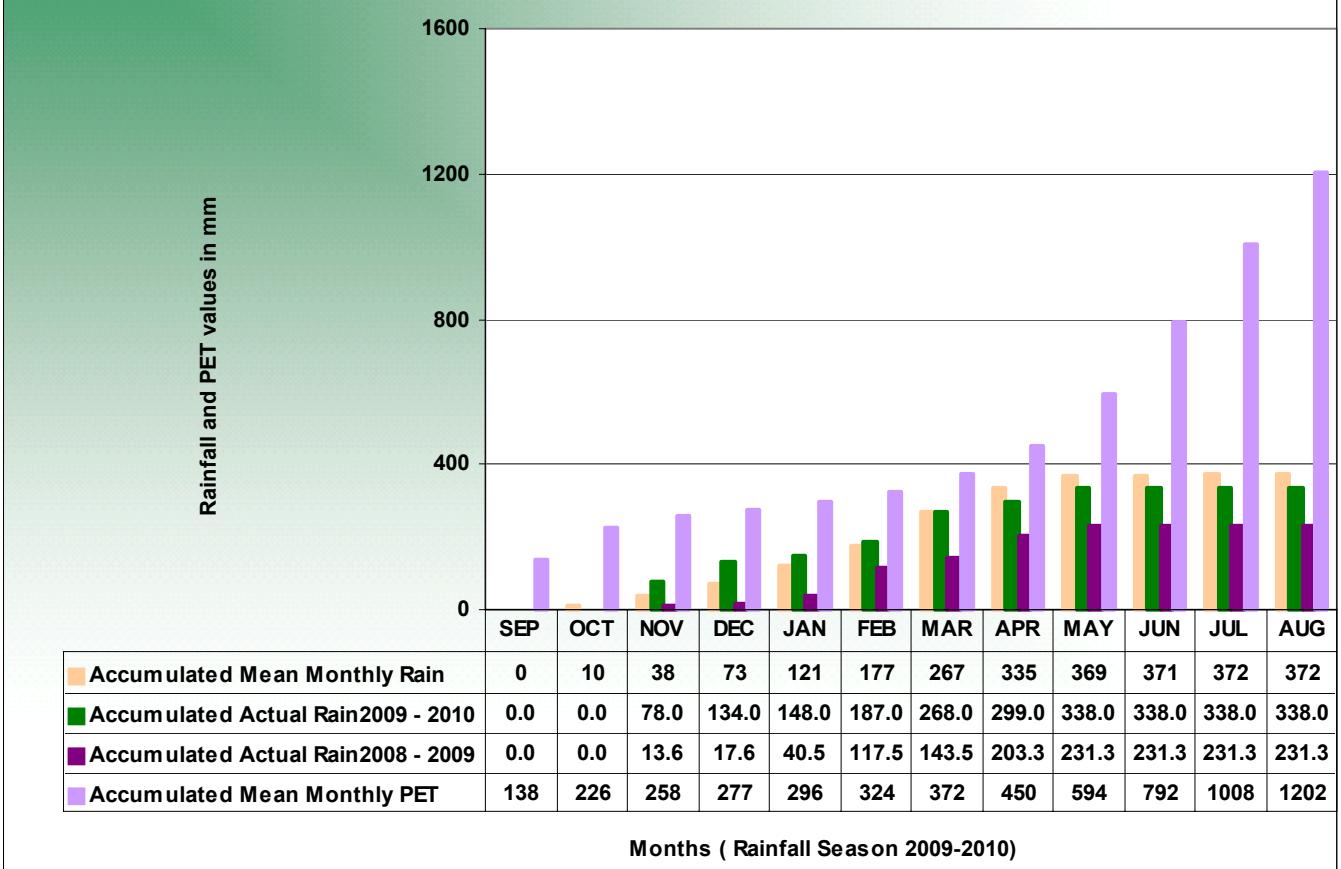
Kunduz: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



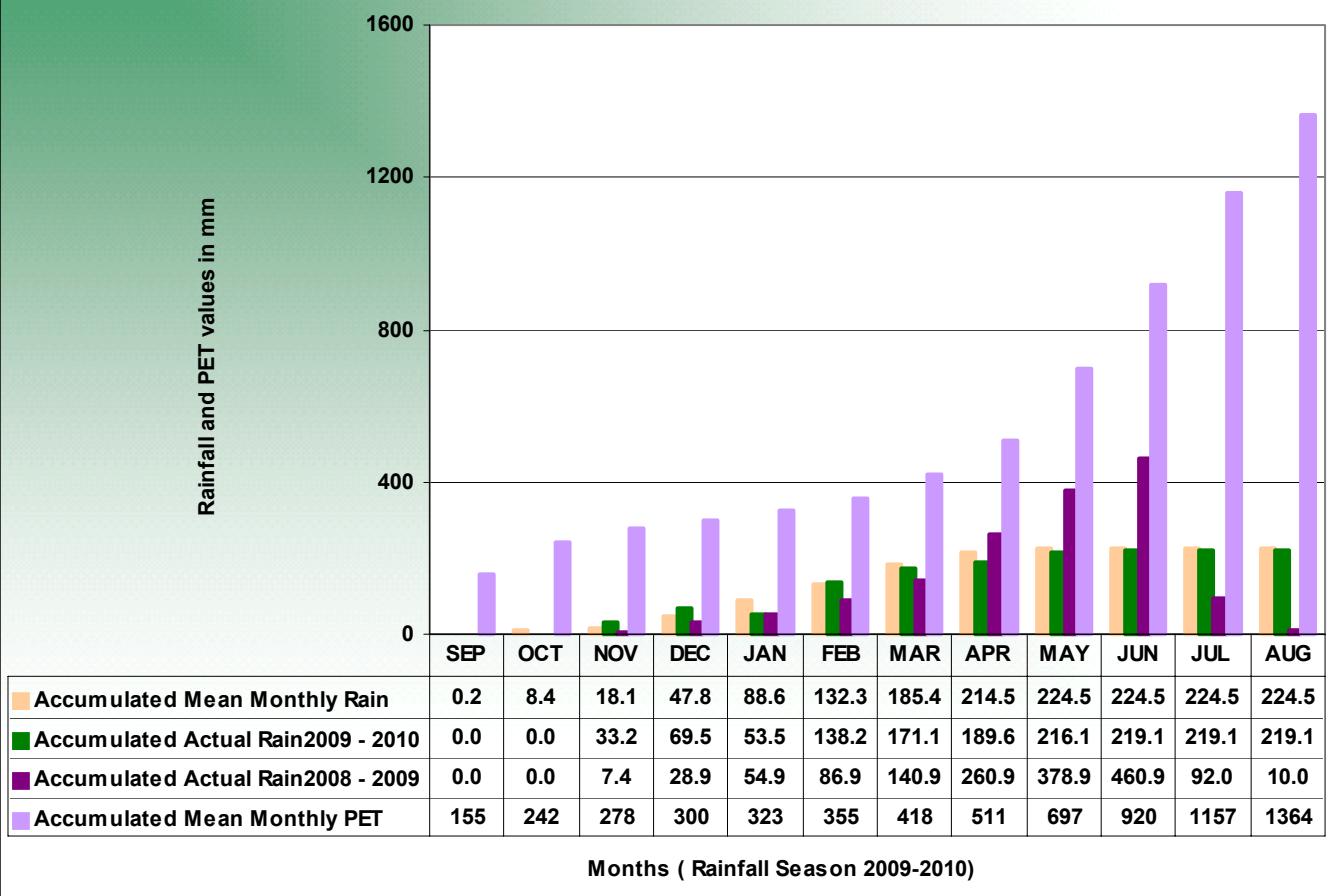
Mazar: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



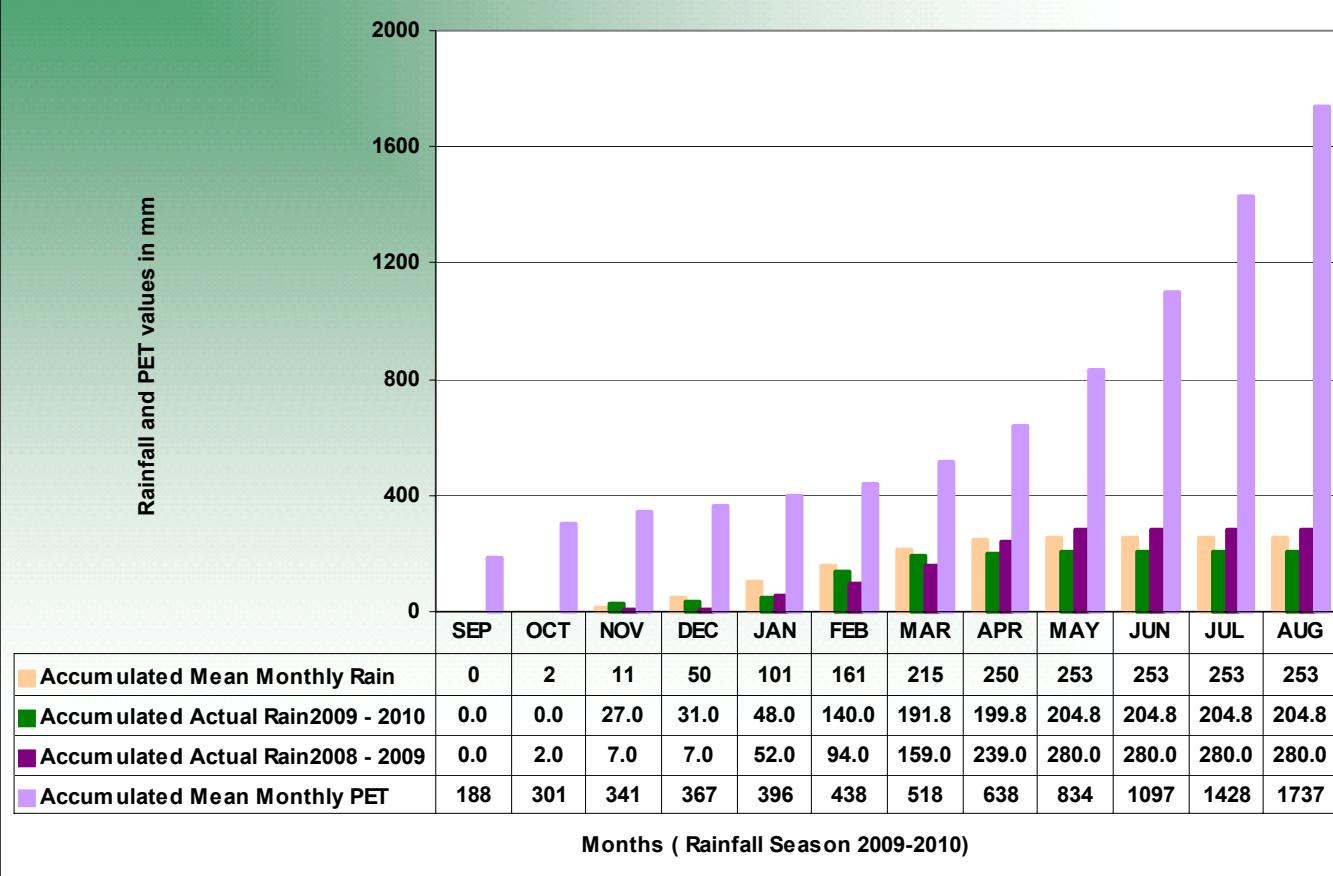
Maimana: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)

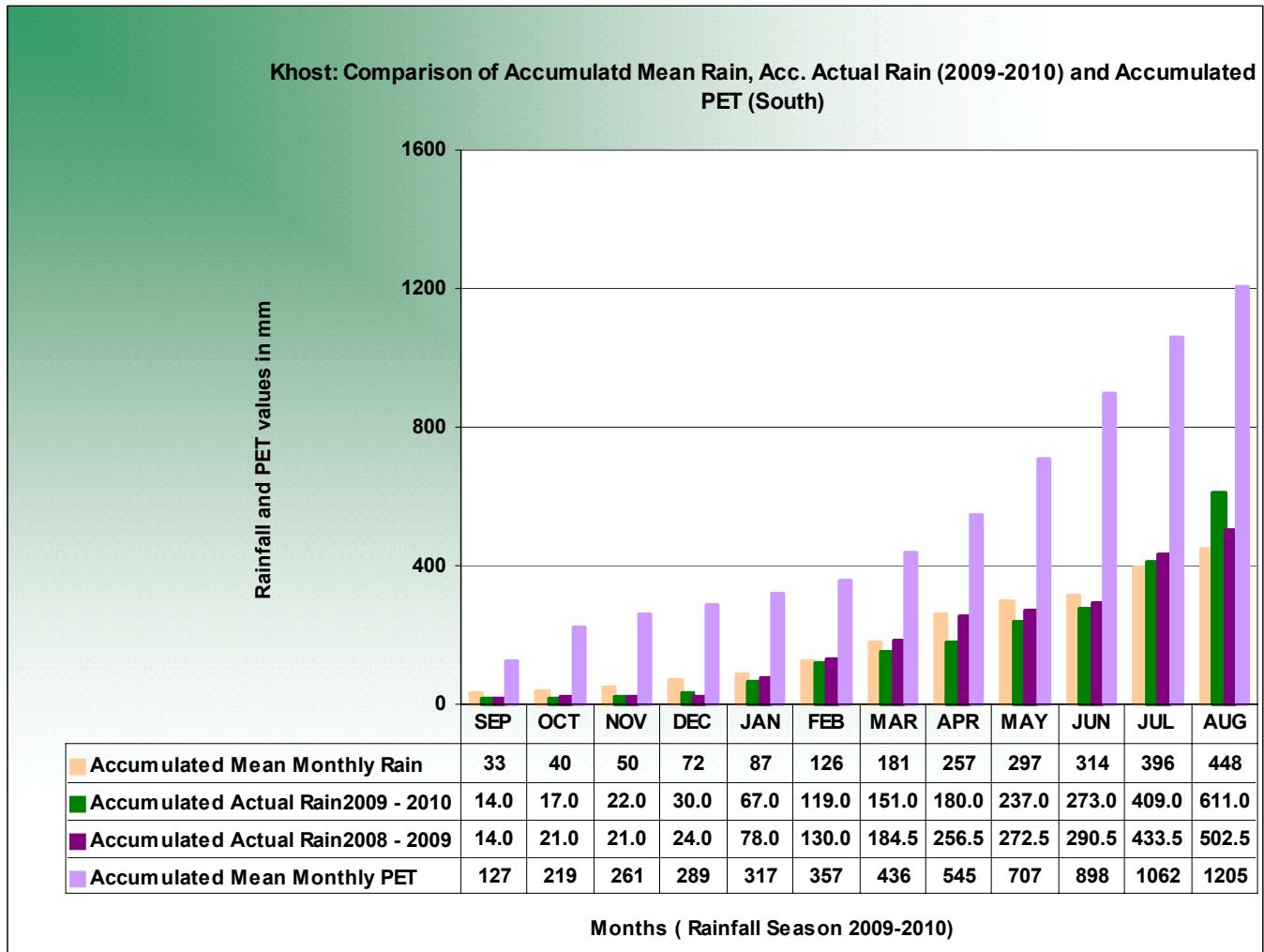
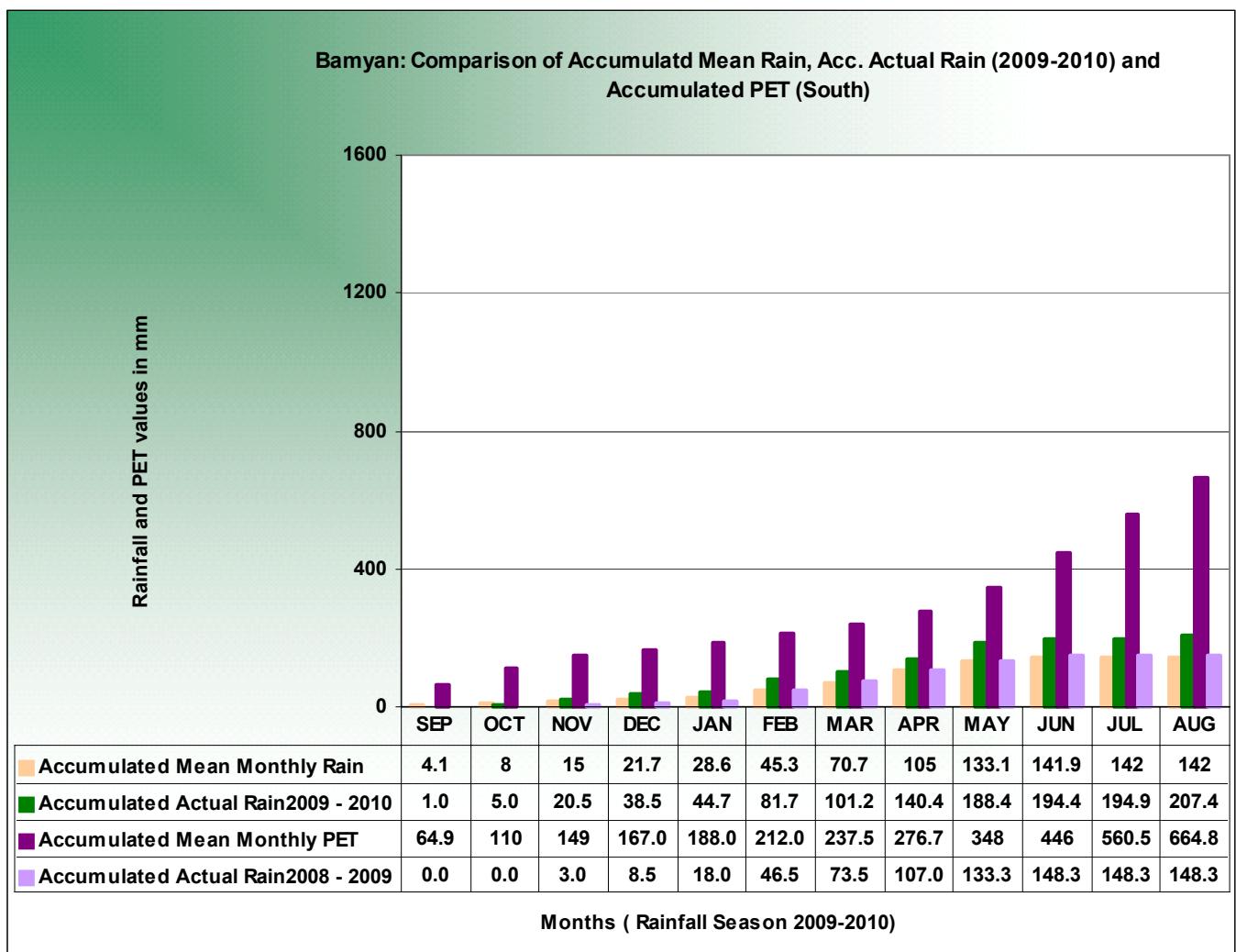


Sheberghan: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)

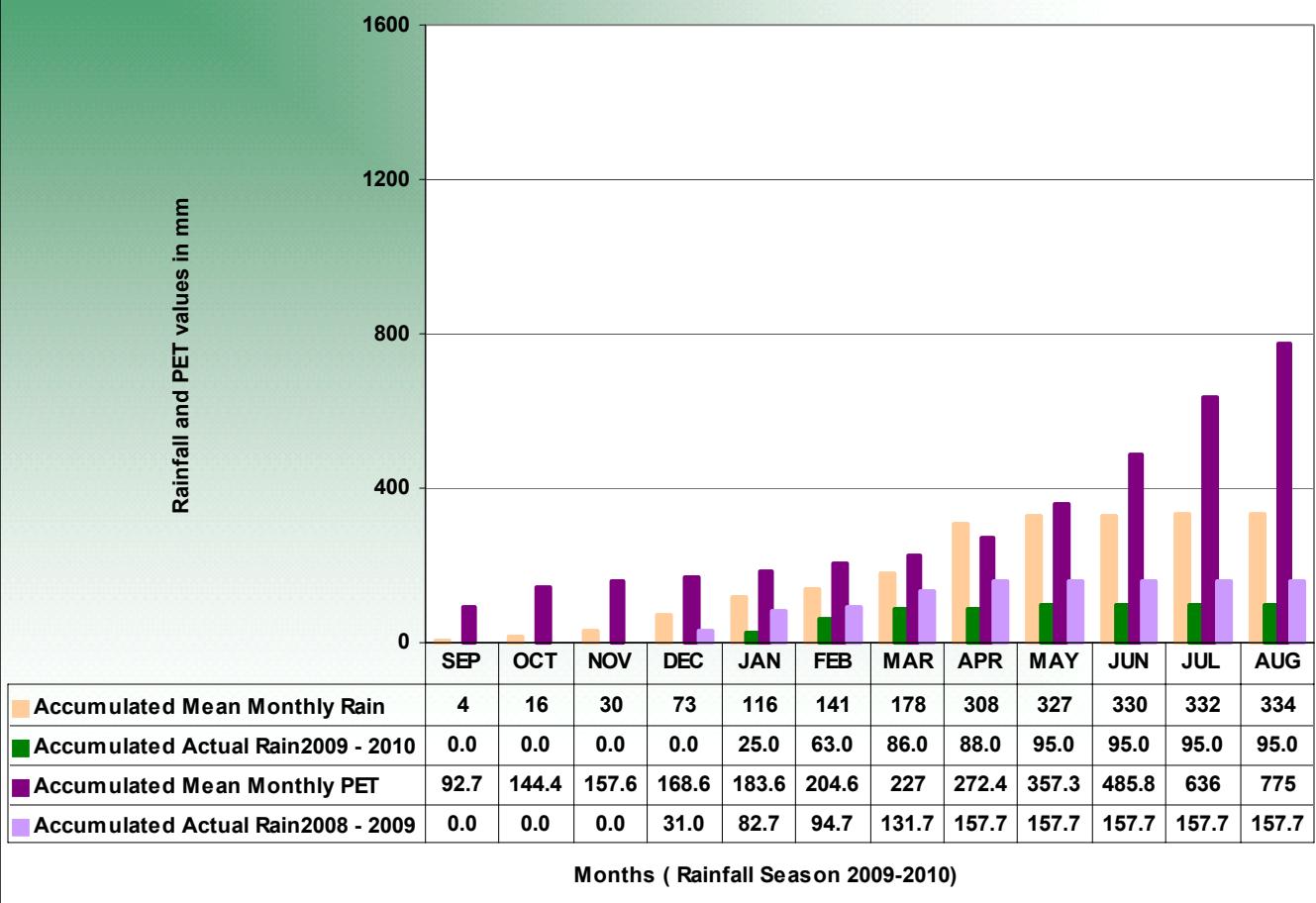


Hirat: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)

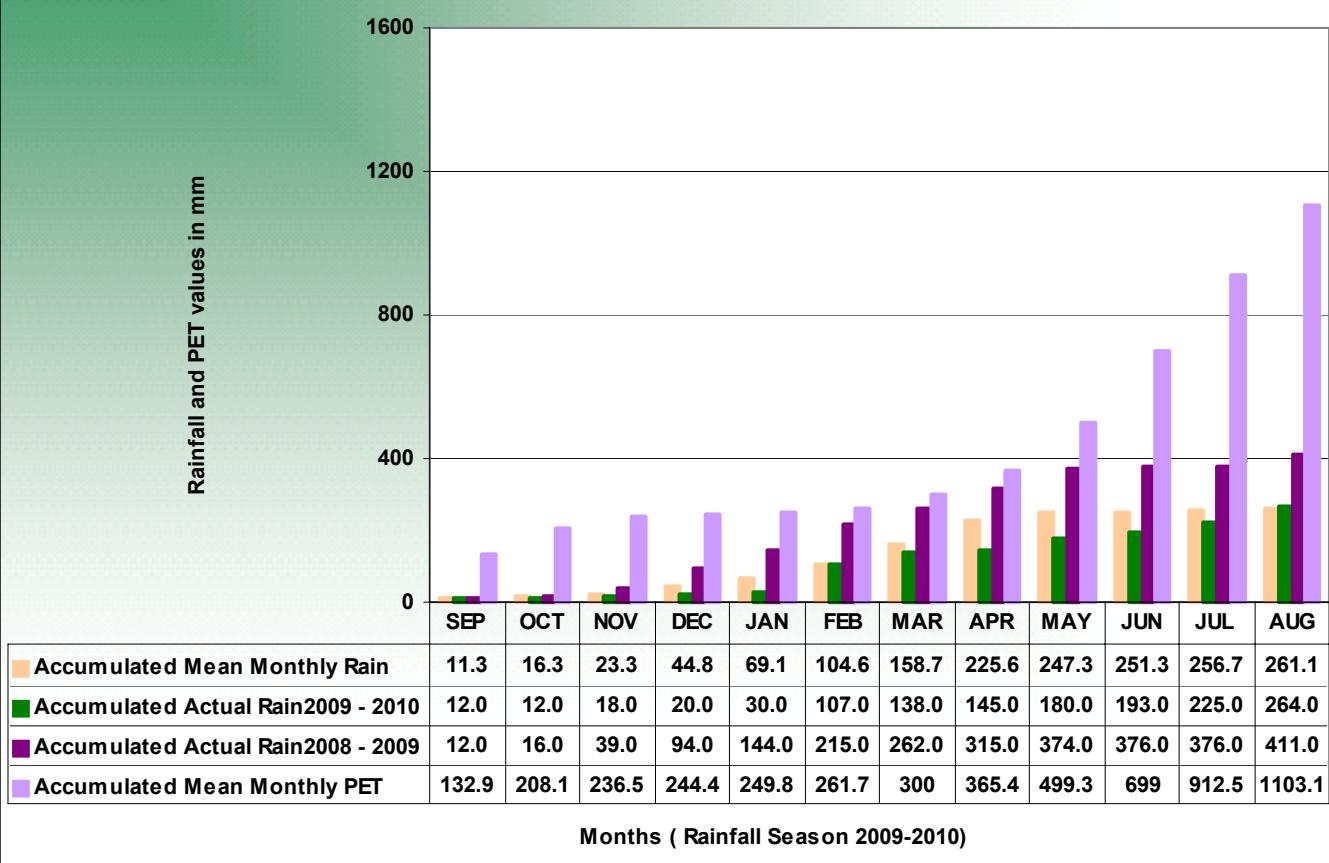




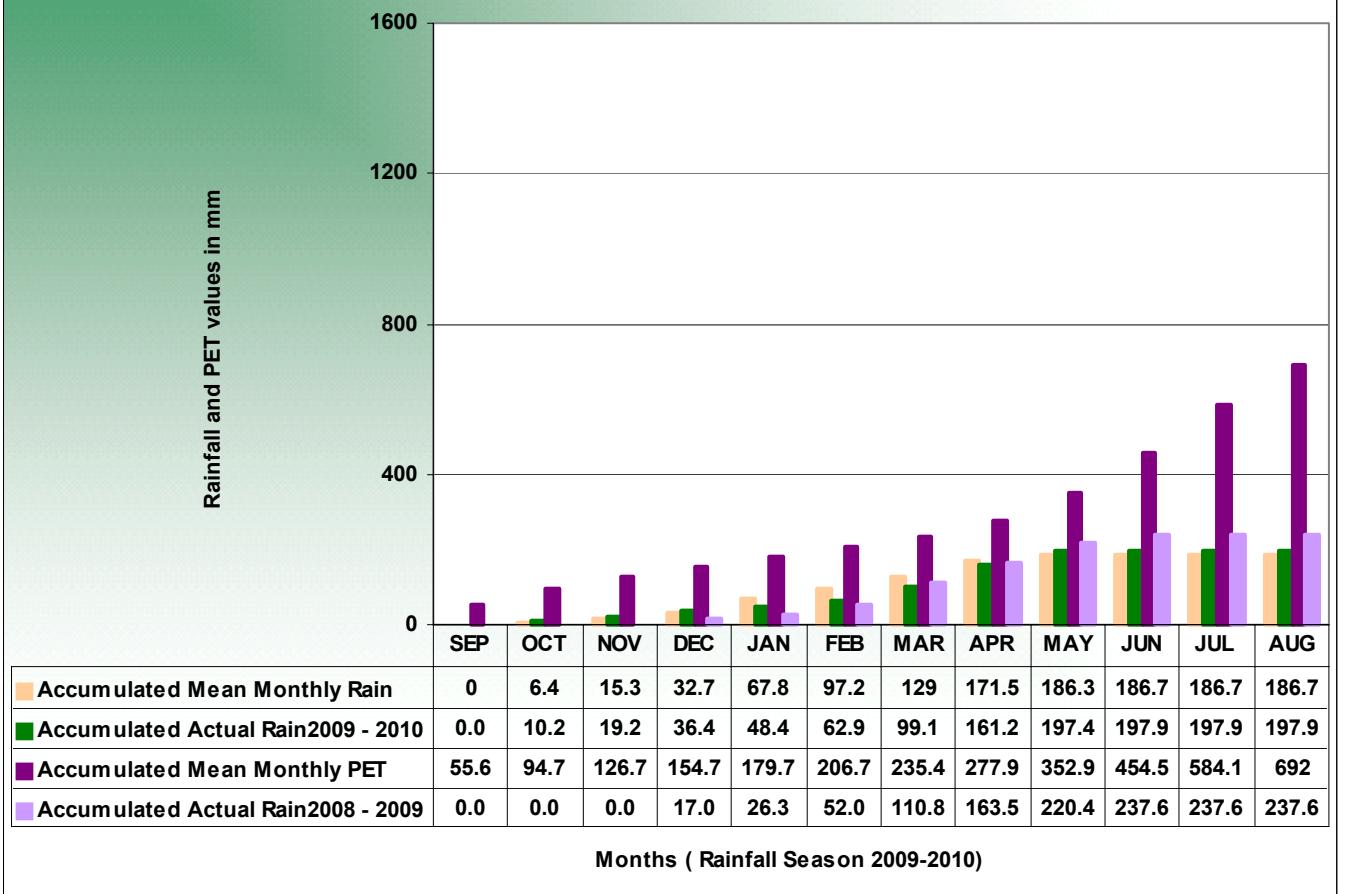
Qalat: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



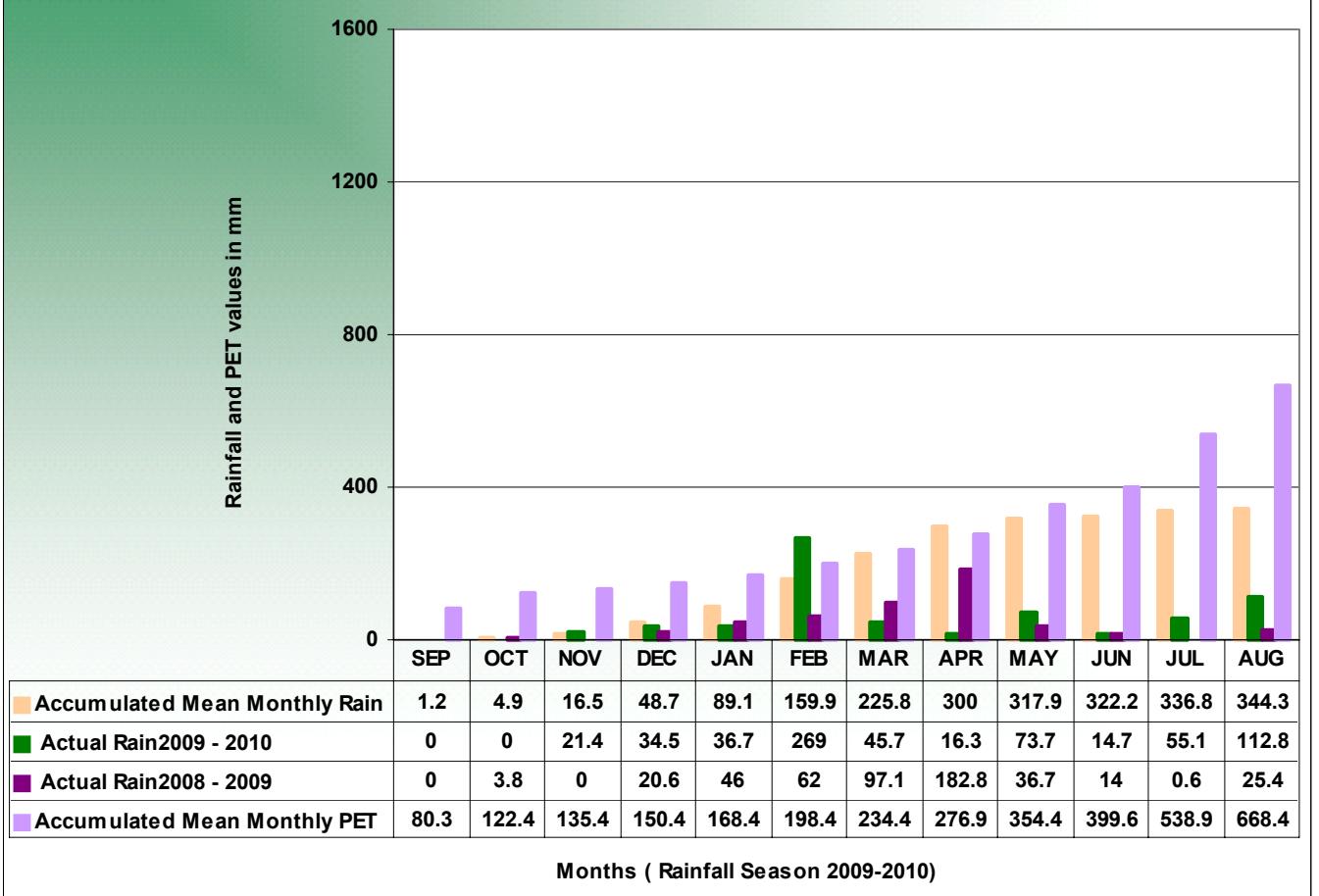
Laghman: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



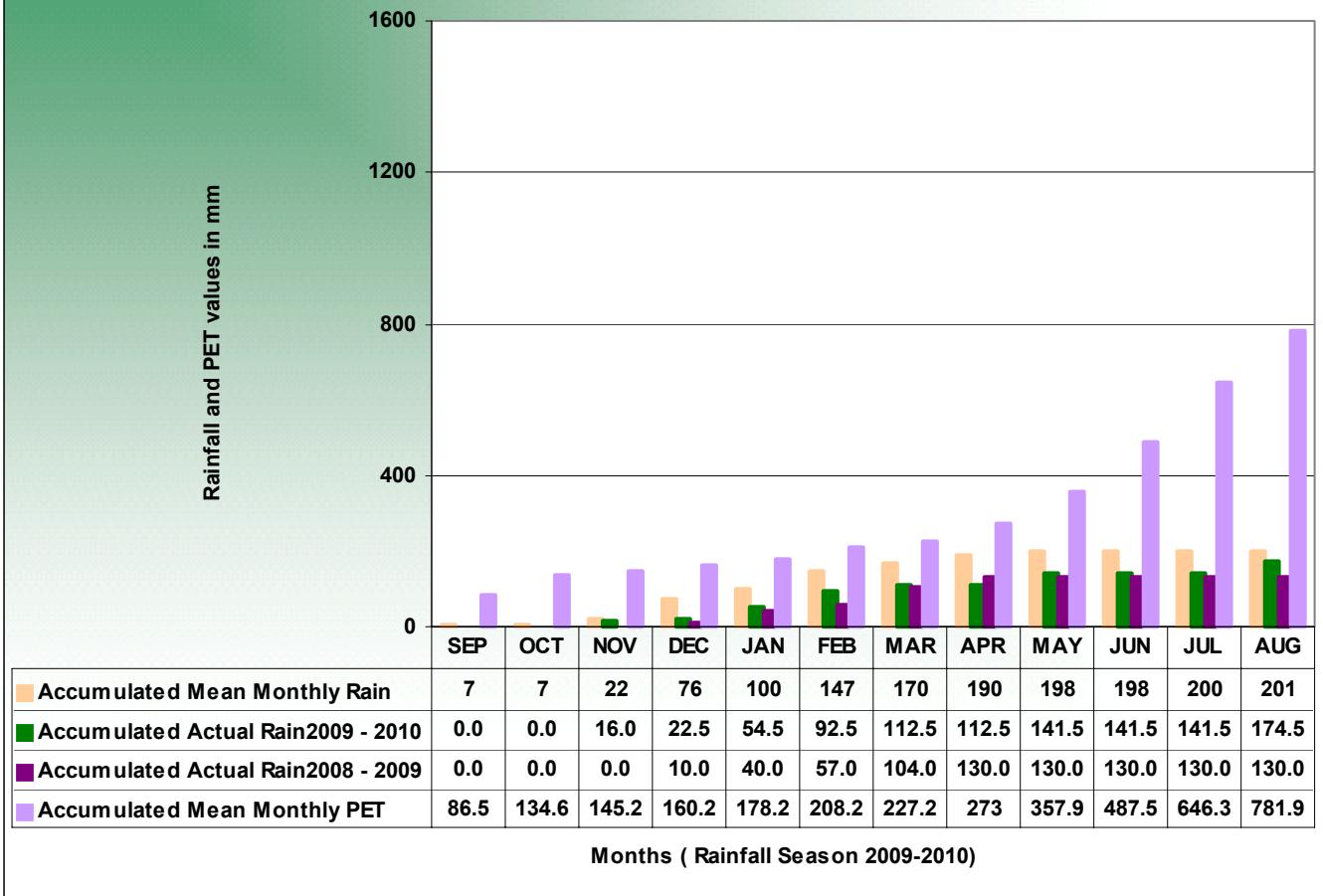
Cheghcharan: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



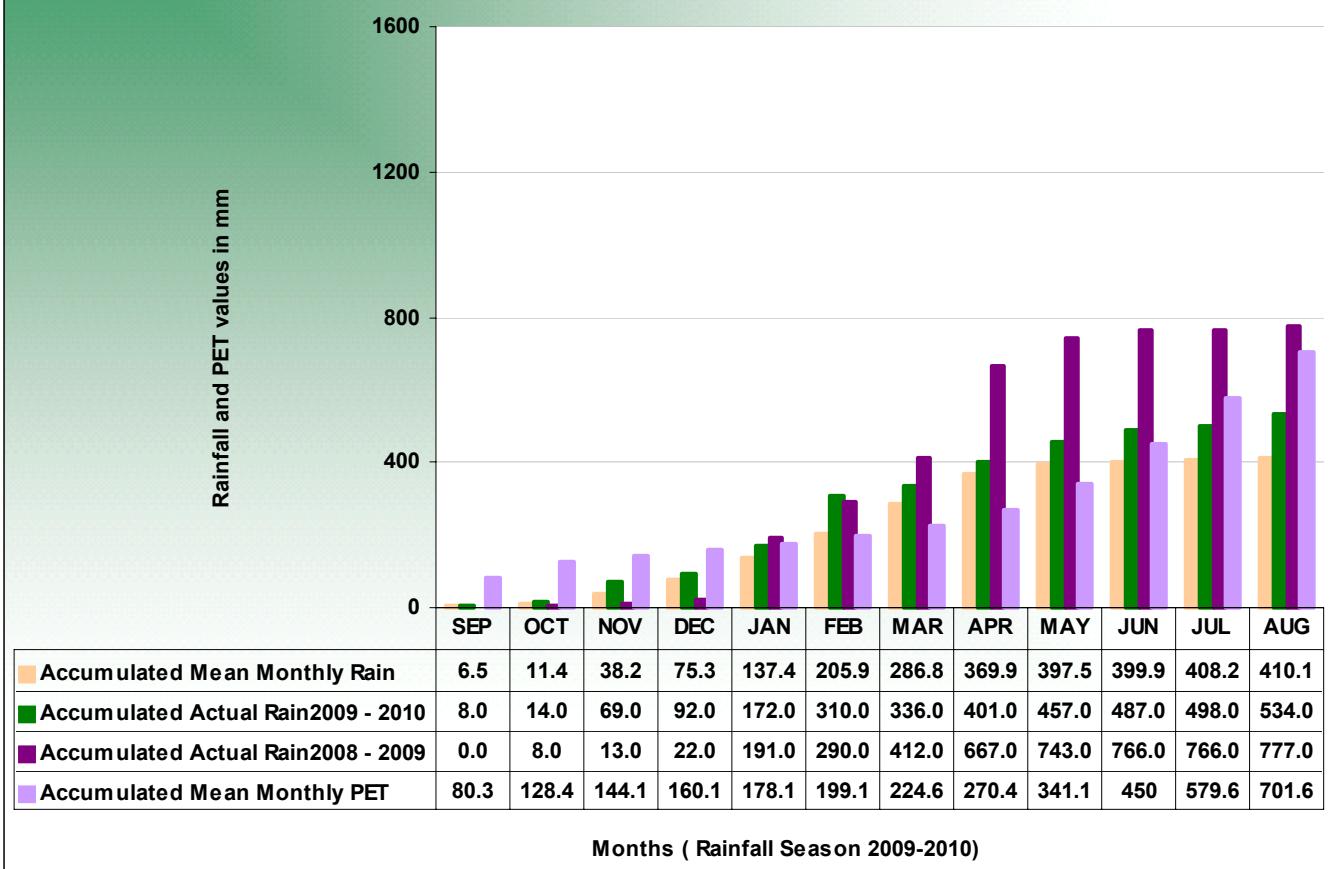
Gardiz: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



Muquer: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)

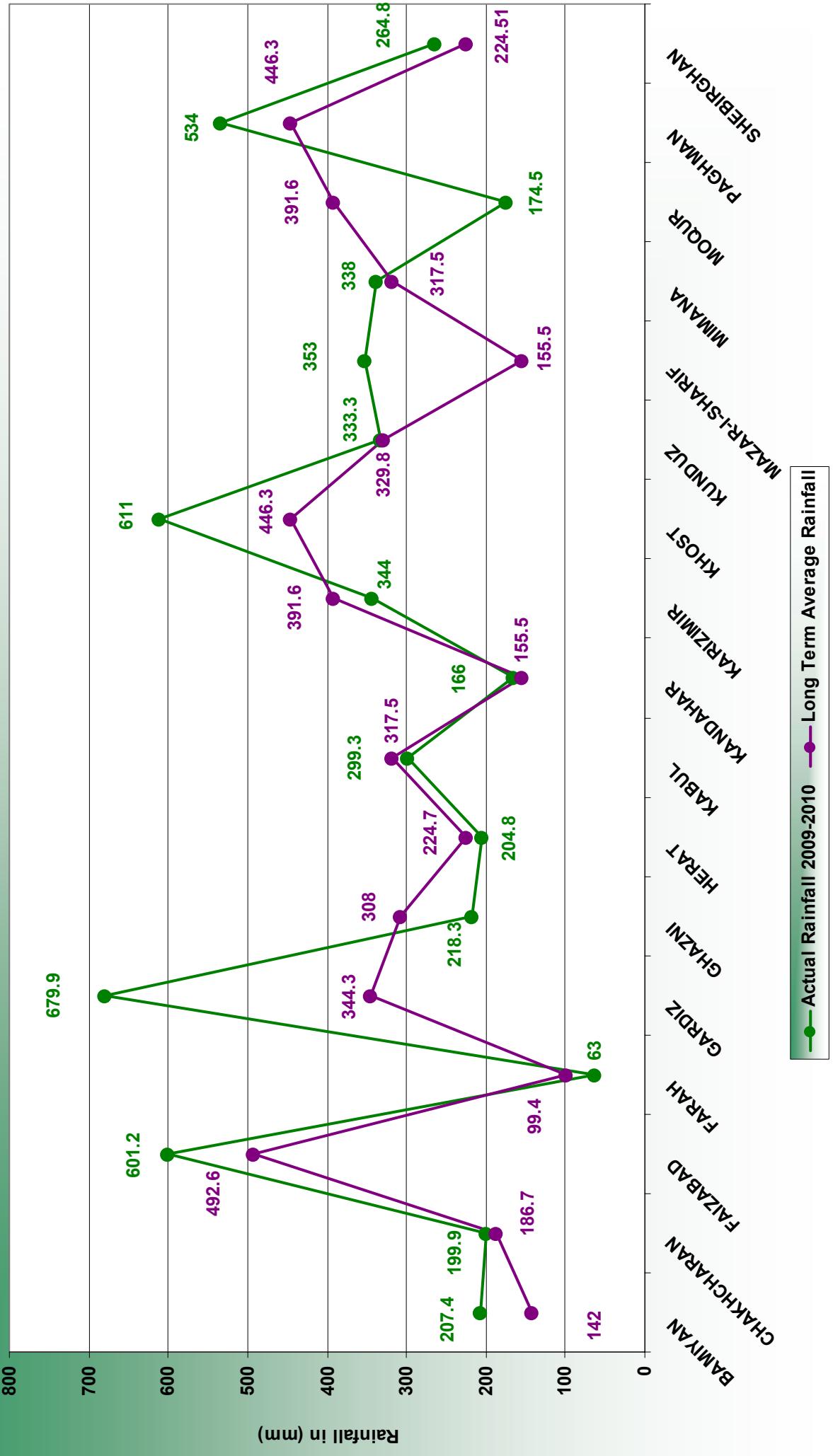


Paghman: Comparison of Accumulated Mean Rain, Acc. Actual Rain (2009-2010) and Accumulated PET (South)



Seasonal Rainfall (mm) (2009- 2010)
Compared to
Long-Term Average

Comparison of Actual Yearly Rainfall (2009 - 2010) with Long Term Average

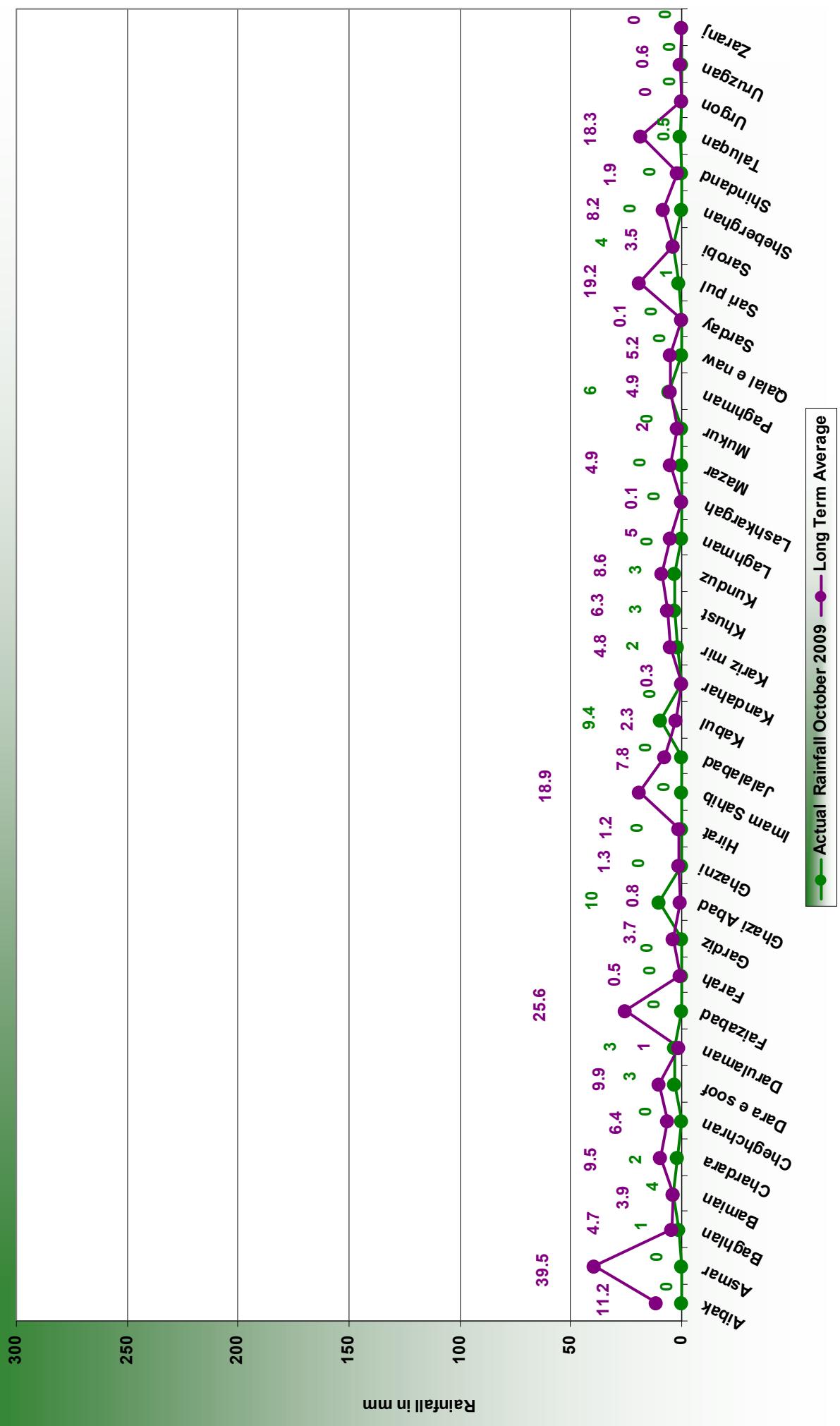


Monthly Rainfall Comparison With Long Term Average

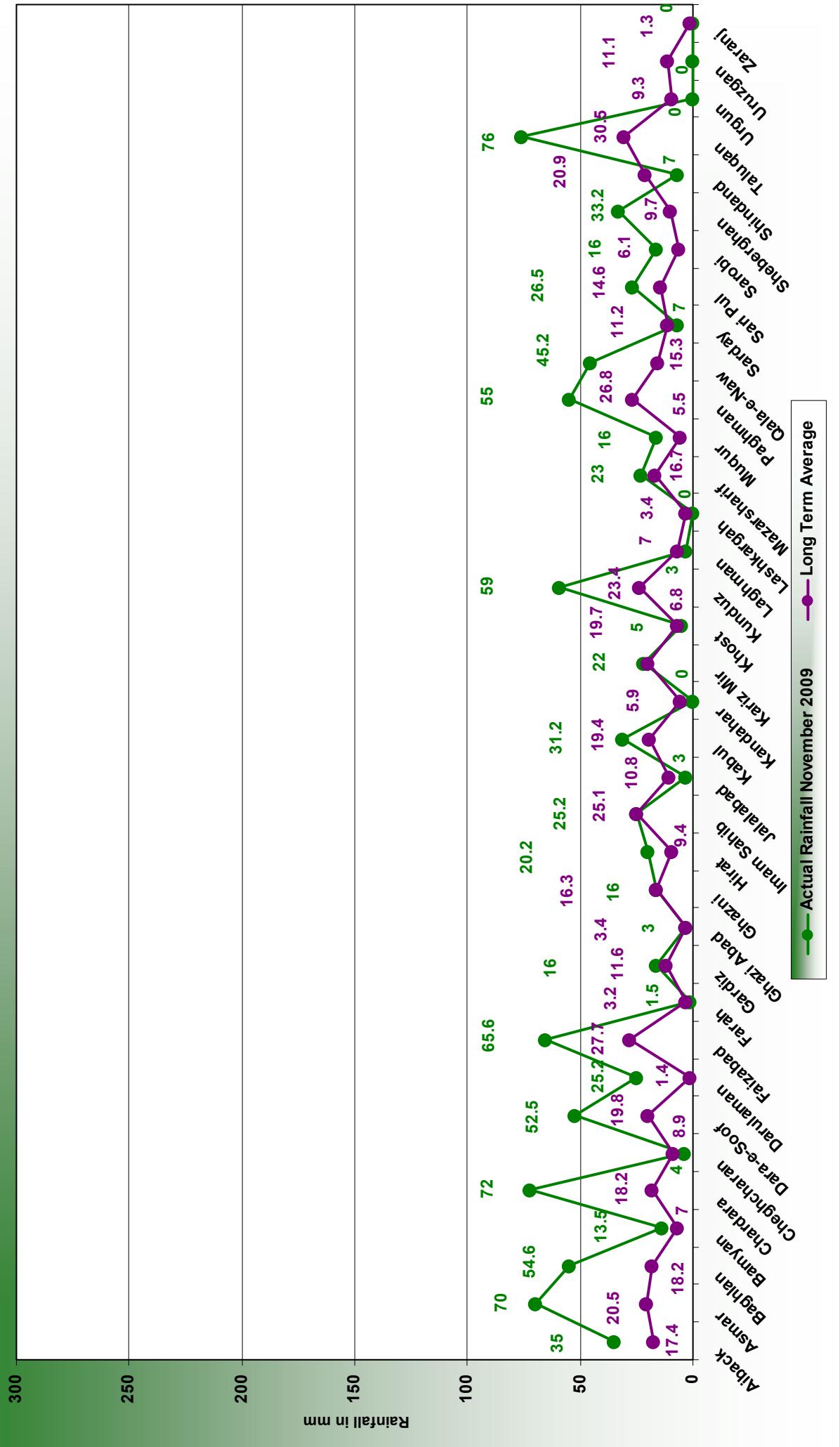
Comparison of Actual Rainfall September 2009 with the same Month of Long Term Average



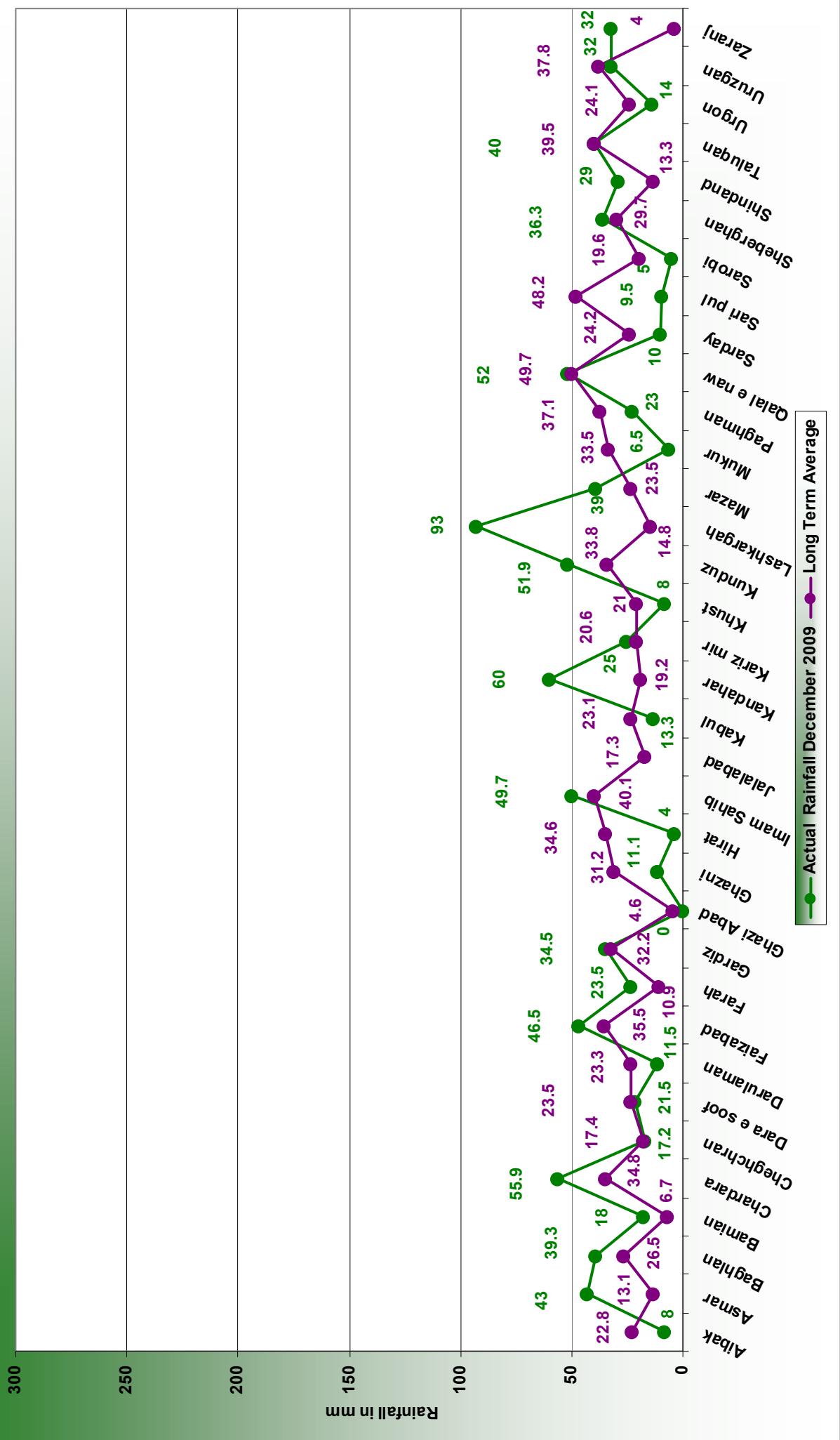
Comparison of Actual Rainfall October 2009 with the Same Month of Long Term Average



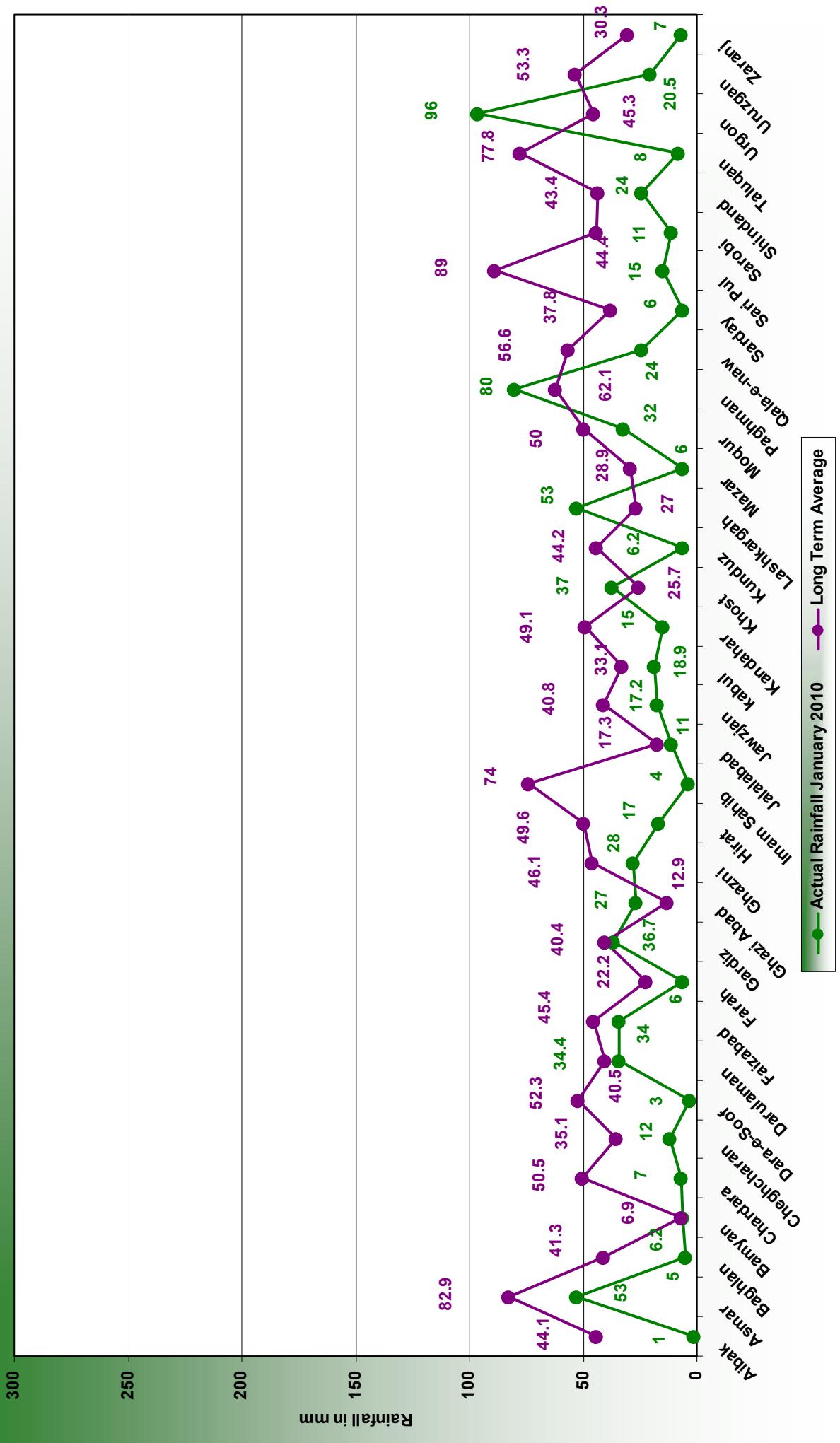
Comparison of Actual Rainfall November 2009 with the Same Month of Long Term Average



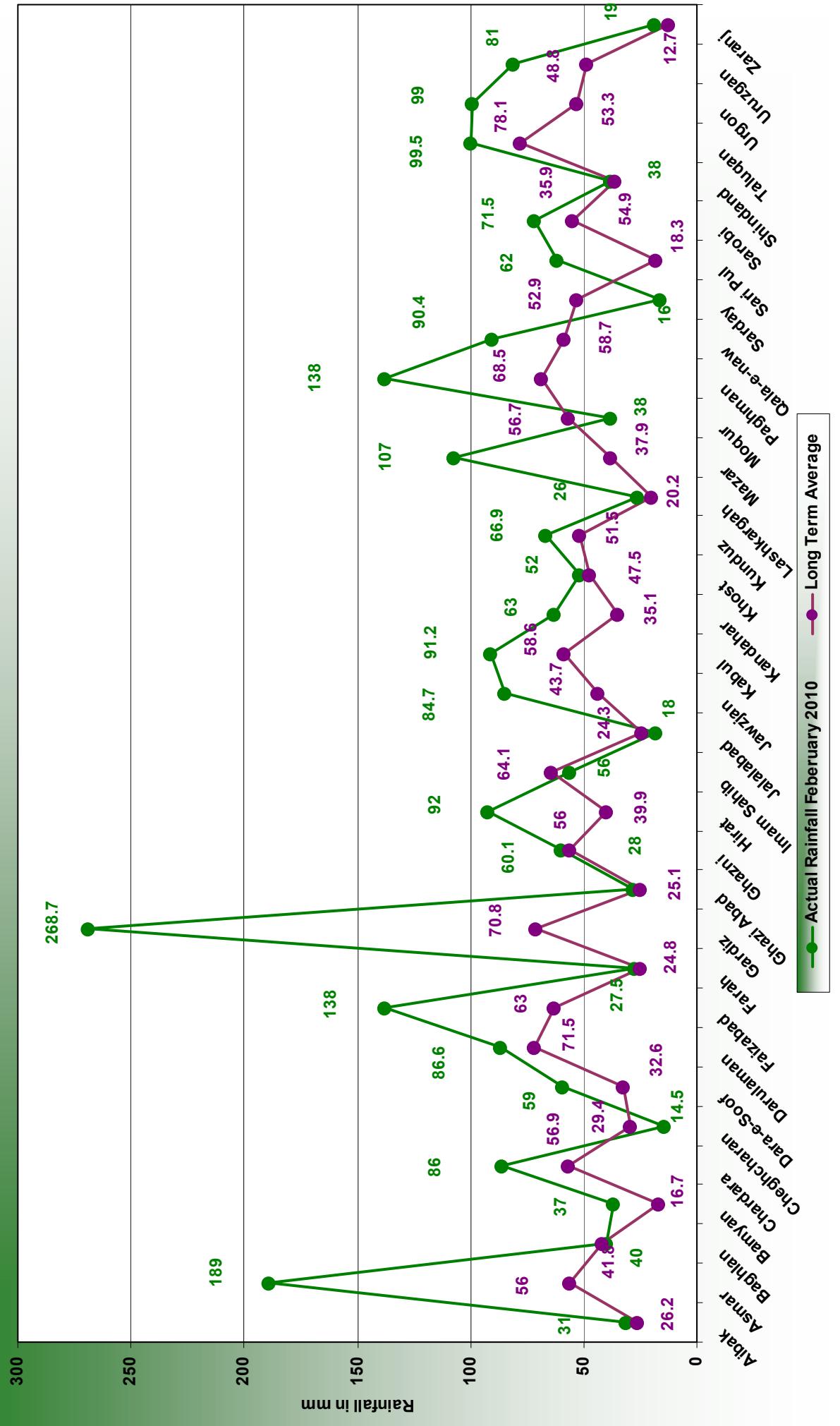
Comparison of Actual Rainfall December 2009 with the Same Month of Long Term Average



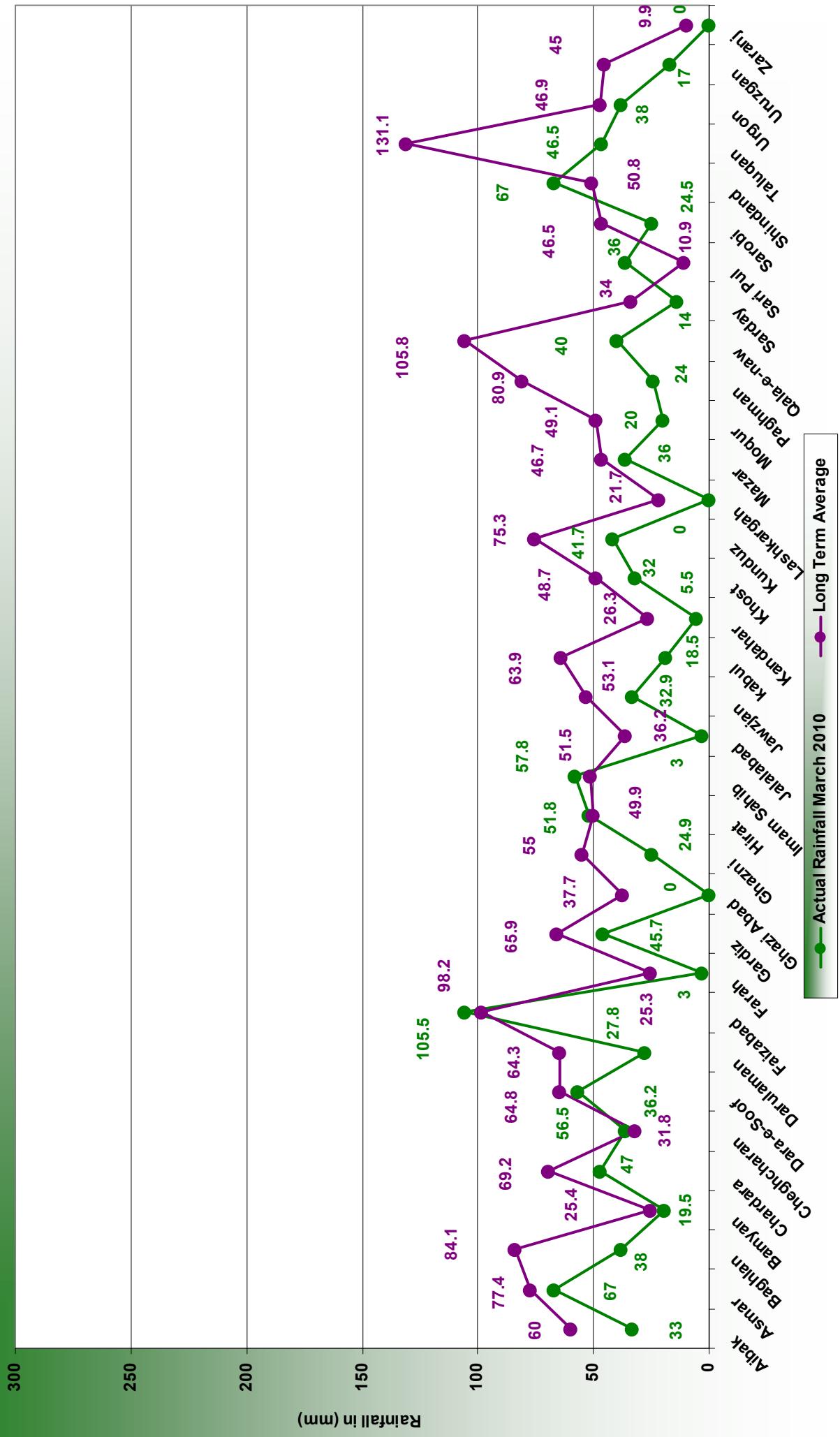
Comparison of Actual Rainfall January 2010 with the Same Month of Long Term Average



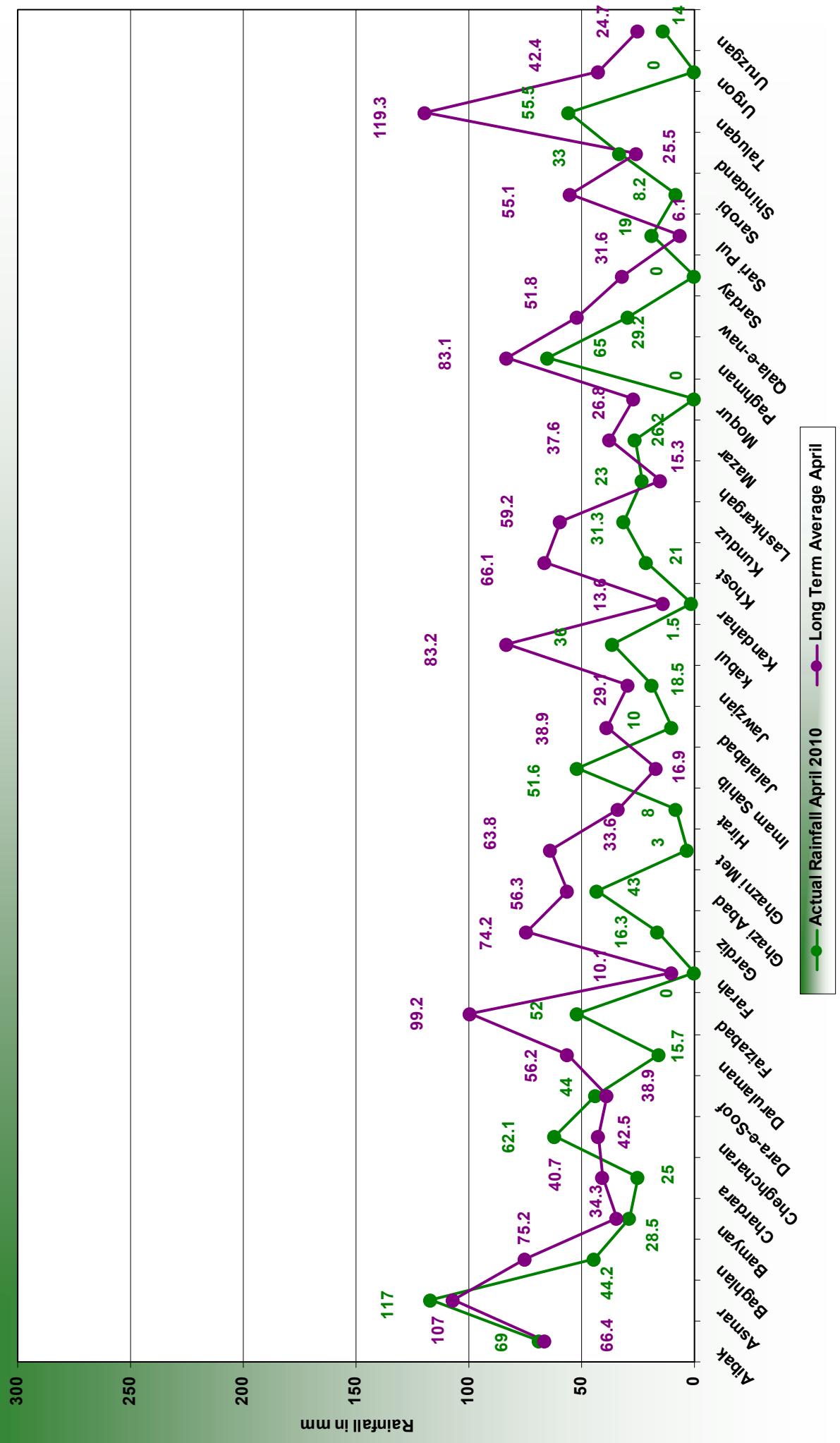
Comparison of Actual Rainfall February 2010 with the Same Month of Long Term Average



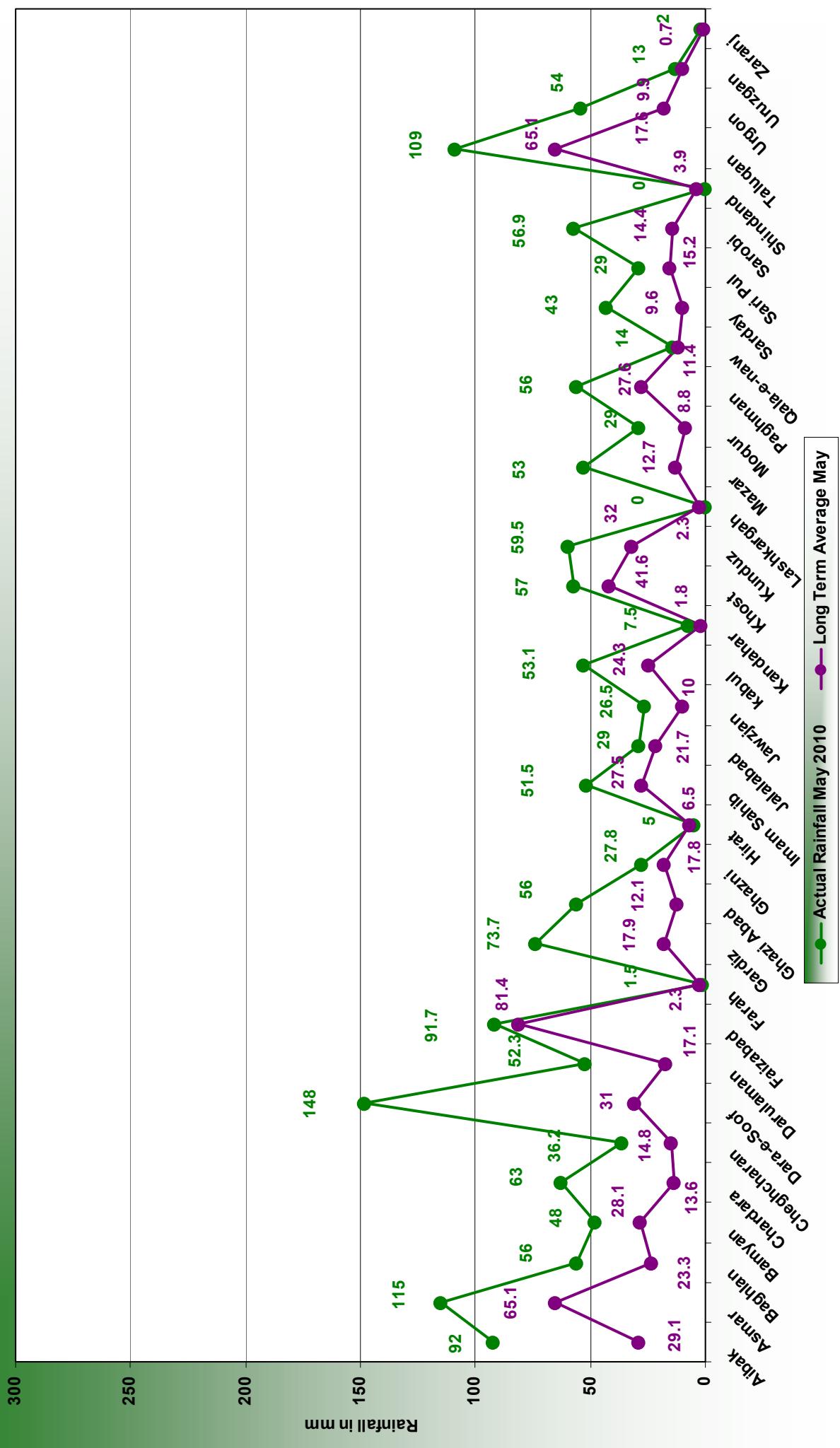
Comparison of Actual Rainfall March 2010 with the Same Month of Long Term Average



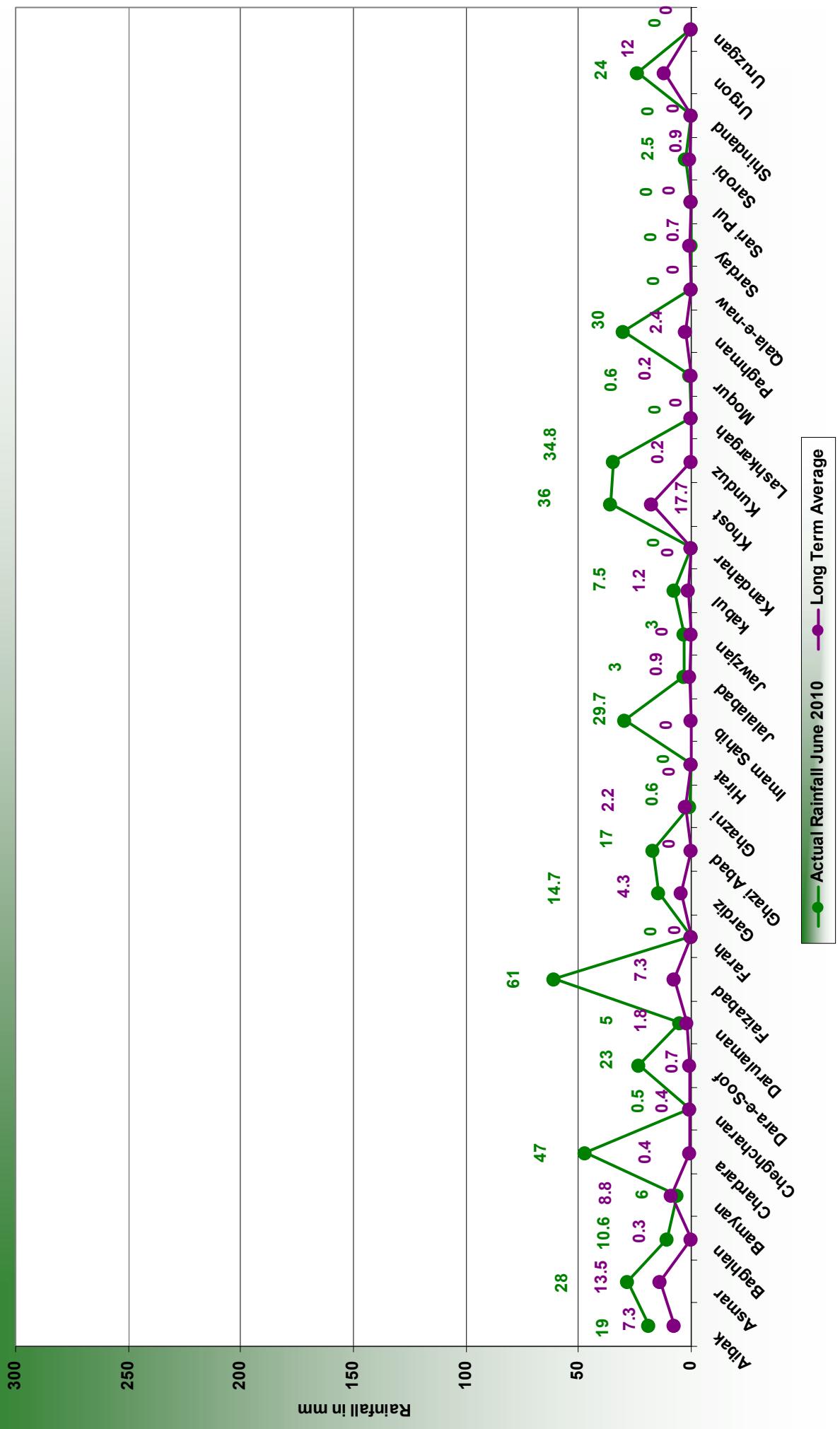
Comparison of Actual Rainfall April 2010 with the Same Month of Long Term Average



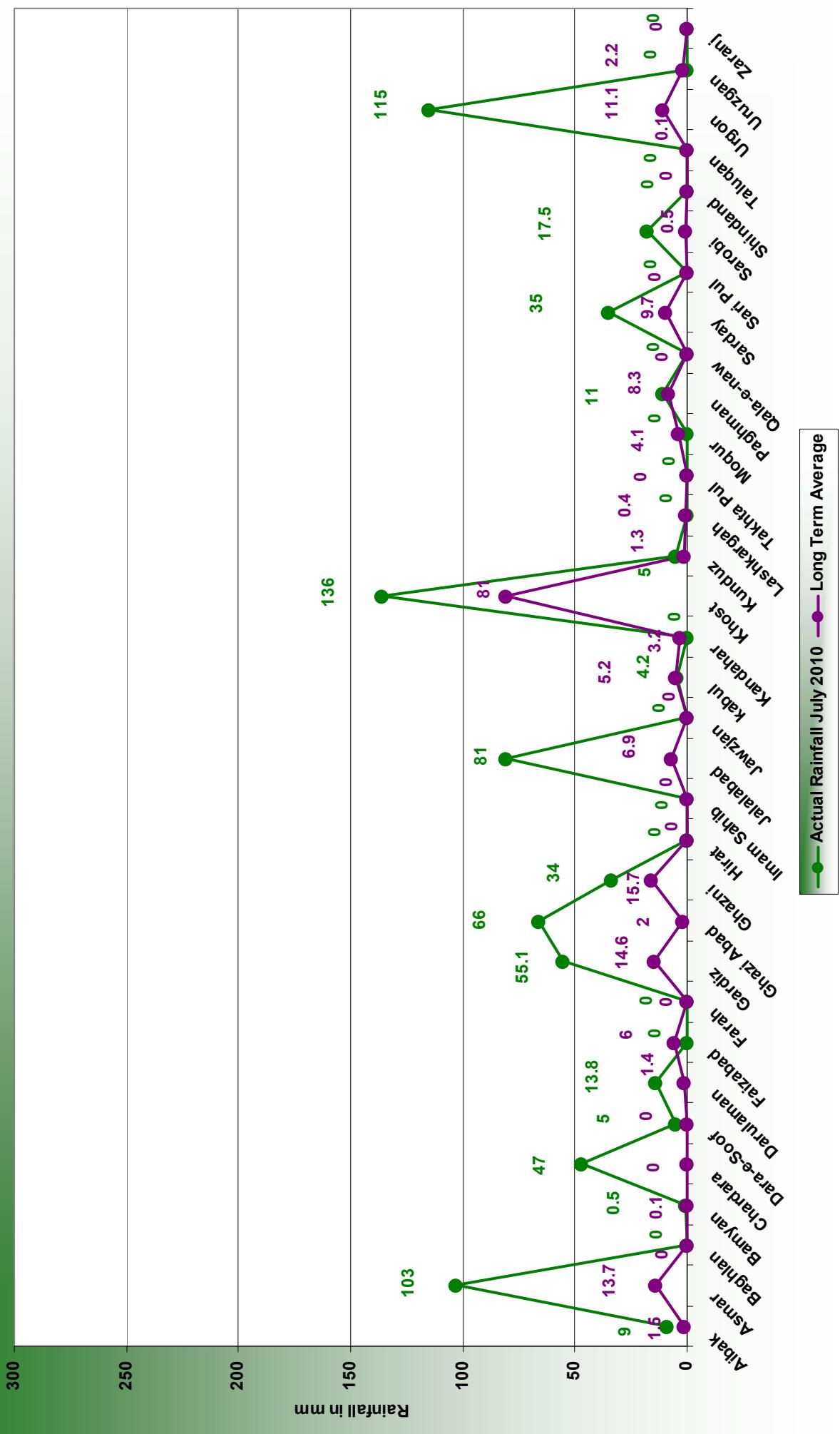
Comparison of Actual Rainfall May 2010 with the Same Month of Long Term Average



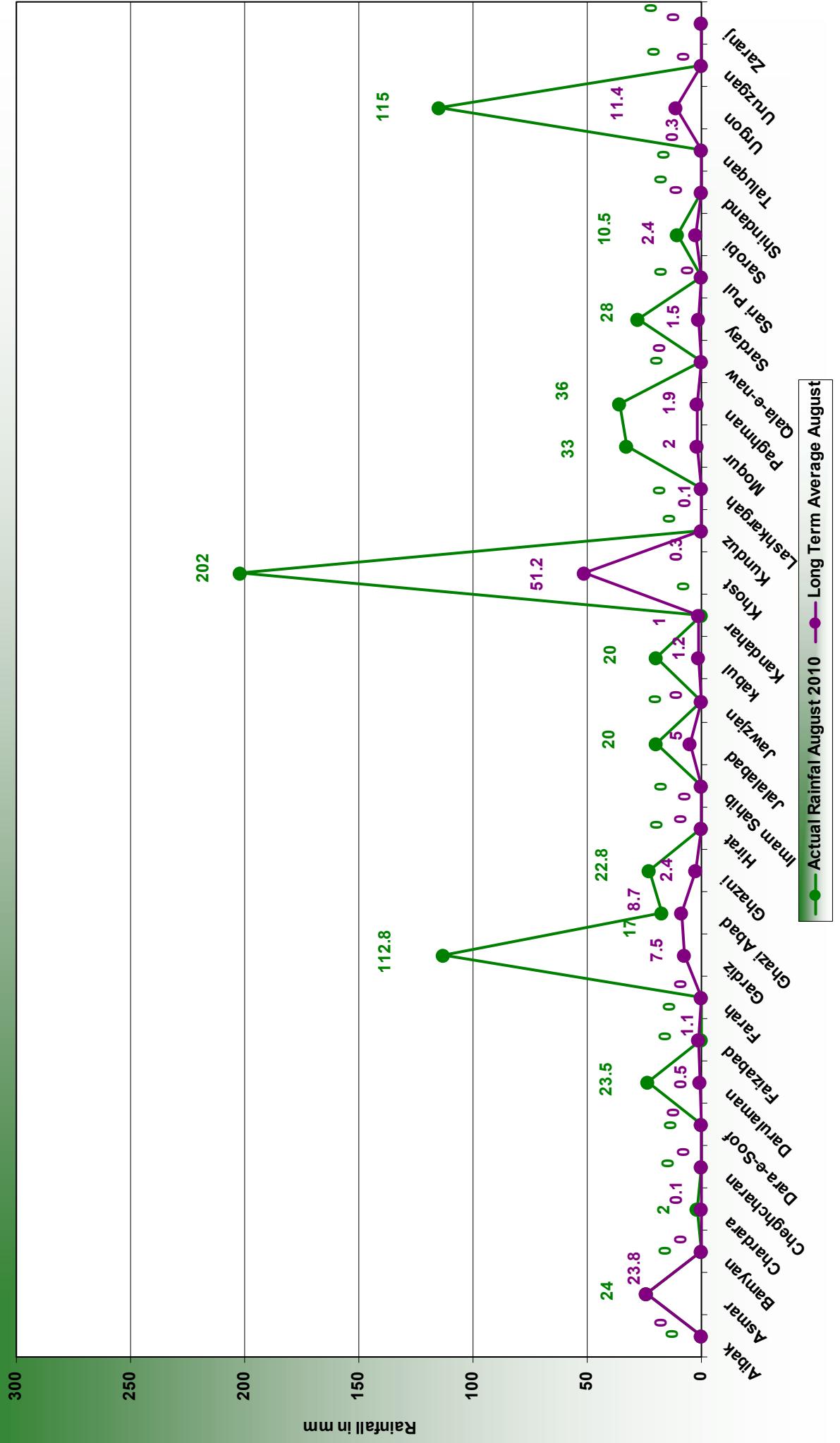
Comparison of Actual Rainfall June 2010 with the Same Month of Long Term Average



Comparison of Actual Rainfall July 2010 with the Same Month of Long Term Average



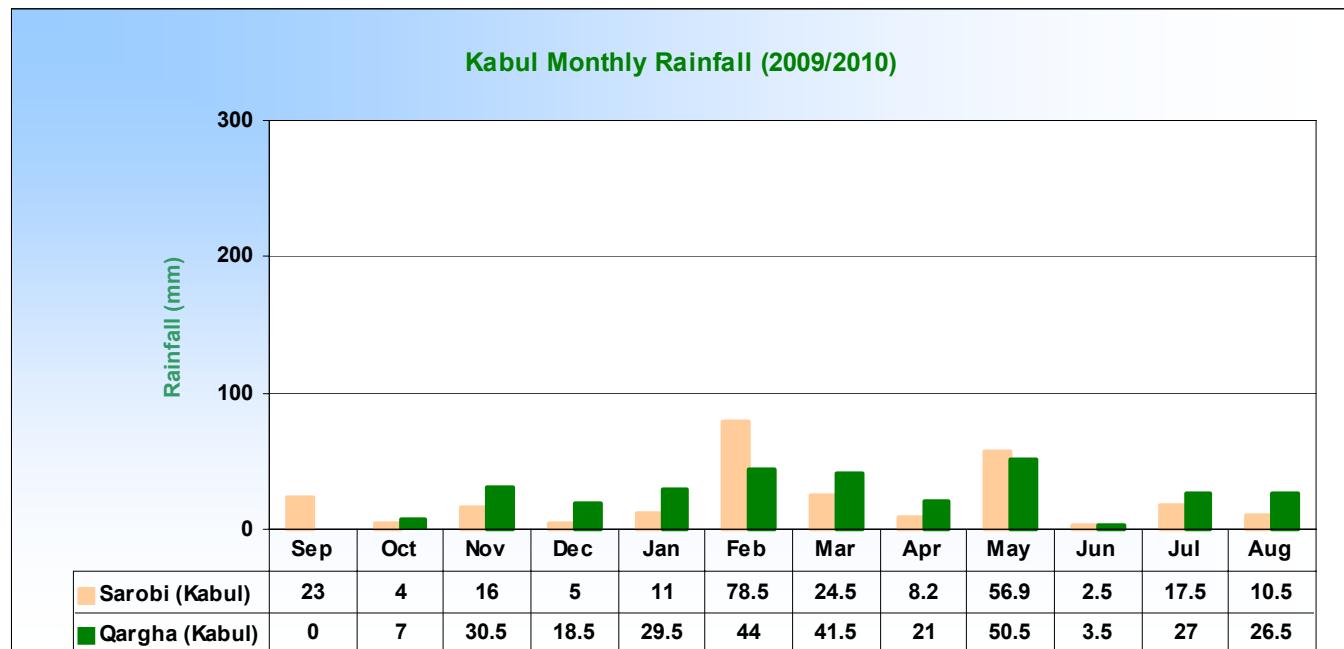
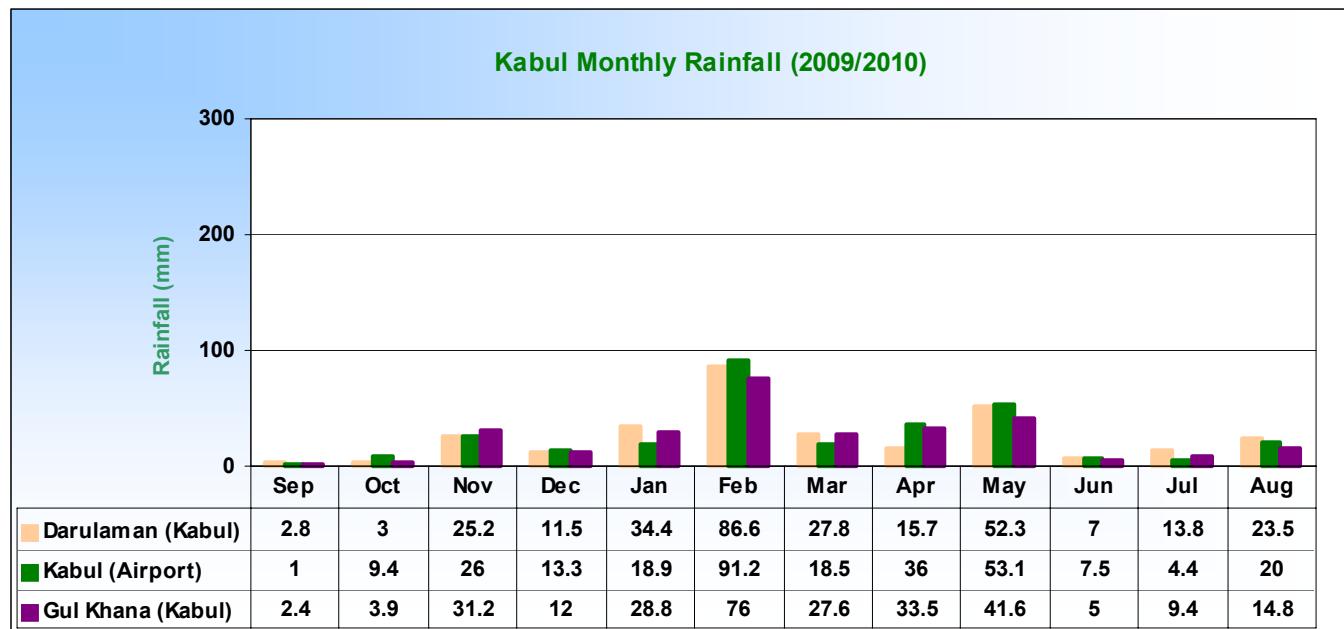
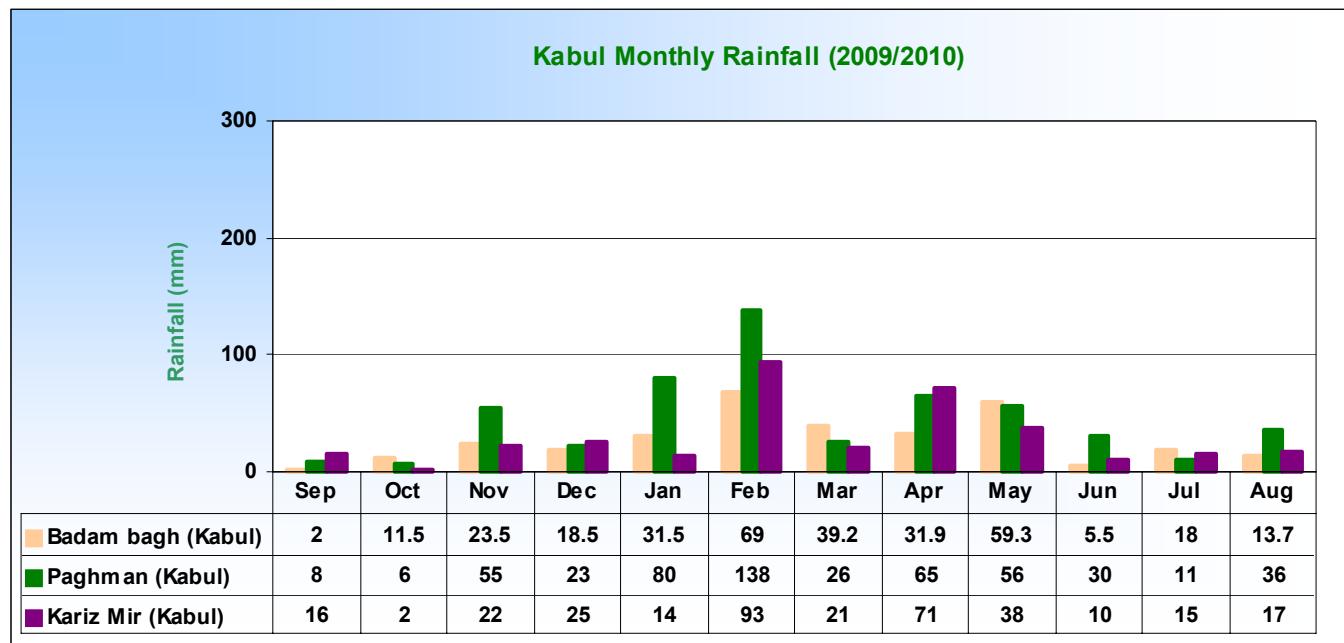
Comparison of Actual Rainfall August 2010 with the Same month of Long Term Average



Dekadal Rainfall (mm) Graphs for
Season (2009-2010)
By Region

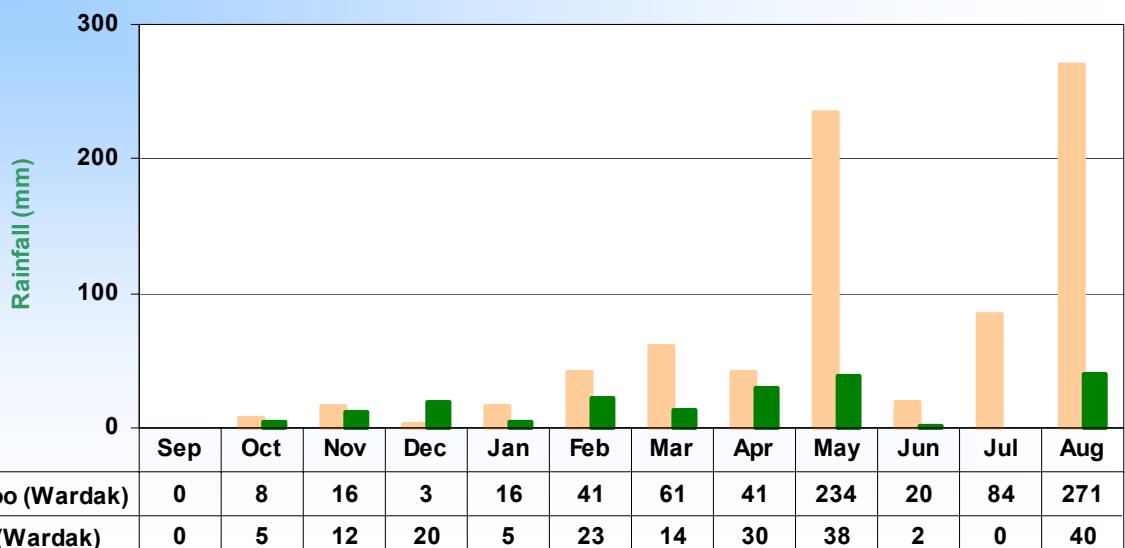
Dekadal Rainfall Graphs by Region

Capital Region

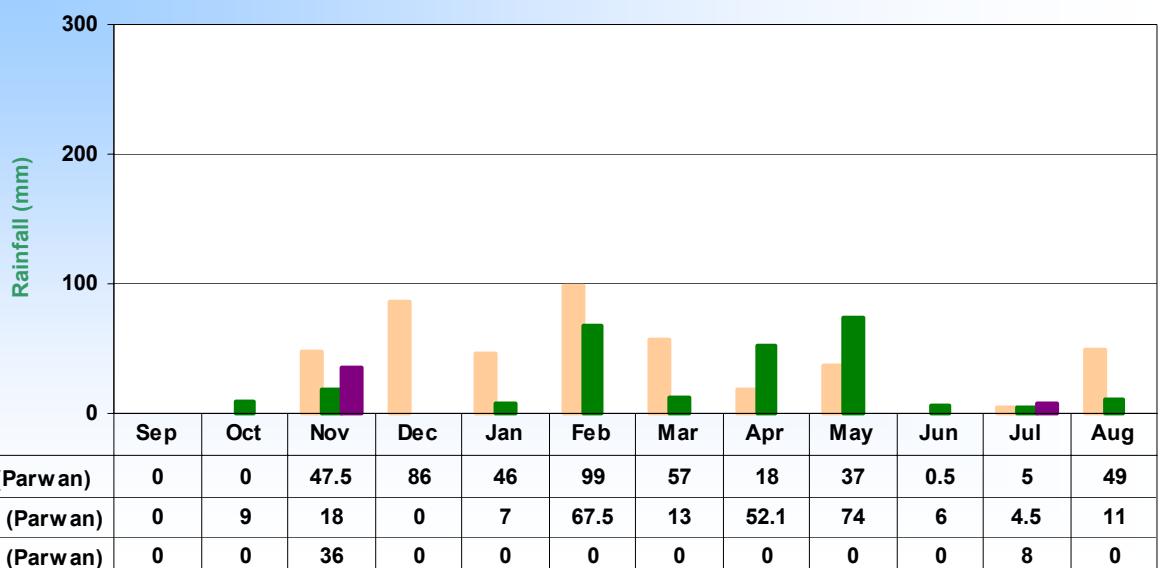


Capital Region

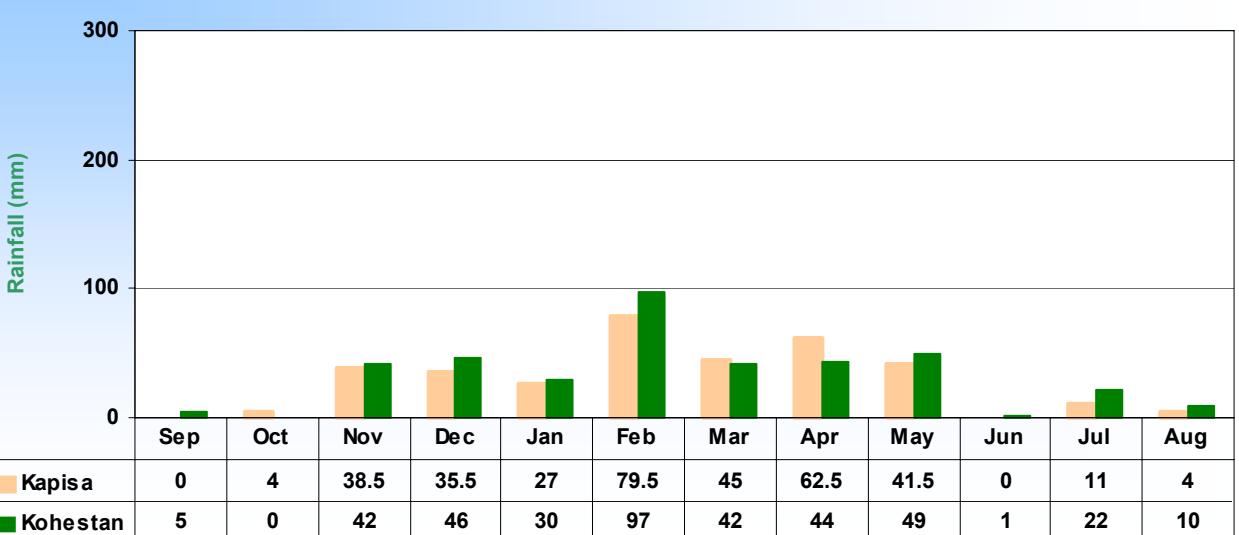
Wardak Monthly Rainfall (2009/2010)



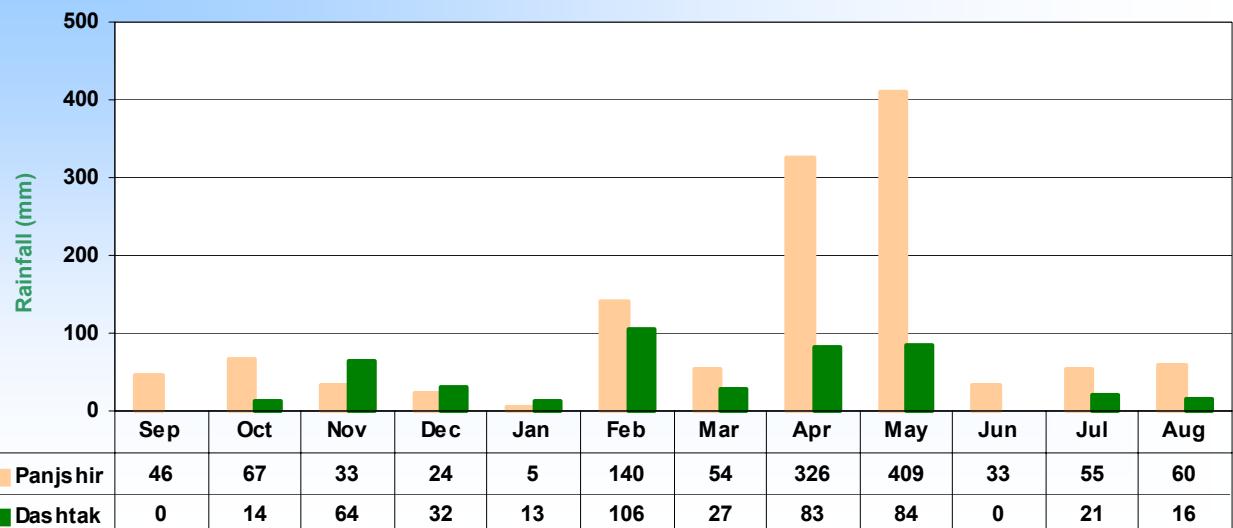
Parwan Monthly Rainfall (2009/2010)



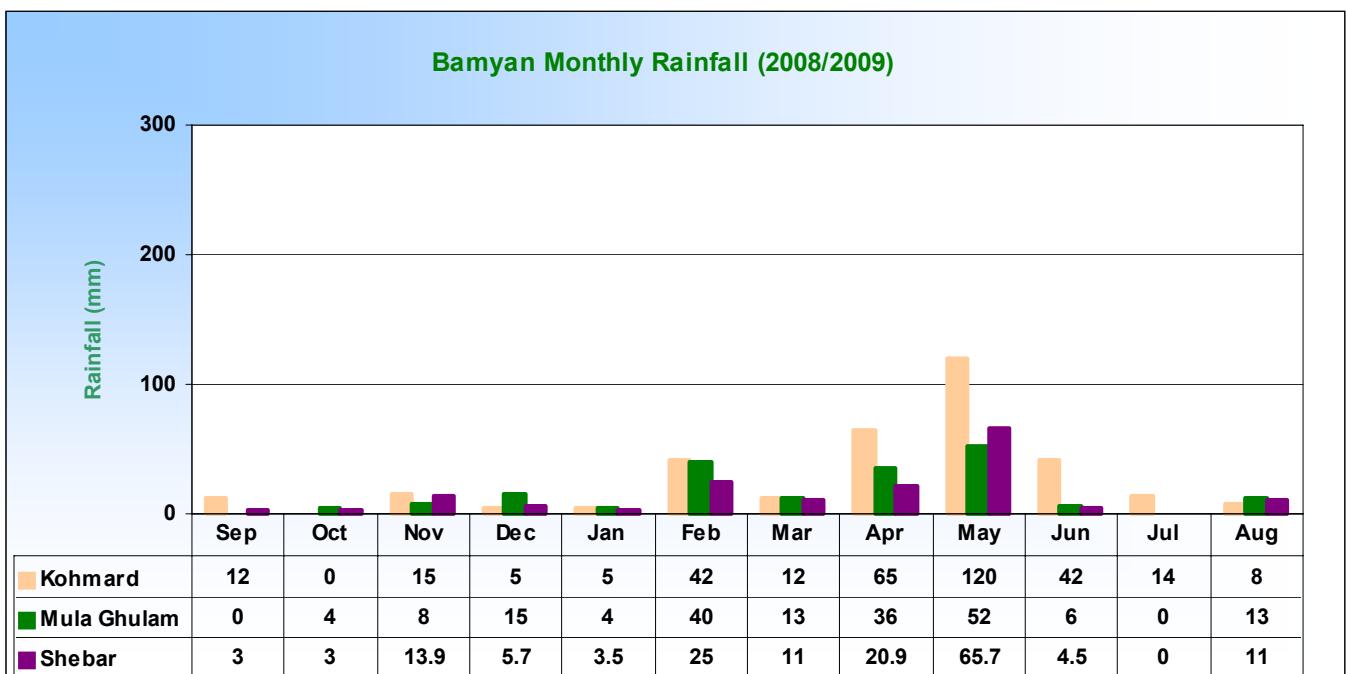
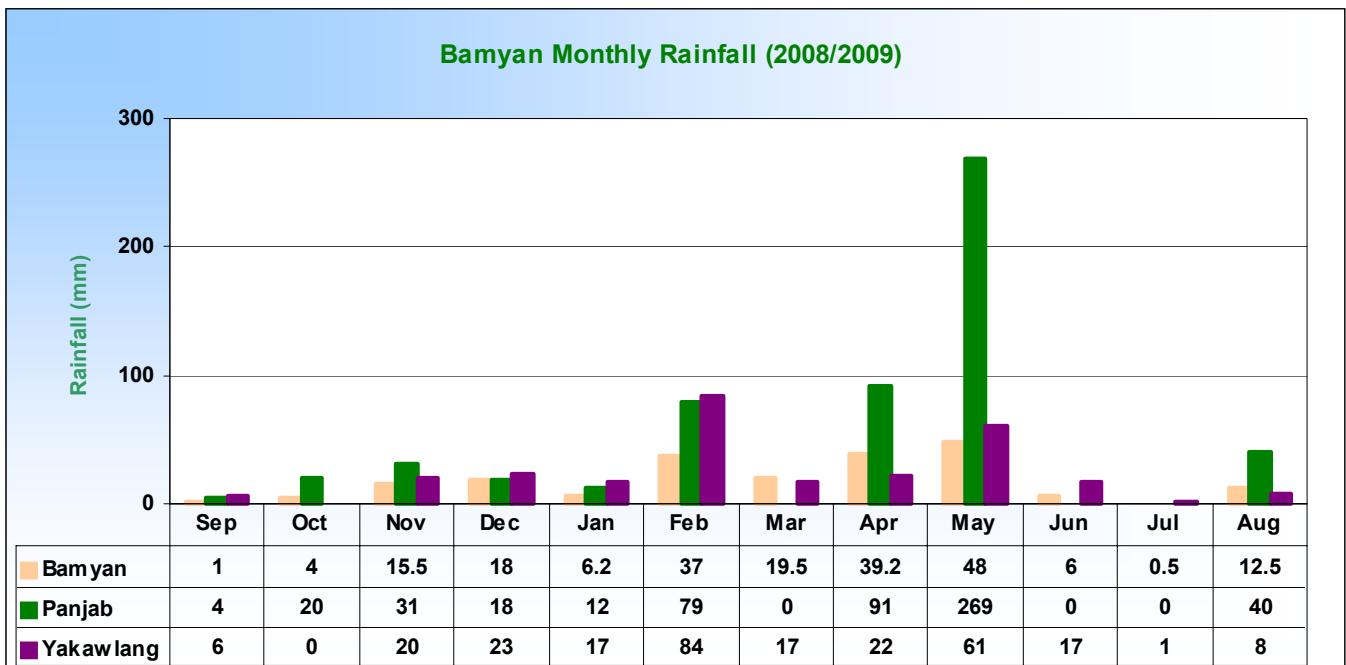
Kapisa Monthly Rainfall (2009/2010)



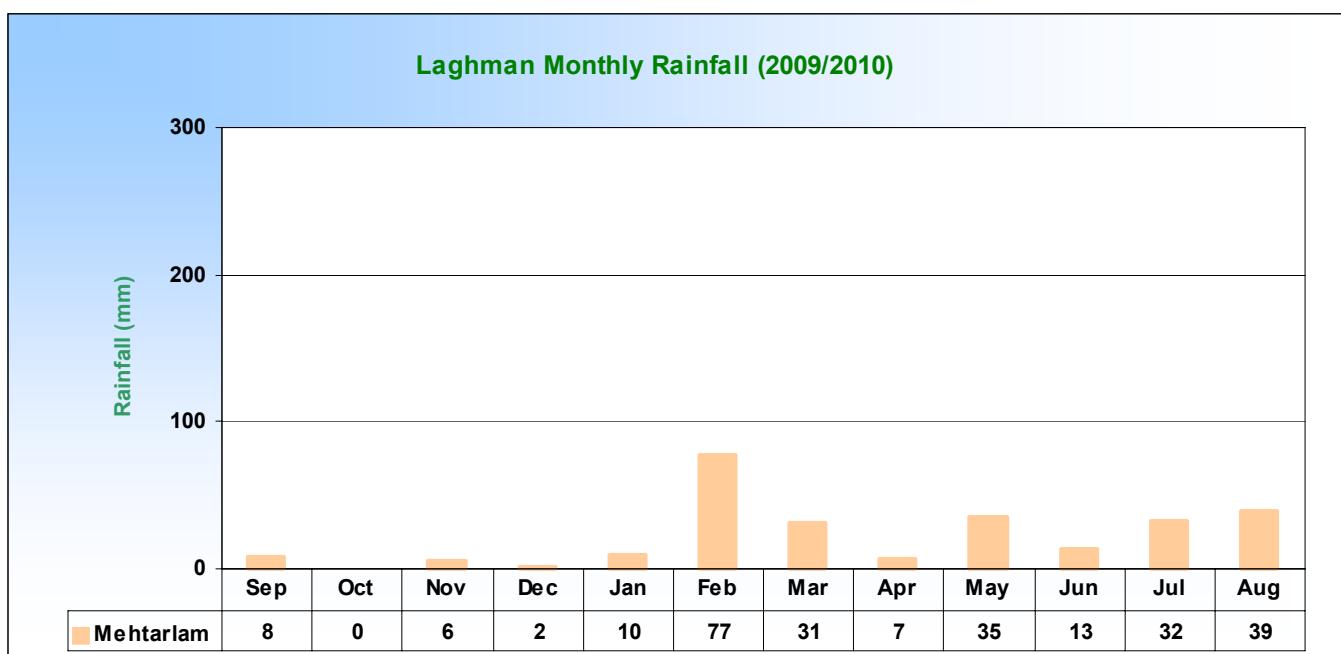
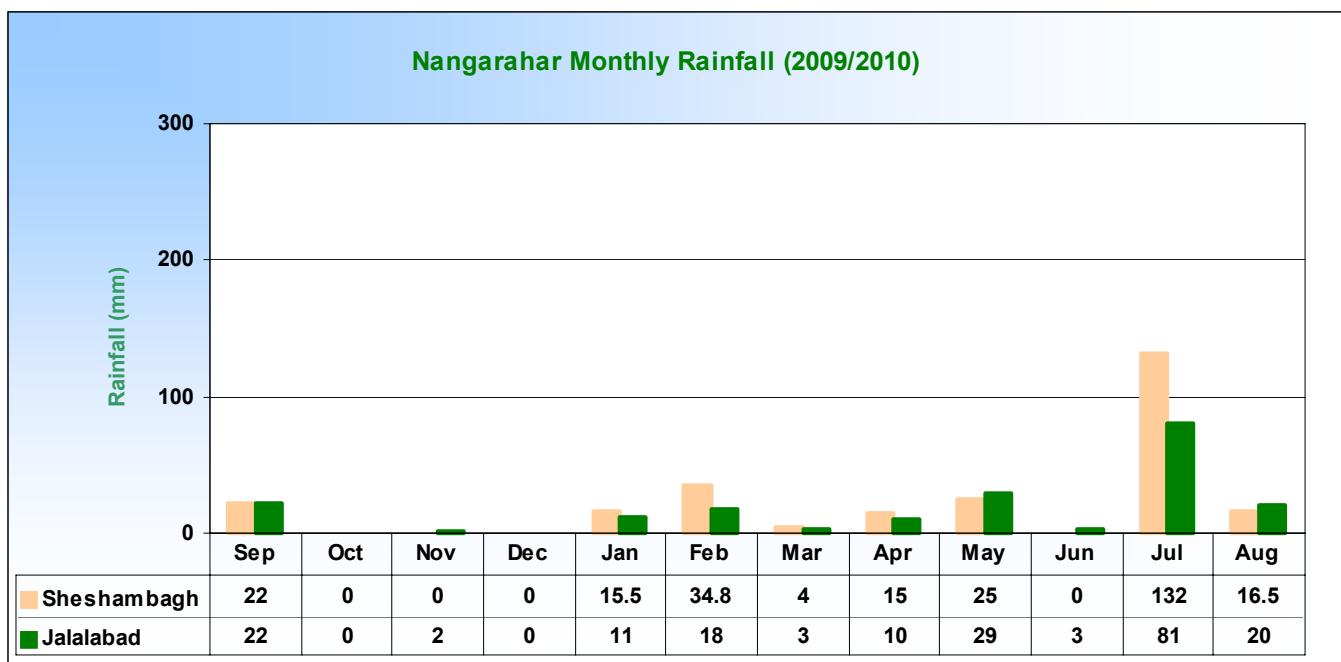
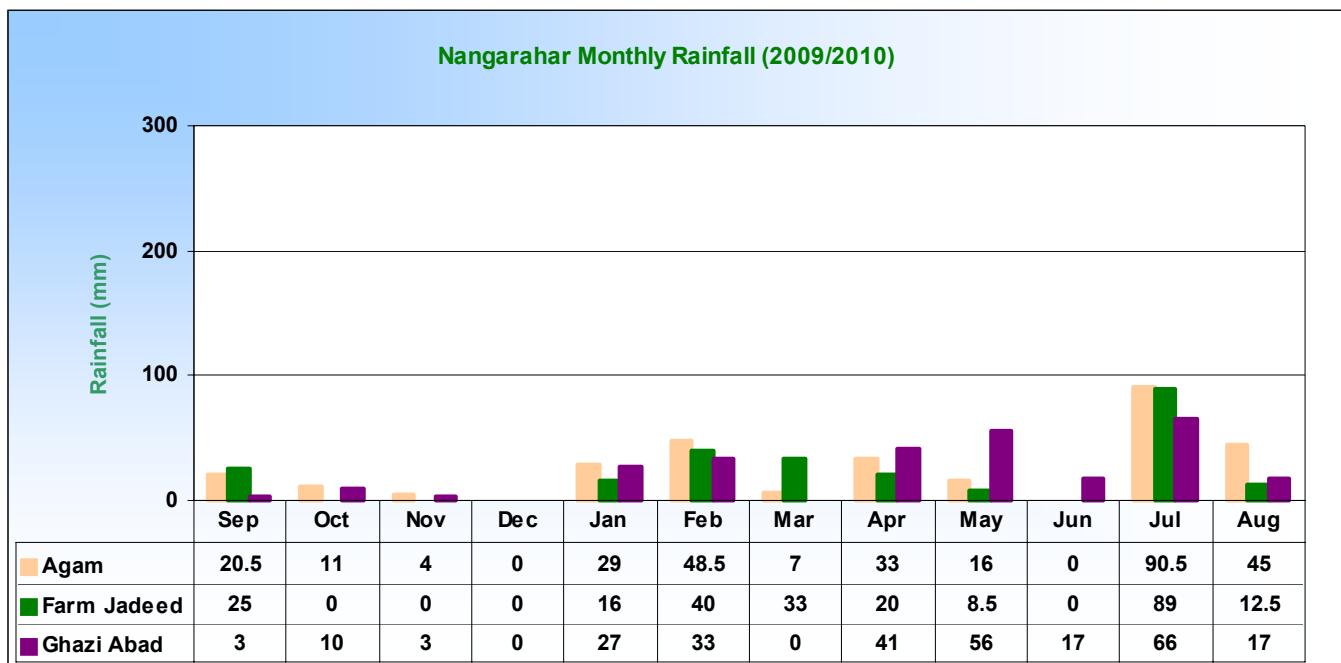
Panjshir Monthly Rainfall (2009/2010)



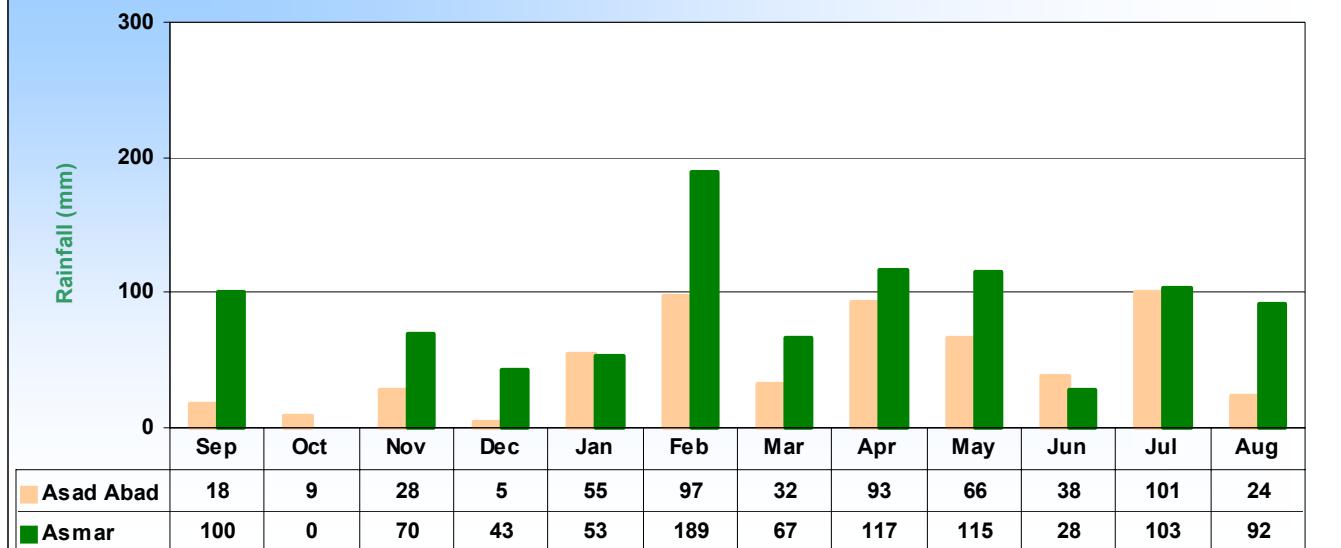
Central Highland Region



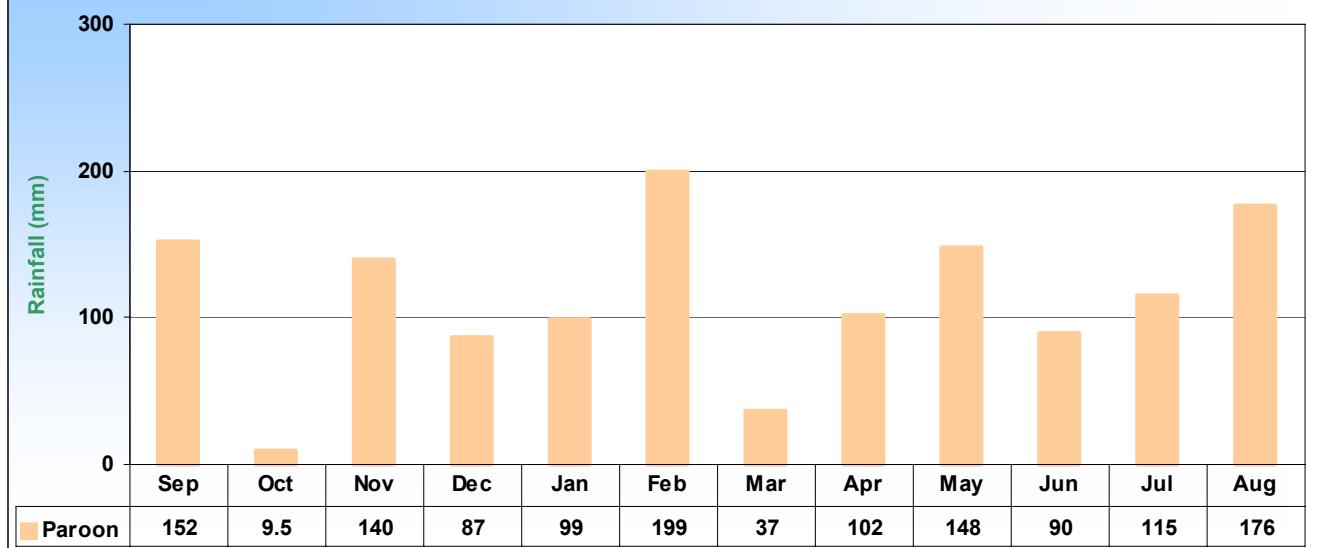
Eastern Region



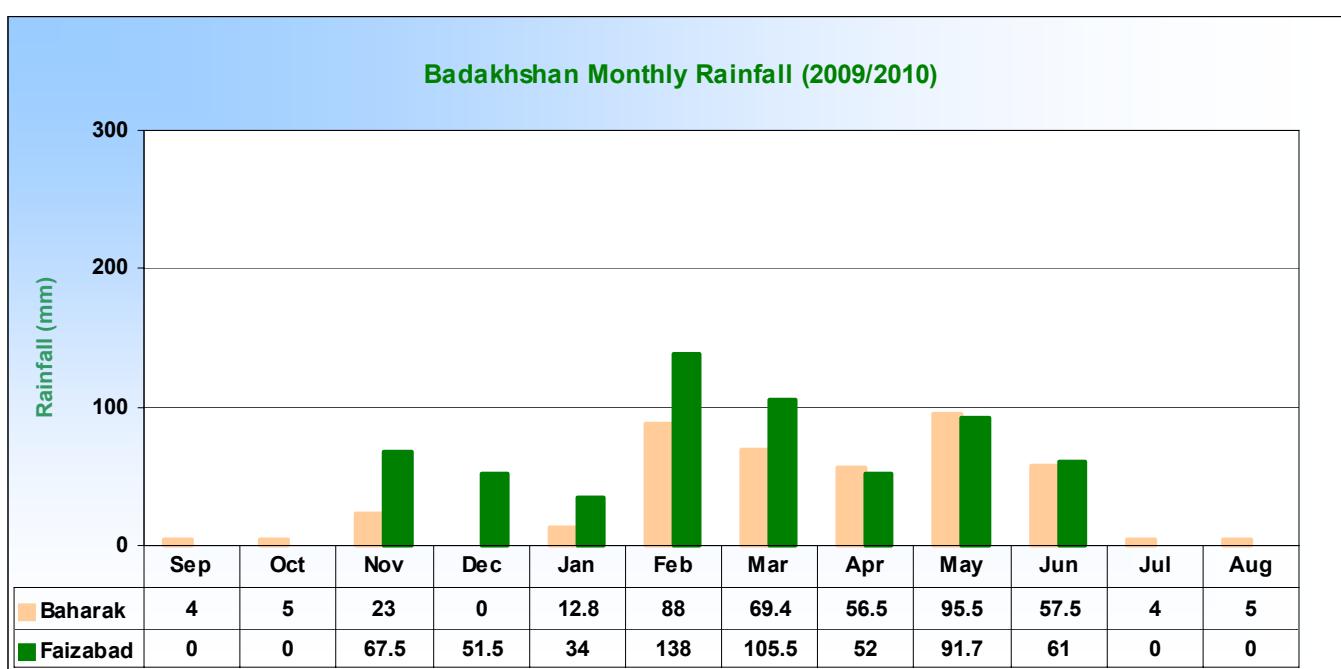
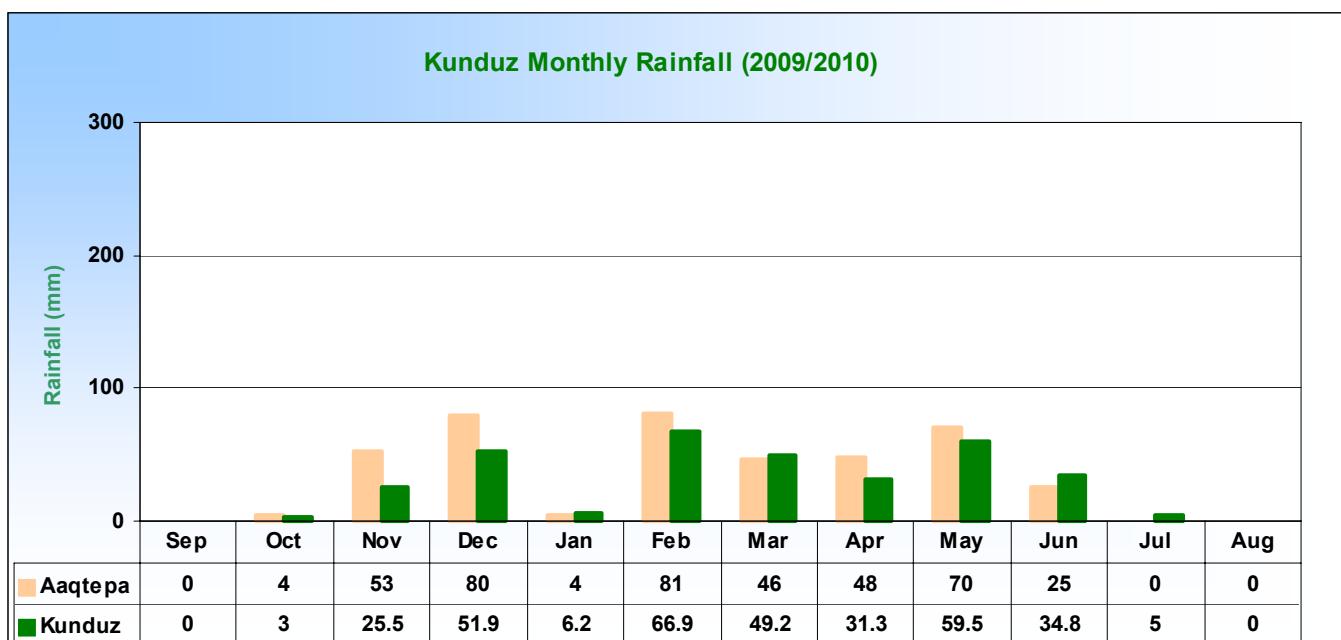
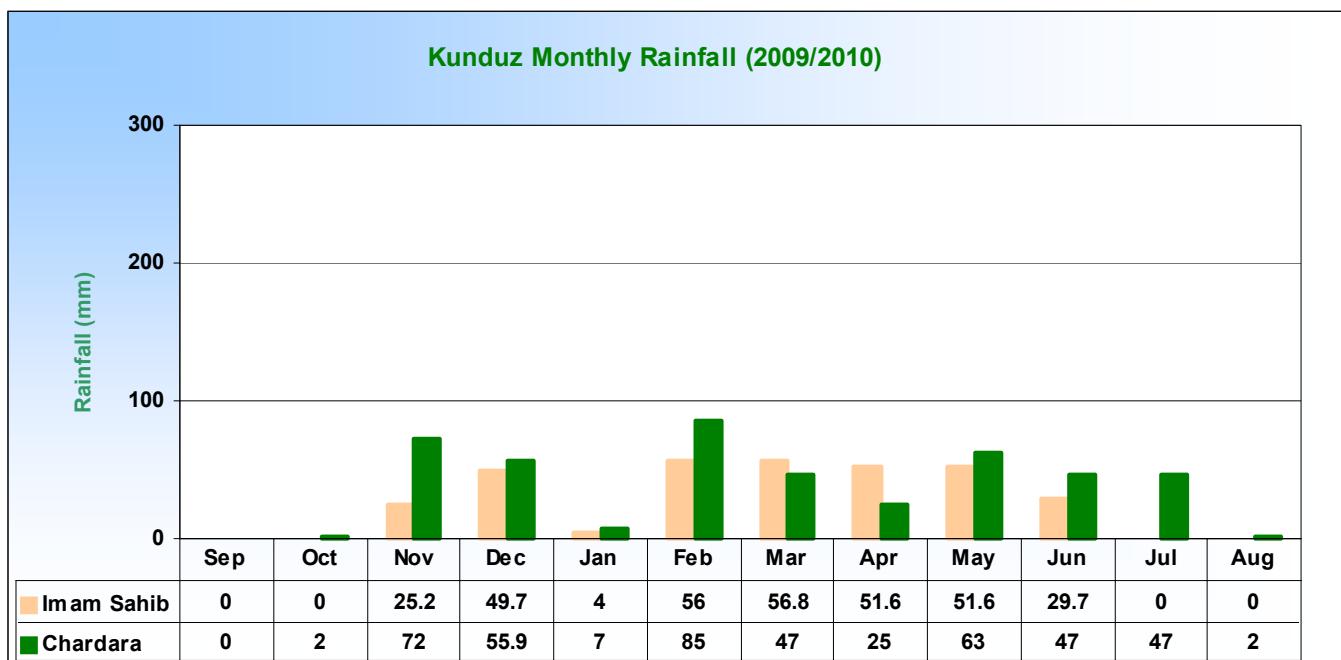
Kunar Monthly Rainfall (2009/2010)



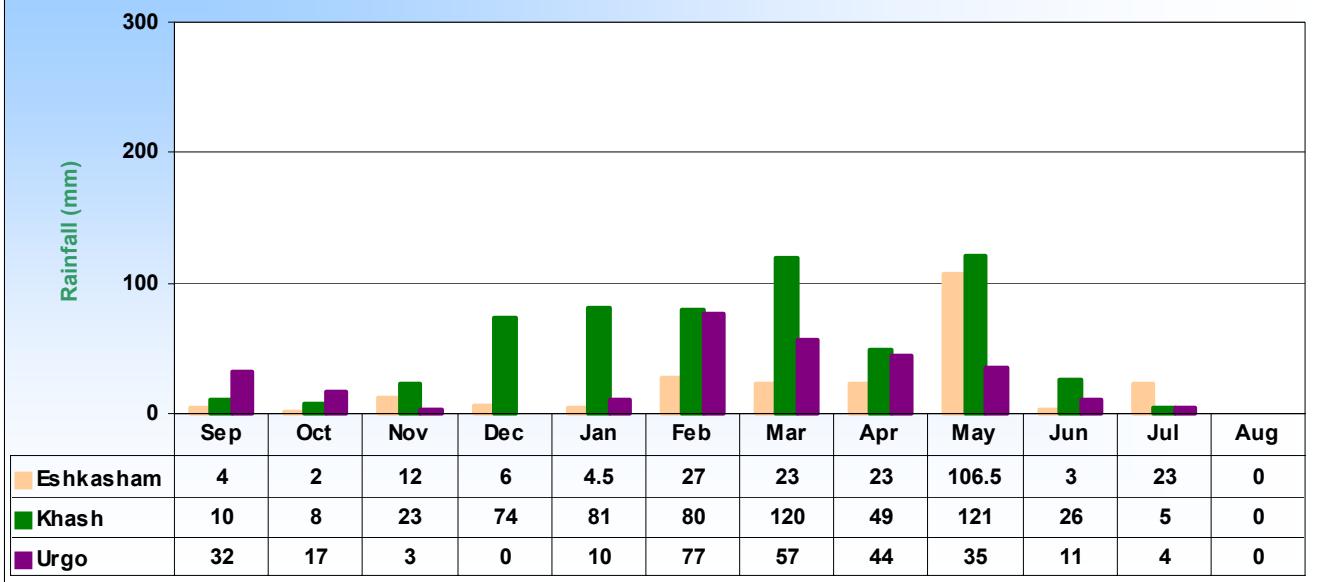
Nooristan Monthly Rainfall (2009/2010)



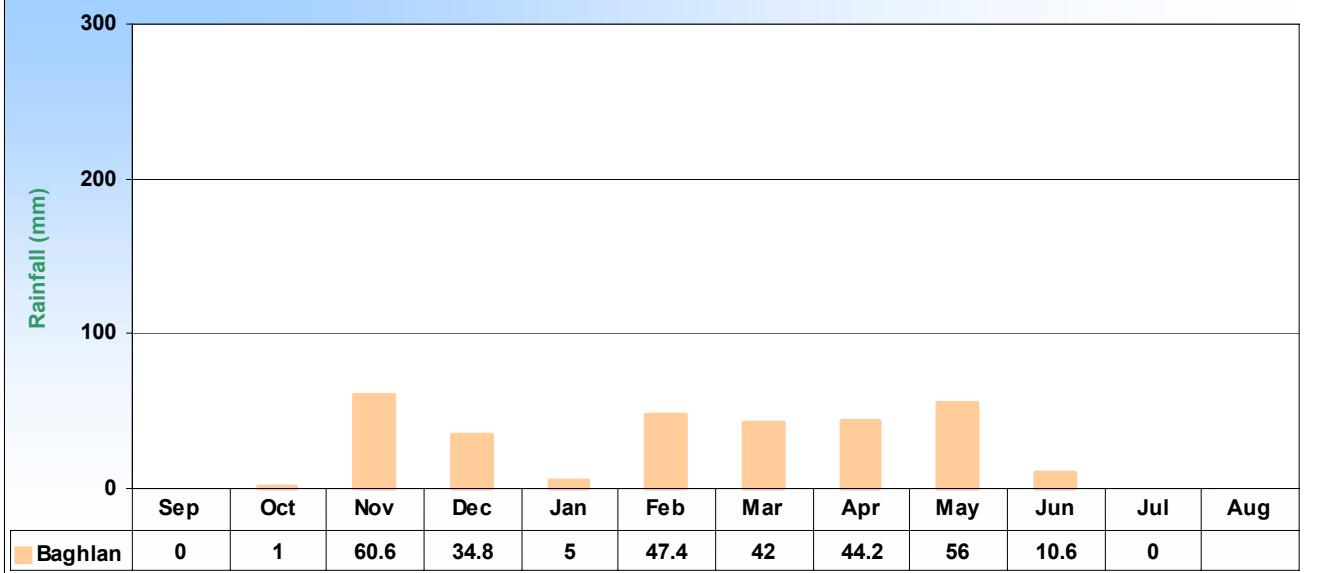
North East Region



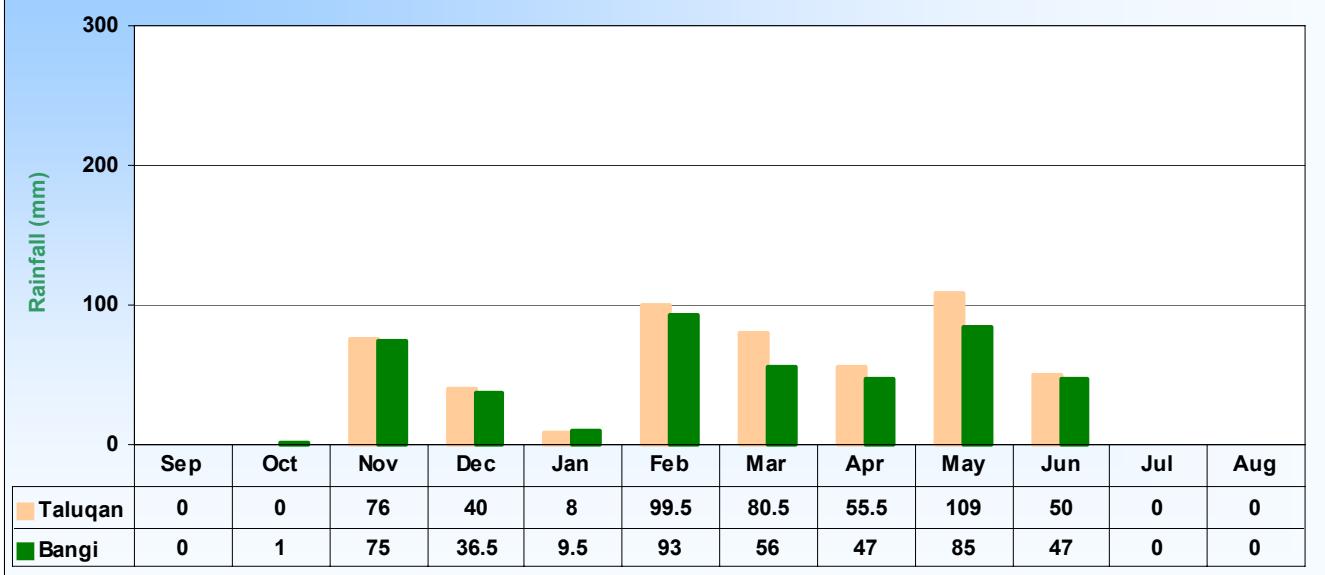
Badakhshan Monthly Rainfall (2009/2010)



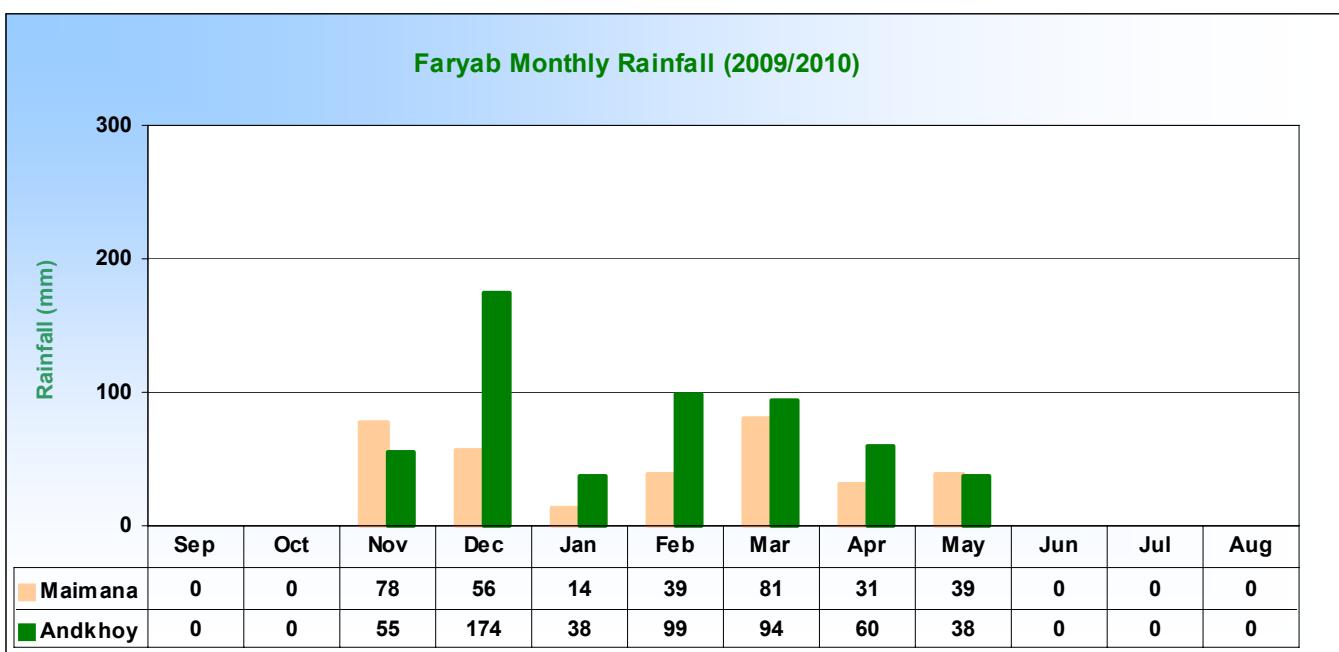
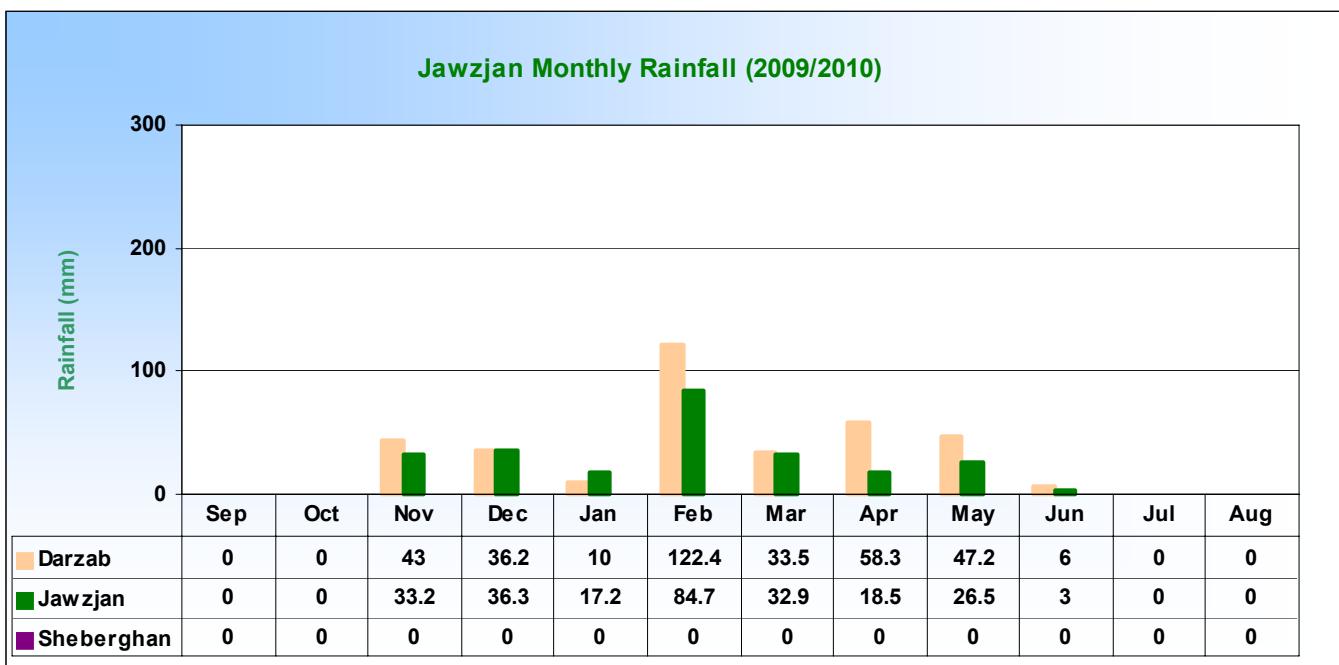
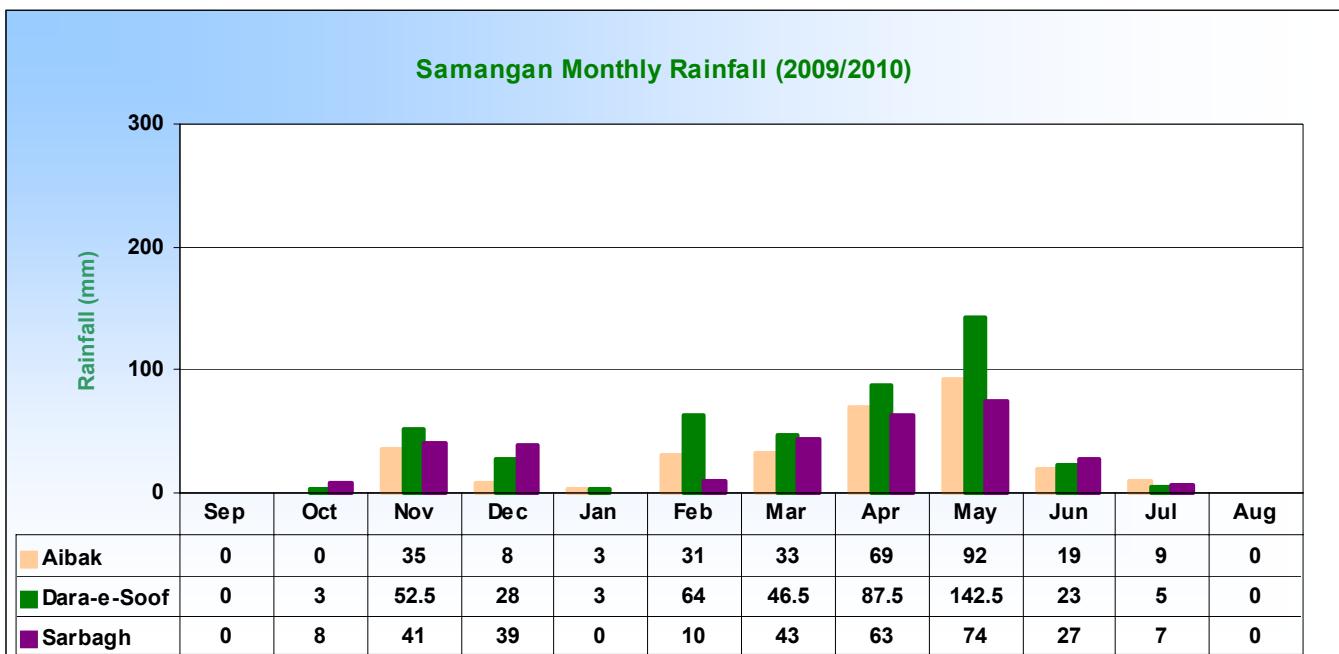
Baghlan Monthly Rainfall (2009/2010)



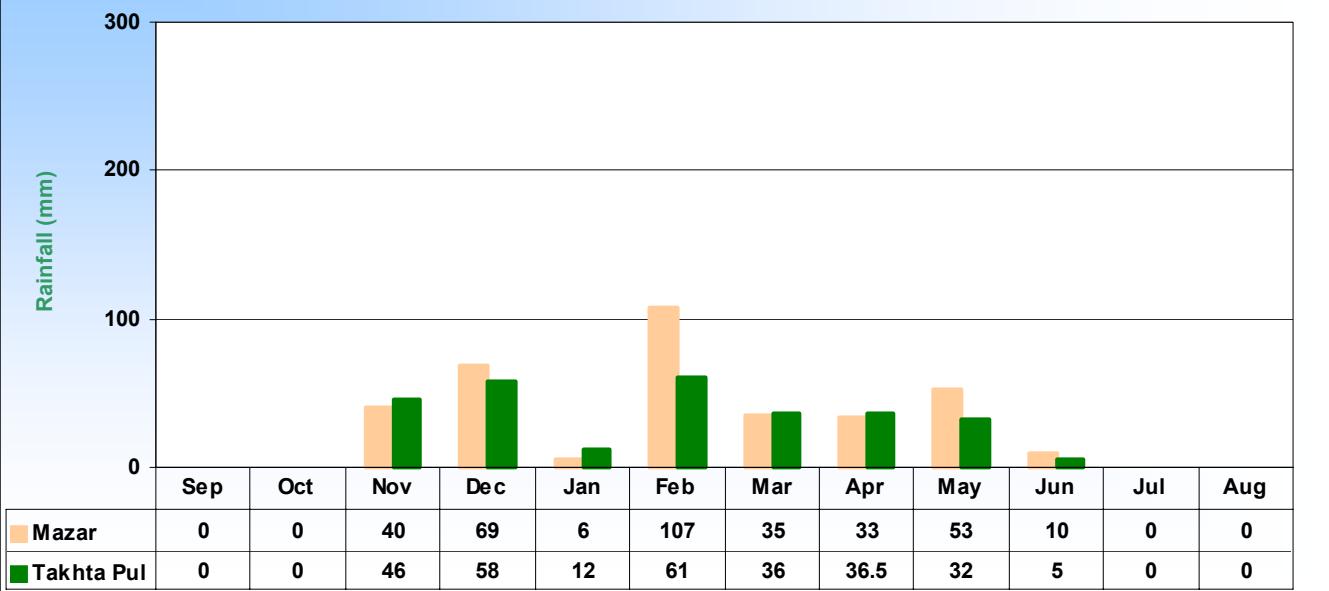
Takhar Monthly Rainfall (2009/2010)



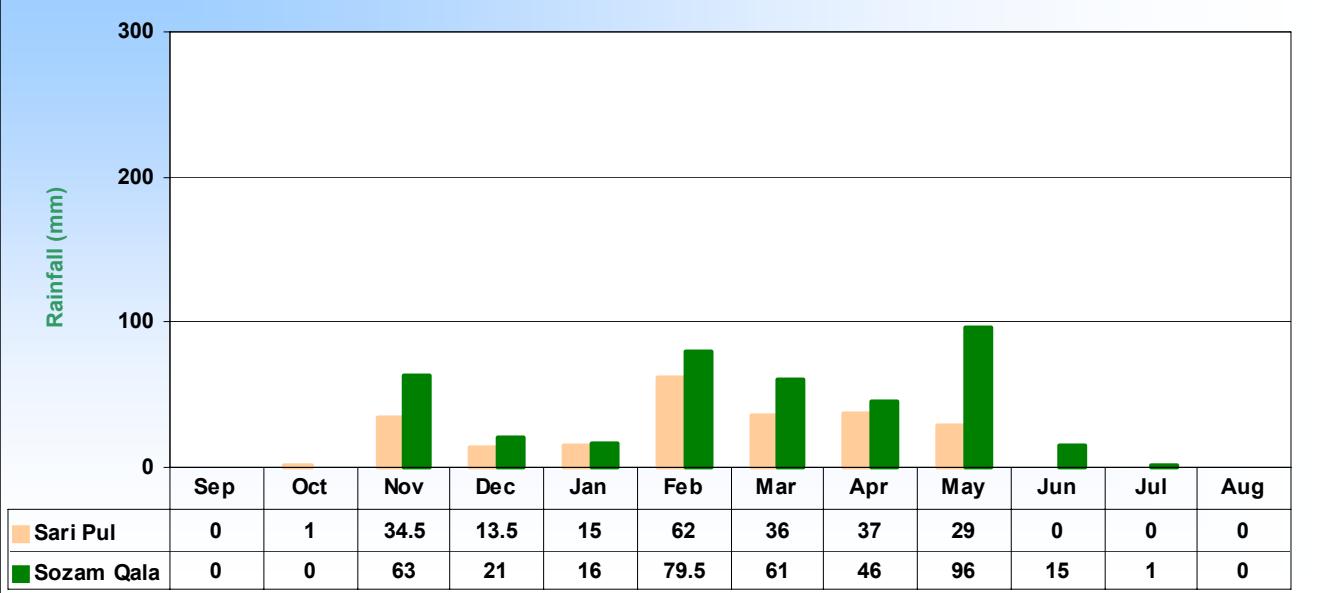
Northern Region



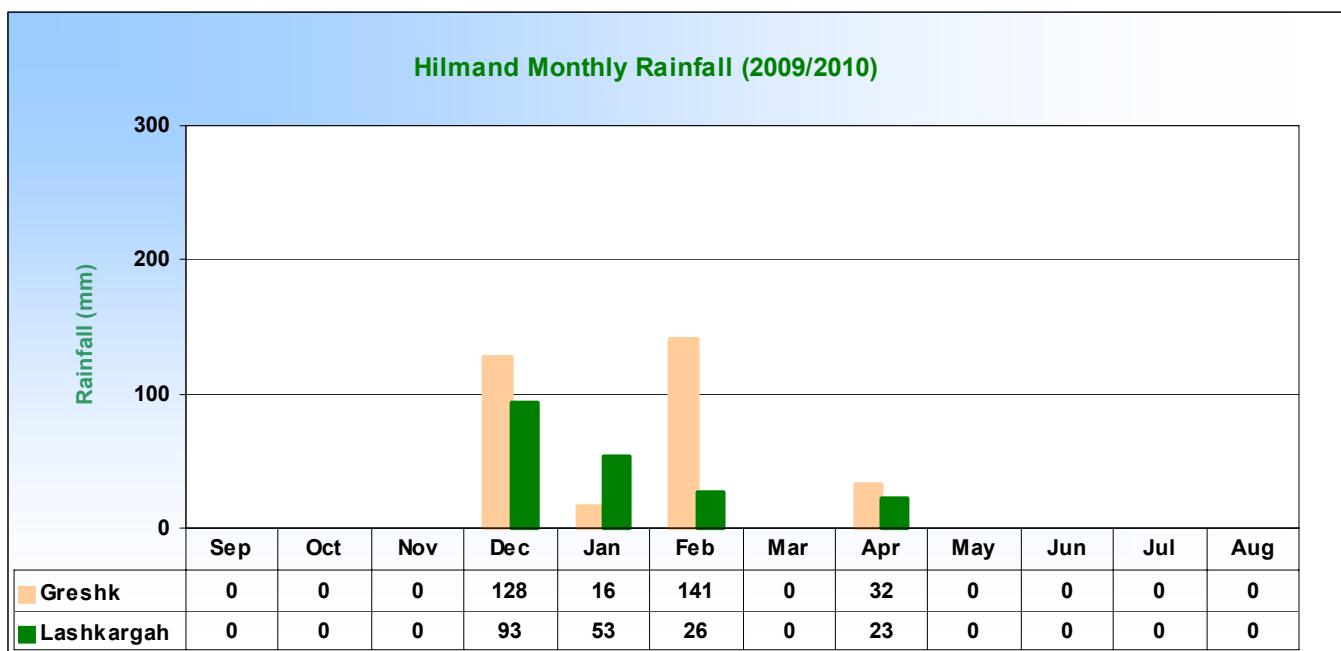
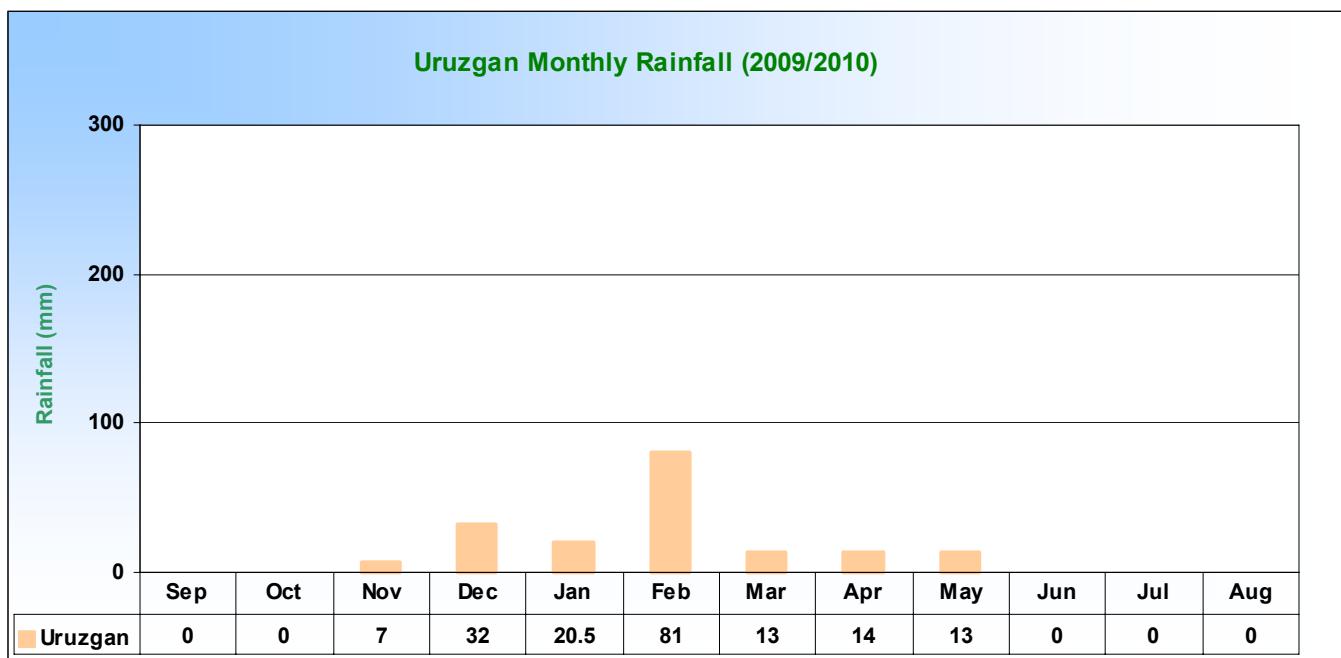
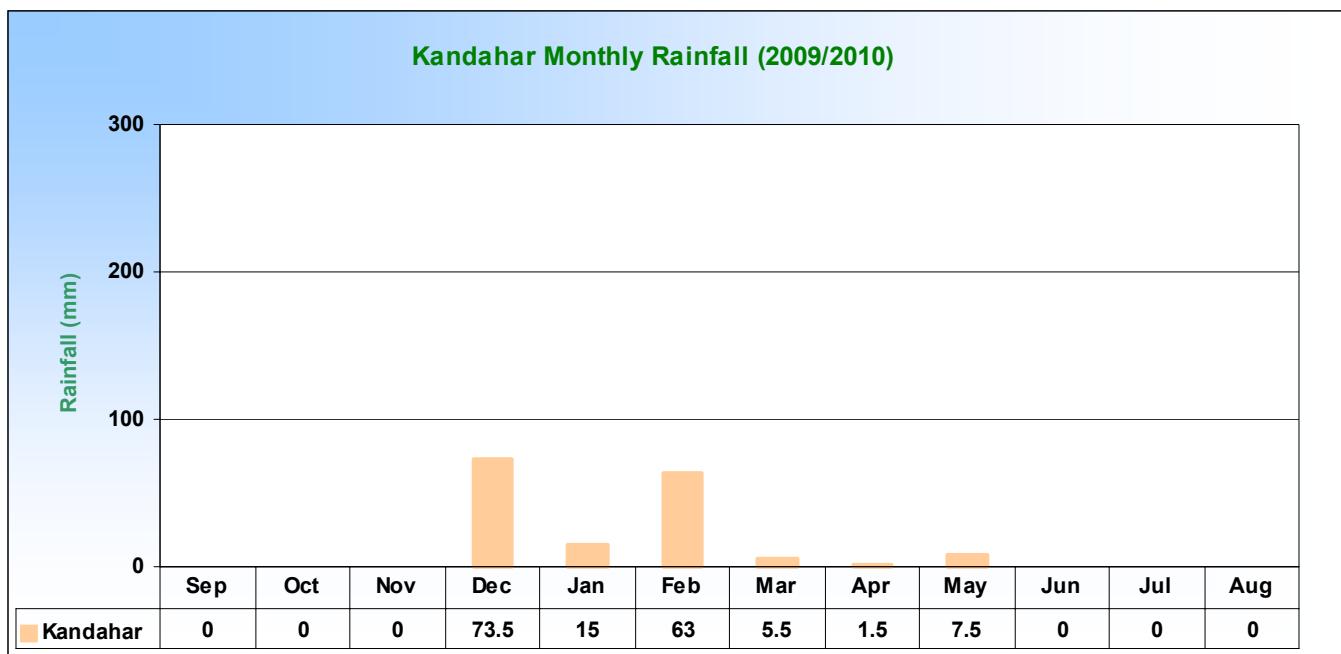
Balkh Monthly Rainfall (2009/2010)



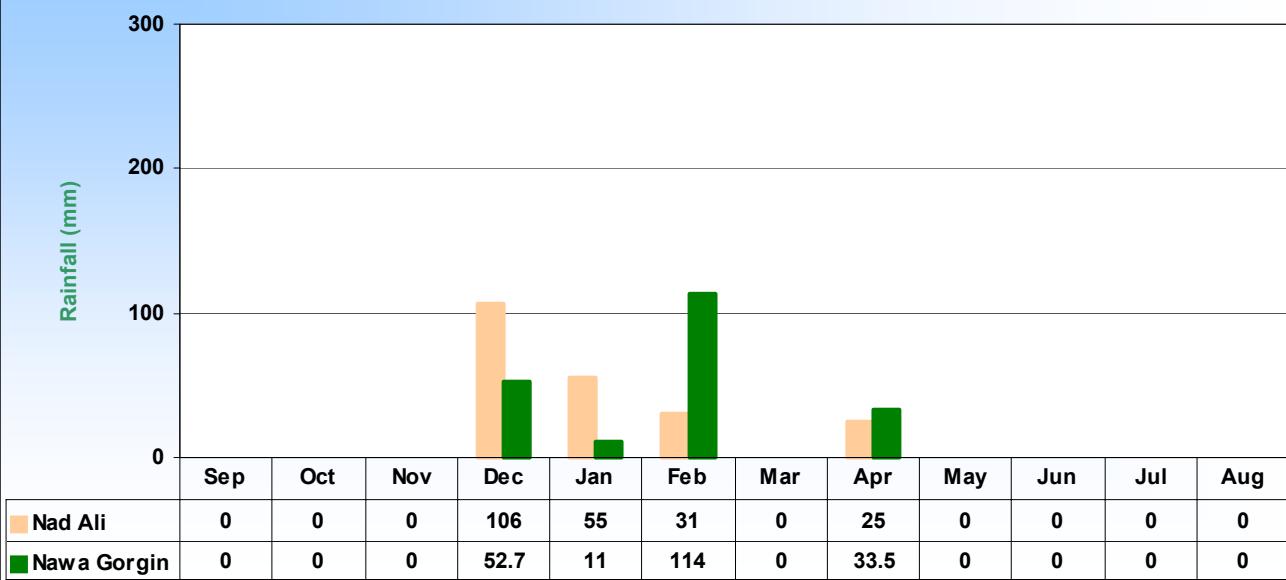
Sari Pul Monthly Rainfall (2009/2010)



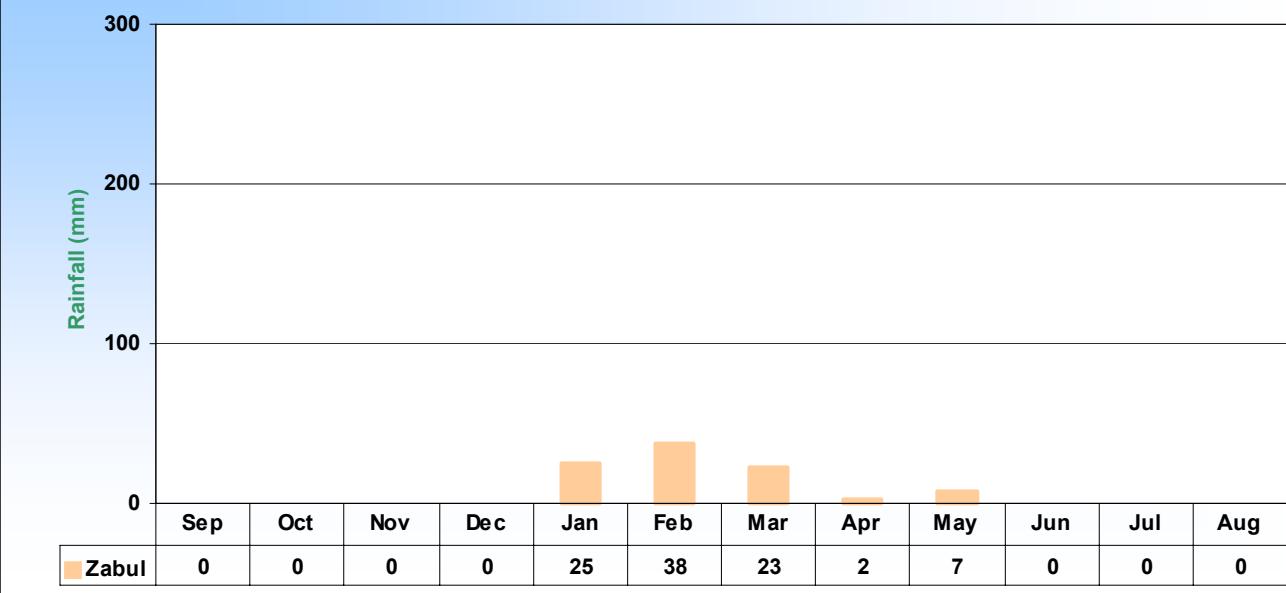
Southern Region



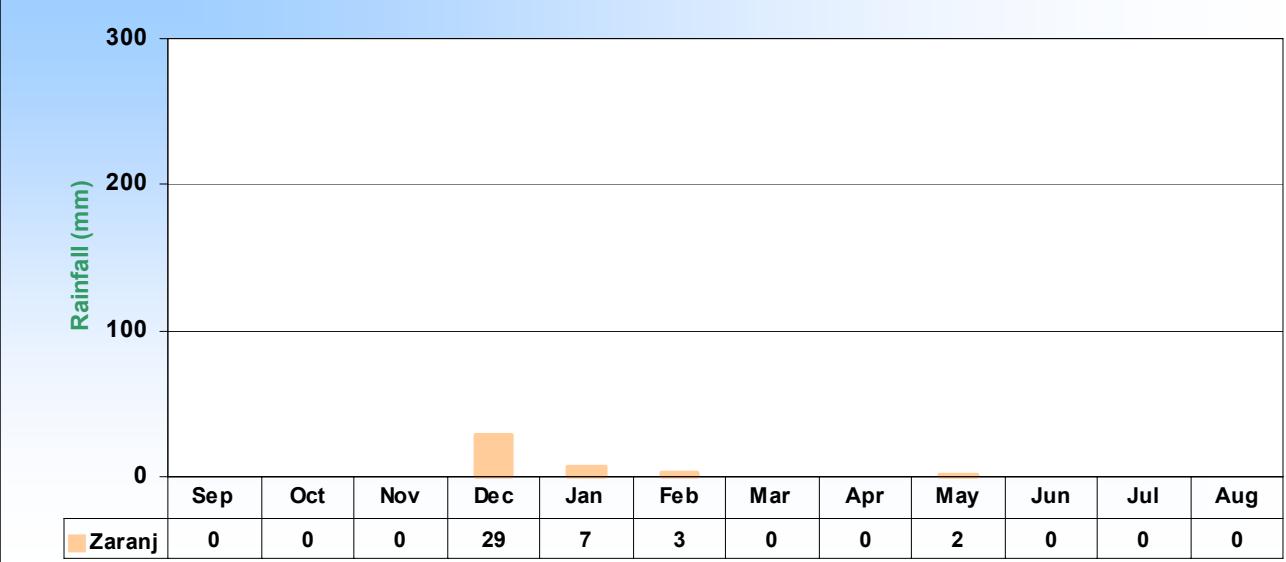
Hilmand Monthly Rainfall (2009/2010)



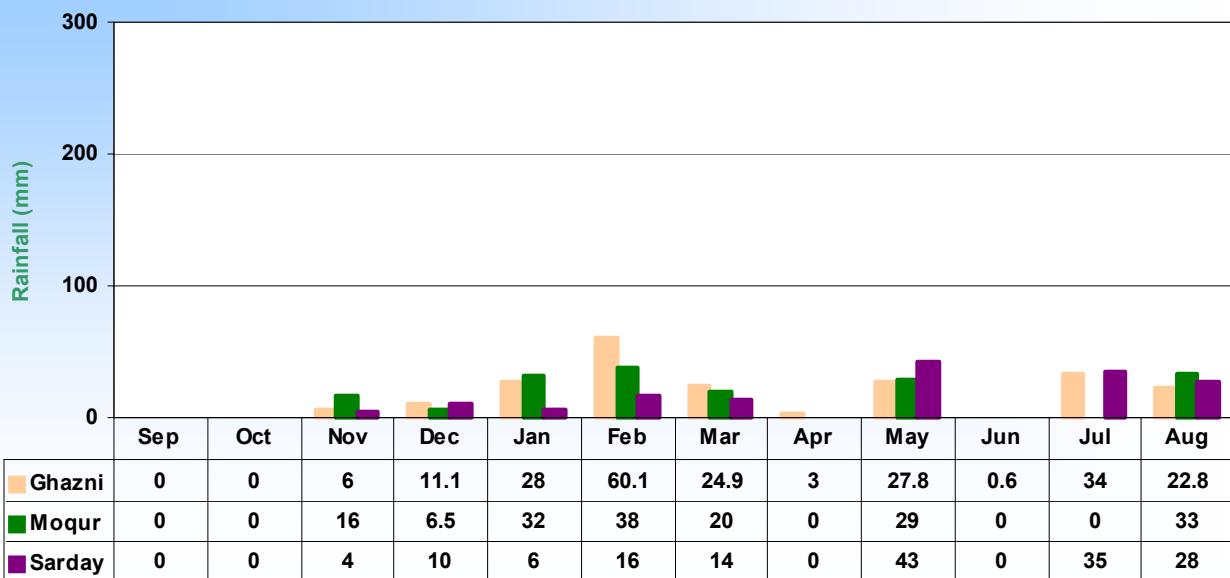
Zabul Monthly Rainfall (2009/2010)



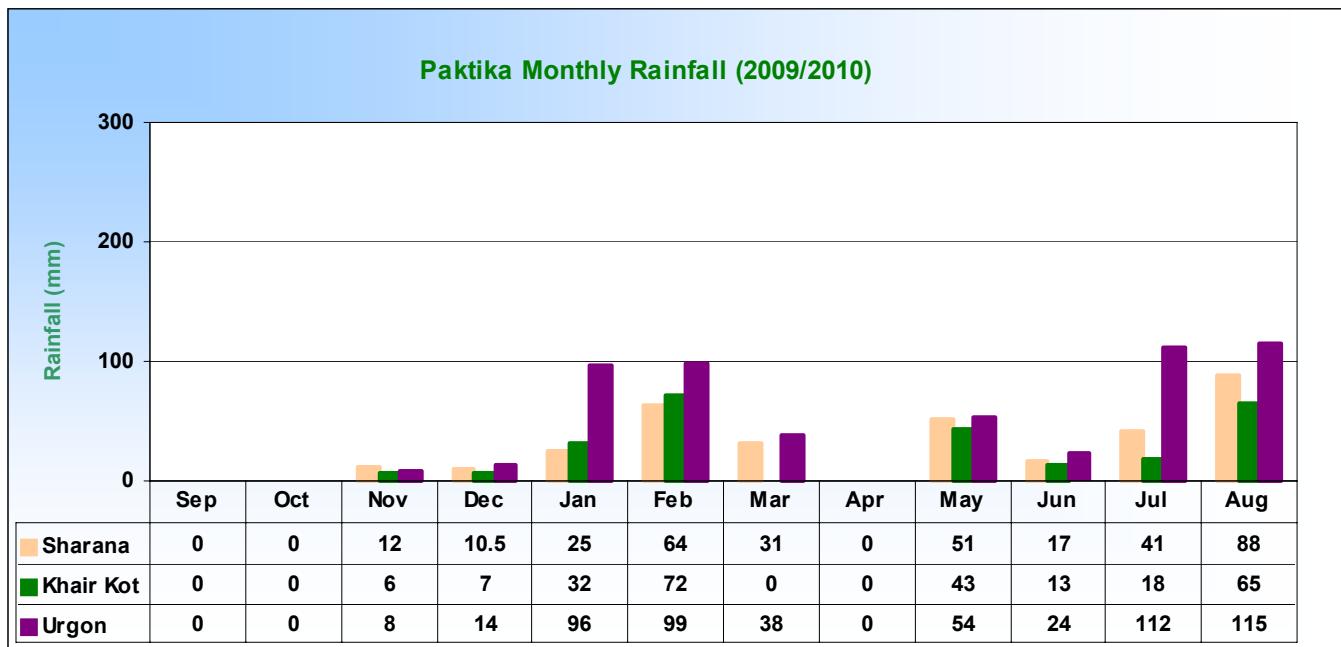
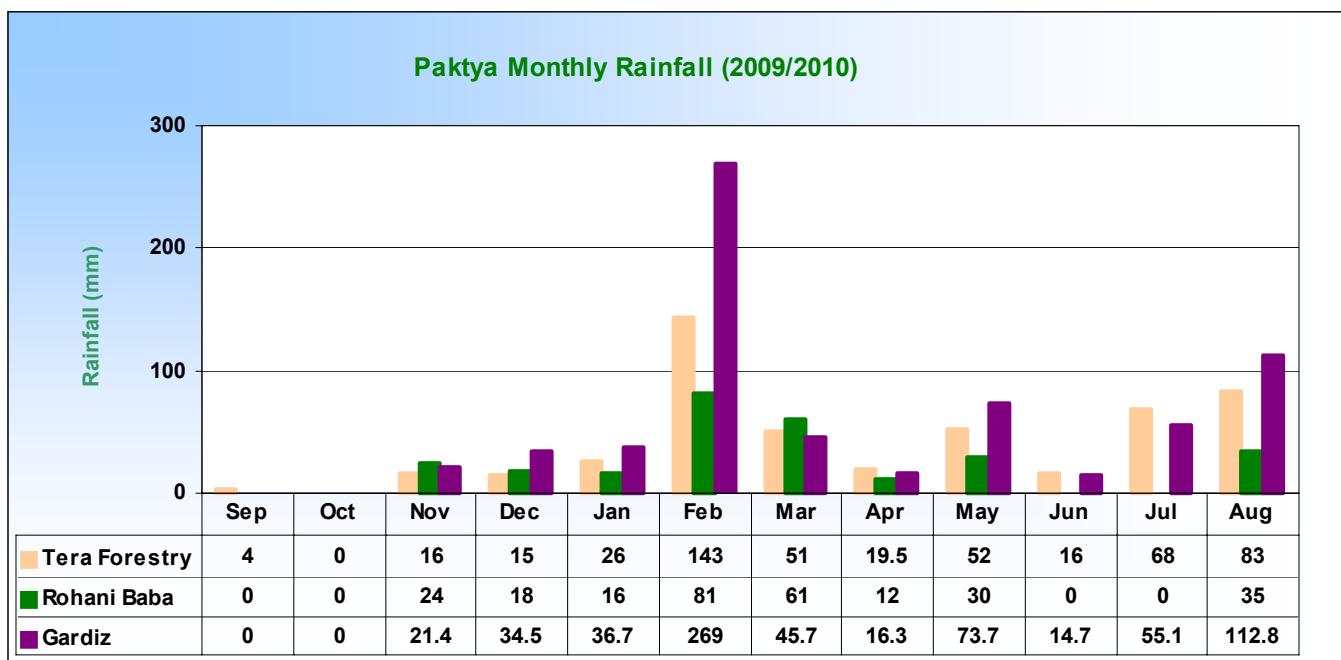
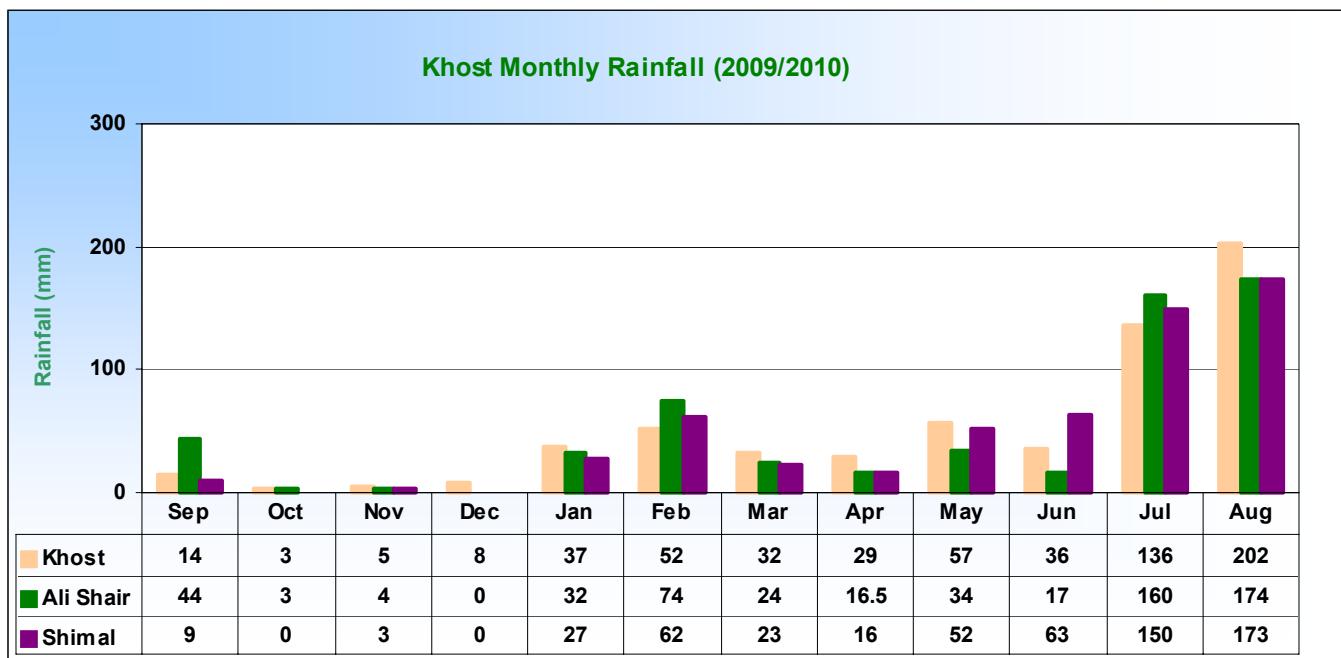
Nimroz Monthly Rainfall (2009/2010)



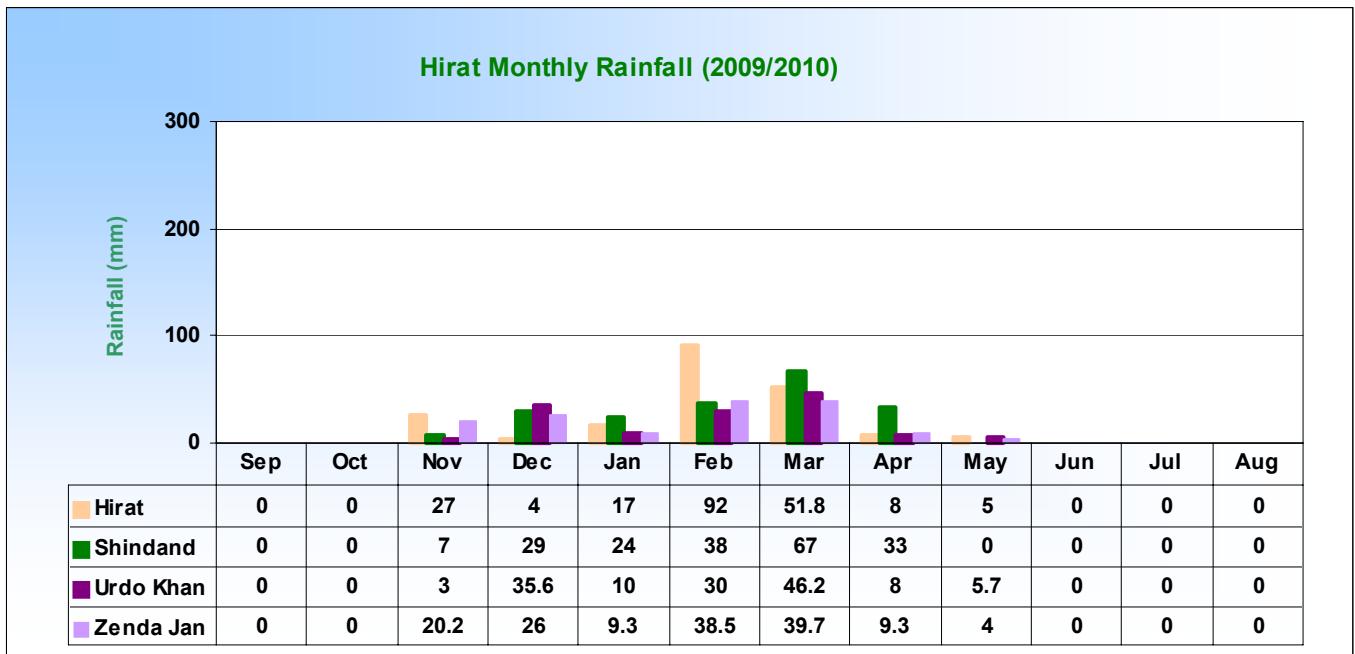
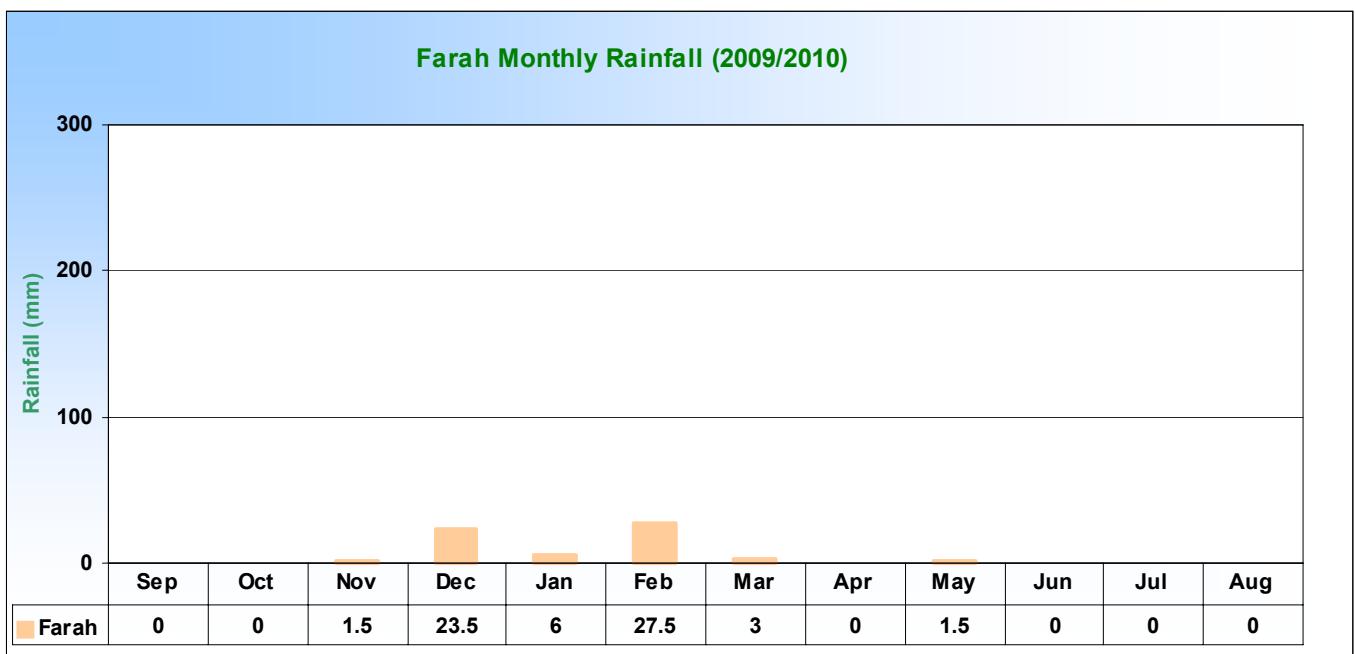
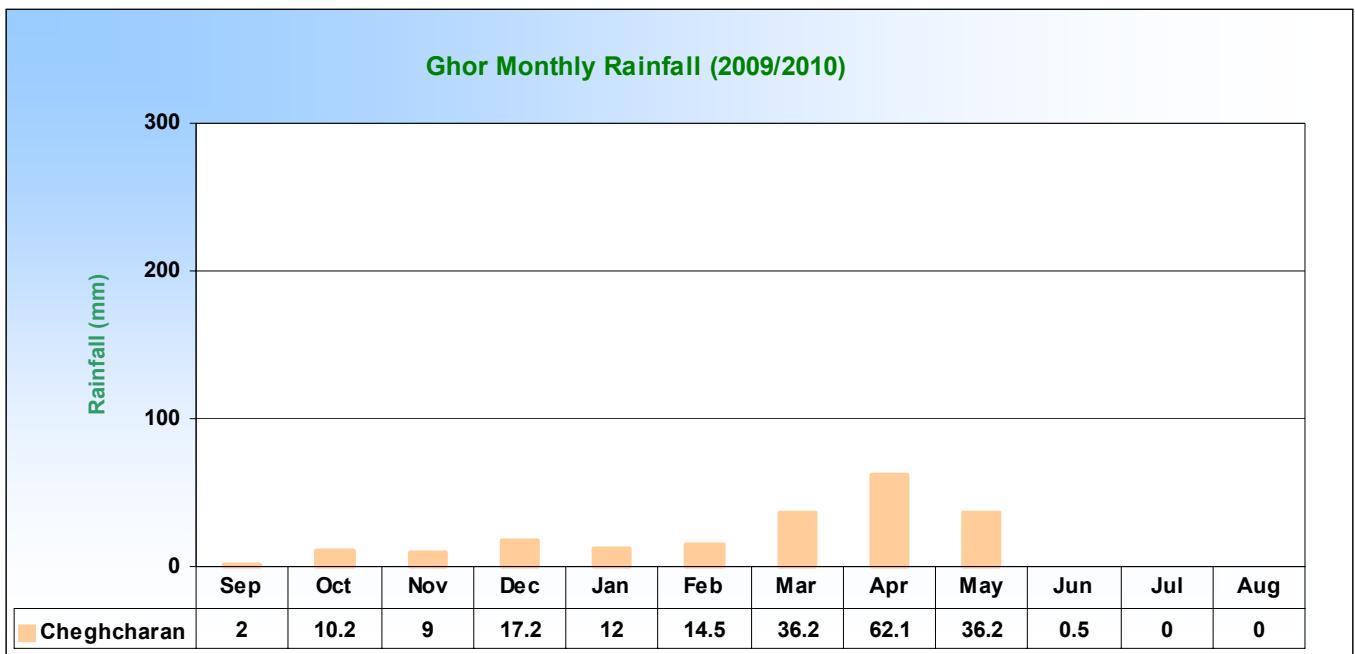
Ghazni Monthly Rainfall (2009/2010)



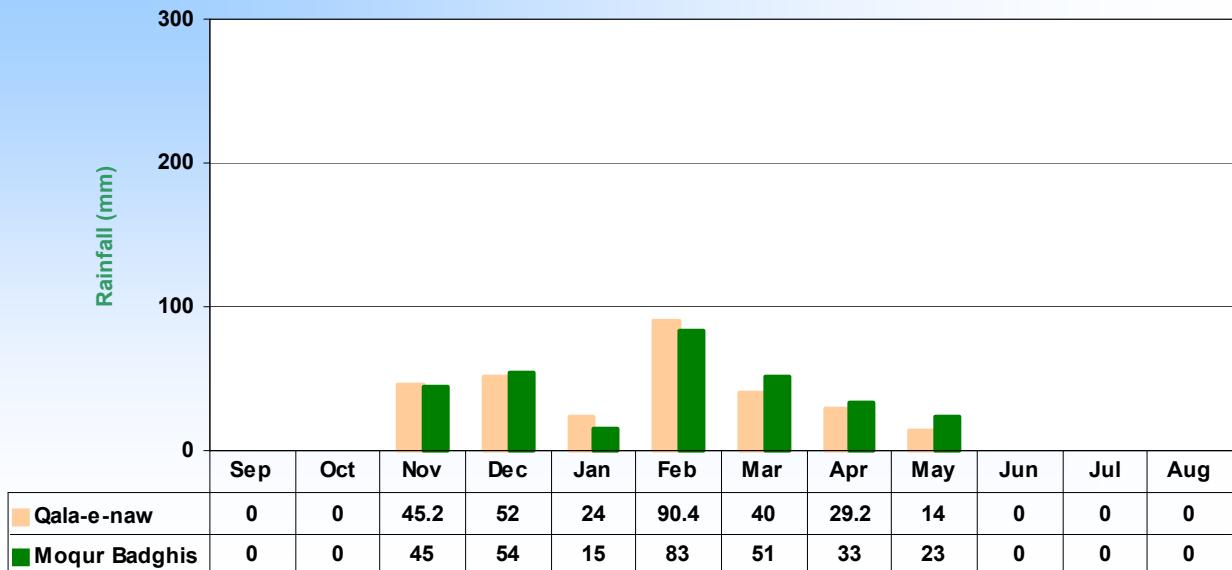
South East Region



Western Region

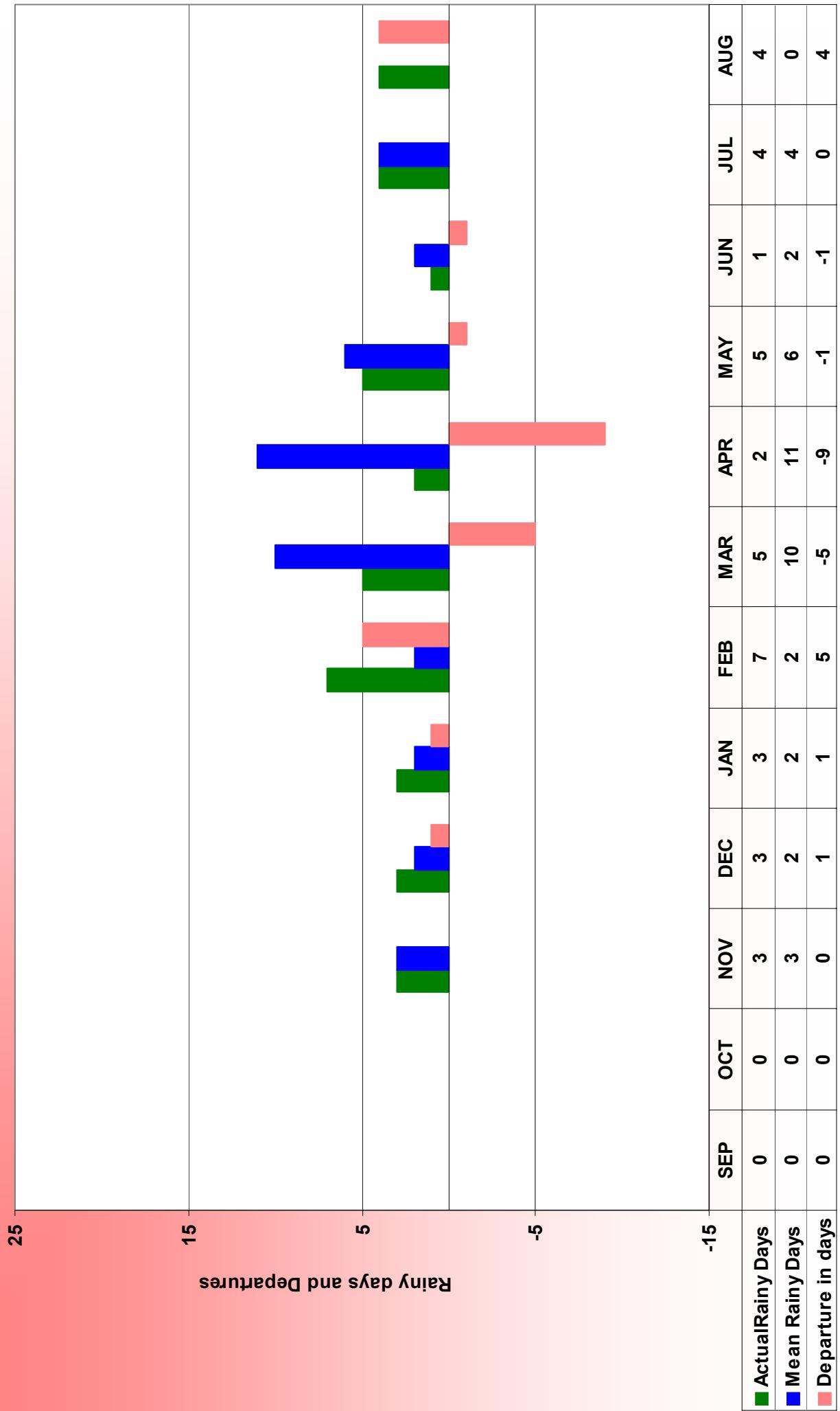


Badghis Monthly Rainfall (2009/2010)

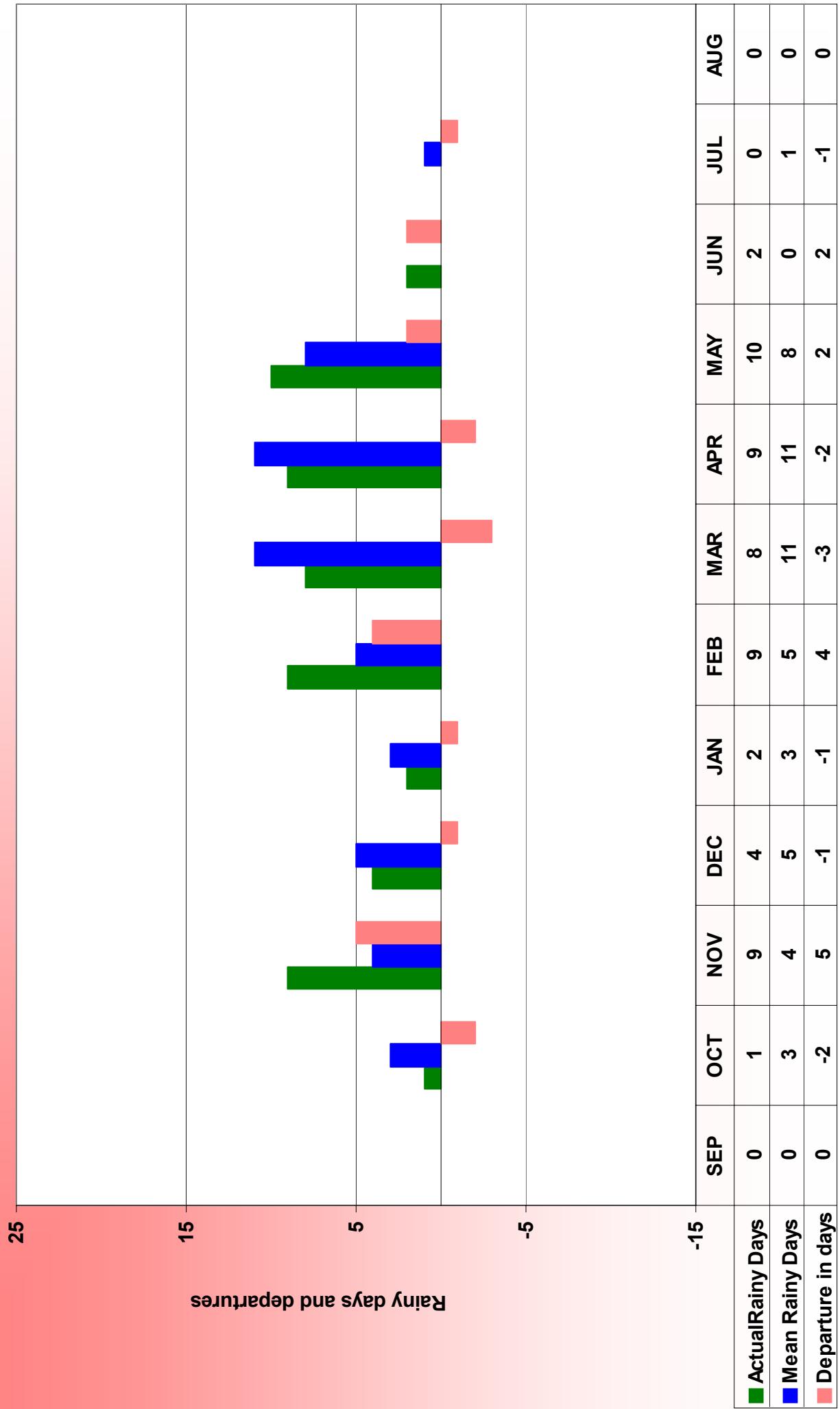


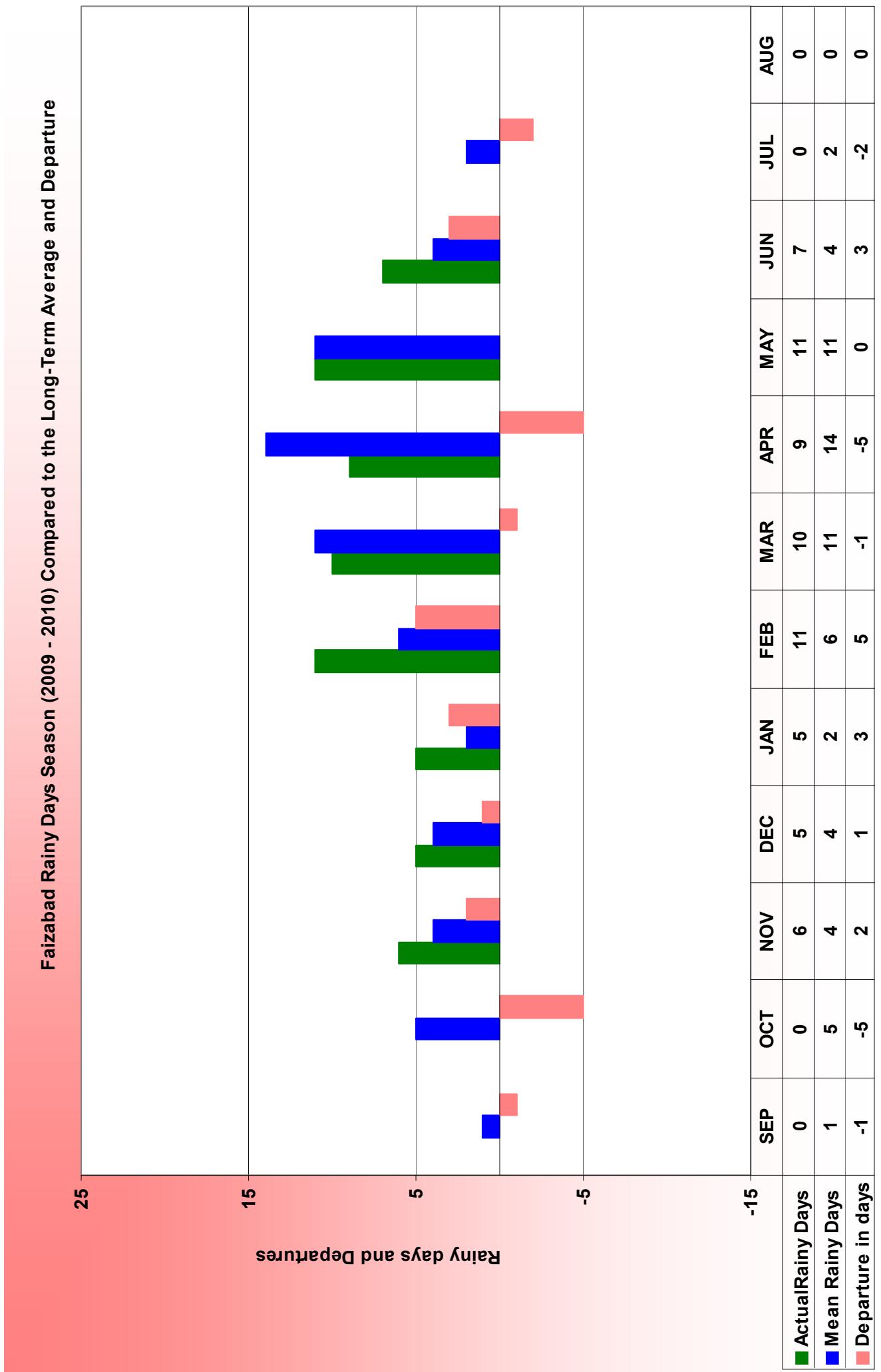
Rainy Days
Compared with
Long Term Average and Departure
Season (2009- 2010)

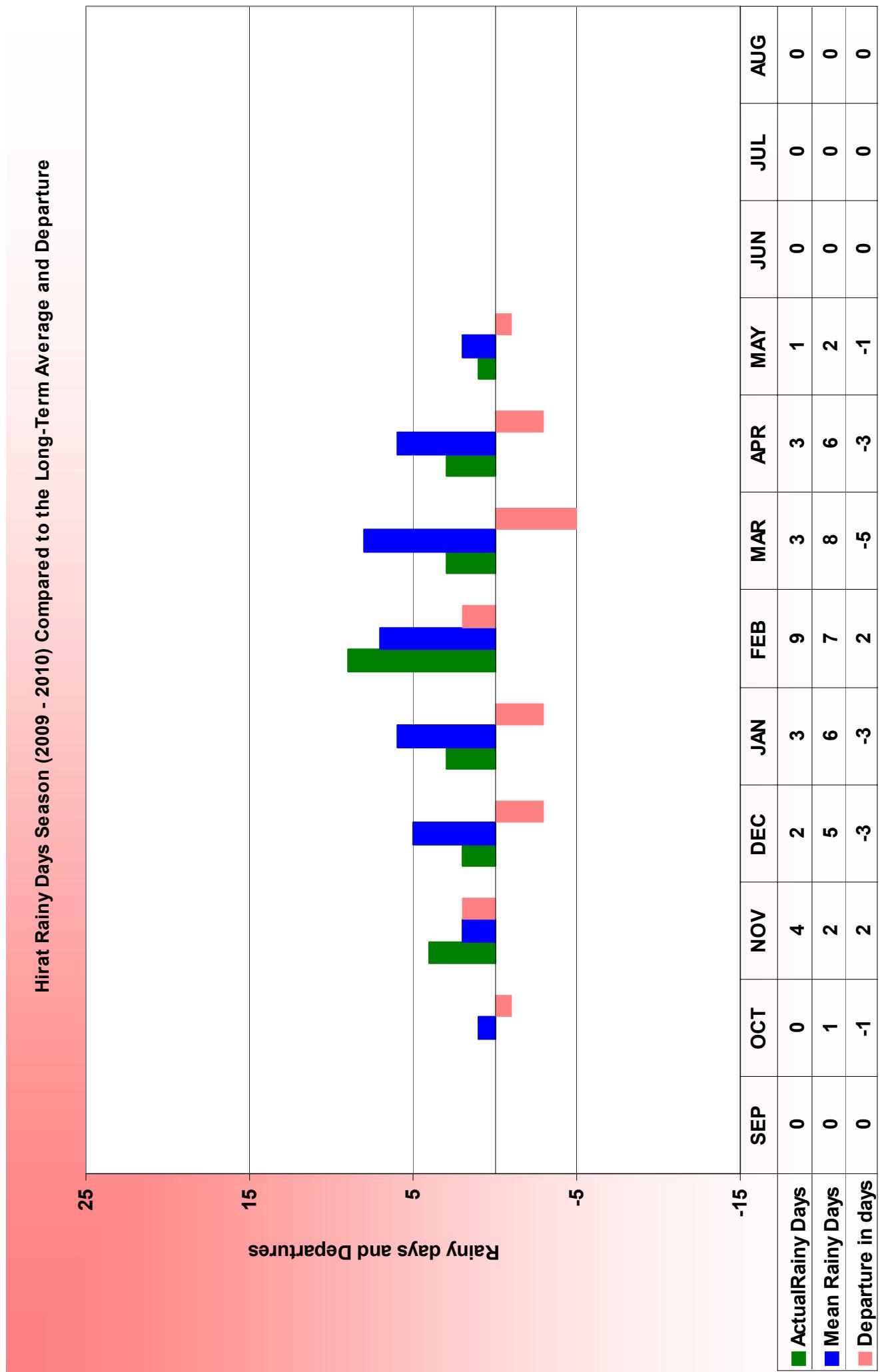
Ghazni Rainy Days Season (2009 - 2010) Compared to the Long-Term Average and Departures



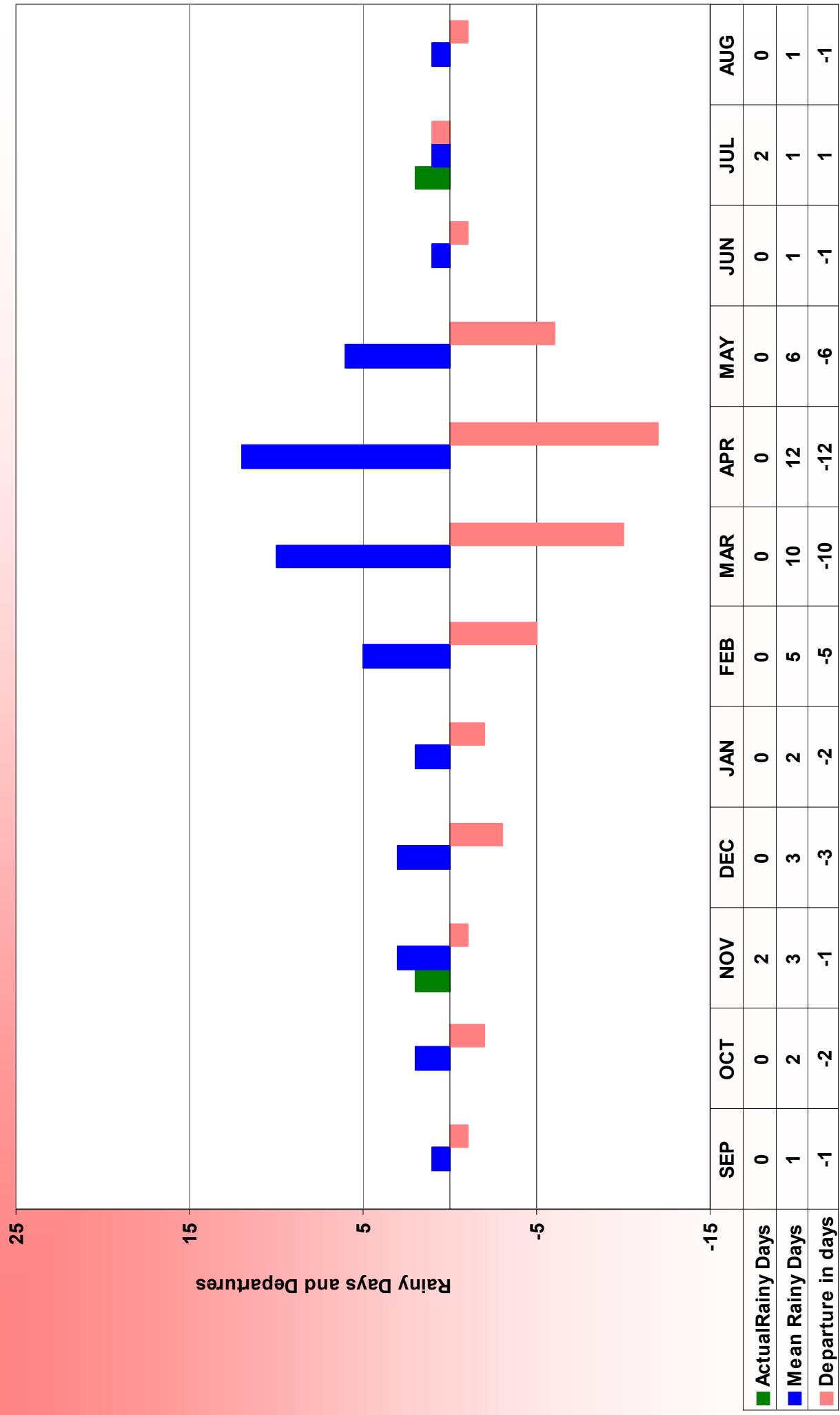
Baghlan Rainy Days Season (2009 - 2010) Compared to the Long-Term Average and Departure

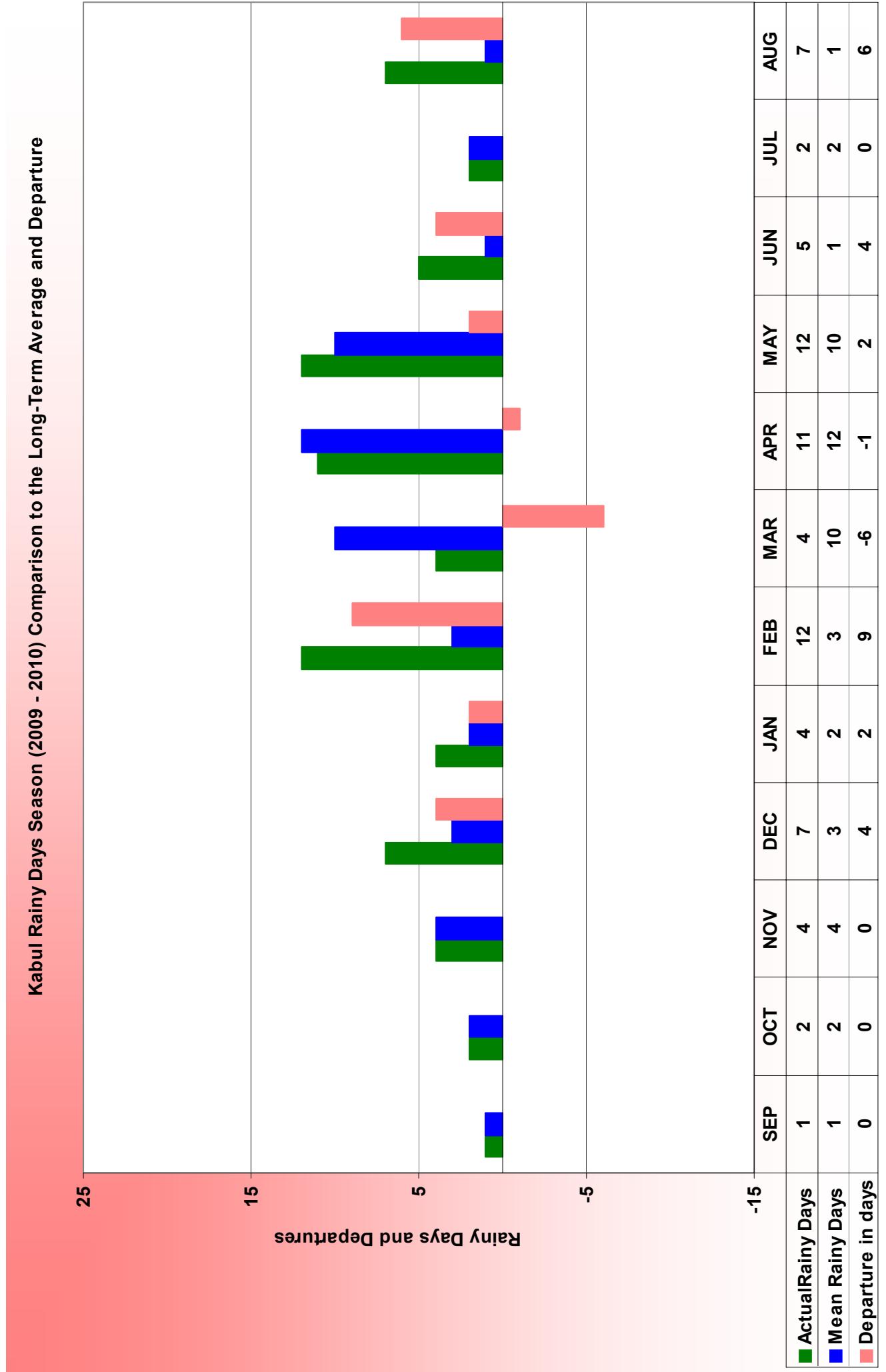


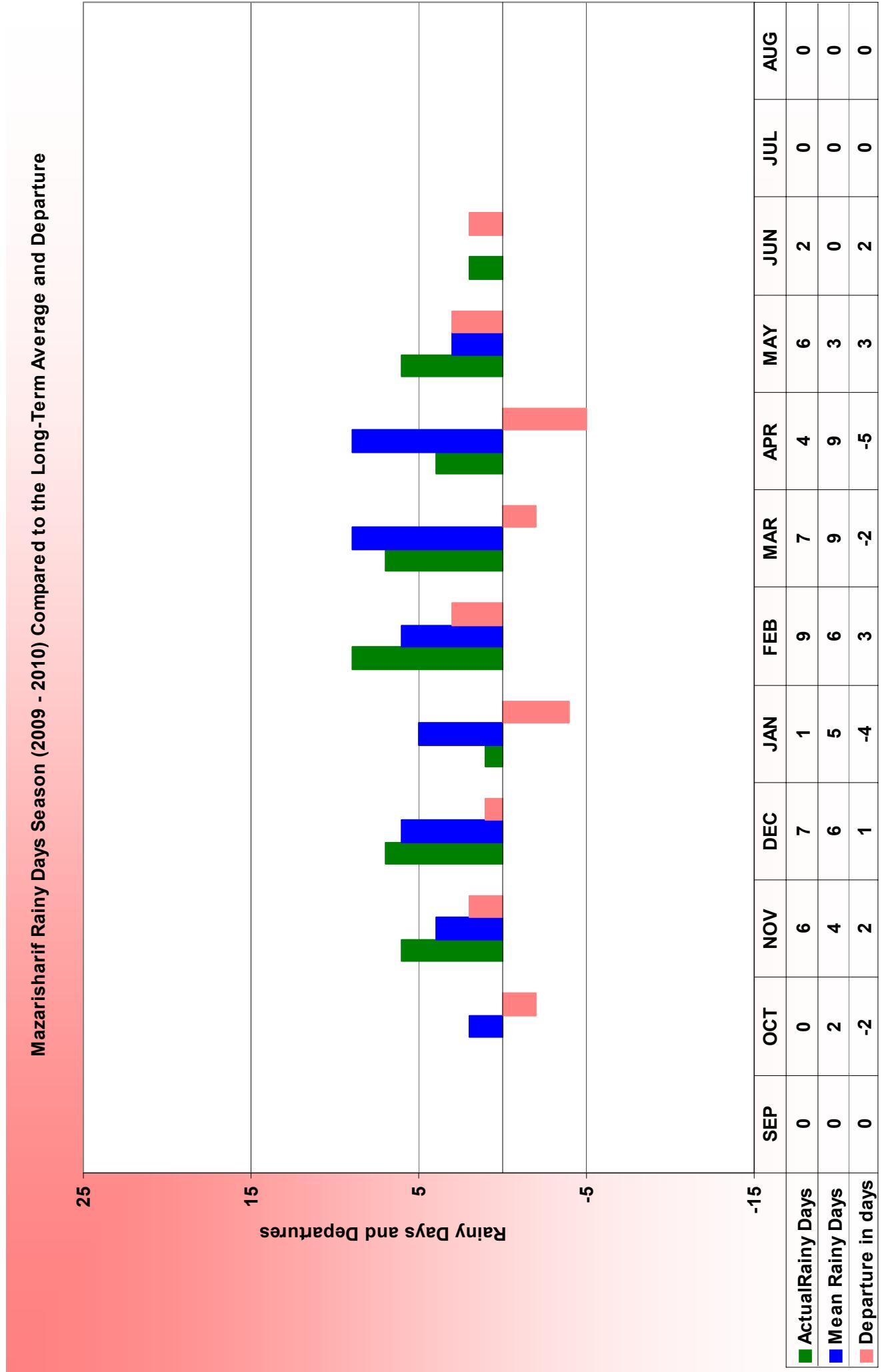


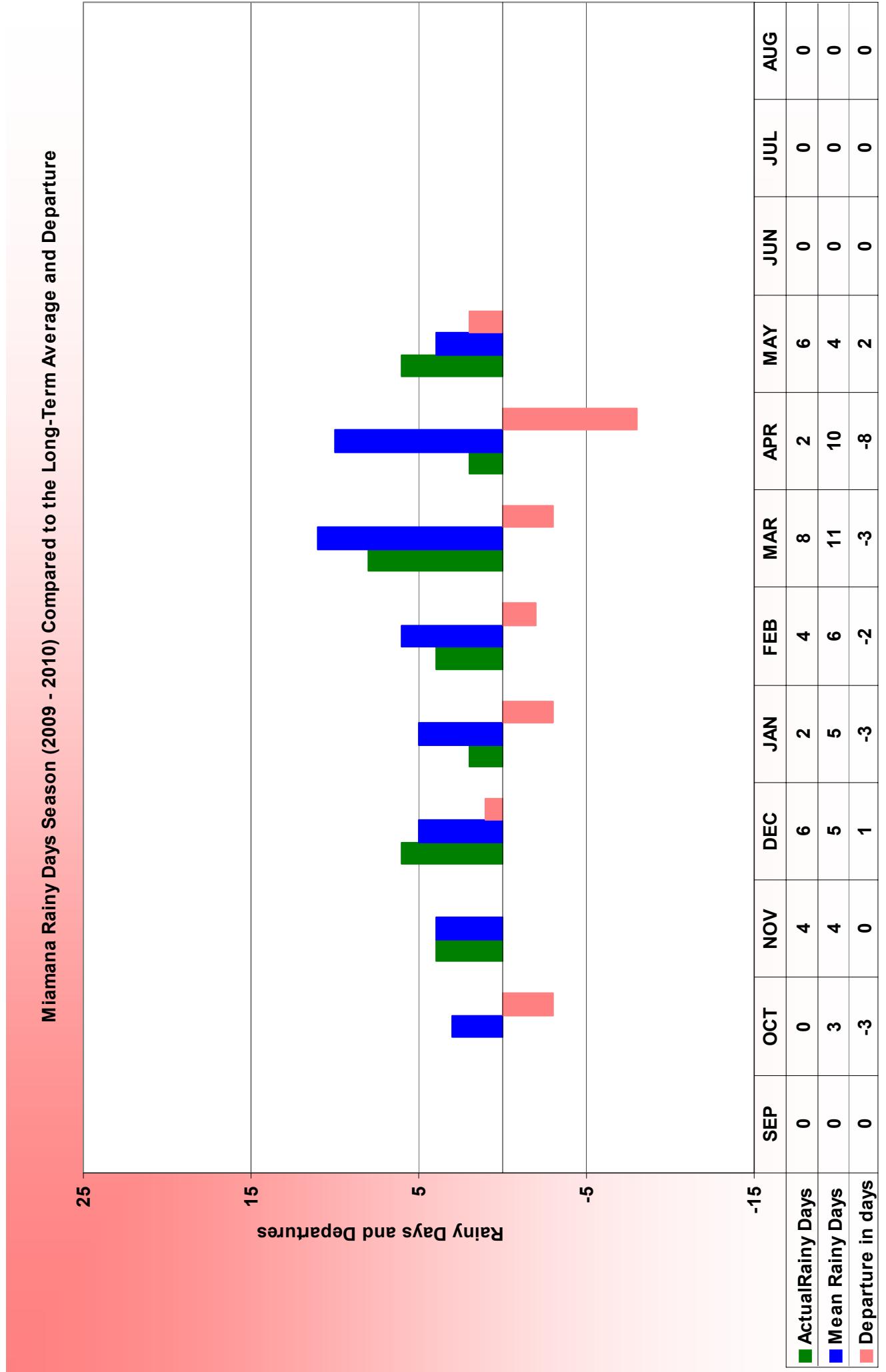


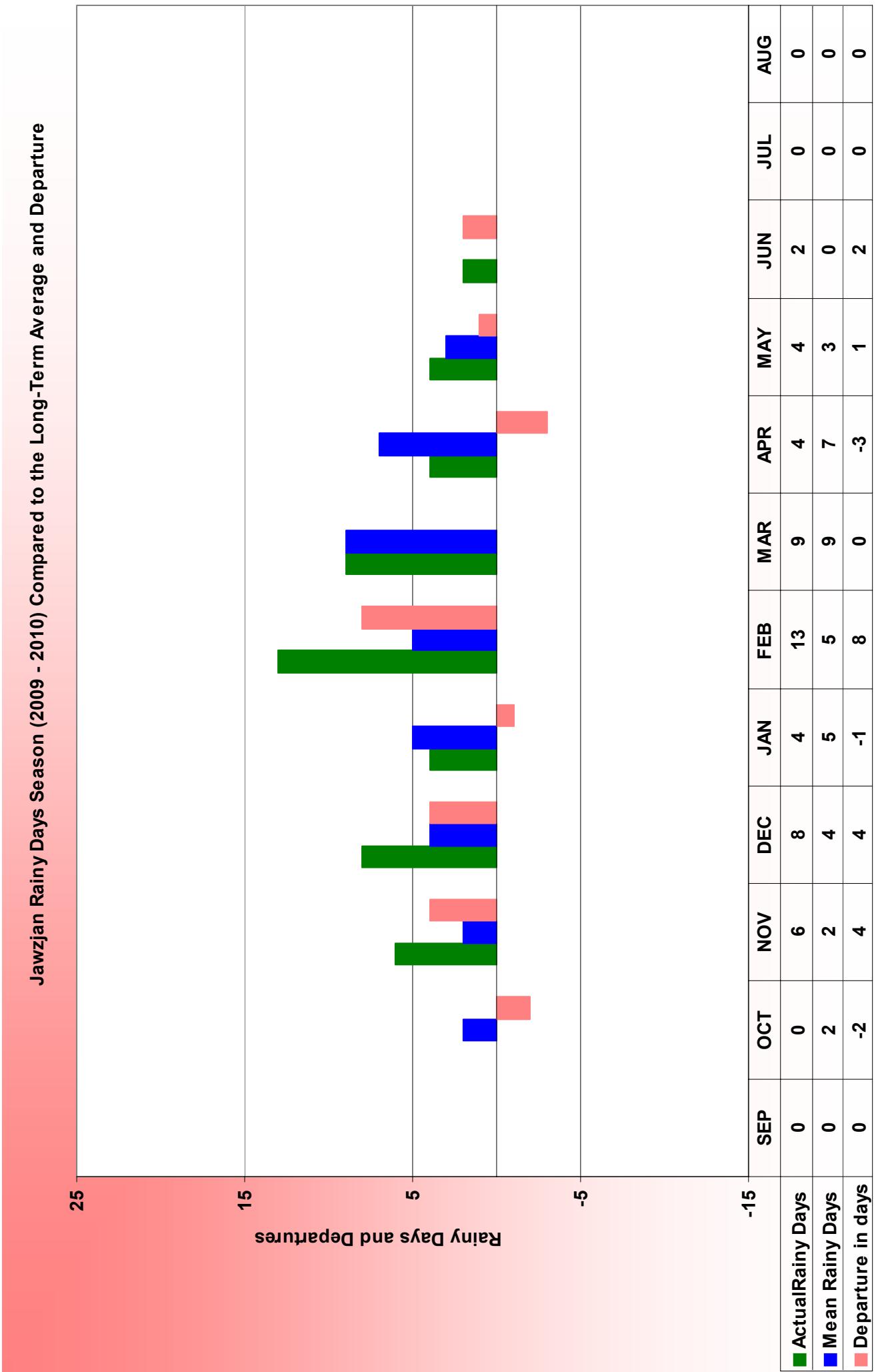
Jabulseraj Rainy Days Season (2009 - 2010) Compared to the Long-Term Average and Departure



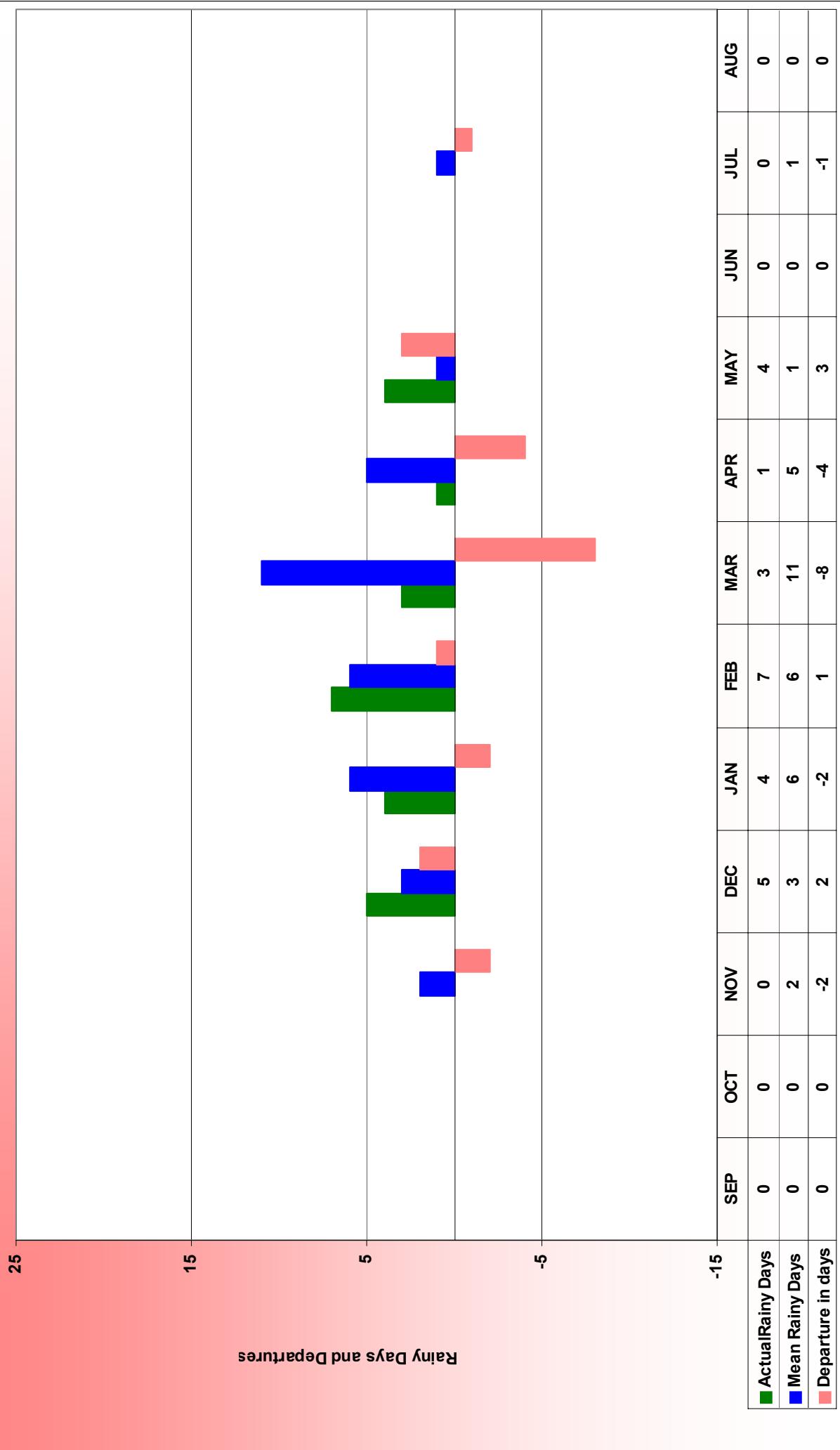




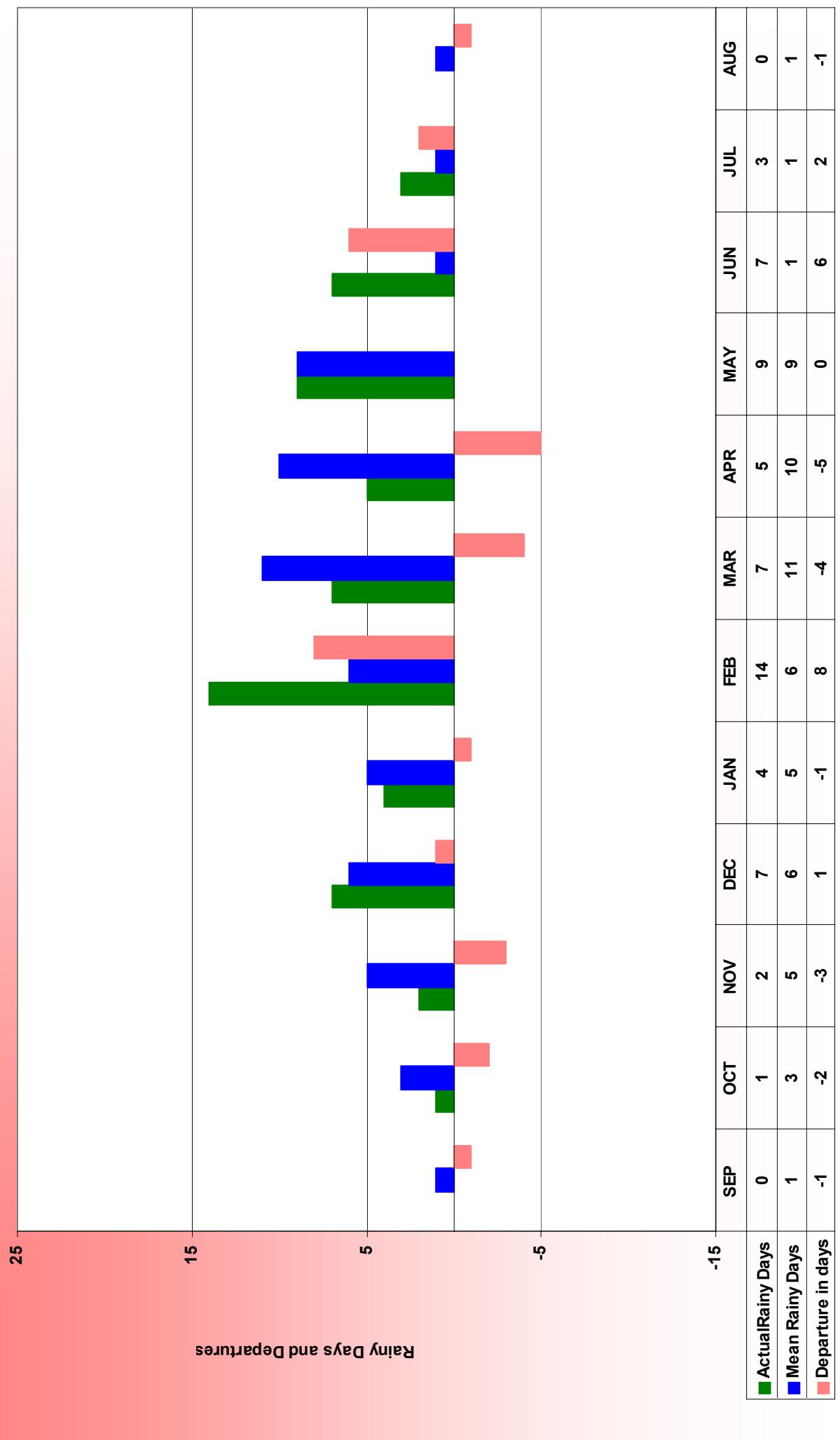




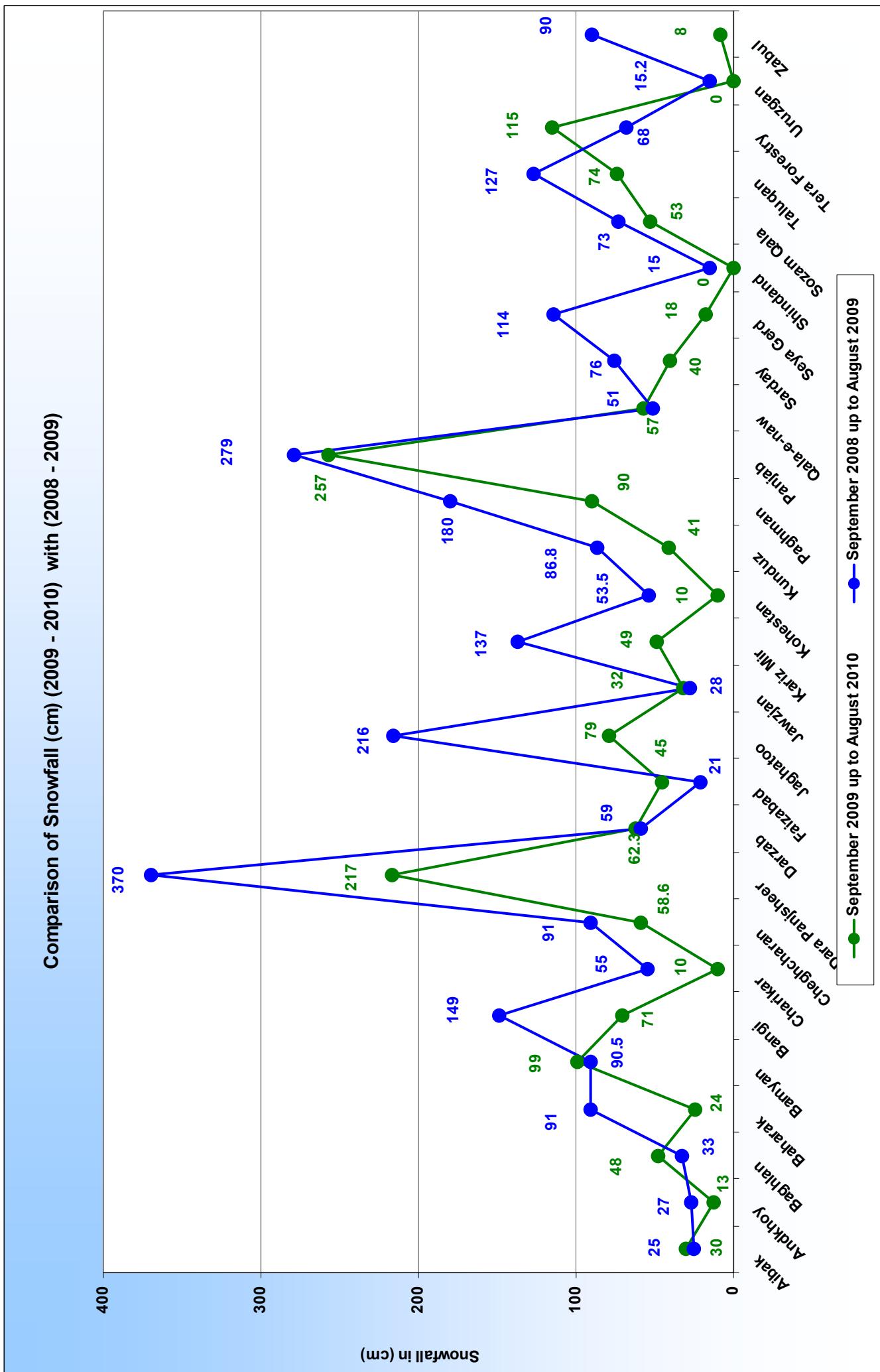
Kandahar Rainy Days Season (2009 - 2010) Compared to the Long-Term Average and Departure



Kunduz Rainy Days Season (2009 - 2010) Compared to the Long-Term Average and Departure

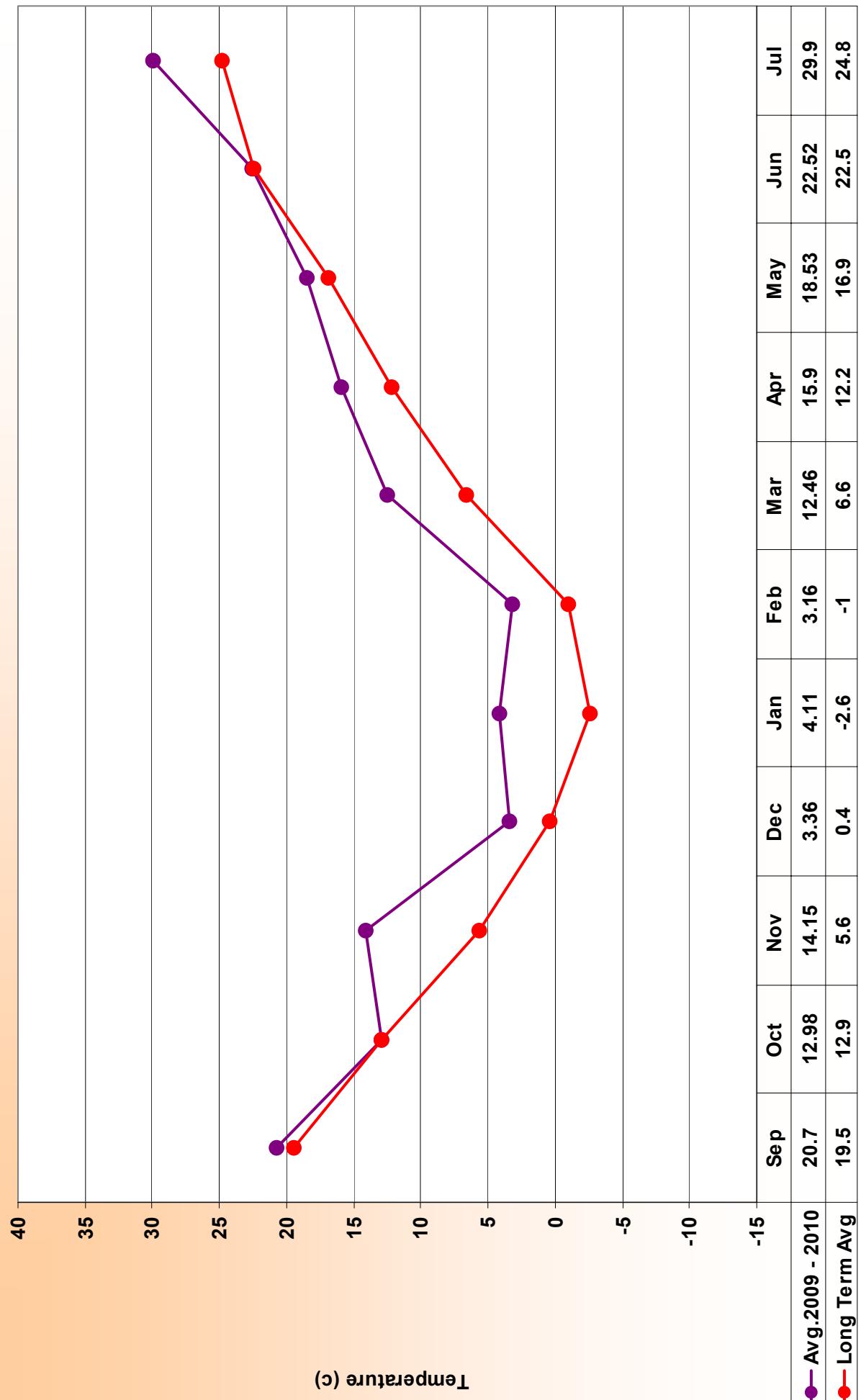


**Snowfall (cm) Current Year
Compared with
Last Year
Agricultural Season (2009- 2010)**

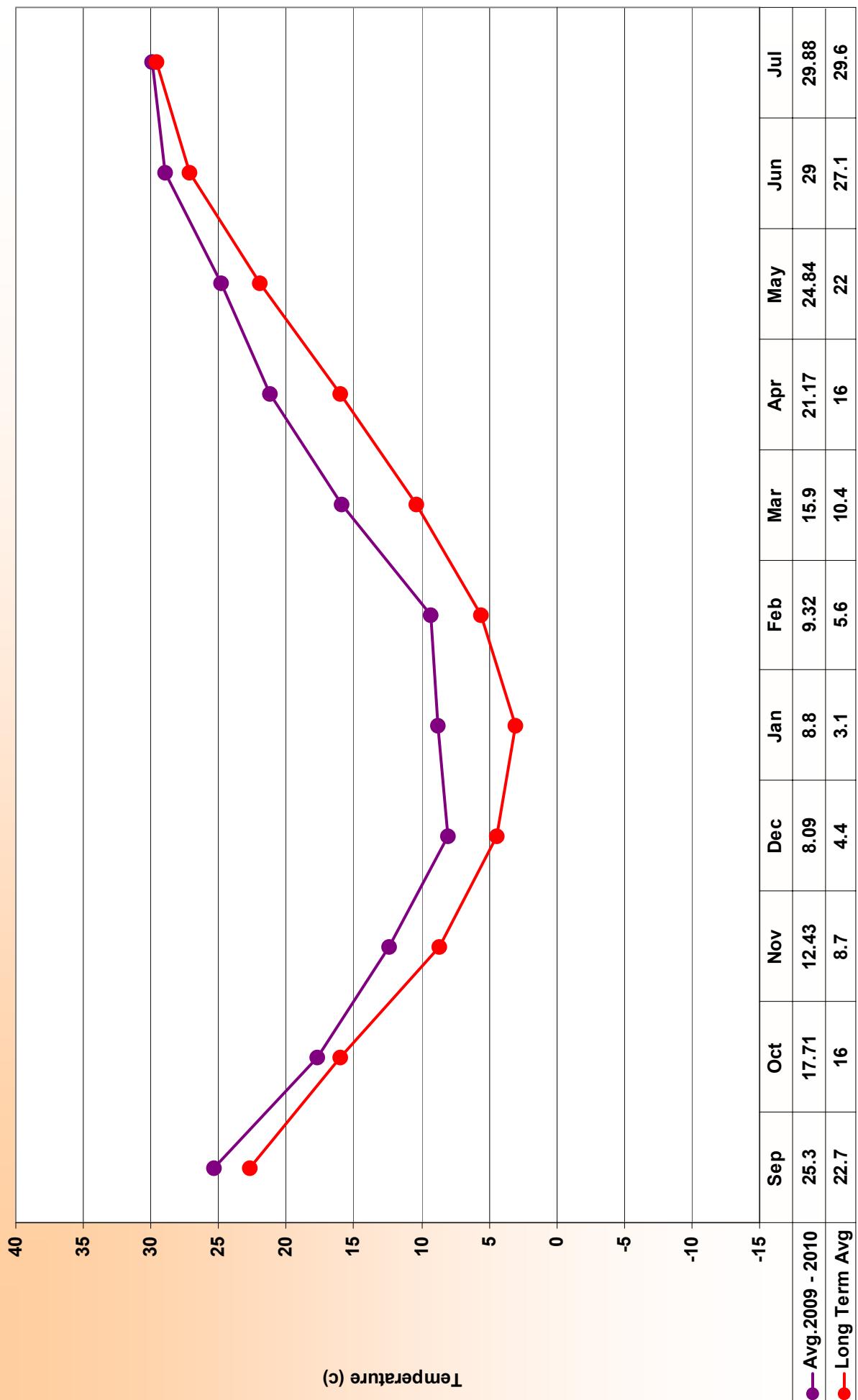


Average Temperature (2009-2010)
Compared with
Long Term Average

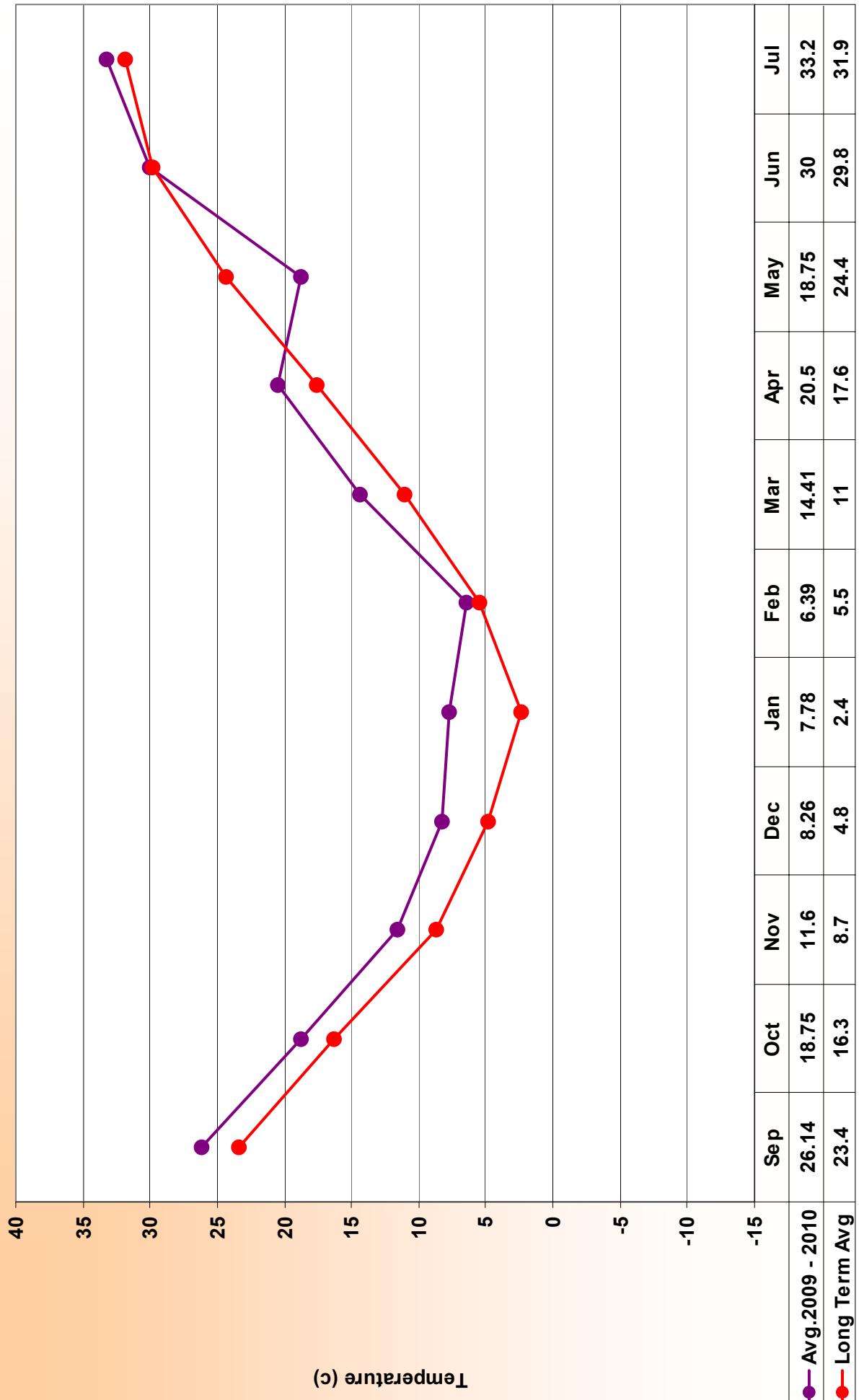
Kabul Average Temperature (2009 - 2010) Compared to the Long Term Average



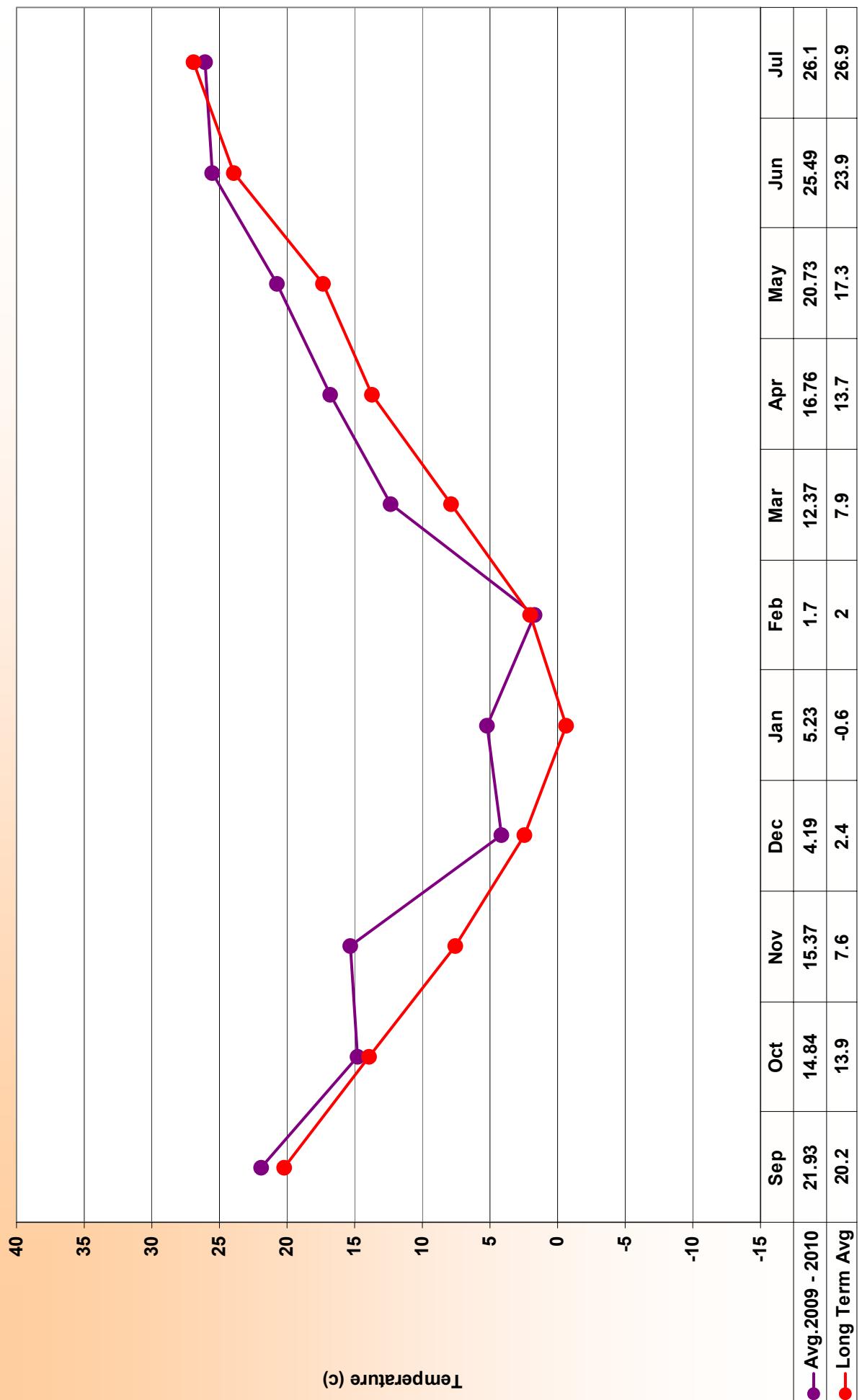
Hirat Average Temperature (2009 - 2010) Compared to the Long Term Average



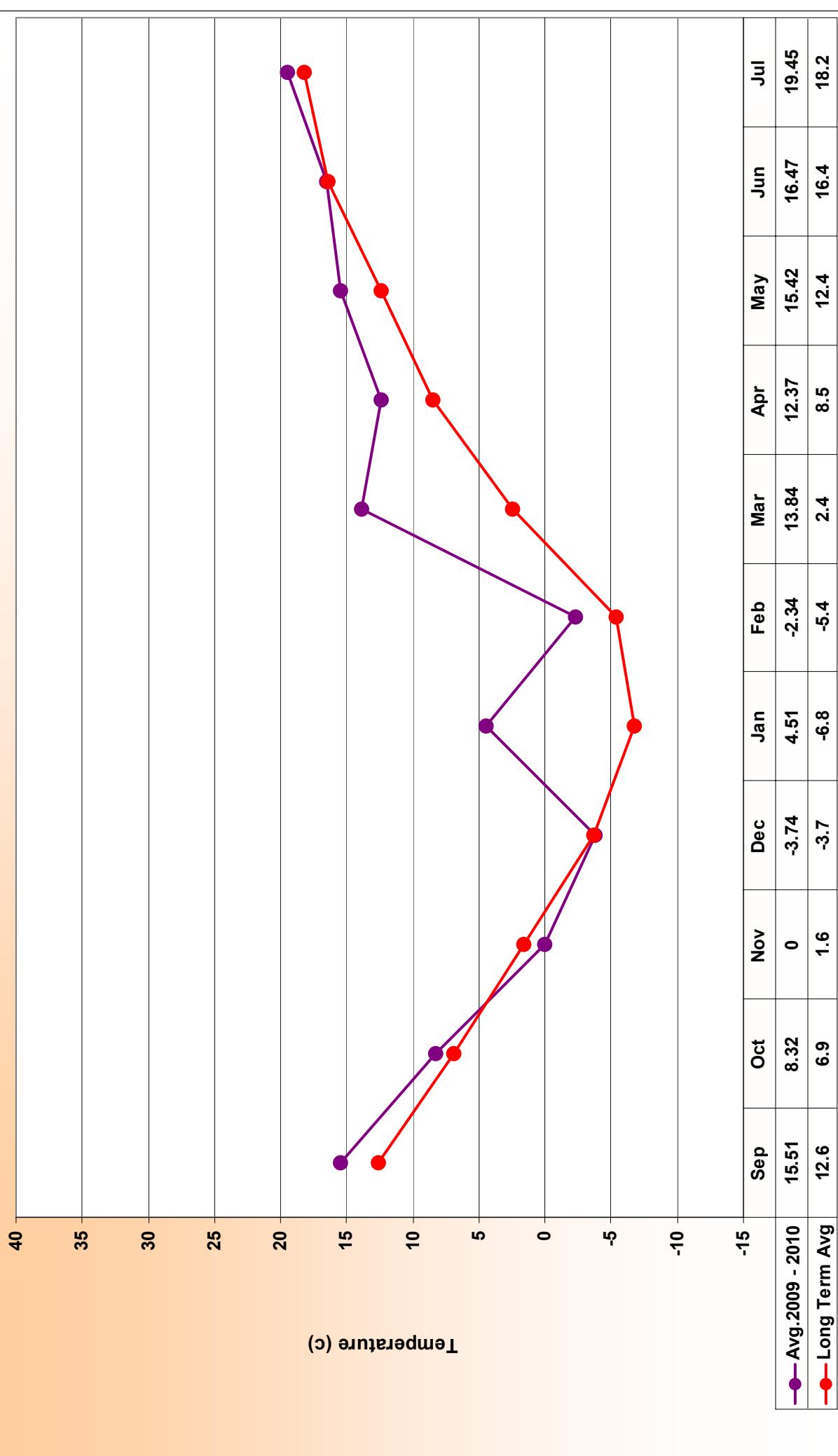
Mazar-i-Sharif Average Temperature (2009 - 2010) Compared to the Long Term Average



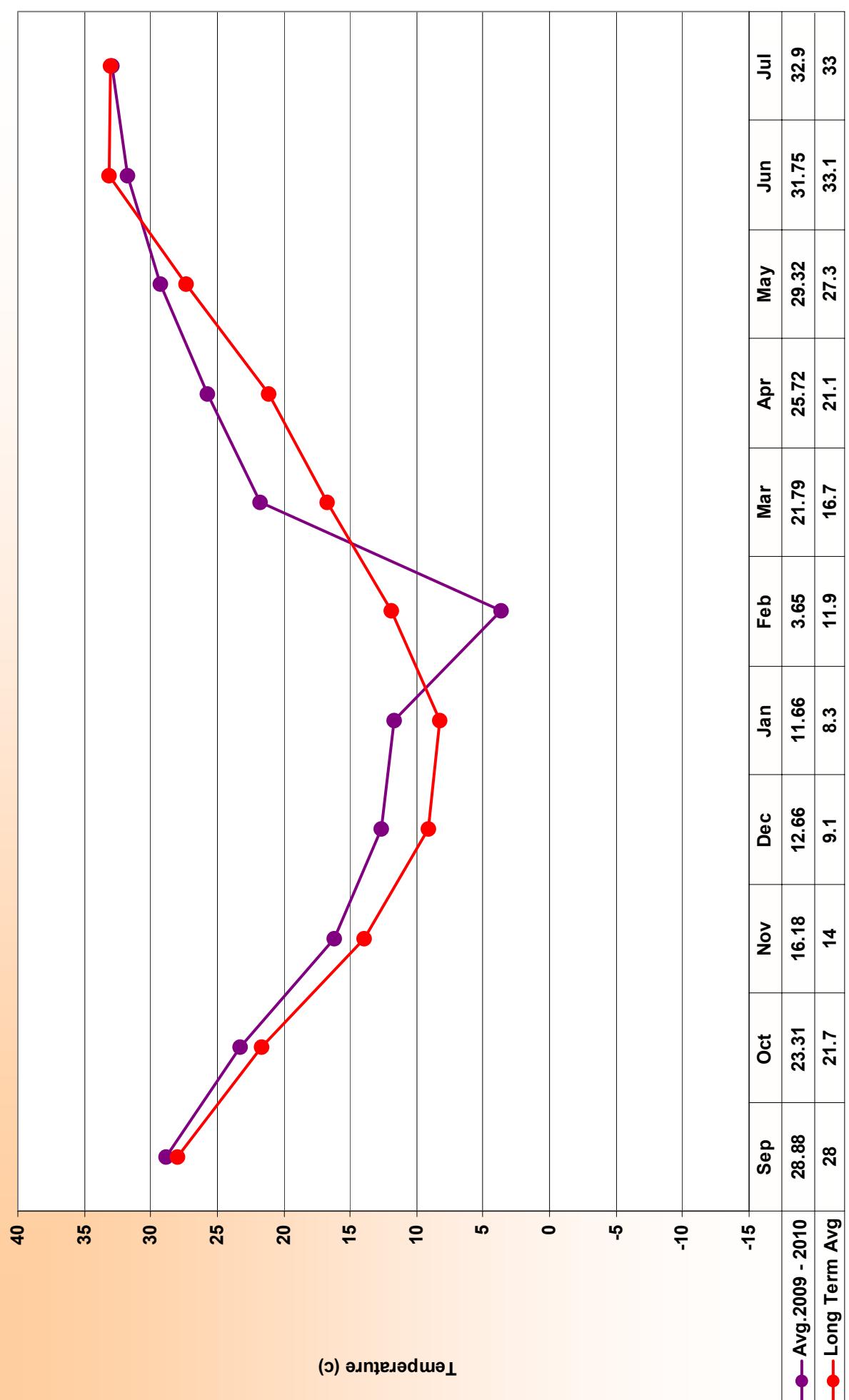
Faizabad Average Temperature (2009 - 2010) Compared to the Long Term Average



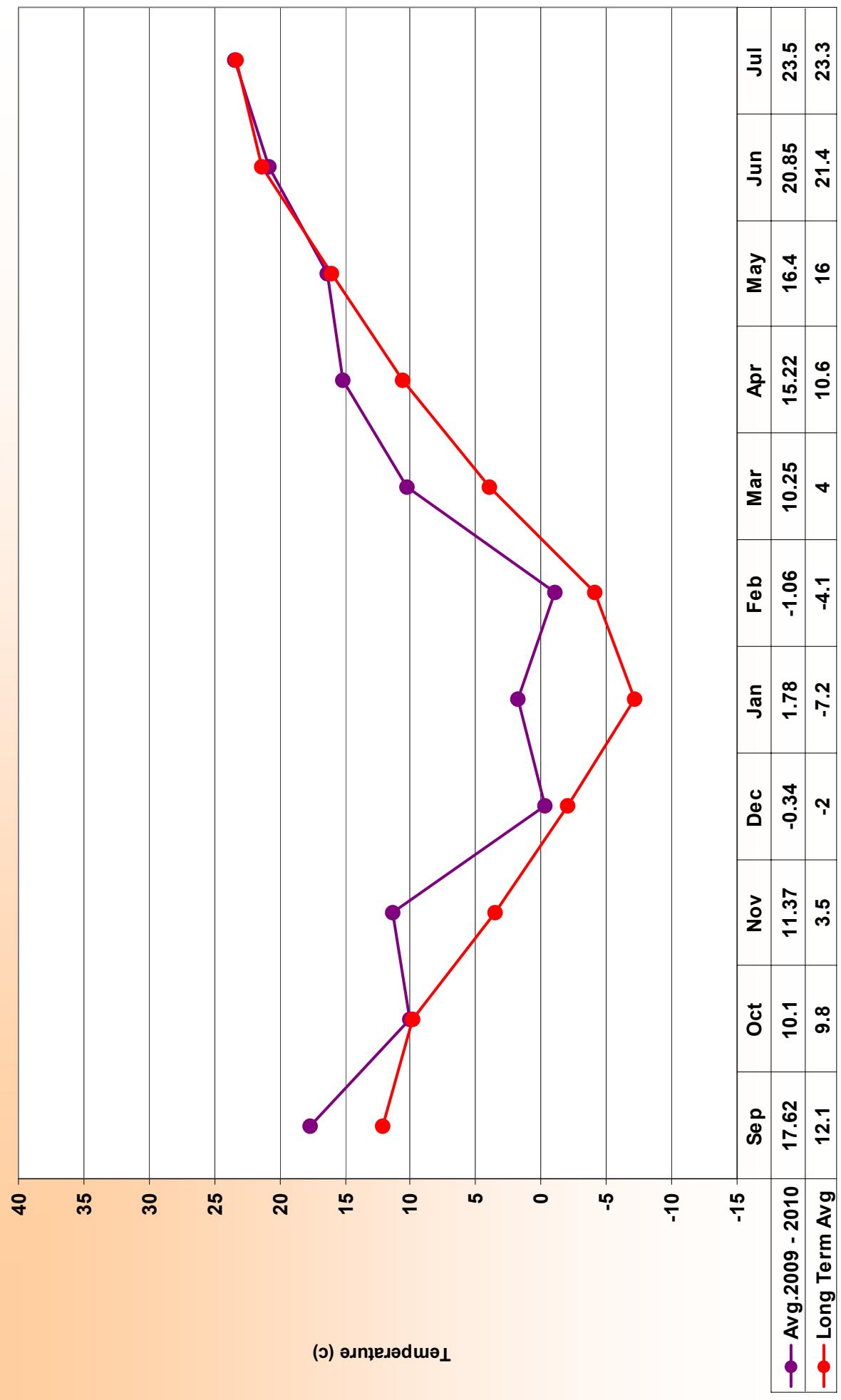
Bamyan Average Temperature (2009 - 2010) Compared to the Long Term Average



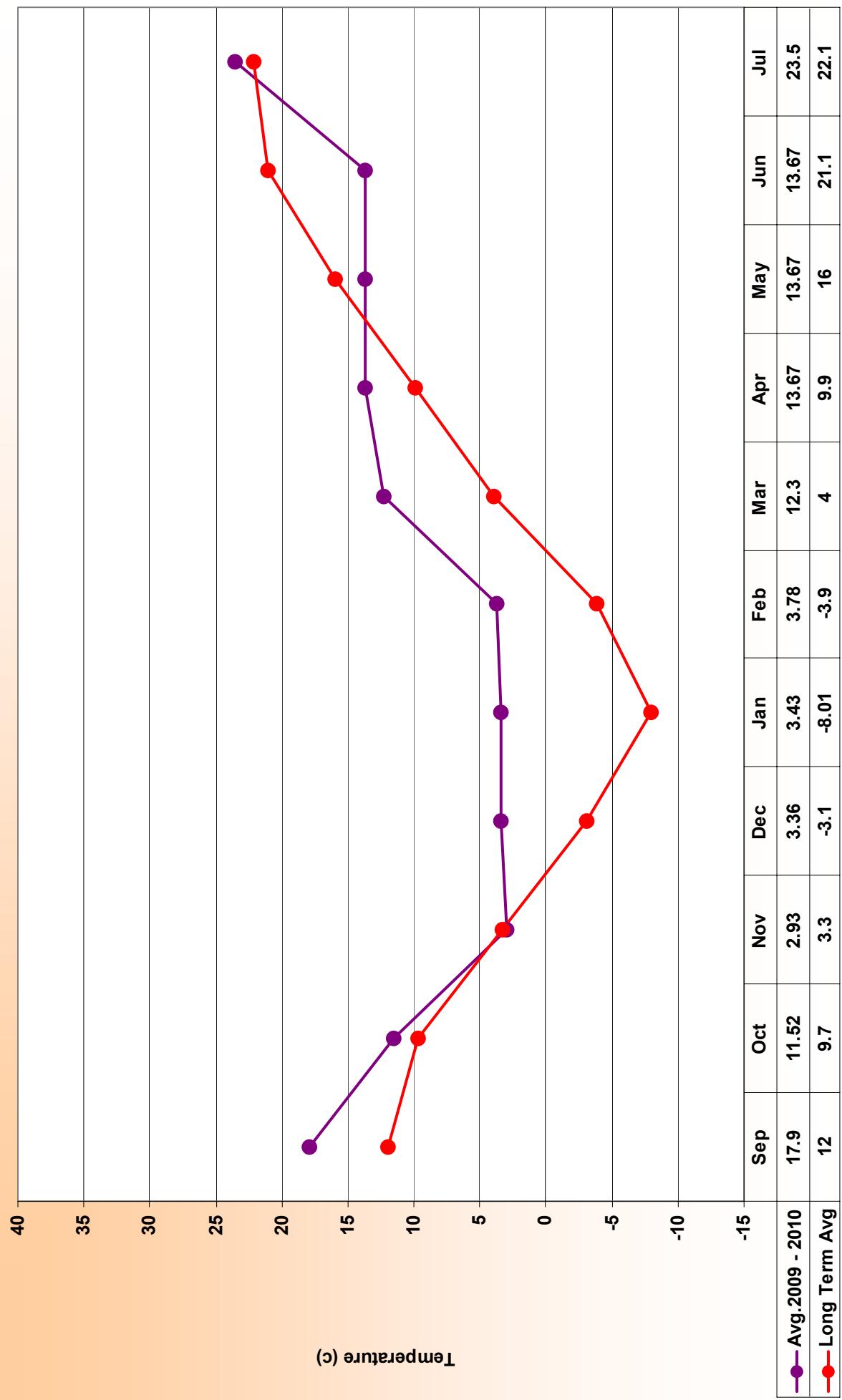
Jalalabad Average Temperature (2009 - 2010) Compared to the Long Term Average



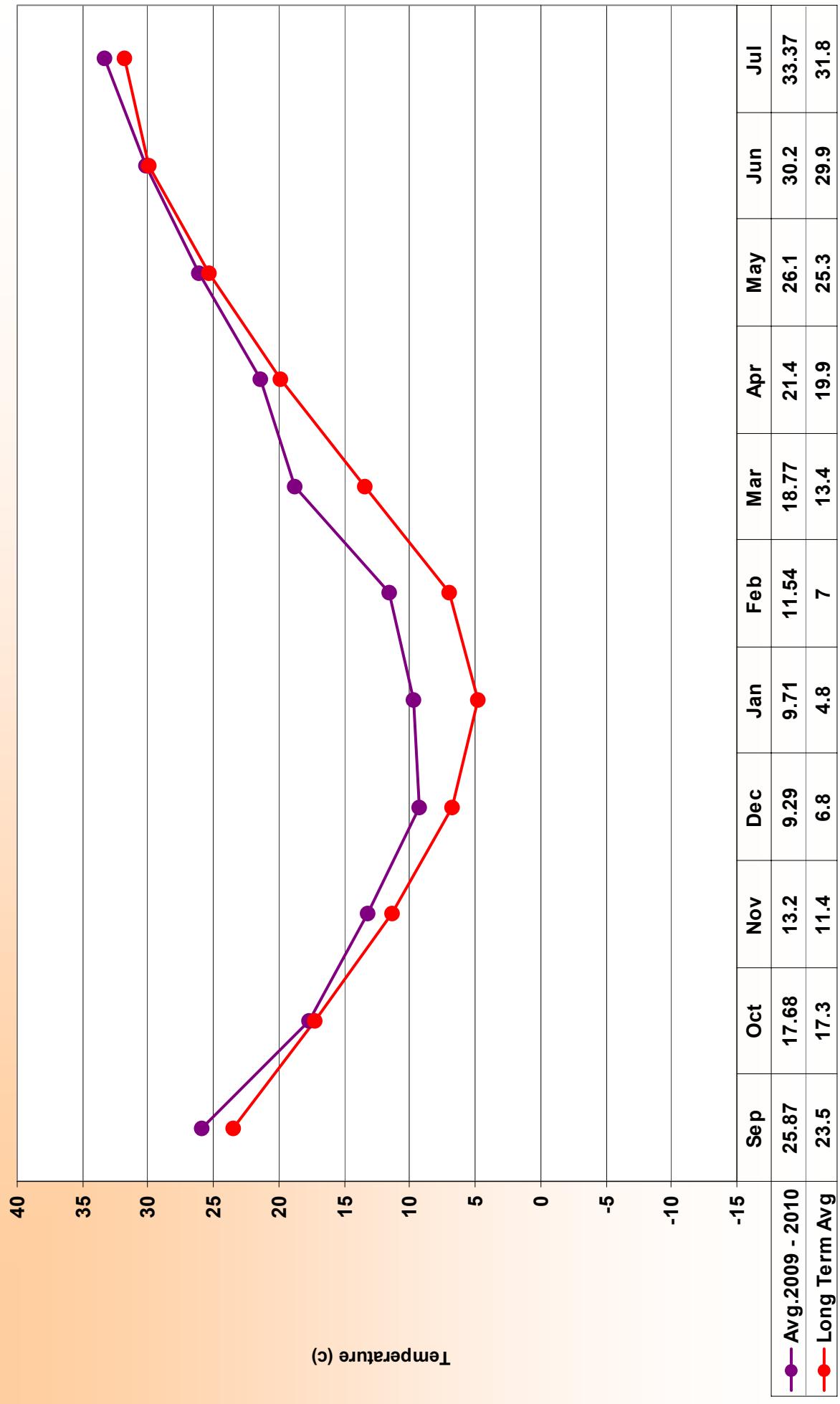
Ghazni Average Temperature (2009 - 2010) Compared to the Long Term Average



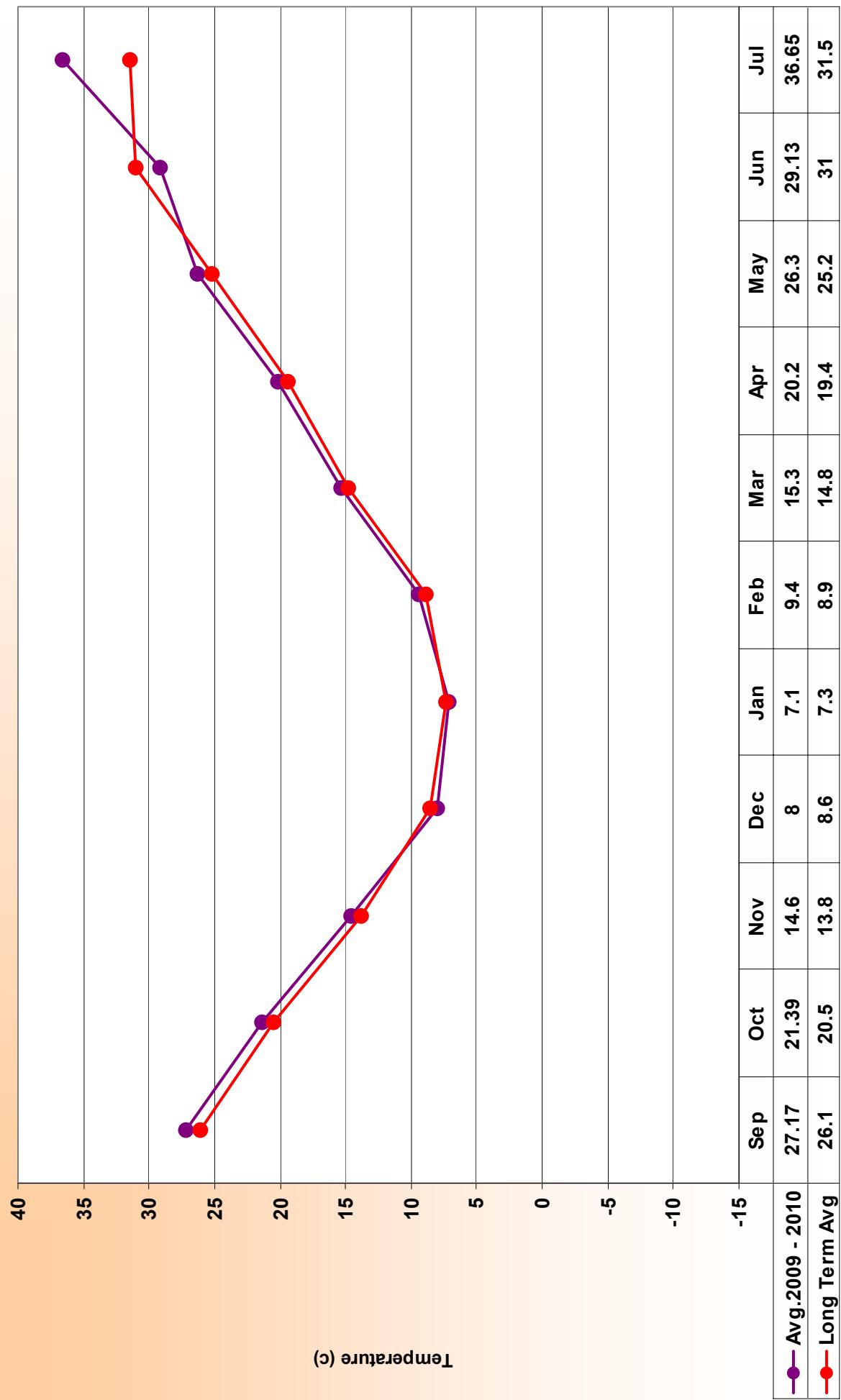
Sarday Average Temperature (2009 - 2010) Compared to the Long Term Average



Kandahar Average Temperature (2009 - 2010) Compared to the Long Term Average



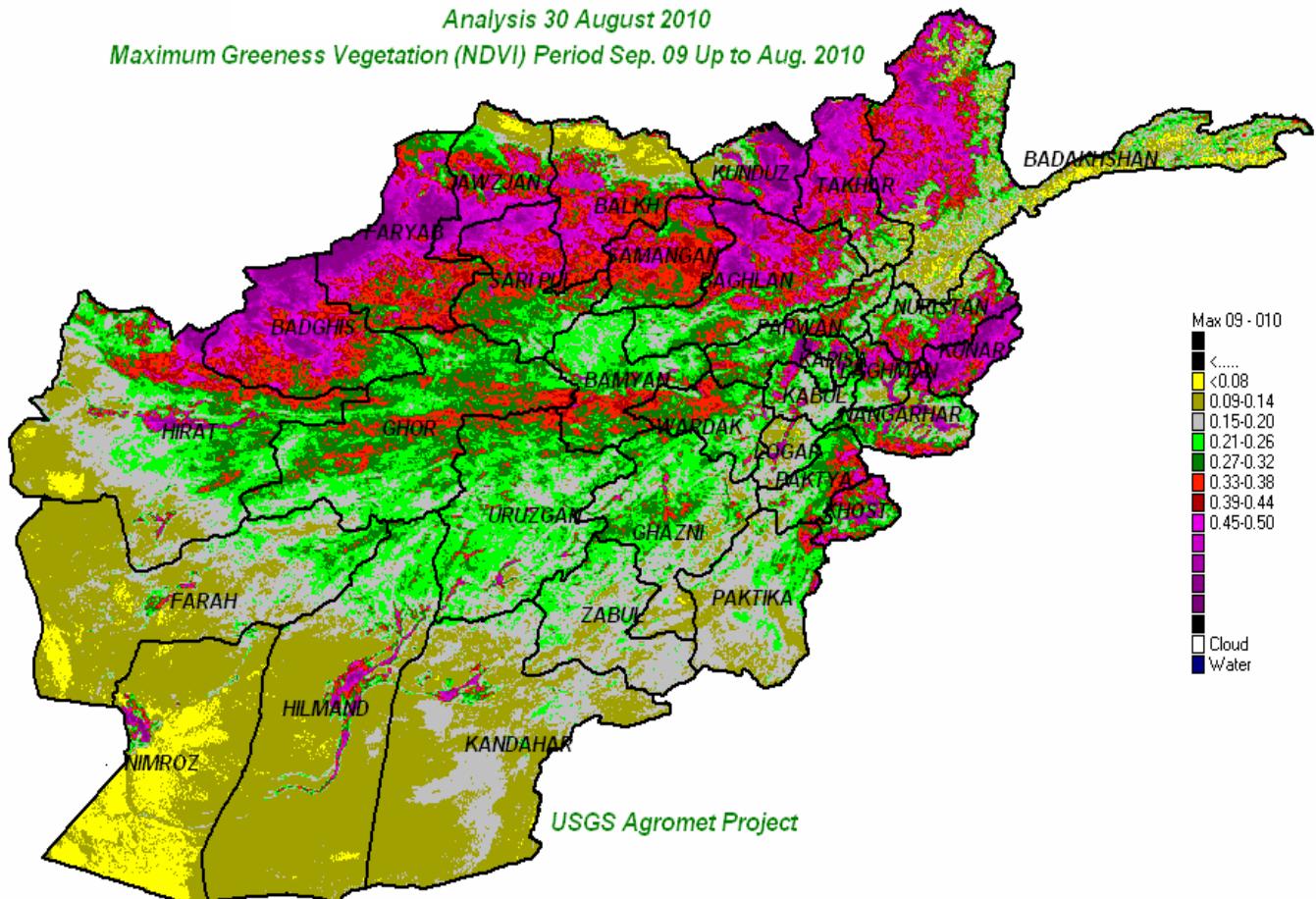
Laghman Average Temperature (2009 - 2010) Compared to the Long Term Average



Normalized Difference Vegetation Index
(NDVI)
Agricultural Season (2009- 2010)

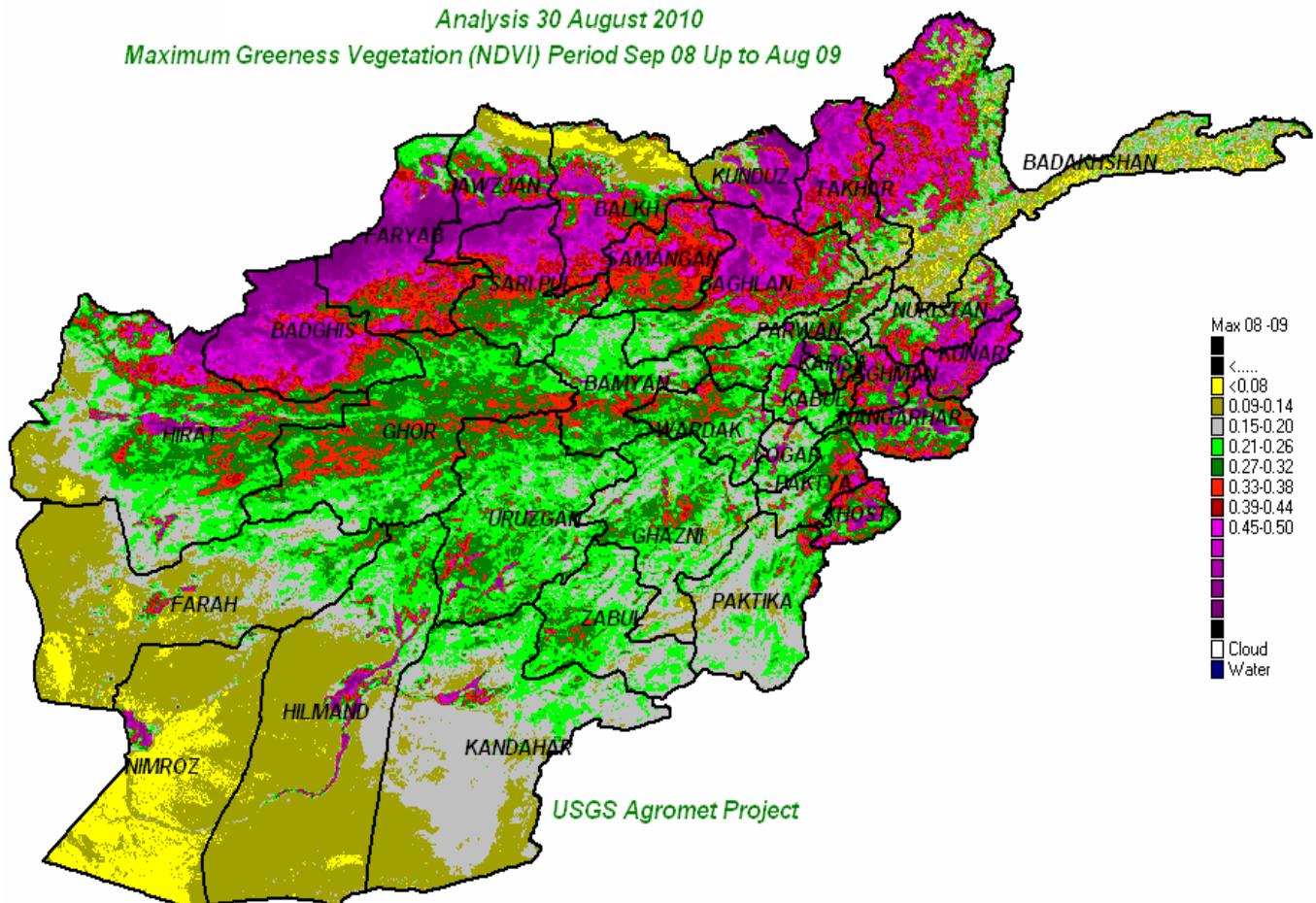
Analysis 30 August 2010

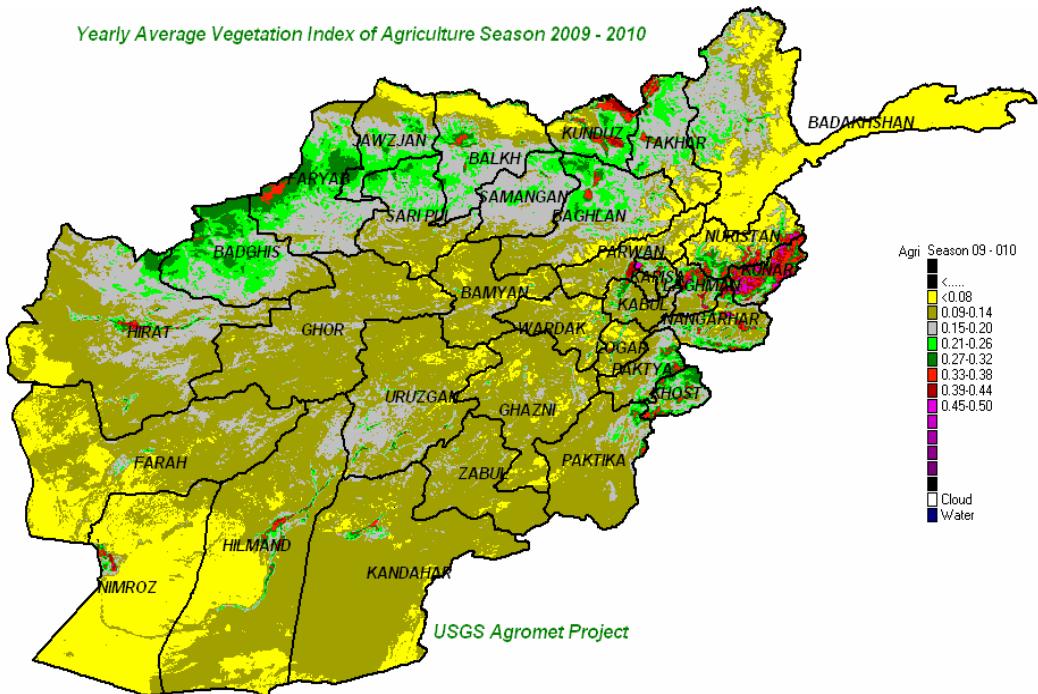
Maximum Greenness Vegetation (NDVI) Period Sep. 09 Up to Aug. 2010



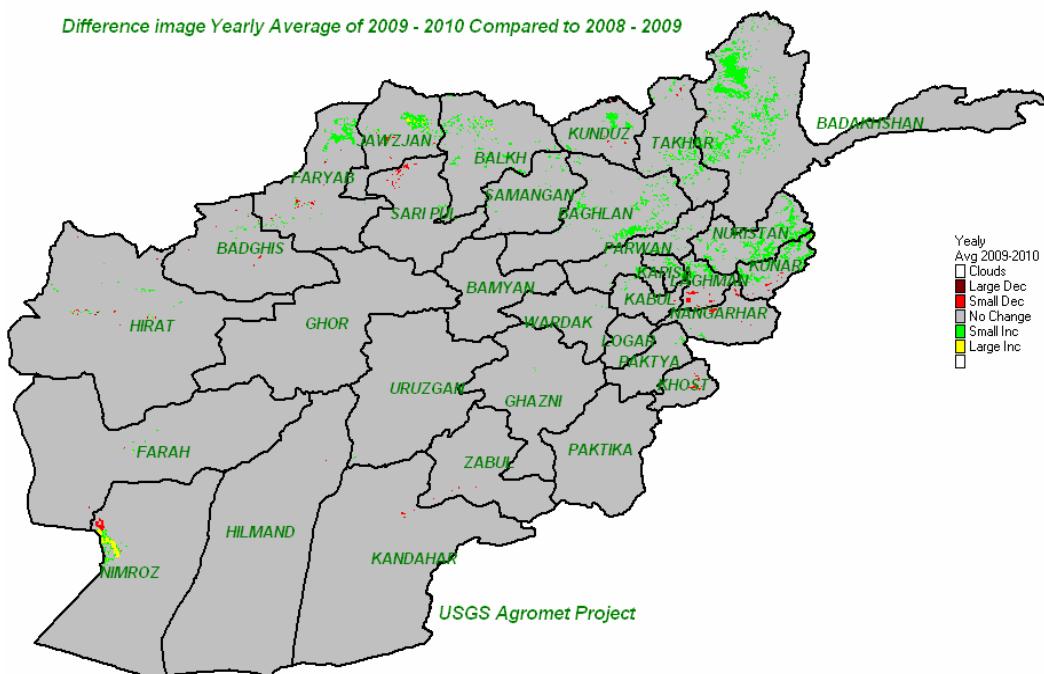
Analysis 30 August 2010

Maximum Greenness Vegetation (NDVI) Period Sep 08 Up to Aug 09

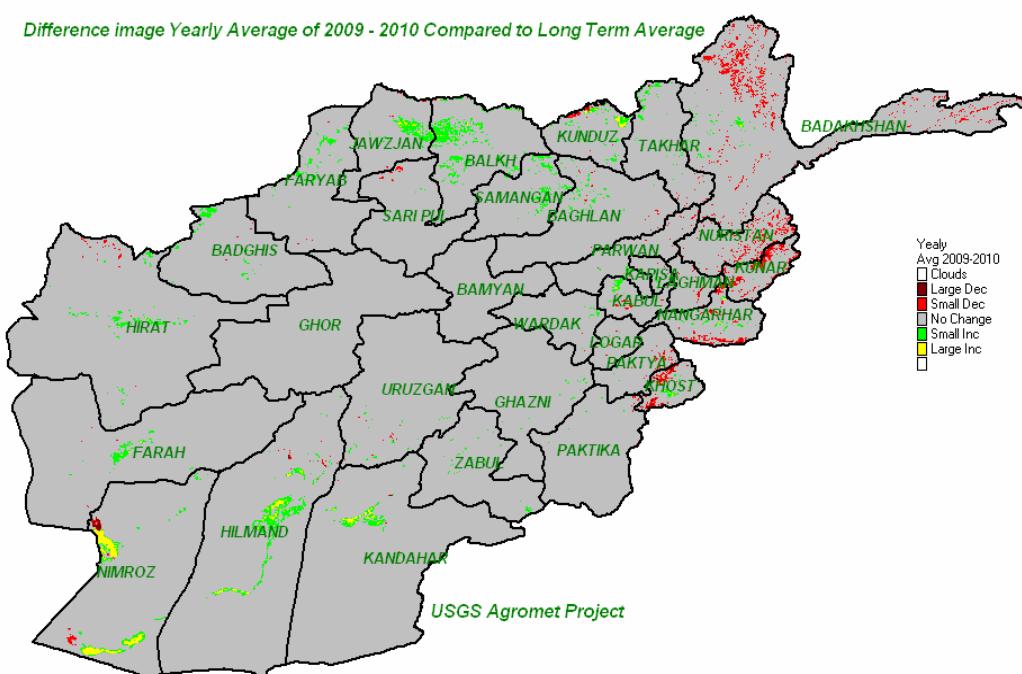


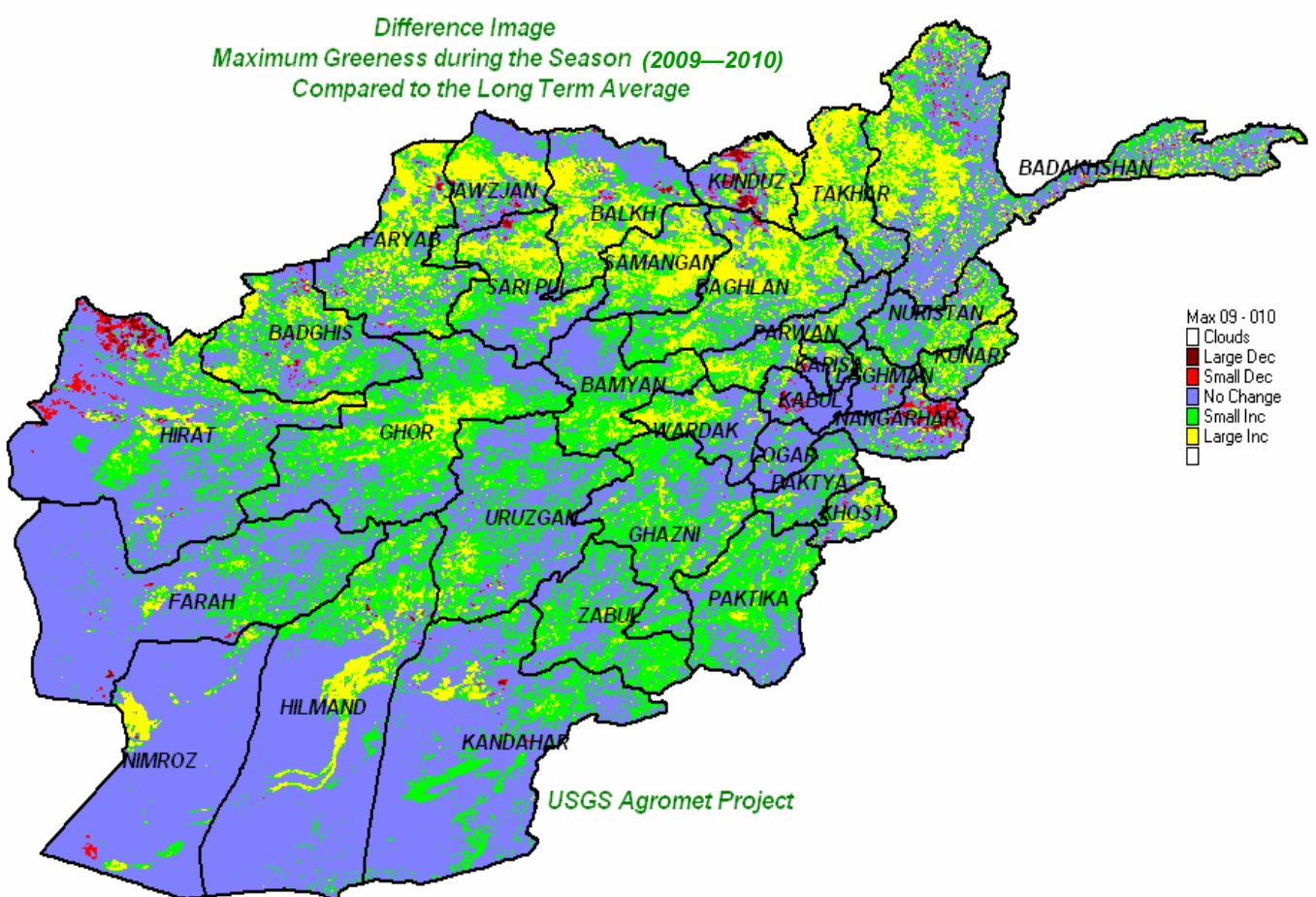
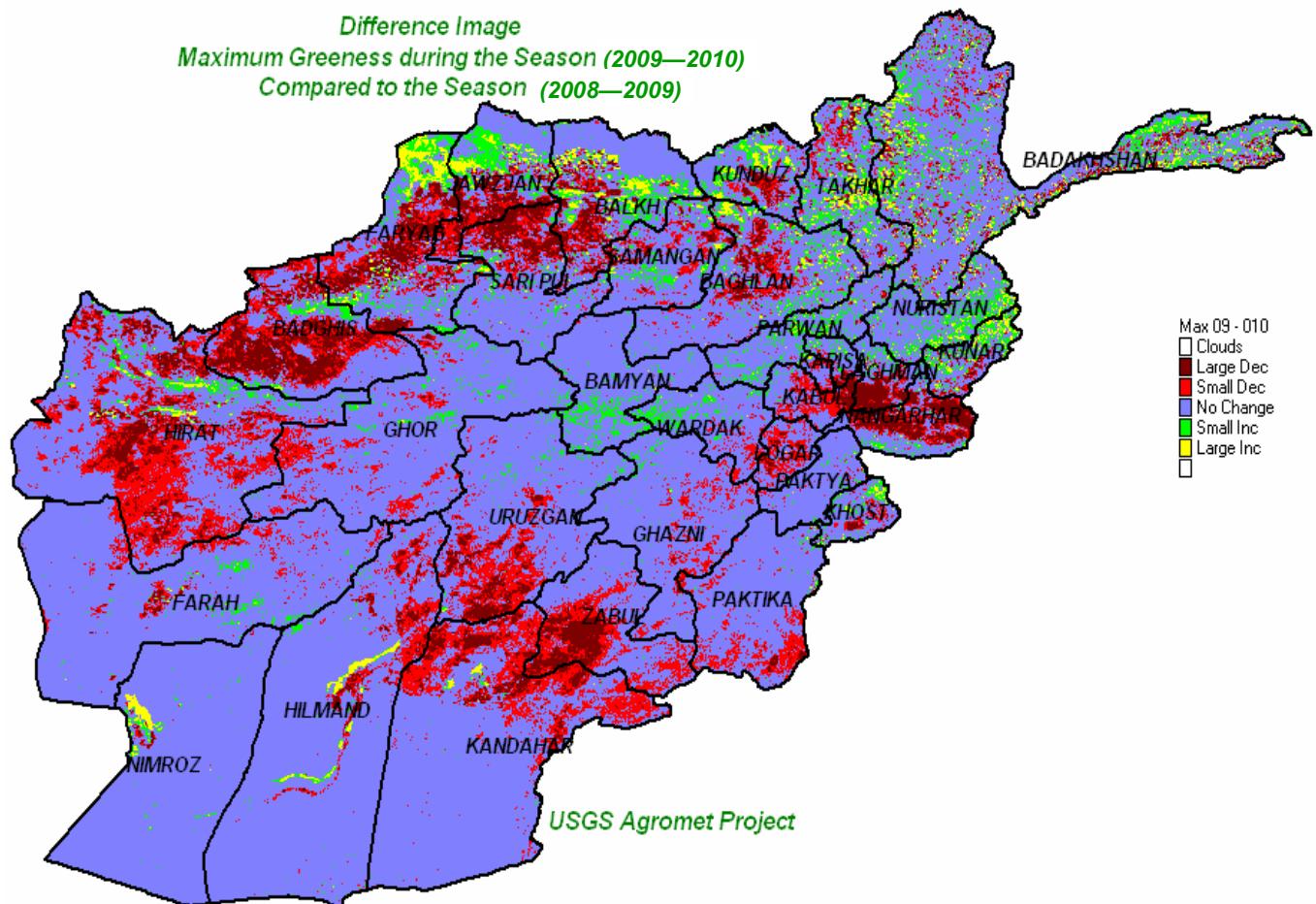


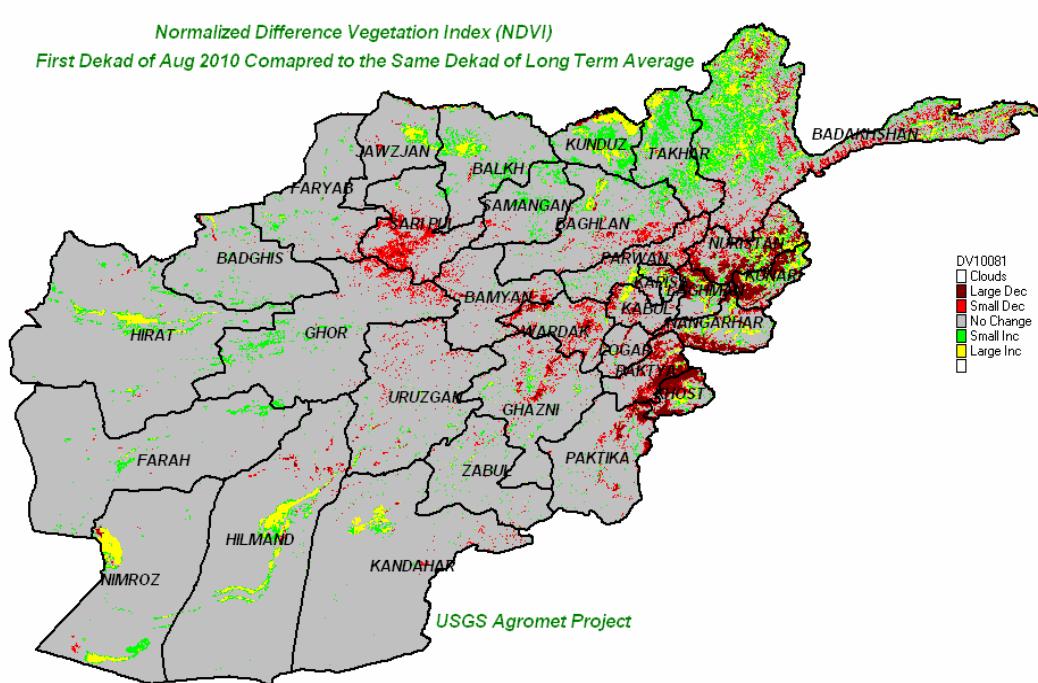
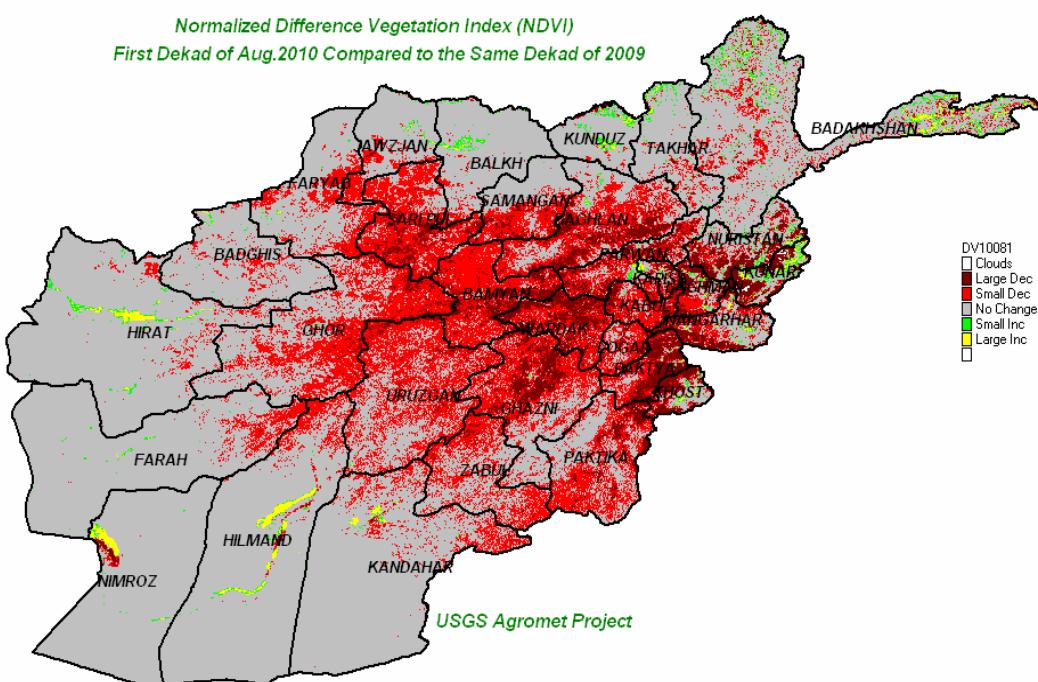
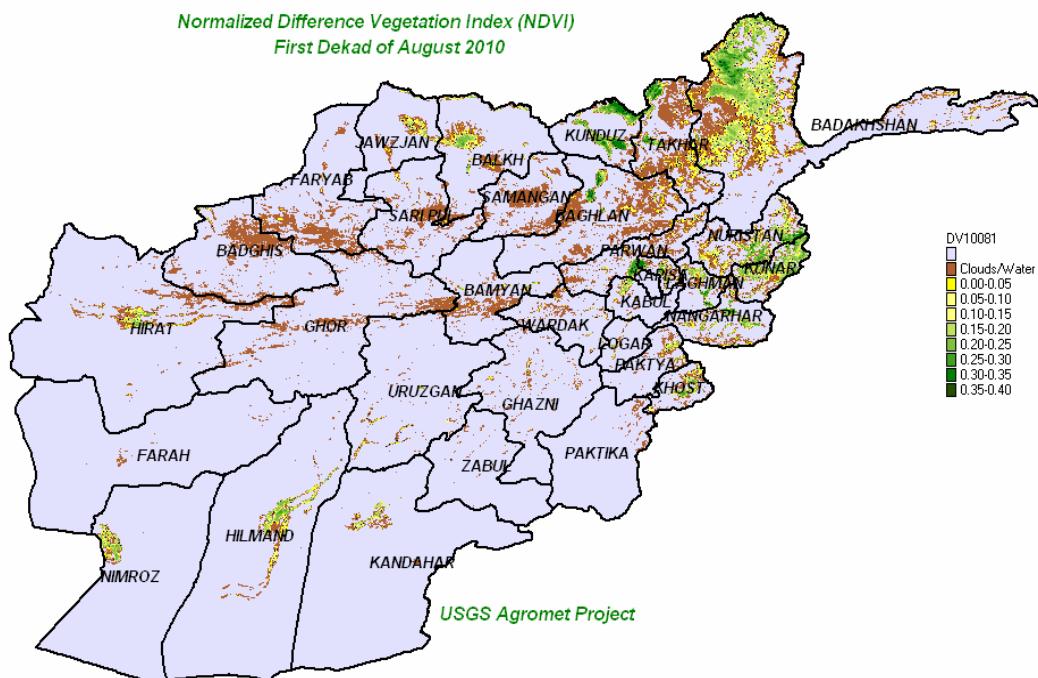
Difference image Yearly Average of 2009 - 2010 Compared to 2008 - 2009



Difference image Yearly Average of 2009 - 2010 Compared to Long Term Average







Frost Days
Compared with
Last Year and Long Term Average
Agricultural Season (2009 - 2010)

