



Monsoon 2020 Rainfall Report

CDPC / Pakistan Meteorological Department

CDPC Technical Report No. 2/2020; October 2020

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Overview

- National rainfall for the monsoon 2020 season was 41% above normal.
- Monsoon 2020 seasonal rainfall over Sindh and Pakistan were ranked as 3rd and 10th wettest season respectively since 1961.
- National rainfall for the month of September was 89% above normal.
- September ranked as ninth wettest month since 1961 and all provinces except Balochistan experienced excessive rainfall.
- National rainfall for the month of August was 108% above normal. and ranked as Pakistan ever wettest month since 1961.
- Sindh and Balochistan experienced exceptionally excessive rainfall of 363% & 271% above average respectively and both recorded August ever highest rainfall in last sixty years
- Total rainfall of August 2020 broke several records at Karachi city.
- Total rainfall recorded at Karachi-Faisal 588.0 mm, at Karachi-Masroor 436.0 mm & Karachi-Airport 367.0 mm. These three were wettest August in 48 years, 63 years & 89 years of record respectively.
- In August 2020, Karachi-Faisal site recorded 231.0 mm, the heaviest one day rainfall on record.

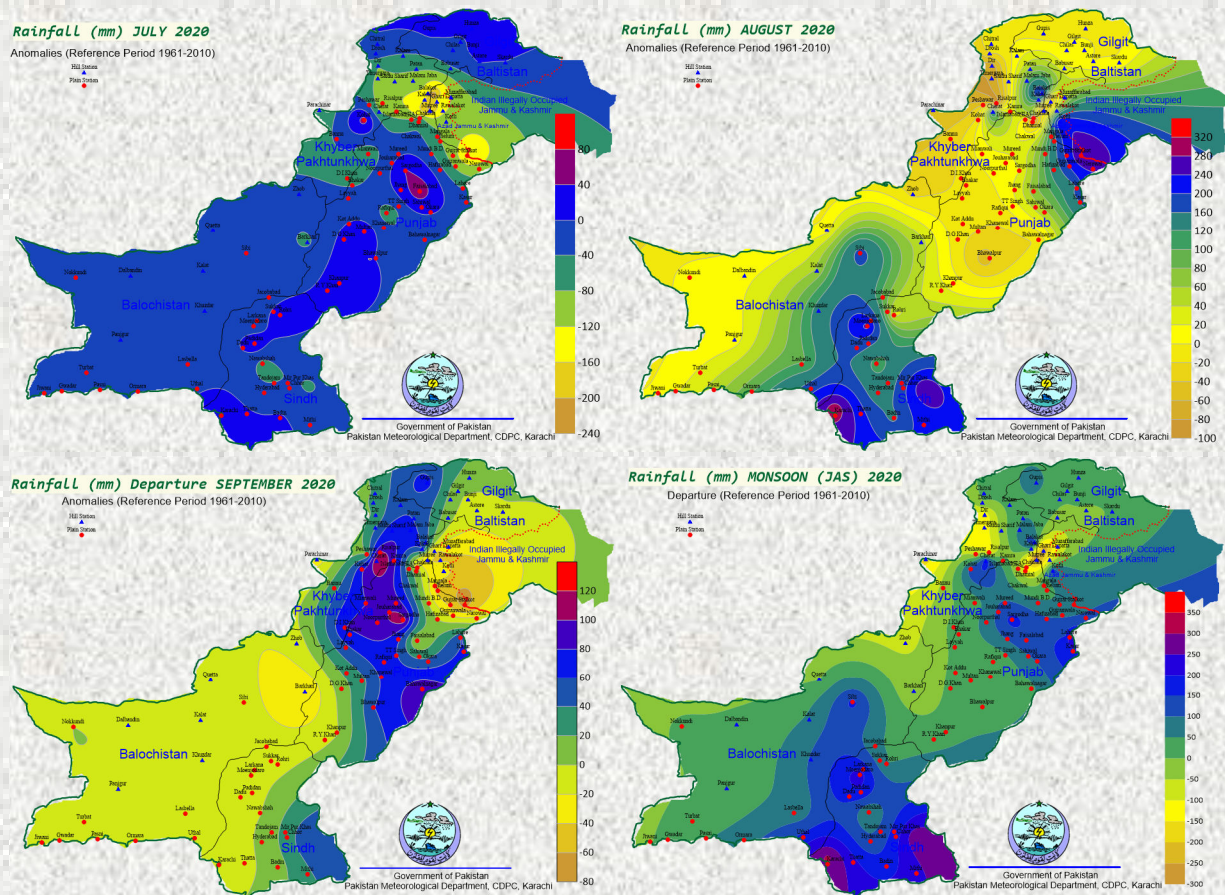


Fig-1: Spatial distribution of Monsoon months & season rainfall departure (mm)

During the monsoon season (1-Jul to 30-Sep) 2020, country recorded 41% above normal rainfall. On regional scale; GB, Balochistan, Sindh & Punjab recorded above normal rainfall whereas KP & AJK recorded close and below to normal rainfall respectively. The monsoon 2020 rainfall of Pakistan can be grouped among ten heaviest monsoon rainfall since 1961. The seasonal 2002 rainfall over Sind province was exceptional, 148% above normal and ranked as third heaviest rainfall during last sixty years period the other two were +276% (1994) and +222% (2011). July 2020, Pakistan as whole, recorded 34% below normal rainfall. On regional scale, all provinces except GB recorded below average rainfall.

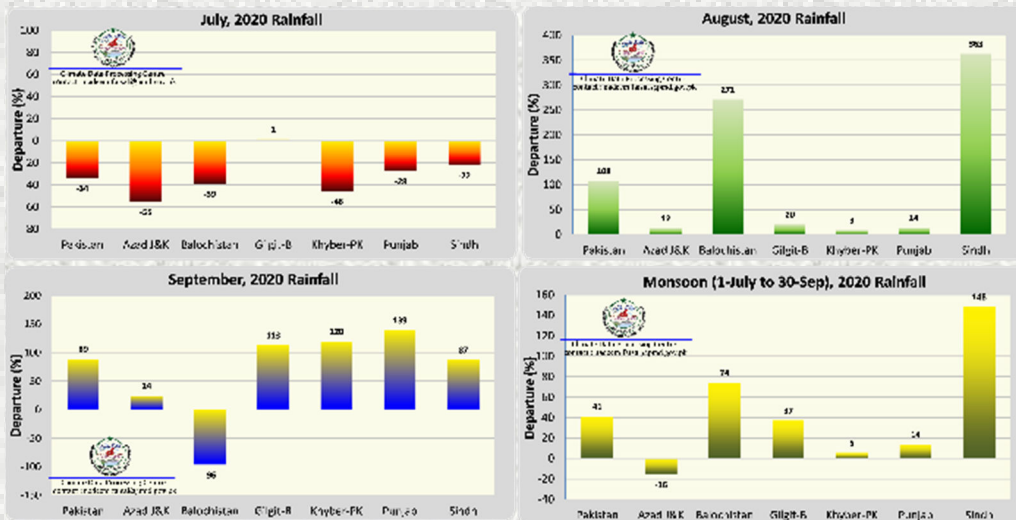
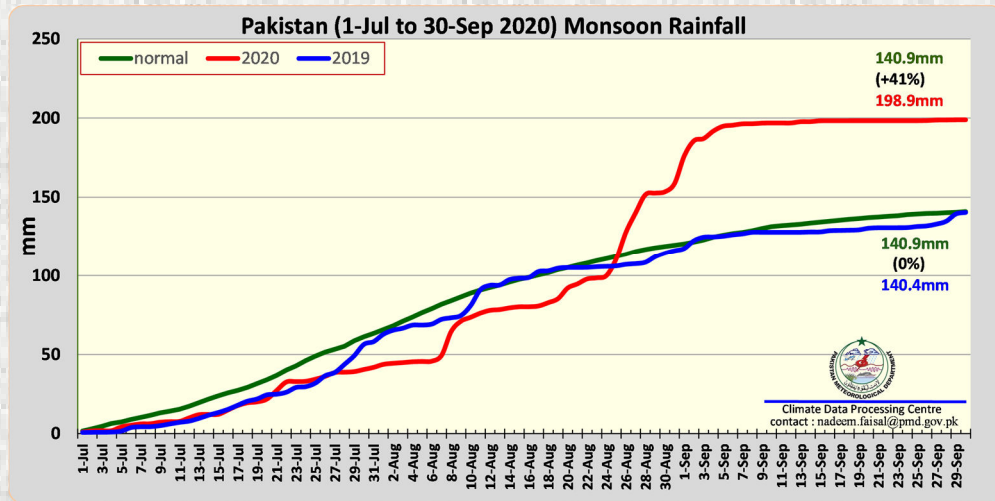


Fig-2: Country season cumulative rainfall (top) & distribution of seasonal & monthly rainfall (bottom)

National rainfall for the month of August was 108% above normal for Pakistan as a whole and ranked as ever highest wettest month since 1961. The provinces of Sindh and Balochistan experienced exceptionally excessive rainfall of 363% & 271% more than average rainfall respectively and both recorded August highest ever rainfall in last sixty years. Punjab (+14%), AJK (+12%) & GB (+20%) recorded slightly more than average rainfall while KP (+9%) recorded close to monthly average rainfall.

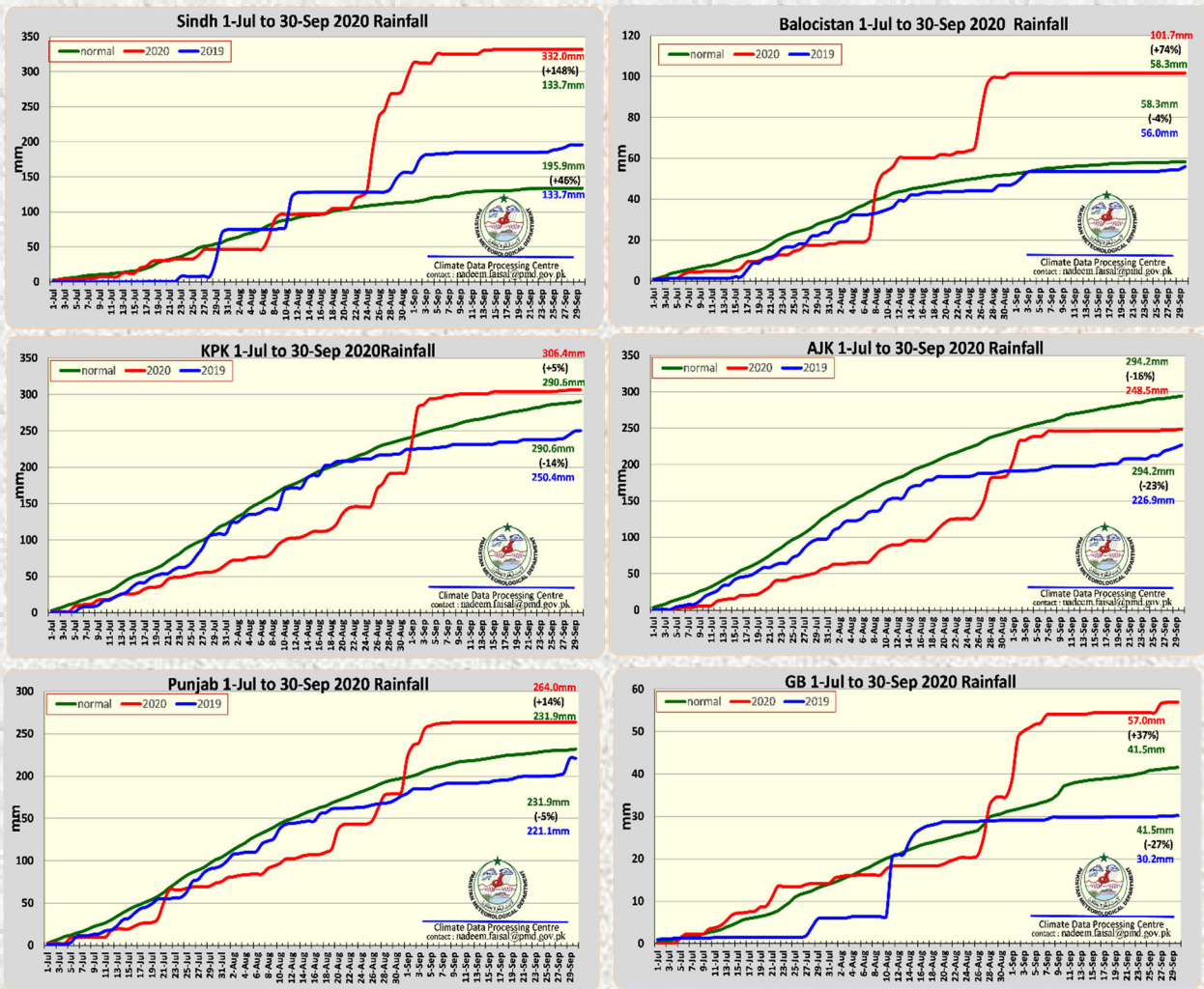


Fig-3: Provinces season cumulative rainfall

The total rainfall of August 2020 at Karachi city were particularly notable. It recorded 588.0 mm at Faisal, 436.0 mm at Masroor & 367.0 mm at Airport and these are wettest August in 48 years, 63 years & 89 years respectively of record. On 28th Faisal site recorded 231.0 mm of 24-hours rainfall, which was the heaviest one-day rainfall on record. This was also the highest 24-hours rainfall for any month among three Karachi sites. The previous August record in the city was 209.8 mm at Masroor on 18th August 1978, and the previous record for any month was 211.3 mm also at Masroor on 26th July, 1967. As a result of the unprecedented August rainfall, one of the history's major urban flooding occurred at Metropolis of Karachi affecting millions of people and inflicting widespread infrastructure damages.

National rainfall for the month of September was **89%** above normal for Pakistan as a whole and ranked as ninth highest wettest month since 1961. All provinces except Balochistan (-96%) experienced excessive rainfall of 139% (Punjab), 120% (KP), 113% (GB), 87% (Sindh) & 24% (AJK). The September rainfall over KP, Punjab & GB are ranked as 3rd, 6th & 7th highest respectively,