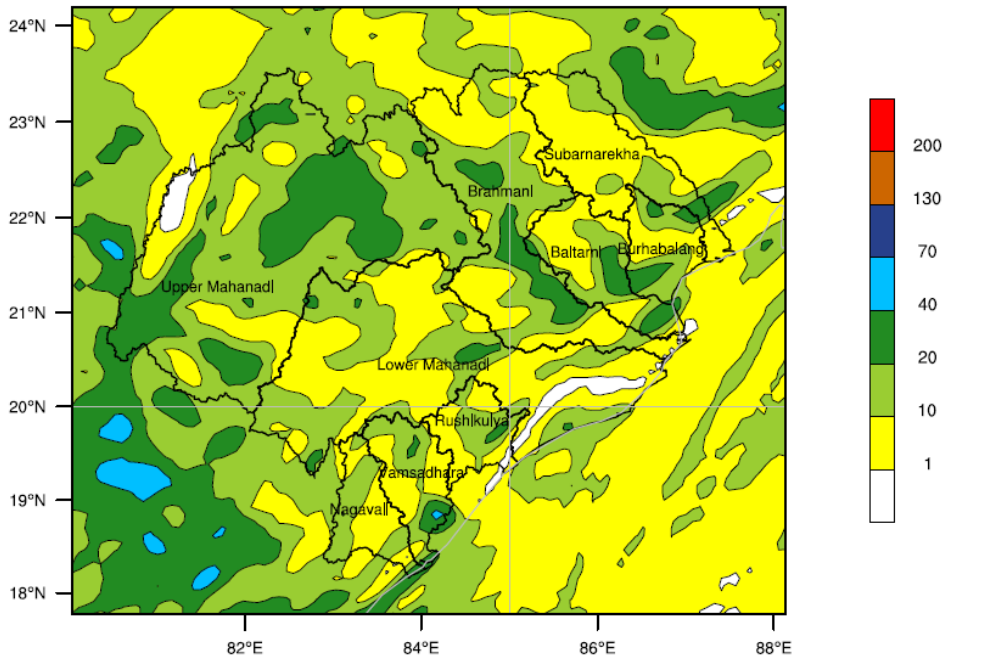
Flood forecasting is a joint operational responsibility of India Meteorological Department (IMD) and Central Water Commission (CWC). IMD provides sub basin wise Quantitative Precipitation Forecast (QPF) and other weather-related inputs in the form of QPF & Hydromet Bulletins generally during flood season through its Flood Meteorological Offices (FMOs) and the same will be used by CWC to issue the flood

Init: 2020-07-19_00:00:00
Valid: 2020-07-20_03:00:00

FLOOD MET OFFICE BHUBANESWAR

IMD WRF Rainfall (mm) Forecast(24hr)

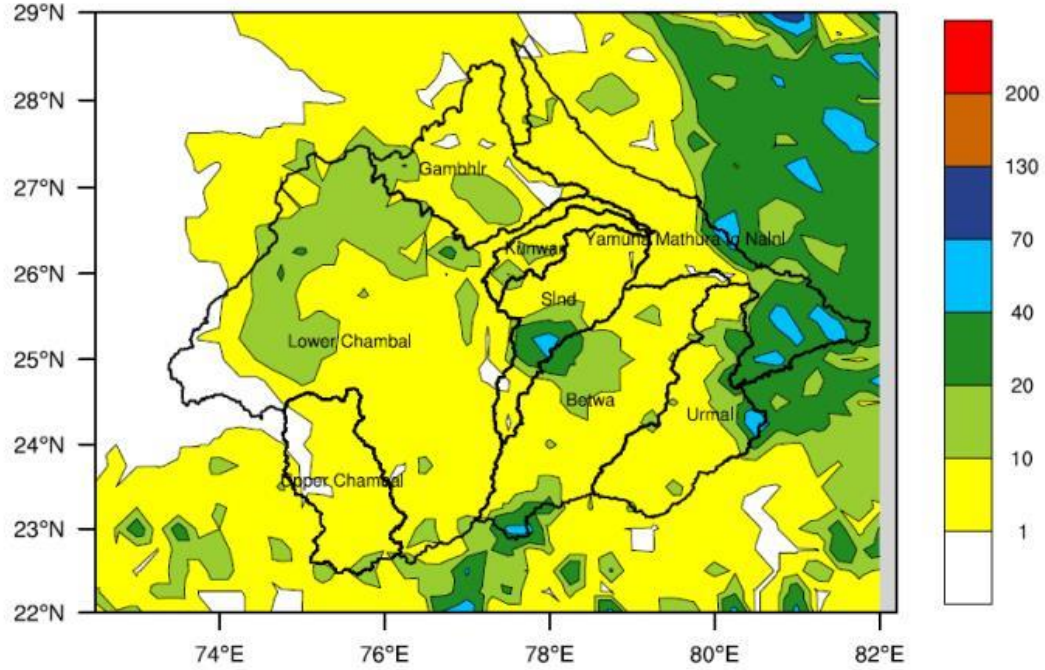


Sub basin wise Average Rainfall Estimation

Baltarnl =	13 mm
Brahmanl =	12 mm
Burhabalang =	13 mm
Lower Mahanadl =	9 mm
Nagavall =	11 mm
Rushlkulya =	10 mm
Subarnarekha =	8 mm
Upper Mahanadl =	16 mm
Vamsadhara =	12 mm

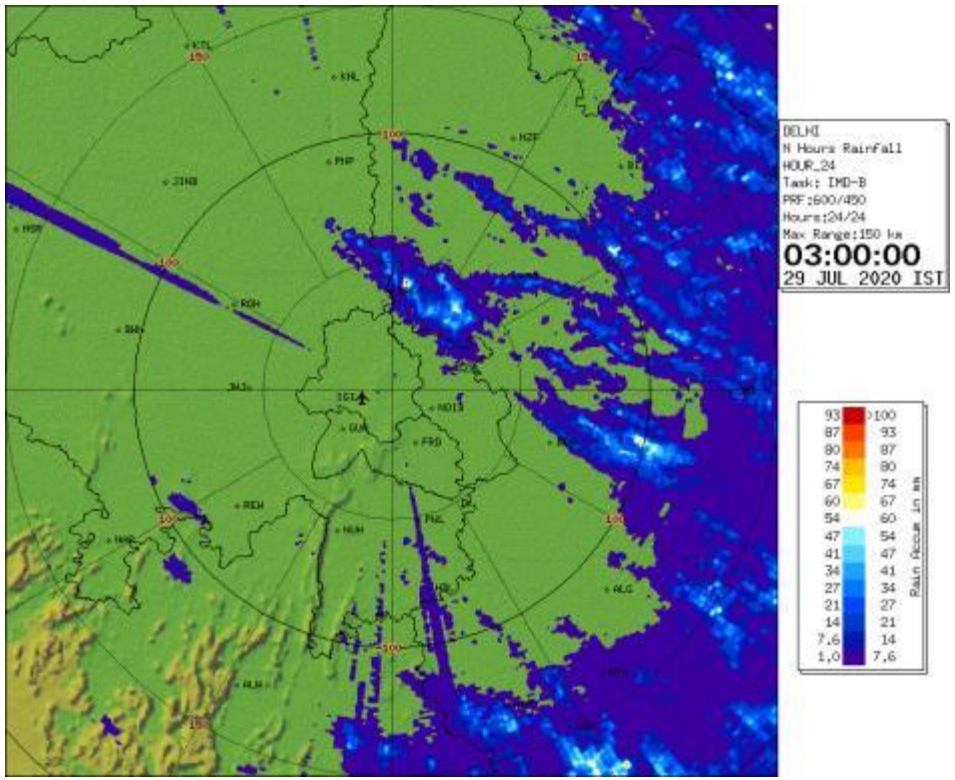
FLOOD MET OFFICE AGRA

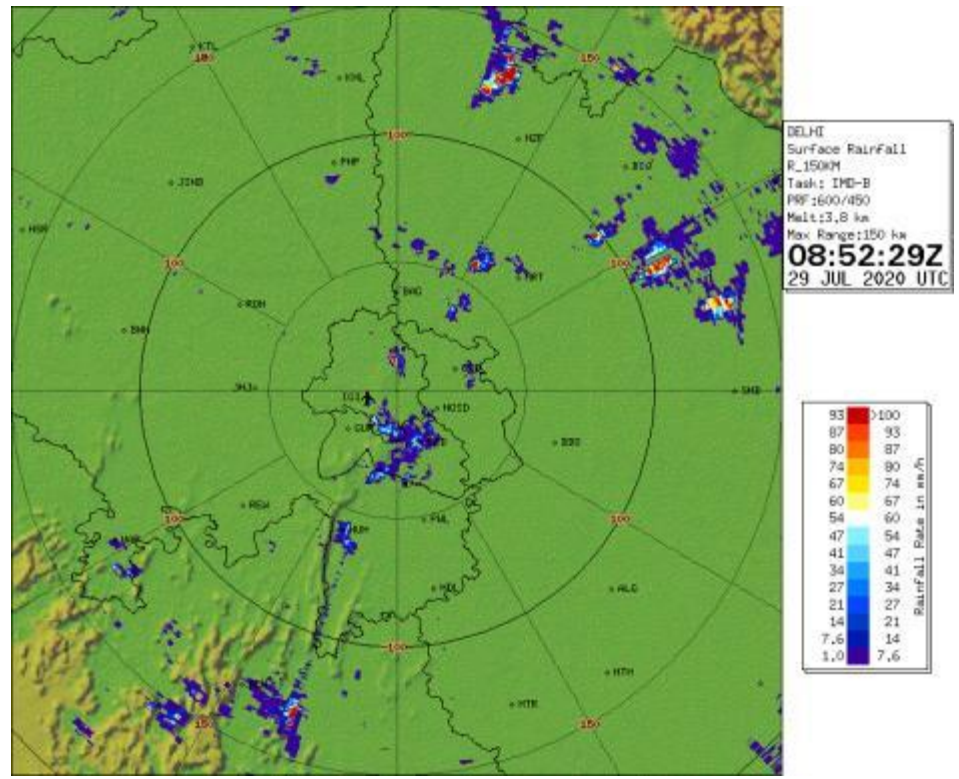
IMD GFS Rainfall(mm) Forecast (24hr) Day 1 FCST valid for: 20.07.2020 TILL 08:30 IST



Sub basin wise Average Rainfall Estimation

Betwa =	9 mm
Gambhlr =	6 mm
Kunwarl =	9 mm
Lower Chambal=	7 mm
Sind =	9 mm
Upper Chambal =	3 mm
Urmal =	9 mm
Yamuna Mathura to Nalnl =	17 mm


DELHI
N Hours RainFall
HOUR_24
Task: IMD-B
PRF:600/450
Hours:24/24
Max Range:150 km
03:00:00
29 JUL 2020 IST
93 >100
87 93
80 87
74 80
67 74
60 67
54 60
47 54
41 47
34 41
27 34
21 27
14 21
7.6 14
1.0 7.6
Rain Accum in mm


DELHI
Surface RainFall
R_150KM
Task: IMD-B
PRF:600/450
Malt:3.8 km
Max Range:150 km
08:52:29Z
29 JUL 2020 UTC
93 >100
87 93
80 87
74 80
67 74
60 67
54 60
47 54
41 47
34 41
27 34
21 27
14 21
7.6 14
1.0 7.6
Rainfall Rate in mm/hr

18.4.4 Objectives

1) To provide real-time informational guidance products pertaining to the imminence of potential small-scale flash flooding.

2) To issue guidance alerts warnings in association with nowcast or forecasts of rainfall on potential small watersheds for preparation of any disastrous events.

18.4.5 Flash Flood Guidance Model

The Flash Flood Guidance System (FFGS) is a diagnostic tool ingesting real-time satellite precipitation data, on-site gauge precipitation and temperature data, model-forecasted precipitation, and, on the basis of available spatial databases, produces flash-flood-occurrence diagnostic and prognostic indices over small flash flood prone catchments.

In this context, flash flood guidance of duration T for a small catchment is the volume of rainfall accumulated over a future period T that is just enough to cause bankfull flow at the outlet of the draining stream. Thus, if the volume of accumulated rainfall is greater than flash flood guidance during the future period then overbank flow is expected (minor flash flooding). The diagnostic flash flood guidance index may then be used with nowcast or forecast rainfall volumes of the appropriate durations to identify the likelihood of flash flooding at the outlet of specific small catchments.

Flash Flood Guidance (FFG) is the amount of rainfall of a given duration over a small drainage area needed to cause minor flooding (bankfull) condition at the outlet of the stream which drains that basin. Flash Flood Guidance is an index of how much rainfall is needed to overcome soil and channel storage capacities and to cause minor flooding.

Flash Flood Threat (FFT) is the amount of rainfall of a given duration in excess of the corresponding Flash Flood Guidance value. The flash flood threat, when used with observed rainfall, is an indicator of areas where flooding is imminent and where immediate action may be needed.