



Central Water Commission
Upper Ganga Basin Organisation, Lucknow
Daily Flood Situation Report Cum Advisories
Date: 25 AUGUST, 2020

FSR No.64

Dated 25-08-2020

1. Weather forecast by IMD

I. SYNOPTIC SITUATION:

- ◆ The Low Pressure Area over Southwest Rajasthan & neighbourhood now lies over southwest Rajasthan & adjoining Pakistan with the associated cyclonic circulation extending upto 7.6 km above mean sea level tilting southwestwards with height. It is likely to merge with heat low during next 48 hours.
- ◆ The Low Pressure Area over North Bay of Bengal & neighbourhood now lies as a Well-Marked Low Pressure Area over the same region. The associated cyclonic circulation extends upto 7.6 km above mean level tilting southwestwards with height.
- ◆ The Monsoon Trough at mean sea level now passes through centre of Low Pressure Area over Southwest Rajasthan & adjoining Pakistan, Churu, Narnaul, Gorakhpur, Patna, Bankura, Canning and thence south-eastwards to the centre of Low Pressure Area over North Bay of Bengal & neighbourhood and extends upto 1.5 Km above mean sea level.

II. a) DETERMINISTIC FORECAST (QPF):

Sr. No.	BASIN NAME	SUBBASIN CODE/NAME	QPF (mm)		
			Day-1	Day-2	Day-3
1	Alaknanda	Alaknanda	11-25	11-25	11-25
2	Bhagirathi	Bhagirathi	11-25	11-25	11-25
3	Ganga	Chhatnag to Mirzapur	11-25	11-25	26-50
		Narora to Phaphamau	0.1-10	0.1-10	11-25
		Phaphamau to Ballia	0.1-10	11-25	11-25
		Gomti	0.1-10	0.1-10	11-25
		Sai	0.1-10	11-25	26-50
		Upper Ganga	11-25	11-25	11-25
4	Ghaghra	Lower Ghaghra	0.1-10	11-25	0.1-10
		Middle Ghaghra	0.1-10	11-25	11-25
		Upper Ghaghra	0.1-10	0.1-10	0.1-10
5	Ramganga	Ramganga	0.1-10	0.1-10	11-25
6	Rapti	Rapti	0.1-10	0.1-10	0.1-10
7.	Sharda	Sharda	0.1-10	0.1-10	11-25

II (b) DETERMINISTIC FORECAST (DISTRIBUTION)

	BASIN NAME	SUBBASIN CODE/NAME	INTENSITY (I) & SPATIAL DISTRIBUTION (D)					
			Day-1		Day-2		Day-3	
			I	D	I	D	I	D
1	Alaknanda	Alaknanda	M	WS	M	WS	M	WS
2	Bhagirathi	Bhagirathi	M	WS	M	WS	M	WS
3	Ganga	Chhatnag to Mirzapur	M	WS	M	WS	M	WS
		Narora to Phaphamau	L	SCT	M	FWS	M	WS
		Phaphamau to Ballia	L	SCT	M	WS	M	WS
		Gomti	L	ISOL	M	SCT	M	WS
		Sai	L	SCT	M	WS	M	WS
		Upper Ganga	M	WS	M	WS	M	WS
4	Ghaghra	Lower Ghaghra	L	ISOL	M	WS	M	SCT
		Middle Ghaghra	L	ISOL	M	WS	M	WS
		Upper Ghaghra	L	SCT	M	SCT	M	SCT
5	Ramganga	Ramganga	L	SCT	M	SCT	M	WS
6	Rapti	Rapti	L	ISOL	M	SCT	M	SCT
7.	Sharda	Sharda	M	SCT	M	SCT	M	WS

QPF in Ranges (mm)	UNLISTED	0	0.1-10	11-25	26-50	51-100	>100
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III. HEAVY RAINFALL WARNING:

NAME OF BASIN	NAME OF SUB- BASIN	Day-1		Day-2		Day-3	
		I	D	I	D	I	D
Alaknanda	Alaknanda	H	ISOL	H	ISOL	H	ISOL
Bhagirathi	Bhagirathi	H	ISOL	H	ISOL	H	ISOL
Ganga	Chhatnag to Mirzapur			H	ISOL	H	ISOL
	Narora to Phaphamau						
	Phaphamau to Ballia			H	ISOL	VH	ISOL
	Gomti					H	ISOL
	Sai					VH	ISOL
	Upper Ganga			H	ISOL	H	ISOL
Ghaghra	Lower Ghaghra						
	Middle Ghaghra			H	ISOL	H	ISOL
	Upper Ghaghra			H	ISOL		
Ramganga	Ramganga					H	ISOL
Rapti	Rapti						
Sharda	Sharda					H	ISOL

Spatial Distribution of Rainfall		
DRY	Dry	No Station reported rainfall
ISOL	One or two Places	25% or less number of stations recorded rainfall 2.5 mm
SCT	At a few Places	26%-50% number of stations recorded rainfall 2.5 mm
FWS	At many Places	51%-75% number of stations recorded rainfall 2.5 mm
WS	At most places	76%-100% number of stations recorded rainfall 2.5 mm

Intensity of Rainfall					
MDry	NIL	0 cm	VL	Very Light Rainfall	Trace
L	Light Rainfall	Upto 1 cm	M	Moderate rainfall	02-06 cm
H	Heavy rainfall	07-11 cm	VH	Very Heavy rainfall	12-20 cm
EH	Extremely Heavy rainfall	21 cm or More			
ExH	Exceptionally Heavy Rainfall	When the amount is a value near about the highest recorded rainfall at or near the station for the month or season. However, this term will be used only when the actual rainfall amount exceeds 12 cm			

IV. PROBABILISTIC FORECAST

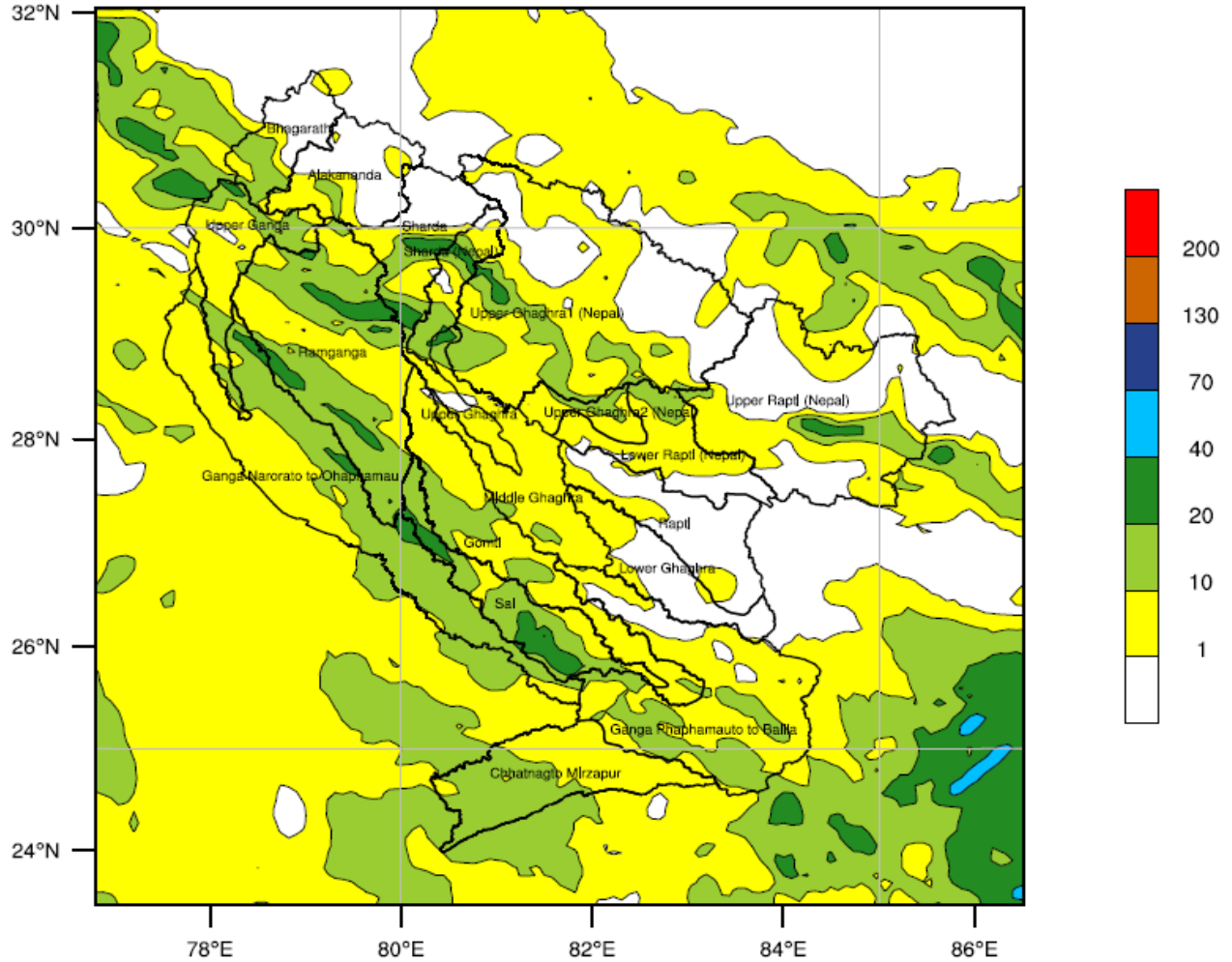
S. No.	BASIN NAME	SUBBASIN CODE/NAME	Day-1						Day-2						Day-3						
			0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	
1	Alaknanda	Alaknanda		25-50	50-75	5-25				25-50	50-75	5-25					25-50	50-75			
2	Bhagirathi	Bhagirathi		25-50	50-75	5-25				25-50	50-75	5-25					25-50	50-75			
3	Ganga	Chhatnag to Mirzapur		25-50	50-75						75-100	5-25					25-50	50-75			
		Narora to Phaphamau		75-100						75-100							25-50	50-75			
		Phaphamau to Ballia		75-100						25-50	50-75						75-100	5-25			
		Gomti		75-100						50-75	25-50					5-25	75-100				
		Sai		75-100						5-25	75-100						25-50	50-75			
		Upper Ganga		25-50	50-75							75-100	5-25				75-100				
4	Ghaghra	Lower Ghaghra	25-50	50-75						25-50	50-75					50-75	25-50				
		Middle Ghaghra	25-50	50-75						25-50	50-75					25-50	50-75				
		Upper Ghaghra		75-100						50-75	25-50					50-75	25-50				
5	Ramganga	Ramganga		75-100						50-75	25-50					5-25	75-100				
6	Rapti	Rapti	25-50	50-75						50-75	25-50					50-75	25-50				
7.	Sharda	Sharda		75-100						50-75	25-50					5-25	75-100				

Probability of occurrence (%)	0-5	5-25	25-50	50-75	75-100
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Init: 2020-08-25_00:00:00
 Vald: 2020-08-26_03:00:00

FLOOD MET OFFICE LUCKNOW

IMD WRF Rainfall (mm) Forecast(24hr)



Sub basin wise Average Rainfall Estimation

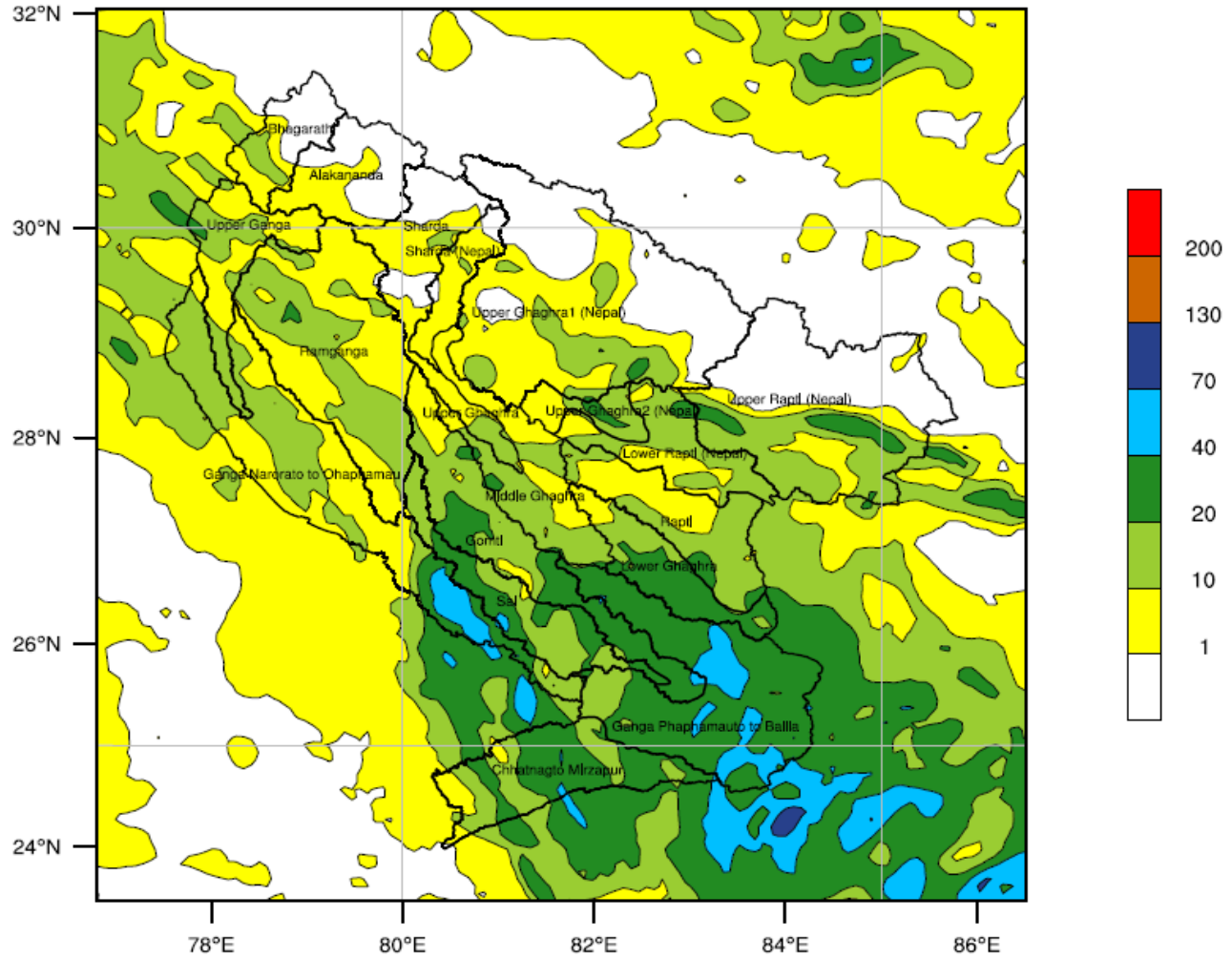
Alaknanda = 2 mm	Rapti = 1 mm
Bhagirathi = 6 mm	Sai = 15 mm
Chhatnagto Mirzapur = 10 mm	Sharda = 9 mm
Ganga Narorato Ohaphamau = 11 mm	Sharda (Nepal) = 6 mm
Ganga Phaphamauto Balia = 7 mm	Upper Ganga = 8 mm
Gomti = 8 mm	Upper Ghaghra = 5 mm
Lower Ghaghara = 1 mm	Upper Ghaghra1 (Nepal) = 7 mm
Lower Rapti (Nepal) = 4 mm	Upper Ghaghra2 (Nepal) = 4 mm
Middle Ghaghara = 6 mm	Upper Rapti (Nepal) = 4 mm
Ramganga = 12 mm	

OUTPUT FROM WRF V3.6.1 MODEL
 WE = 1001 ; SN = 945 ; Levels = 45 ; Dls = 9km ; Phys Opt = 16 ; PBL Opt = 2 ; Cu Opt = 5

Init: 2020-08-25_00:00:00
 Valid: 2020-08-27_03:00:00

FLOOD MET OFFICE LUCKNOW

IMD WRF Rainfall (mm) Forecast(48hr)



Sub basin wise Average Rainfall Estimation

Alaknanda = 1 mm	Rapti = 12 mm
Bhagirathi = 4 mm	Sai = 20 mm
Chhatnagto Mirzapur = 22 mm	Sharda = 6 mm
Ganga Narorato Ohaphamau = 15 mm	Sharda (Nepal) = 4 mm
Ganga Phaphamauto Ballia = 31 mm	Upper Ganga = 10 mm
Gomti = 19 mm	Upper Ghaghra = 4 mm
Lower Ghaghara = 21 mm	Upper Ghaghra1 (Nepal) = 12 mm
Lower Rapti (Nepal) = 12 mm	Upper Ghaghra2 (Nepal) = 8 mm
Middle Ghaghara = 13 mm	Upper Rapti (Nepal) = 7 mm
Ramganga = 10 mm	

OUTPUT FROM WRF V3.6.1 MODEL

WE = 1001 ; SN = 945 ; Levels = 45 ; Dls = 9km ; Phys Opt = 16 ; PBL Opt = 2 ; Cu Opt = 5

2. Summary of flood situation as per CWC flood forecasting network

Flood Situation on 25 AUGUST, 2020



1. River Sarda at Paliakalan in KHERI district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs today. At 14:00 hrs, it was flowing at a level of 154.10 with falling trend which is 0.00m above its Danger Level of 154.10m and 1.22m below its previous HFL of 155.32 m (2014-07-21).
2. River Ghagra at Turtipar in BALLIA district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs today. At 14:00 hrs, it was flowing at a level of 64.81m with falling trend which is 0.80m above its Danger Level of 64.01 m and 1.19m below its previous HFL of 66.0 m (1998-08-28).
3. River Ghagra at Elginbridge in BARABANKI district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs today. At 14:00 hrs, it was flowing at a level of 106.116m with falling trend which is 0.046 m above its Danger Level of 106.07 m and 1.50m below its previous HFL of 107.616 m (2014-08-18).
4. River Ghagra at Ayodhya in FAIZABAD district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs today. At 14:00 hrs, it was flowing at a level of 92.90m with falling trend which is 0.17m above its Danger Level of 92.73 m and 1.11m below its previous HFL of 94.01 m (2009-10-11).
5. River Ganga at Kachhlabridge in BUDAN district of Uttar Pradesh continues to flow in SEVERE SITUATION at 08:00 hrs today. At 08:00 hrs, it was flowing at a level of 162.50m with steady trend which is 0.50m above its Danger Level of 162.0 m and 0.29m below its previous HFL of 162.79 m (2010-09-24).

2.1 Rainfall Situation

Amount of rainfall recorded at 8:30 hours IST of today (≥ 50 mm or more)

Name of Place (State)	Rainfall (in mm)
Ganga Nagar (U.K)	50.4

2.2 LEVEL FORECAST

LEVEL FORECAST		
S.No.	Flood Situations	No. of Forecasting Sites
Extreme Flood Situation:		
A.	(Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalized)	0
Severe Flood Situation :		
B.	(Site(s) where water Level touching or exceeding the Danger Level but below Highest Flood Level(HFL)	03
Above Normal Flood Situation:		
C.	(Site (s) where water level touching or exceeding the warning Level but below Danger Level)	05
Total Numbers of Sites above Warning Level (A+B+C)		08
INFLOW FORECAST		
Number of Sites for which inflow forecasts issued:		02
(Where inflow are equal or exceed the specified Threshold Limit for a particular reservoir/ barrage)		02

2.3 Above Normal (Water Level touching or exceeding the warning Level but below Danger Level)

Name of river	Flood Forecasting Sites	District	State	Danger Level(m)	Warning Level (m)	Previous Highest		Actual Level			Forecast			
						Level (m)	Date	Level (m)	Time	Trend	Level (m)	Date	Time	Trend
Ganga	Garhmukteshwar	Ghaziabad	U.P	199.33	198.33	199.9	2010	198.53	0800		198.43	26.08.20	0800	F
Ganga	Fatehgarh	Farukhabad	U.P	137.6	136.60	138.14	2010	137.47	0800	R	137.45	26.08.20	0800	F
Ganga	Ankinghat	Kanpur Dehat	U.P	124.0	123.0	124.49	2010	123.14	0800	F	123.08	26.08.20	0800	F
Ram Ganga	Moradabad	Moradabad	U.P	190.60	189.60	192.88	2010	190.45	0800	S	190.38	25.08.20	2000	F
Ghaghra	Elgin Bridge	Barabanki	U.P	106.07	105.07	107.616	2014	106.146	0800	S	106.00	26.08.20	0800	F

2.4 Severe Flood Situation (Water Level touching or exceeding the Danger Level but below Highest Flood Level (HFL))

Name of river	Flood Forecasting Sites	District	State	Danger Level(m)	Warning Level (m)	Previous Highest		Actual Level			Forecast			
						Level(m)	Date	Level(m)	Time	Trend	Level (m)	Date	Time	Trend
Ghaghra	Turtipar	Baliya	U.P	64.01	63.01	66.00	1998	64.87	0800	F	64.65	26.08.20	0800	F
Ghaghra	Ayodhya	Faizabad	U.P	92.73	91.73	94.01	2009	92.95	0800	F	92.80	26.08.20	0800	F
Ganga	Kachhla bridge	Budaun	U.P	161.00	162.00	162.79	2010	162.50	0800	S	162.35	26.08.20	0800	F

2.5 Extreme Flood Situation (Water Level exceeded or equalized Highest Flood Level (HFL))

Name of river	Flood Forecasting Sites	District	State	Danger Level(m)	Warning Level (m)	Previous Highest		Actual Level			Forecast			
						Level(m)	Date	Level(m)	Time	Trend	Level (m)	Date	Time	Trend

Note - No Station is in this situation Dated 25.08.2020

2.6 Inflow Forecast

Name of river	Flood Forecasting Sites	District	State	HFL(m)	FRL(m)	Previous Highest		Actual Level			Forecast			
						Discharge (Q)	Date	Discharge (Q)	Time	Trend	D (Q)	Date	Time	Trend
Sharda	Narora Barrage	Bulandshahr	U.P					3621.80	0800	S	3115.20	26.08.20	0800	F
Sone	Bansagar Dam	Harda	M.P.		341.64				0800	R	1260.00	26.08.20	0800	R

Advisory on Hydro Meteorological Situation Expected from 26-08-2020 to 27-08-2020

As per rainfall pattern given in section II, Alaknanda, Bhagirathi, rivers are expected to receive moderate to heavy rain at widespread areas in next 48 hrs. Ganga river is expected to receive light to heavy rain at scattered to widespread areas in next 48 hrs. Ghaghra, Ramganga, Sharda & Rapti river basins are expected to receive light to moderate rain at scattered to widespread areas in next 48 hours. Water level at most of CWC stations are expected to fall in next 48 hours. Level forecast will be issued if the level of river at stations are likely to touch or cross warning level. From the given QPF, Above normal flood like situation is expected in Ghaghra, Rapti & Sharda river basins.

अधिशसीअभियंता

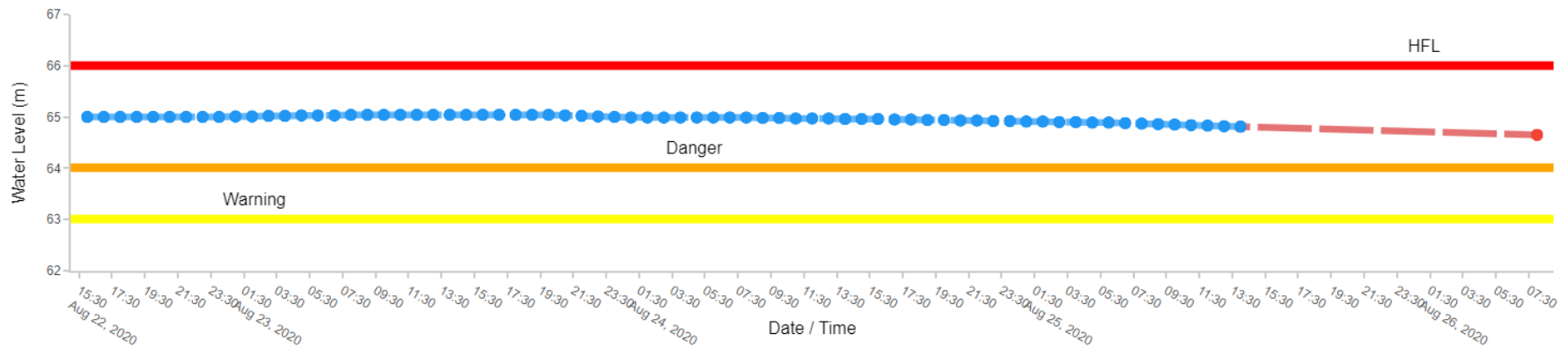
मध्य गंगा मण्डल -1 लखनऊ

Hydrograph view of - Turtipar



District	Basin	River	Division
BALLIA	Ganga	Ghagra	Middle Ganga Division-I(MGD-I), Lucknow

Forecasted Water Level Measured Water Level

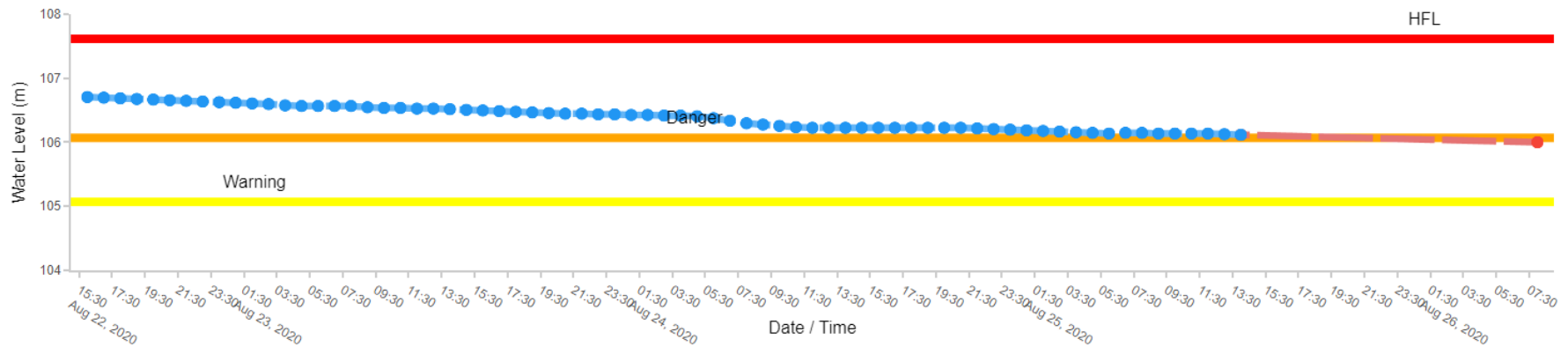


Hydrograph view of - Elginbridge



District	Basin	River	Division
BARABANKI	Ganga	Ghagra	Middle Ganga Division-I(MGD-I), Lucknow

Forecasted Water Level Measured Water Level

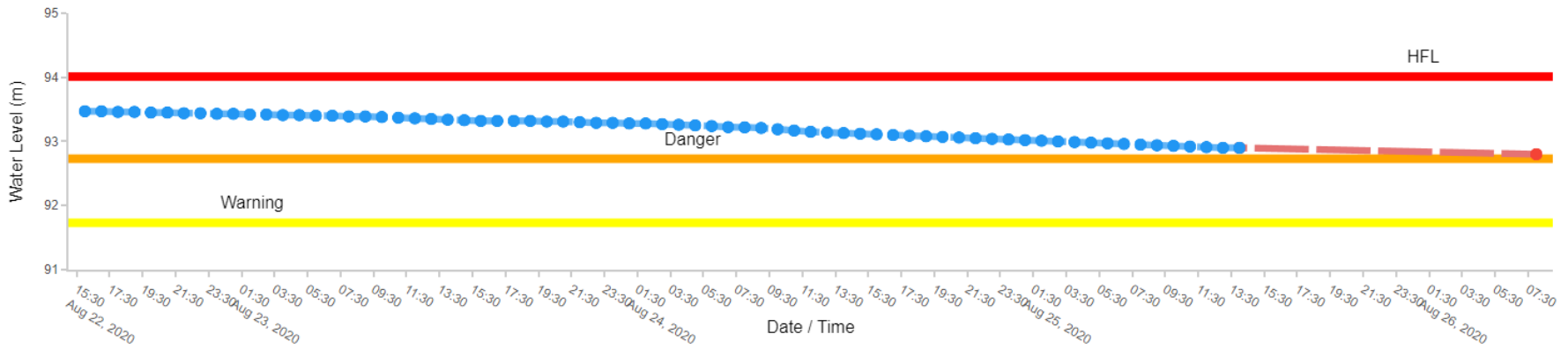


Hydrograph view of - Ayodhya



District	Basin	River	Division
FAIZABAD	Ganga	Ghagra	Middle Ganga Division-I(MGD-I), Lucknow

Forecasted Water Level (Red line with dots)
Measured Water Level (Blue line with dots)

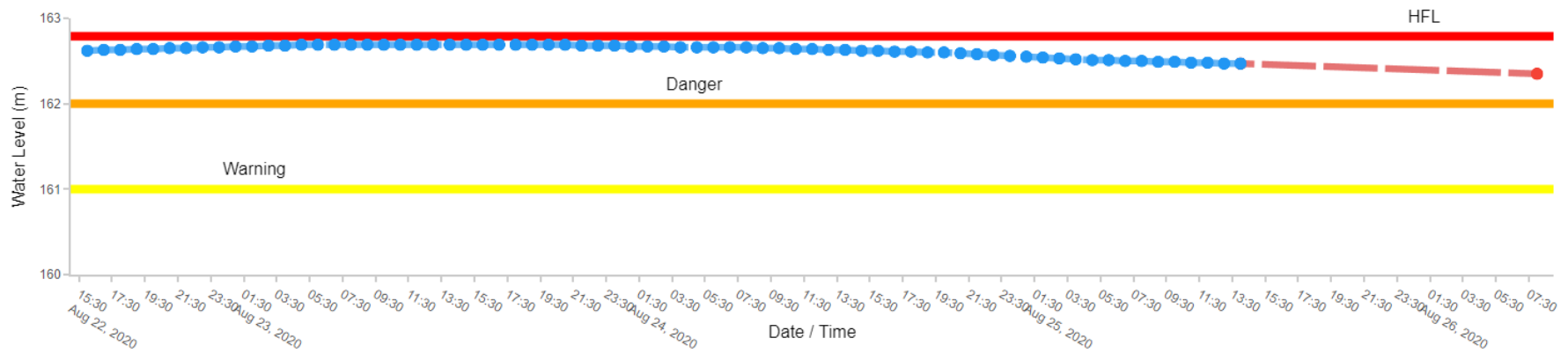


Hydrograph view of - Kachhlabridge



District	Basin	River	Division
BUDAUN	Ganga	Ganga	Middle Ganga Division-II(MGD-II), Lucknow

Forecasted Water Level (Red line with dots)
Measured Water Level (Blue line with dots)

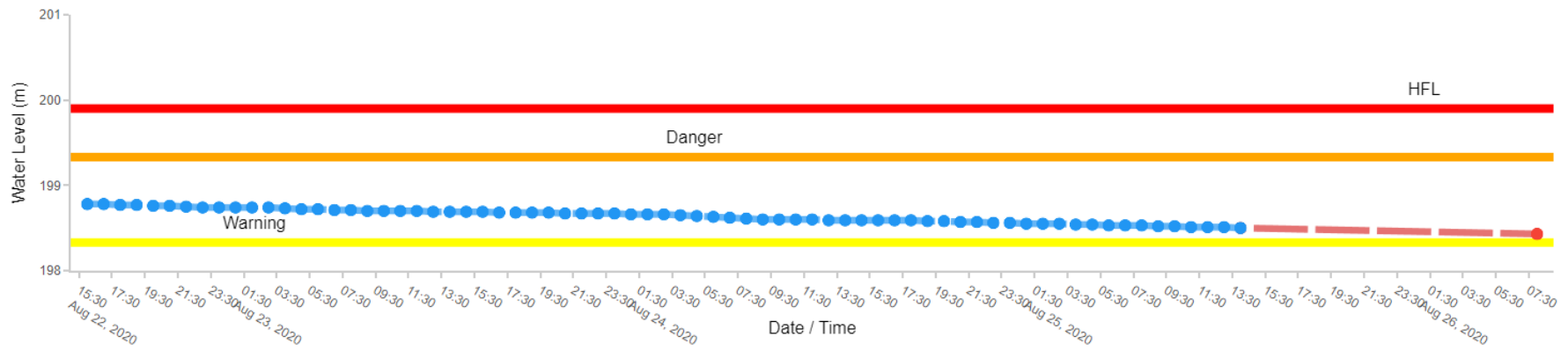


Hydrograph view of - Garhmukteshwar



District	Basin	River	Division
GHAZIABAD	Ganga	Ganga	Middle Ganga Division-II(MGD-II), Lucknow

Forecasted Water Level Measured Water Level

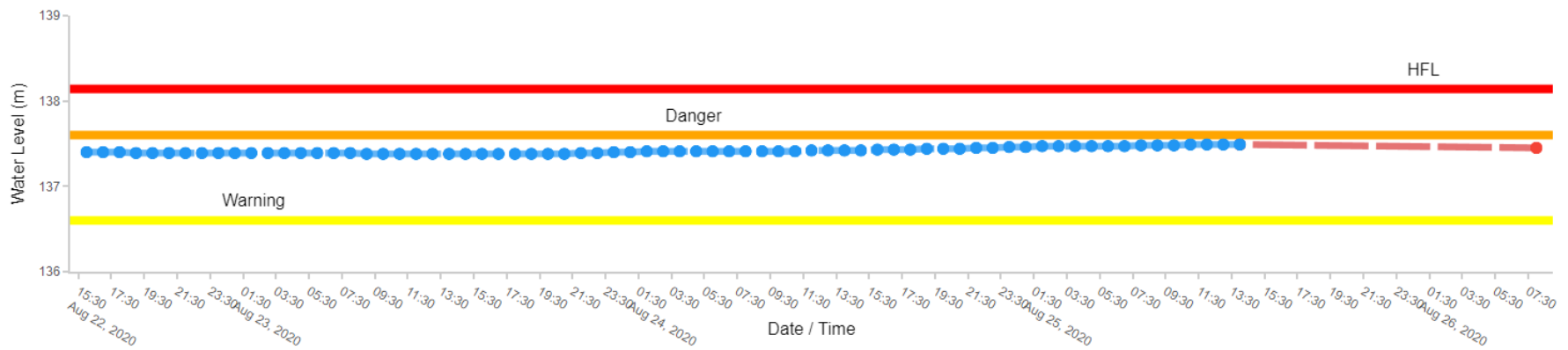


Hydrograph view of - Fatehgarh



District	Basin	River	Division
FARRUKHABAD	Ganga	Ganga	Middle Ganga Division-II(MGD-II), Lucknow

Forecasted Water Level Measured Water Level

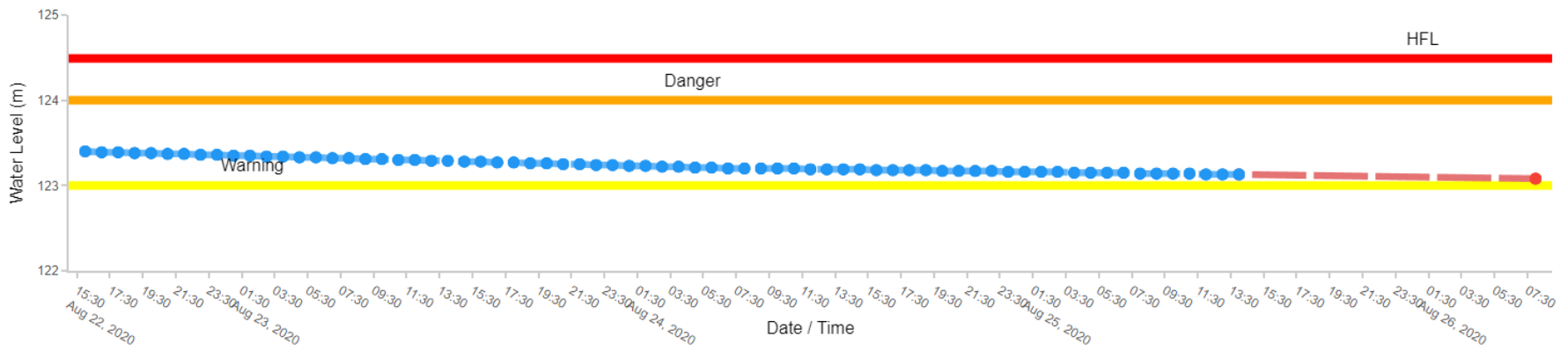


Hydrograph view of - Ankinghat



District	Basin	River	Division
KANPUR DEHAT	Ganga	Ganga	Middle Ganga Division-II(MGD-II), Lucknow

Forecasted Water Level Measured Water Level

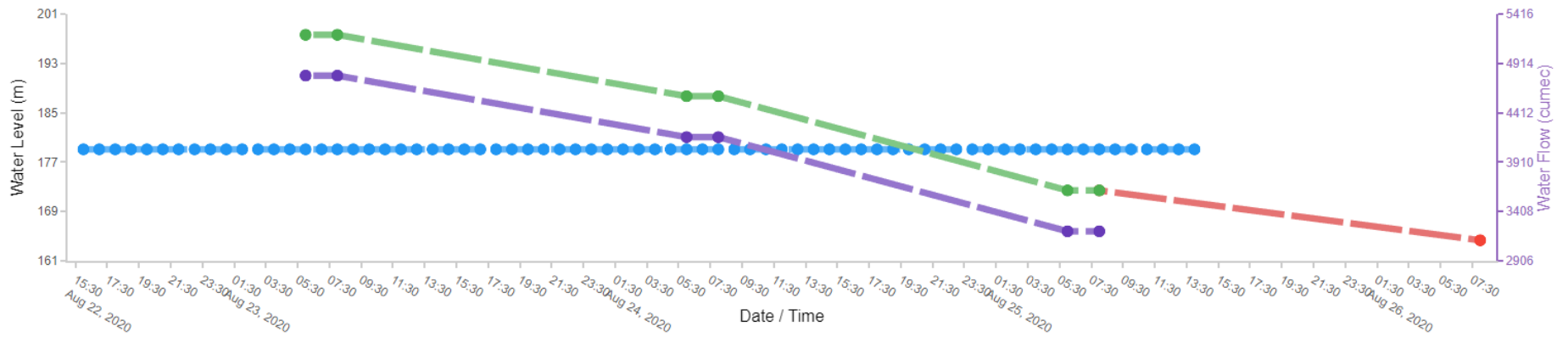


Hydrograph view of - NARORA Barrage



District	Basin	River	Division
BULANDBHAHR	Ganga	Ganga	Middle Ganga Division-II(MGD-II), Lucknow

● Measured Water Level
 ■ Forecasted Water Flow
 ■ Inflow
 ■ Canal Outflow

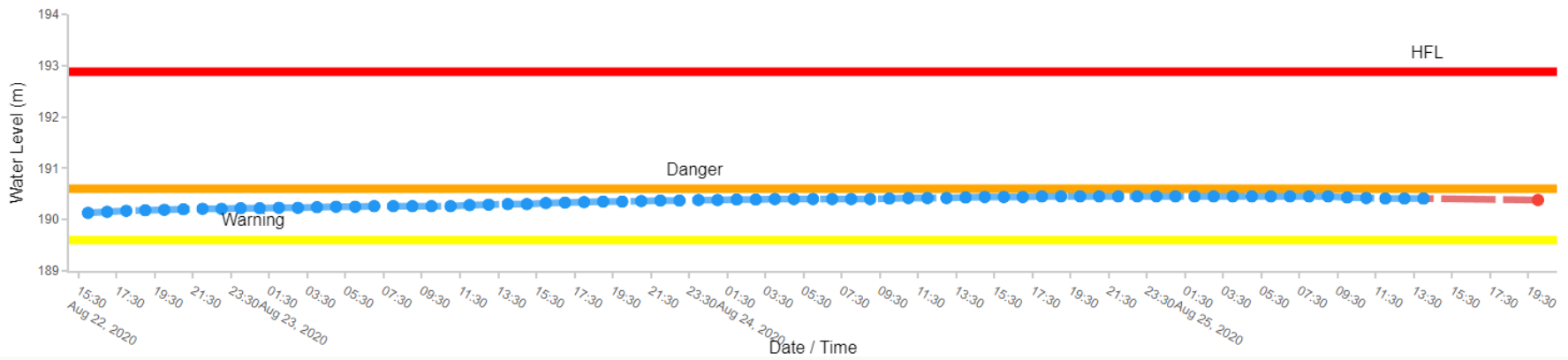


Hydrograph view of - Moradabad



District	Basin	River	Division
MORADABAD	Ganga	Ramganga	Middle Ganga Division-II(MGD-II), Lucknow

Forecasted Water Level Measured Water Level



Hydrograph view of - Bansagar Dam



District	Basin	River	Division
HARDA	Ganga	Sone	Middle Ganga Division-III(MGD-III), Varanasi

Measured Water Level Forecasted Water Flow Inflow

