



Central Water Commission
Upper Ganga Basin Organisation, Lucknow
Daily Flood Situation Report Cum Advisories
Date: 29 July, 2020

FSR No.37

Dated 29-07-2020

1. Weather forecast by IMD

I. SYNOPTIC SITUATION:

- The monsoon trough now passes through Firozpur, Hissar, Gurugram, Gwalior, Banda, Rewa, Daltonganj, Dumka and thence eastwards to Nagaland across Assam.
- The north-south trough from Bihar to north coastal Odisha extending upto 1.5 km above mean sea level has become less marked.
- The cyclonic circulation lies over southwest Rajasthan now lies over Southwest Rajasthan and adjoining North Gujarat between 2.1 & 3.1 km above mean sea level.
- The trough in westerlies runs from Jammu Division to Northeast Arabian Sea off Pakistan coast at 1.5 km above mean sea level has become less marked.
- A cyclonic circulation lies over Northeast Madhya Pradesh & neighbourhood upto 1.5 km above mean sea level.
- A cyclonic circulation lies over Central Pakistan & neighbourhood at 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	0.1-10	0.1-10
2	Bhagirathi	Bhagirathi	11-25	0.1-10	0.1-10
3	Ganga	Chhatnag to Mirzapur	0.1-10	0.1-10	0.1-10
		Narora to Phaphamau	11-25	0.1-10	11-25
		Phaphamau to Ballia	11-25	0.1-10	0.1-10
		Gomti	11-25	11-25	11-25
		Sai	0.1-10	11-25	11-25
		Upper Ganga	26-50	11-25	11-25
4	Ghaghra	Lower Ghaghra	11-25	11-25	11-25
		Middle Ghaghra	11-25	11-25	11-25
		Upper Ghaghra	26-50	26-50	11-25

5	Ramganga	Ramganga	11-25	11-25	11-25
6	Rapti	Rapti	26-50	11-25	26-50
7.	Sharda	Sharda	26-50	11-25	26-50

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	FWS	M	FWS
2	Bhagirathi	Bhagirathi	M	WS	M	FWS	M	FWS
3	Ganga	Chhatnag to Mirzapur	L	WS	L	FWS	L	FWS
		Narora to Phaphamau	M	WS	M	WS	M	WS
		Phaphamau to Ballia	M	WS	M	WS	M	WS
		Gomti	M	WS	M	WS	M	WS
		Sai	M	WS	M	WS	M	WS
		Upper Ganga	M	WS	M	WS	M	WS
4	Ghaghra	Lower Ghaghra	M	WS	M	WS	M	WS
		Middle Ghaghra	M	WS	M	WS	M	WS
		Upper Ghaghra	M	WS	M	WS	M	WS
5	Ramganga	Ramganga	M	WS	M	WS	M	WS
6	Rapti	Rapti	M	WS	M	WS	M	WS
7.	Sharda	Sharda	M	WS	M	FWS	WS	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						
Bhagirathi	Bhagirathi						
Ganga	Chhatnag to Mirzapur						
	Narora to Phaphamau						
	Phaphamau to Ballia						
	Gomti						
	Sai						
	Upper Ganga	H	ISOL	H	ISOL		
Ghaghra	Lower Ghaghra	H	ISOL				
	Middle Ghaghra	H	ISOL				
	Upper Ghaghra	VH	ISOL	H	ISOL	VH	ISOL
Ramganga	Ramganga	H	ISOL	H	ISOL	H	ISOL
Rapti	Rapti	VH	ISOL	H	ISOL	H	ISOL
Sharda	Sharda	VH	ISOL	H	ISOL	VL	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

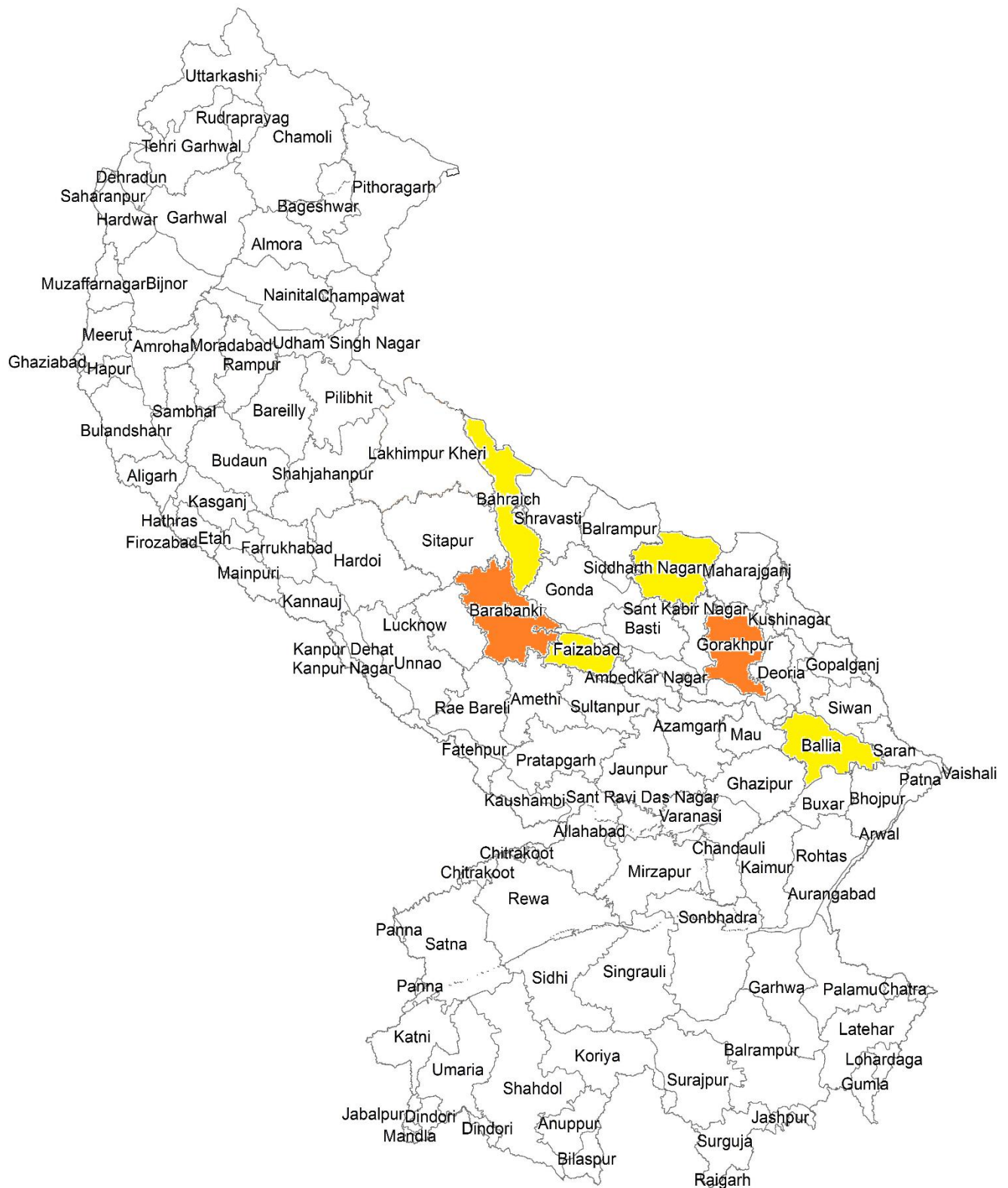
Intensity of Rainfall					
M.Dry	NIL	0 cm	VL	Very Light Rainfall	Trace
L	Light Rainfall	Upto 1 cm	M	Moderate rainfall	02-06 cm
H	Heavy rainfall	07-11 cm	VH	Very Heavy rainfall	12-20 cm
EH	Extremely Heavy rainfall	21 cm or More			
ExH	Exceptionally Heavy Rainfall	When the amount is a value near about 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			50-75	25-50				75-100	5-25					75-100				
2	Bhagirathi	Bhagirathi			50-75	25-50				75-100	5-25					75-100				
3	Ganga	Chhatnag to Mirzapur		50-75	25-50					75-100	5-25					75-100				
		Narora to Phaphamau			50-75	25-50				75-100	5-25					25-50	50-75			
		Phaphamau to Ballia			50-75	25-50				75-100	5-25					75-100	5-25			
		Gomti		5-25	50-75	5-25				25-50	50-75					25-50	50-75			
		Sai		50-75	25-50					25-50	50-75					25-50	50-75			
		Upper Ganga			25-50	50-75				25-50	50-75					25-50	50-75			
4	Ghaghra	Lower Ghaghra		5-25	50-75	5-25				25-50	50-75					25-50	50-75			
		Middle Ghaghra		5-25	50-75	5-25				25-50	50-75					25-50	50-75			
		Upper Ghaghra			25-50	50-75					25-50	50-75				25-50	50-75			
5	Ramganga	Ramganga		5-25	50-75	5-25				25-50	50-75					25-50	50-75			
6	Rapti	Rapti			50-75	25-50				25-50	50-75						25-50	50-75		
7.	Sharda	Sharda			25-50	50-75				25-50	50-75						25-50	50-75		

Probability of occurrence (%)	0-5	5-25	25-50	50-75	75-100
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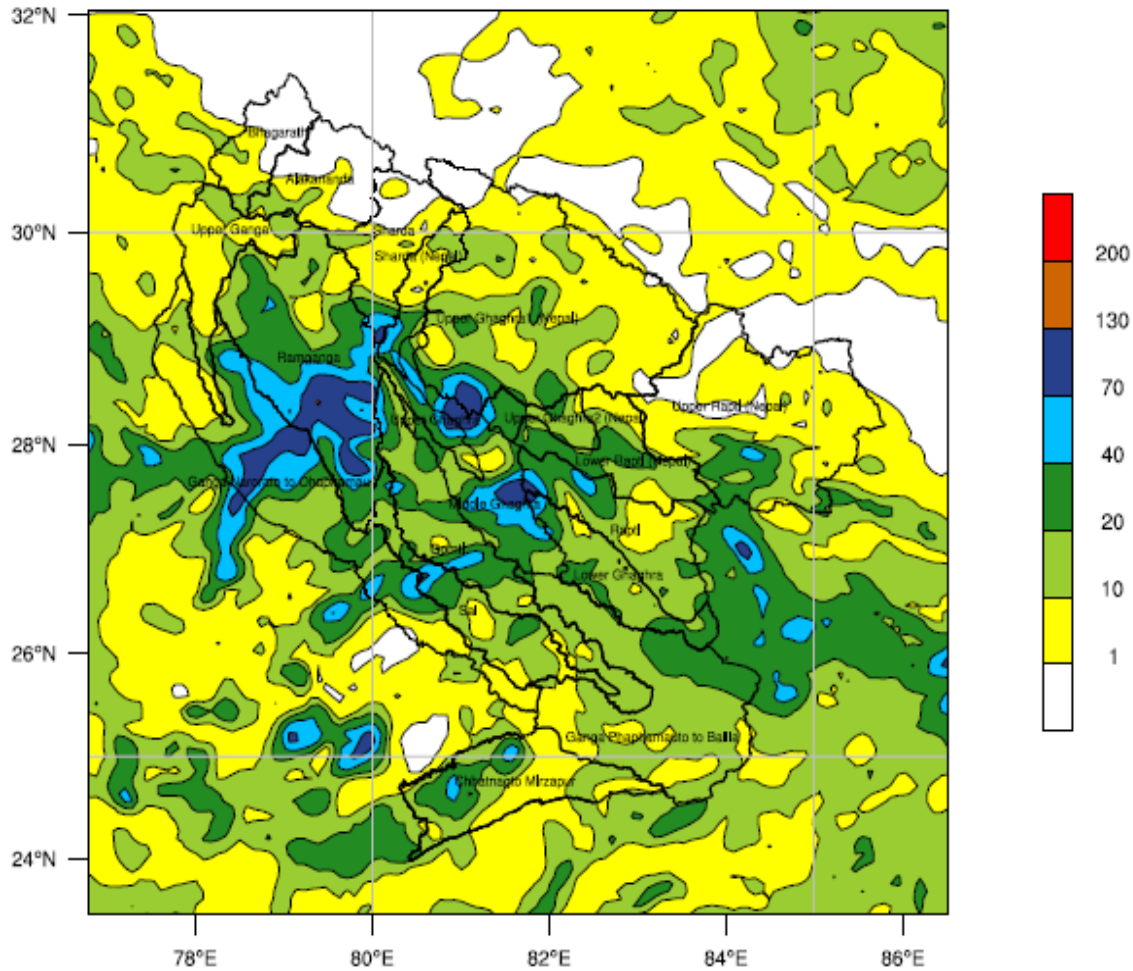
Flood Situation on 29 JULY, 2020



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 154.59 m with Falling trend which is 0.49m above its Danger Level of 154.1 m and 0.73m below its previous HFL of 155.32 m (2014-07-21).
2. River Rohin at Trimohinighat in MAHRAJGANJ 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 82.63m with Raising trend which is 0.19 m above its Danger Level of 82.44 m and 2.85 m below its previous HFL of 85.48 m (2017-08-15).
3. 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 64.12m with Falling trend which is 0.11m above its Danger Level of 64.01 m and 1.88 m below its previous HFL of 66.0 m (1998-08-28).
4. 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 106.396m with Raising trend which is 0.326 m above its Danger Level of 106.07 m and 1.22 m below its previous HFL of 107.616 m (2014-08-18).
5. River Rapti at Birdghat in GORAKHPUR 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 75.775 m with Falling trend which is 0.795 m above its Danger Level of 74.98 m and 1.765m below its previous HFL of 77.54 m (1998-08-23).

FLOOD MET OFFICE LUCKNOW

IMD WRF Rainfall (mm) Forecast(24hr)



Sub basin wise Average Rainfall Estimation

Alaknanda = 3 mm	Rapti = 19 mm
Bhagirathi = 4 mm	Sal = 18 mm
Chhatnagto Mirzapur = 15 mm	Sharda = 17 mm
Ganga Narorato Ohaphamau = 28 mm	Sharda (Nepal) = 14 mm
Ganga Phaphamauto Balla = 14 mm	Upper Ganga = 9 mm
Gomti = 20 mm	Upper Ghaghra = 11 mm
Lower Ghaghara = 19 mm	Upper Ghaghra1 (Nepal) = 23 mm
Lower Rapti (Nepal) = 17 mm	Upper Ghaghra2 (Nepal) = 49 mm
Middle Ghaghara = 34 mm	Upper Rapti (Nepal) = 7 mm
Ramganga = 38 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

2.1 Rainfall Situation

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

Name of Place (State)	Rainfall (in mm)
Fatehgarh (U.P)	54.6
Ghazipur (U.P)	60.4
Balia (U.P)	63.4
Kalgarh (U.P)	62.4
Bareilly (U.P)	80.0
Raebareli (U.P)	112.4
New Motipur (U.P)	107.8
Chauhaanpatti (U.P)	66.4
Paliakalan (U.P)	52.0
Sarda Nagar (U.P)	49.2
Thal (U.P)	122.0
Katernia Ghat (U.P)	83.0
B.K.Ghat (U.P)	76.2
Elginbridge (U.P)	182.2
Ramnagar Bagha (U.P)	58.4
Chauguruji (U.P)	83.6
Jauljibi (U.K)	99.4
Banbasa Barrage (U.K)	79.0
Bangapani (U.K)	143.6
Banbasa (U.K)	79.2
Chisapani (Nepal)	260.6

2.2 LEVEL FORECAST

LEVEL FORECAST		
S.No.	Flood Situations	No. of Forecasting Sites
A.	Extreme Flood Situation:	
	(Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalized)	0
B.	Severe Flood Situation :	
	(Site(s) where water Level touching or exceeding the Danger Level but below Highest Flood Level(HFL)	2
C.	Above Normal Flood Situation:	
	(Site (s) where water level touching or exceeding the warning Level but below Danger Level)	3
Total Numbers of Sites above Warning Level (A+B+C)		5
INFLOW FORECAST		
Number of Sites for which inflow forecasts issued:		1
(Where inflow are equal or exceed the specified Threshold Limit for a particular reservoir/ barrage)		1

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
Ghaghra	Ayodhya	Faizabad	U.P	92.73	91.73	94.01	2009	92.27	0800	S	92.52	30.07.20	0800	R
Rapti	Bansi	Siddharth nagar	U.P	84.9	83.9	85.88	2017	83.64	0800	R	83.90	30.07.20	0800	R
Ghaghra	Turtipar	Baliya	U.P	64.01	63.01	66.00	1998	64.14	0800	F	64.00	30.07.20	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
Rapti	Birdghat	Gorakhpur	U.P	74.98	73.98	77.54	1998	75.80	0800	R	75.65	30.07.20	0800	F
Ghaghra	Elgin Bridge	Barabanki	U.P.	106.07	105.07	107.616	2014	106.106	0800	R	107.00	30.07. 20	0800	R

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

[illegible]

Note - No Station is in this situation Dated 29.07.2020

2.6 Inflow Forecast

[illegible]

Advisory on Hydro Meteorological Situation Expected from 30-07-2020 to 31-07-2020

As per rainfall pattern given in section II, Alaknanda, Bhagirathi, Ganga rivers are expected to receive moderate rain at widespread areas in next 48 hrs. Ghaghra Ramganga, Sharda & Rapti river basins are expected to receive moderate to heavy rain at widespread area in next 48 hours. Water level at most of CWC stations are expected to raise 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 most of river basins.

अधिशालसीअभियंता

मध्य गंगा मण्डल -1 लखनऊ

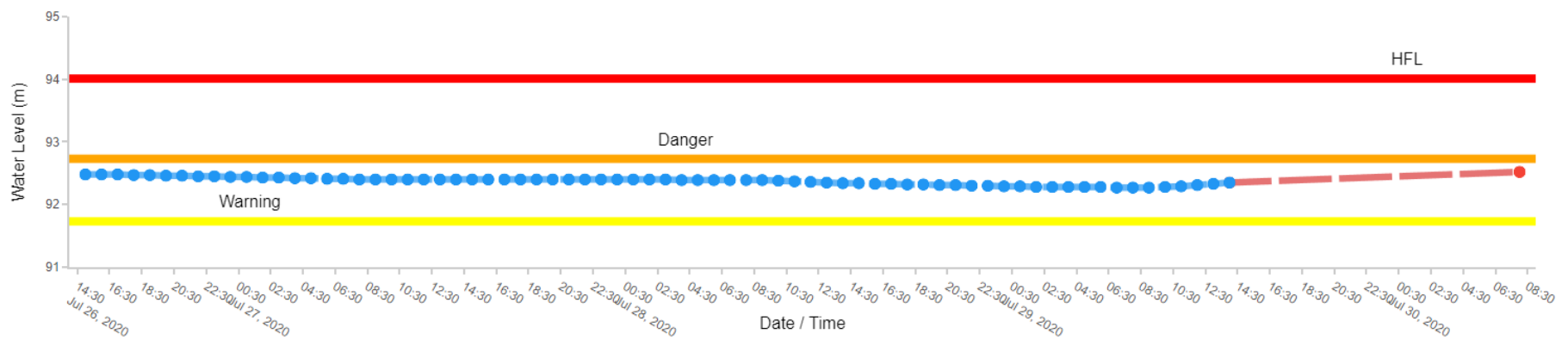


Hydrograph view of - Ayodhya



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

Forecasted Water Level Measured Water Level



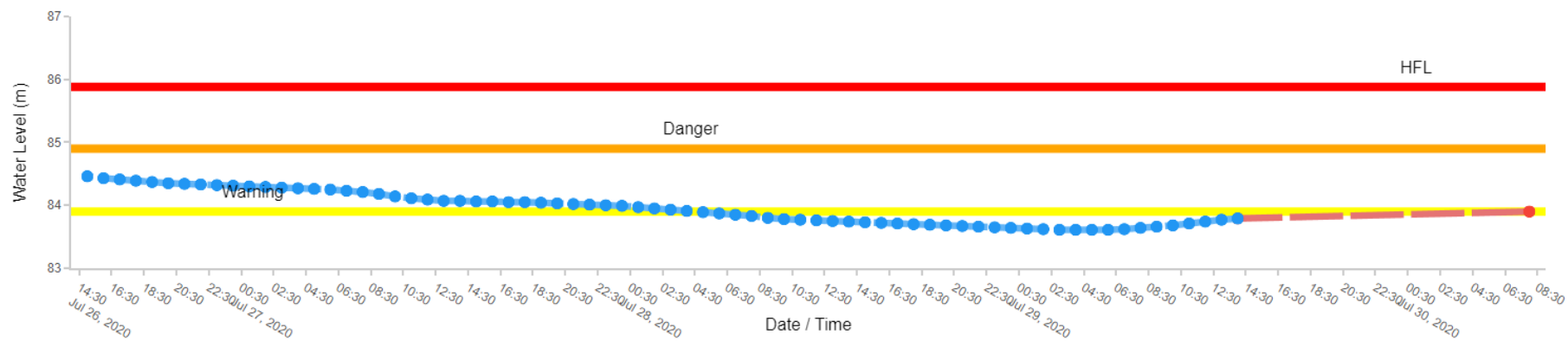


Hydrograph view of - Bansi



District	Basin	River	Division
SIDDHARTHANAGAR	Ganga	Rapti	Middle Ganga Division-I(MGD-I), Lucknow

Forecasted Water Level Measured Water Level



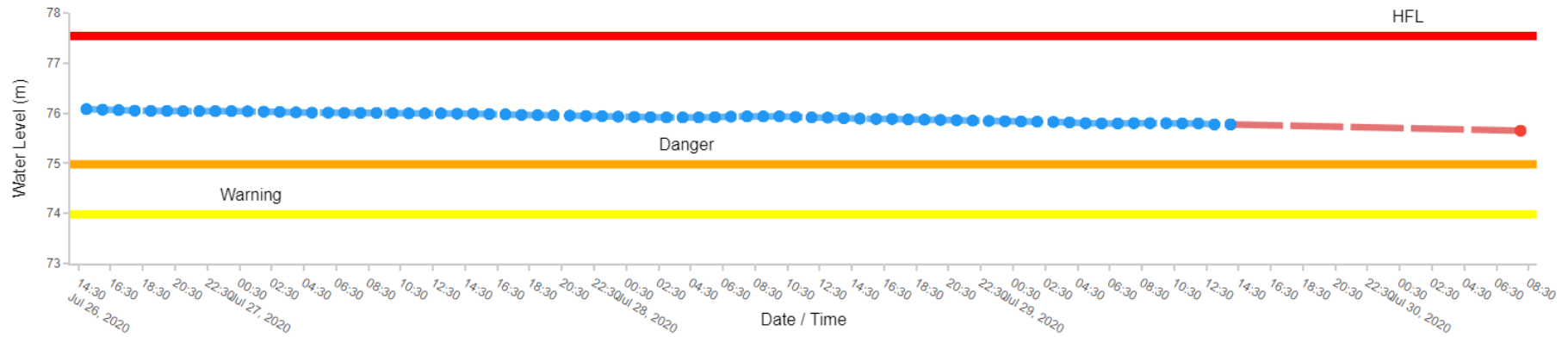


Hydrograph view of - Birdghat



District	Basin	River	Division
GORAKHPUR	Ganga	Rapti	Middle Ganga Division-I(MGD-I), Lucknow

Forecasted Water Level Measured Water Level



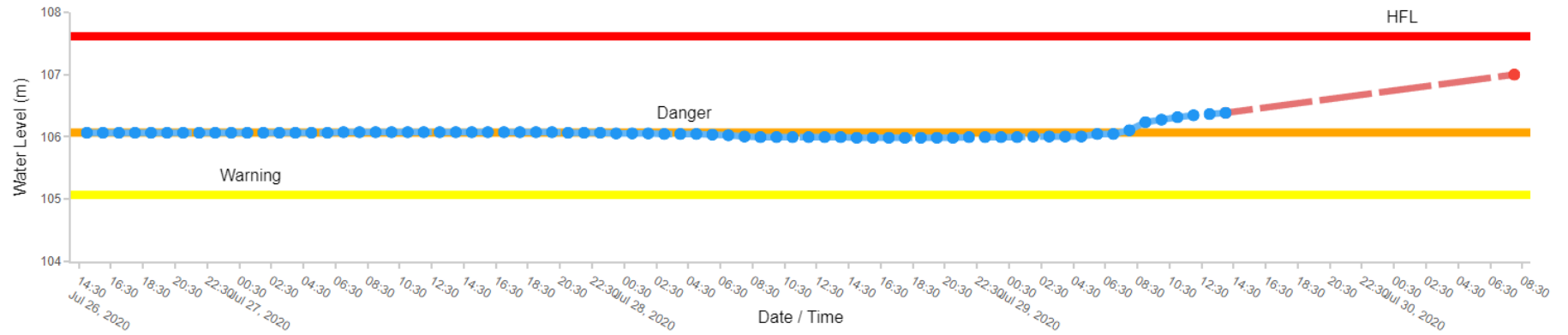


Hydrograph view of - Elginbridge



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

Forecasted Water Level Measured Water Level



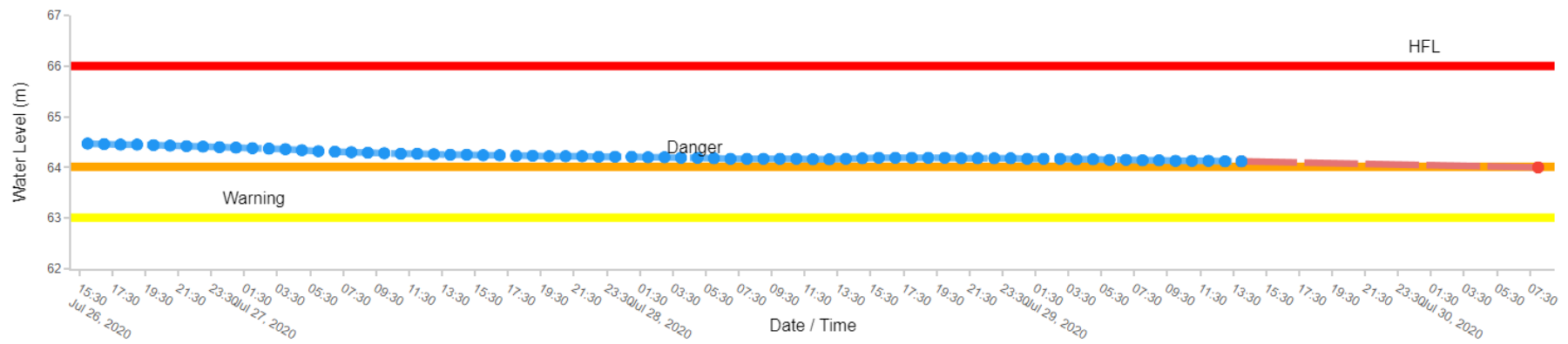


Hydrograph view of - Turtipar



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

Forecasted Water Level Measured Water Level





Hydrograph view of - Katarniaghat Barrage



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

Measured Water Level Forecasted Water Flow Inflow

