



Central Water Commission
Upper Ganga Basin Organisation, Lucknow
Daily Flood Situation Report Cum Advisories
Date: 21 July, 2020

FSR No.29

Dated 21-07-2020

1. Weather forecast by IMD

I. SYNOPTIC SITUATION:

- The monsoon trough at mean sea level now passes through Ganganagar, Delhi, Hardoi and Gorakhpur and eastern part lies close to the foothills of Himalayas.
- The cyclonic circulation over southwest Rajasthan & neighbourhood persists and seen at 3.6 km above mean sea level has become less marked.
- The trough in mid-tropospheric westerlies with its axis between 3.1 and 7.6 km above mean sea level now runs roughly along Long.70°E to the north of Lat. 25°N.
- A cyclonic circulation lies over southwest Uttar Pradesh & neighbourhood at 0.9 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	0.1-10	0.1-10	0.1-10
2	Bhagirathi	Bhagirathi	0.1-10	0.1-10	0.1-10
3	Ganga	Chhatnag to Mirzapur	0.1-10	0.1-10	0.1-10
		Narora to Phaphamau	0.1-10	0.1-10	0.1-10
		Phaphamau to Ballia	0.1-10	0.1-10	11-25
		Gomti	0.1-10	0.1-10	11-25
		Sai	0.1-10	0.1-10	0.1-10
		Upper Ganga	11-25	0.1-10	0.1-10
4	Ghaghra	Lower Ghaghra	26-50	26-50	11-25
		Middle Ghaghra	11-25	11-25	11-25
		Upper Ghaghra	11-25	11-25	0.1-10
5	Ramganga	Ramganga	0.1-10	0.1-10	0.1-10
6	Rapti	Rapti	11-25	26-50	0.1-10
7.	Sharda	Sharda	11-25	0.1-10	0.1-10

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

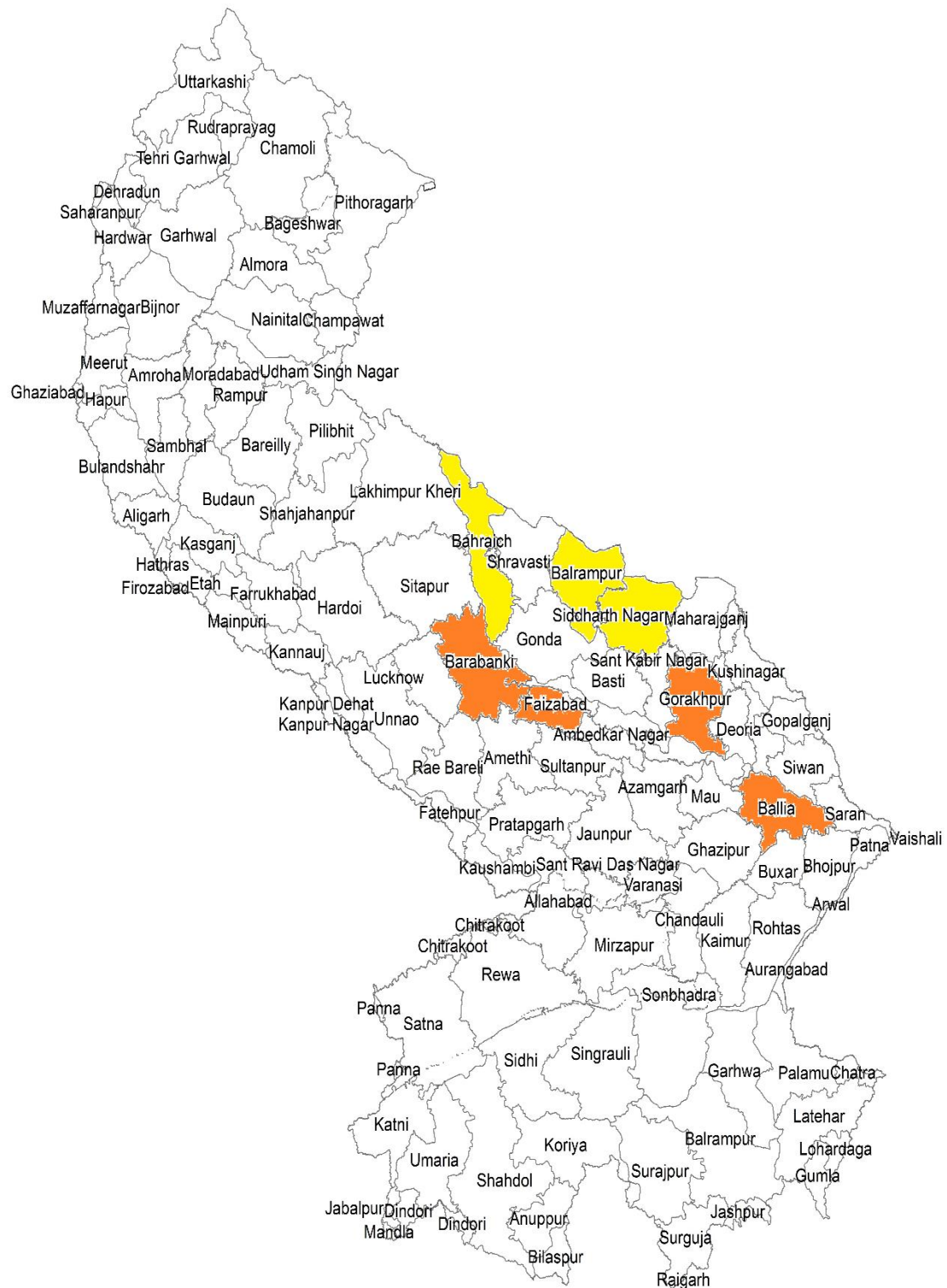
IV. PROBABILISTIC FORECAST

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		75-100						75-100						75-100				
2	Bhagirathi	Bhagirathi		75-100						75-100						75-100				
3	Ganga	Chhatnag to Mirzapur		75-100						50-75	25-50					50-75	25-50			
		Narora to Phaphamau		75-100						75-100						75-100				
		Phaphamau to Ballia		50-75	25-50					75-100						25-50	50-75			
		Gomti		75-100						75-100						25-50	50-75			
		Sai		75-100						75-100						25-50	50-75			
		Upper Ganga			75-100					75-100						75-100				
4	Ghaghra	Lower Ghaghra			25-50	50-75					25-50	50-75				25-50	50-75			
		Middle Ghaghra		5-25	50-75	5-25				5-25	50-75	5-25				5-25	50-75	5-25		
		Upper Ghaghra		25-50	50-75					75-100						75-100				
5	Ramganga	Ramganga		75-100						75-100						75-100				
6	Rapti	Rapti			75-100						25-50	50-75				50-75	25-50			
7.	Sharda	Sharda		25-50	50-75					75-100						75-100				

Probability of occurrence (%)	0-5	5-25	25-50	50-75	75-100
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2. Summary of flood situation as per CWC flood forecasting network

Flood Situation on 21 JULY, 2020



1. River Burhi Rapti at Kakrahi in SIDDHARTHANAGAR 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 86.14 m with Rising trend which is 0.49 m above its Danger Level of 85.65 m and 2.83 m below its previous HFL of 88.97 m (1998-08-22).
2. River Kwano at Chandradeepghat in GONDA district of Uttar Pradesh continues to flow in SEVERE SITUATION at 12:00 hrs today. At 12:00 hrs, it was flowing at a level of 89.25 m with Rising trend which is 0.41 m above its Danger Level of 88.84 m and 2.79 m below its previous HFL of 92.04 m (1989-07-16).
3. 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 92.83 m with Rising trend which is 0.10 m above its Danger Level of 92.73 m and 1.18 m below its previous HFL of 94.01 m (2009-10-11).
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 92.83 m with Rising trend which is 0.10 m above its Danger Level of 92.73 m and 1.18 m below its previous HFL of 94.01 m (2009-10-11).
5. 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 154.63 m with Steady trend which is 0.53 m above its Danger Level of 154.1 m and 0.69 m below its previous HFL of 155.32 m (2014-07-21).
6. 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 106.576 m with Steady trend which is 0.51 m above its Danger Level of 106.07 m and 1.04 m below its previous HFL of 107.616 m (2014-08-18).
7. 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 64.21 m with Rising trend which is 0.20 m above its Danger Level of 64.01 m and 1.79 m below its previous HFL of 66.0 m (1998-08-28).
8. River Gandak at Khadda in KUSHINAGAR district of Uttar Pradesh continues to flow in SEVERE SITUATION at 15:00 hrs today. At 15:00 hrs, it was flowing at a level of 96.24 m with Rising trend which is 0.24 m above its Danger Level of 96.0 m and 1.26 m below its previous HFL of 97.5 m (2002-07-23).
9. 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 75.23 m with Rising trend which is 0.25 m above its Danger Level of 74.98 m and 2.31 m below its previous HFL of 77.54 m (1998-08-23).

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)
Mohana (U.P)	54.0
Bhatpurwa Ghat (U.P)	73.8
Jauljibi (U.P)	88.4
Paliakalan (U.P)	66.0
Shardanagar (U.P)	57.0
Colonelganj (U.P)	60.0
Bansi (U.P)	63.2
Reguali (U.P)	87.4
Kakrahi (U.P)	76.6
Trimohinighat (U.P)	129.0
Chauguruji (U.P)	84.4
New Motipur (U.P)	96.0
Parsohanghat (U.P)	53.8
ChauhaanPatti (U.P)	86.2
Thoothibari (U.P)	77.6
Thal (U.K)	65.8
Haridwar (U.K)	114.4
Chisapani (Nepal)	53.2

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)	4
C.	Above Normal Flood Situation:	
	(Site (s) where water level touching or exceeding the warning Level but below Danger Level)	2
Total Numbers of Sites above Warning Level (A+B+C)		6
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
Rapti	Balrampur	Balrampur	U.P	104.62	103.62	105.54	2015	103.98	0800	S	104.28	22.07.20	0800	R
Rapti	Bansi	Siddharth nagar	U.P	84.9	83.9	85.88	2017	84.31	0800	R	84.44	22.07.20	0800	R

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	Elgin Bridge	Barabanki	U.P.	106.07	105.07	107.616	2014	106.57	0800	R	106.68	22.07. 20	0800	R
Rapti	Birdghat	Gorakhpur	U.P	74.98	73.98	77.54	1998	75.17	0800	R	75.40	22.07.20	0800	R
Ghaghra	Turtipar	Baliya	U.P	64.01	63.01	66.00	1998	64.12	0800	R	64.30	22.07.20	0800	R
Ghaghra	Ayodhya	Faizabad	U.P	92.73	91.73	94.01	2009	92.79	0800	R	92.90	22.07.20	0800	R

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

[illegible]

Note - No Station in this situation Dated 21.07.2020

2.6 Inflow Forecast

[illegible]

Advisory on Hydro Meteorological Situation Expected from 22-07-2020 to 23-07-2020

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

अधिशसीअभियंता

मध्य गंगा मण्डल -1 लखनऊ

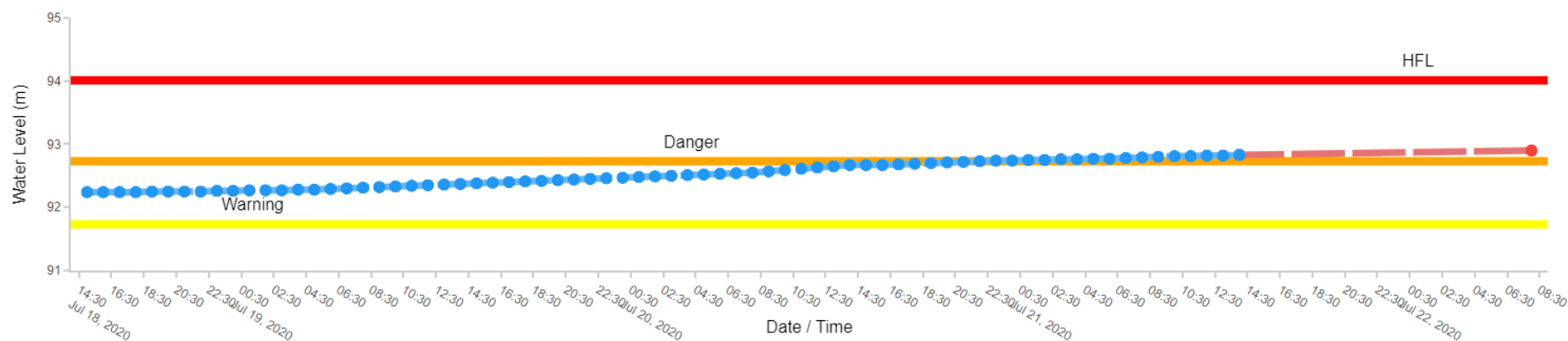


Hydrograph view of - Ayodhya



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

Forecasted Water Level Measured Water Level



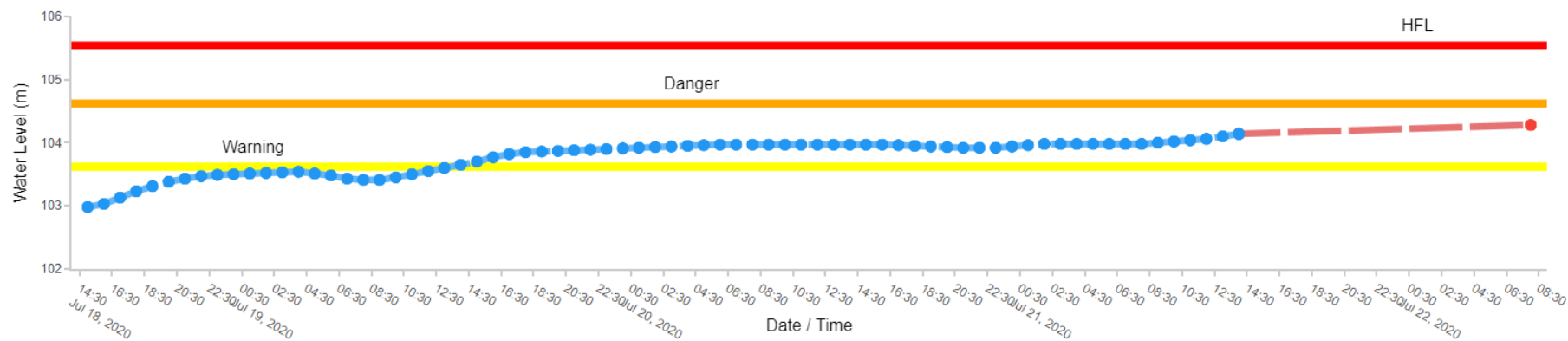


Hydrograph view of - Balrampur



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

Forecasted Water Level Measured Water Level



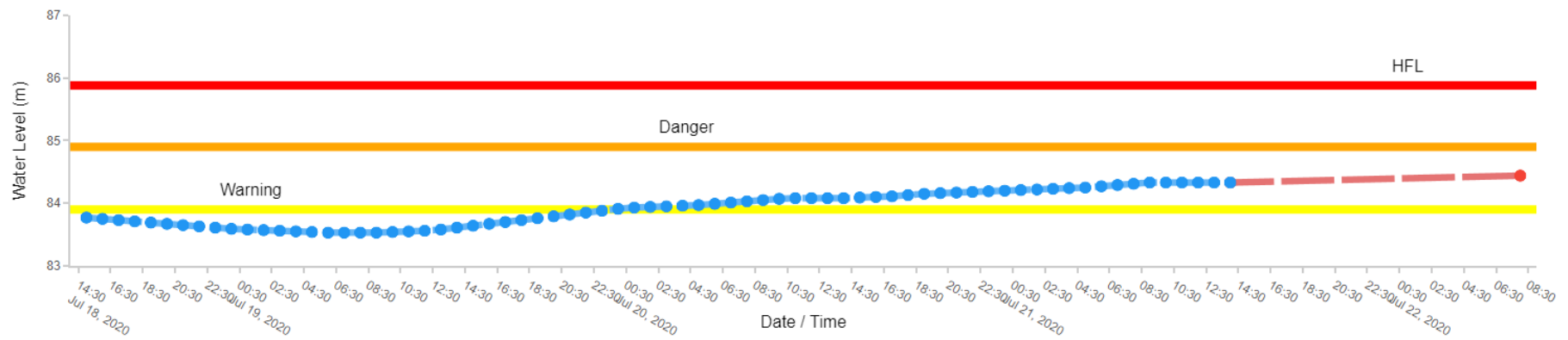


Hydrograph view of - Bansi



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

Forecasted Water Level Measured Water Level



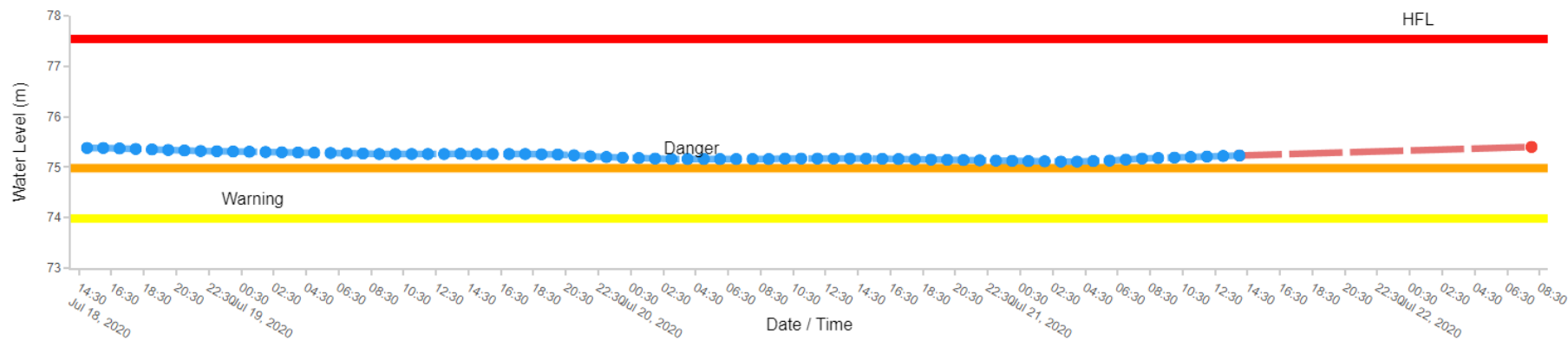


Hydrograph view of - Birdghat



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

Forecasted Water Level Measured Water Level



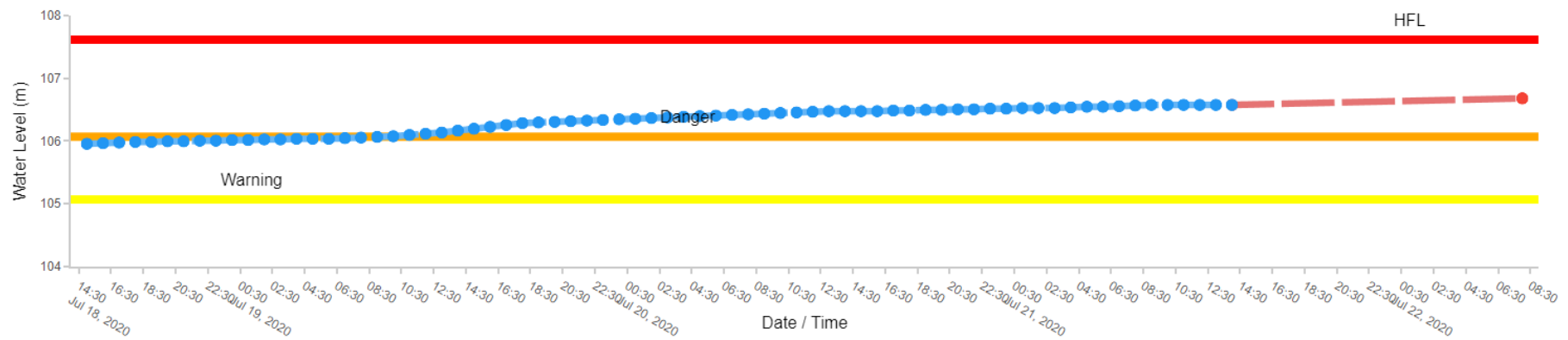


Hydrograph view of - Elginbridge



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

Forecasted Water Level Measured Water Level



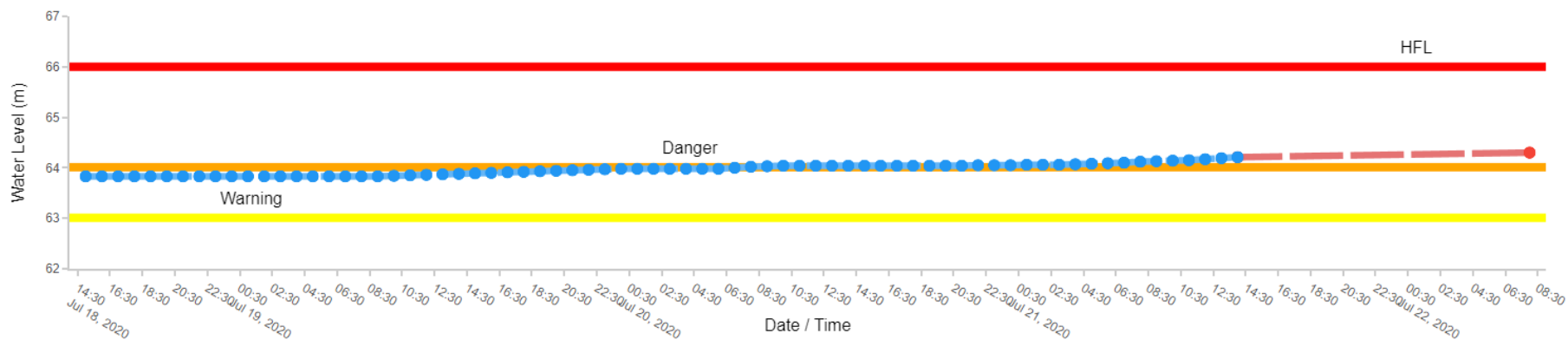


Hydrograph view of - Turtipar



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

