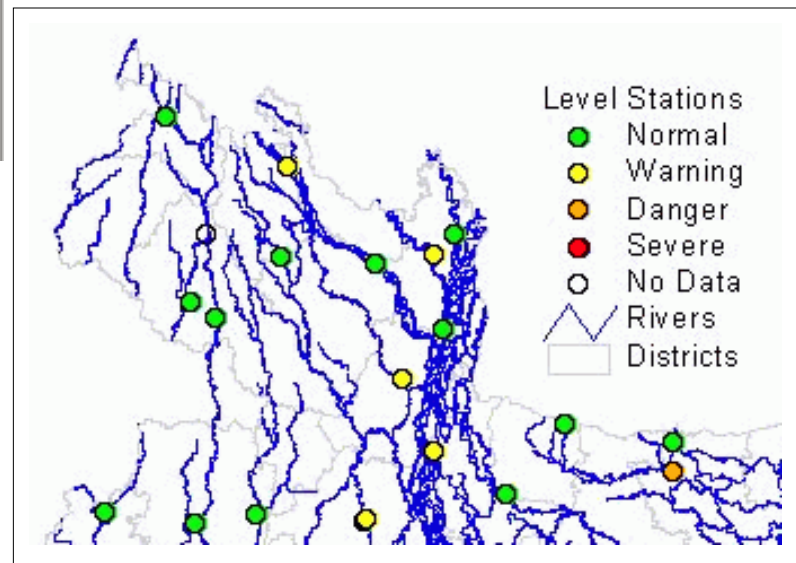
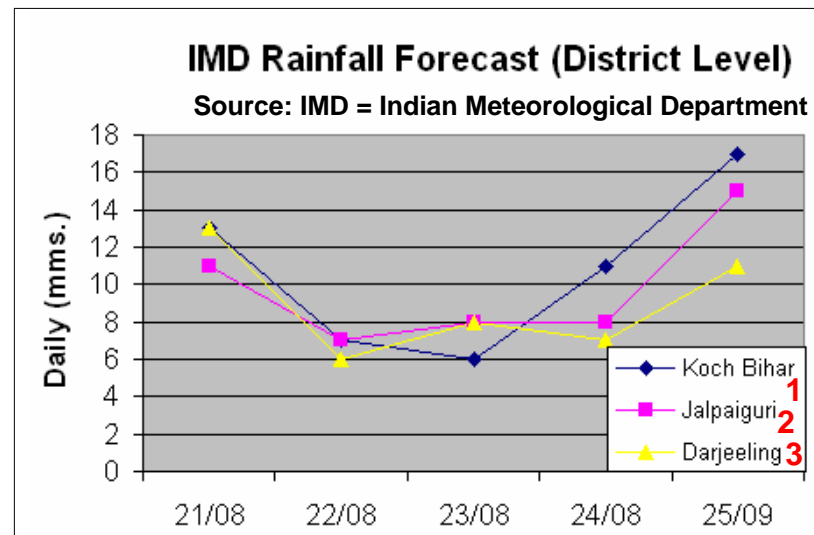


Monsoon Monitoring

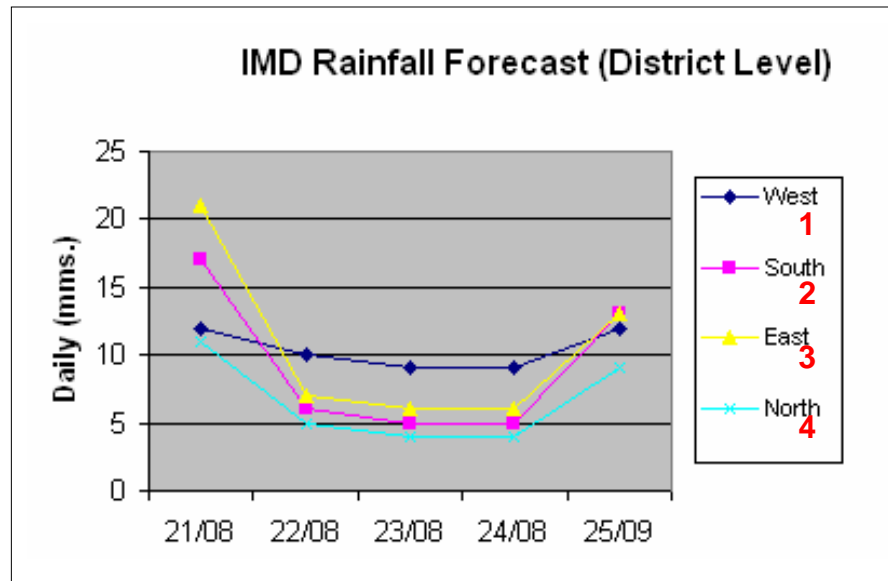
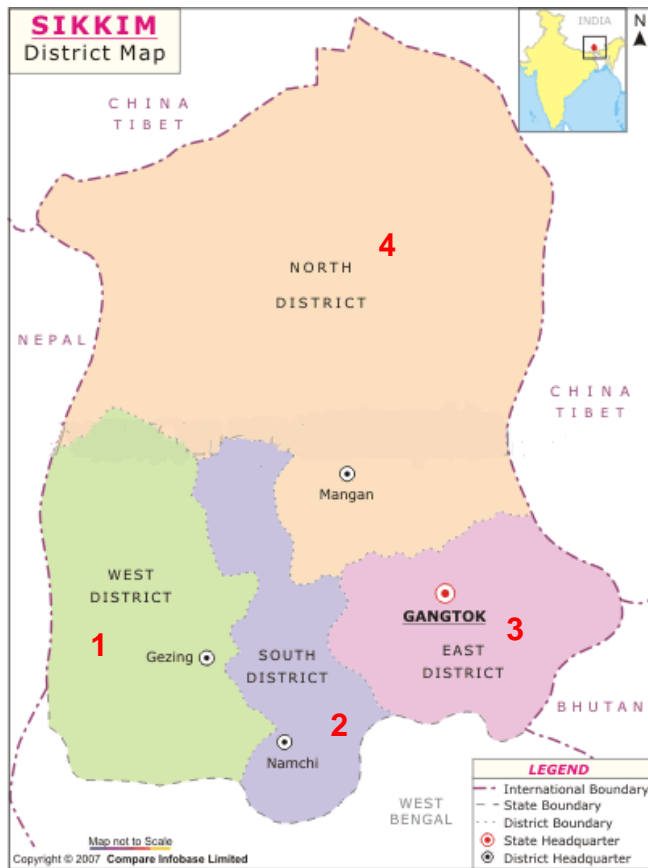
Rainfall forecasts upstream from Bangladesh,
and implications for Flooding.

UN World Food Programme, Bangladesh
Disaster Risk Reduction (DRR) Unit
20 August 2008



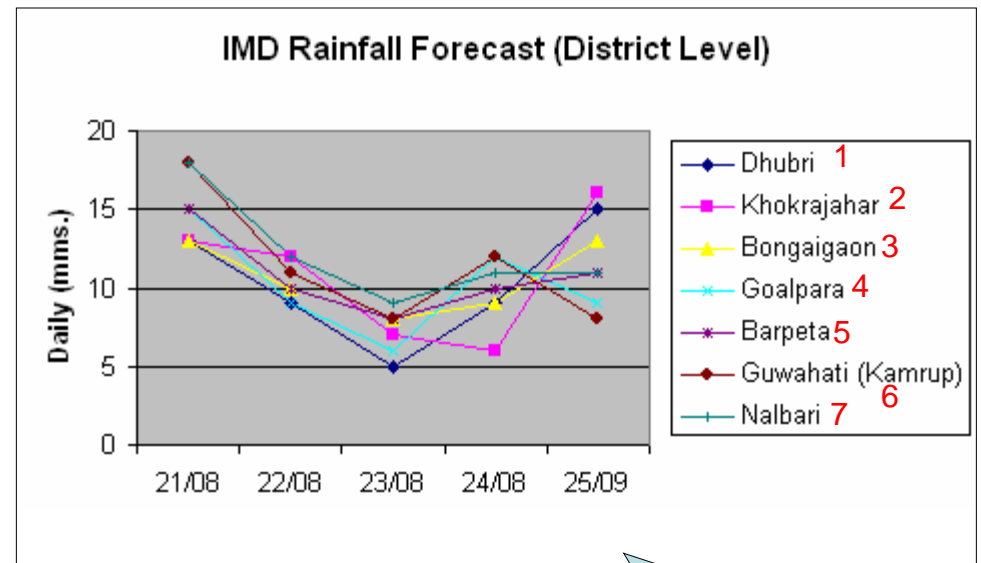
Notes:

1. Rivers in the Northwest of Bangladesh are expected to rise in the coming days due to recent heavy rain upstream.
2. Rains in Koch Bihar, Jalpaiguri, and Darjeeling drain mostly into the Teesta and Bhramaputra.
2. Low-moderate rain is forecast for these districts from the 21st to 25th August.
3. River levels downstream should stabilize or begin to drop thereafter.



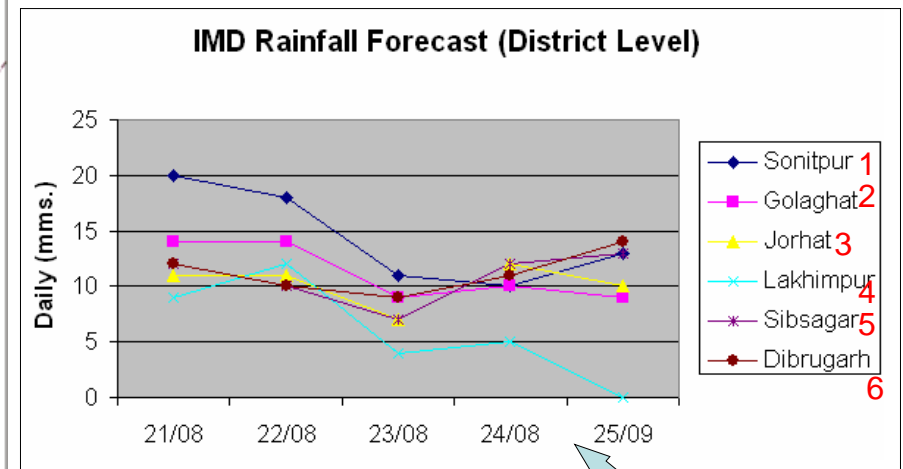
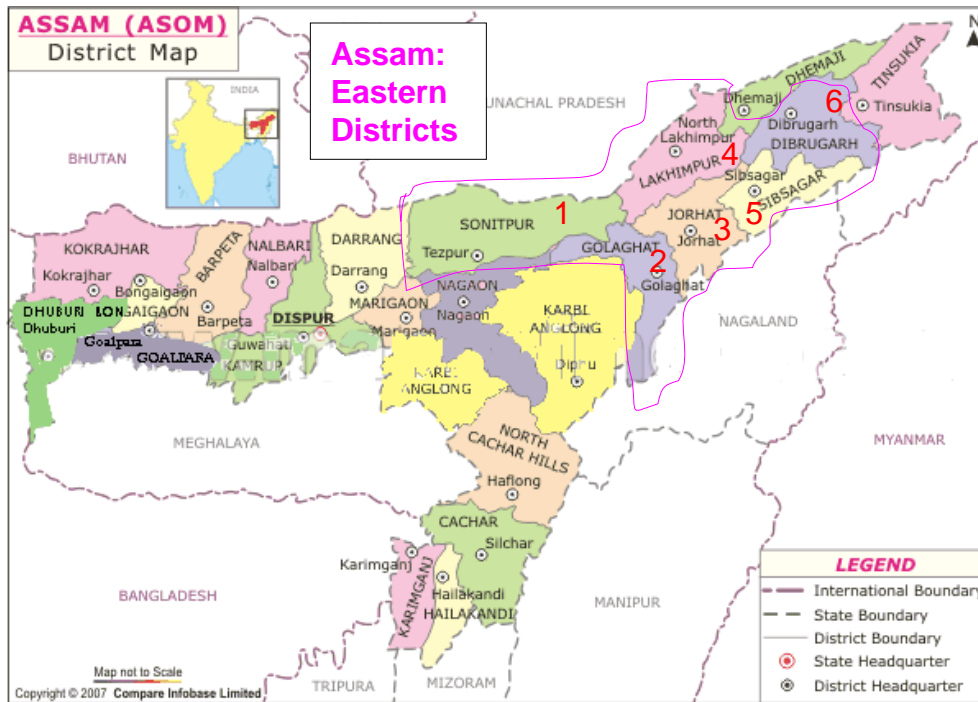
Notes:

1. Rivers in the **Northwest** of Bangladesh are expected to rise in the coming days due to recent heavy rain upstream.
2. Rains in **Sikkim's districts** drain mostly into the Teesta and Bhramaputra.
2. Low-moderate rain is forecast for **these** districts from the 21st to 25th August.
3. River levels downstream should stabilize or begin to drop thereafter.



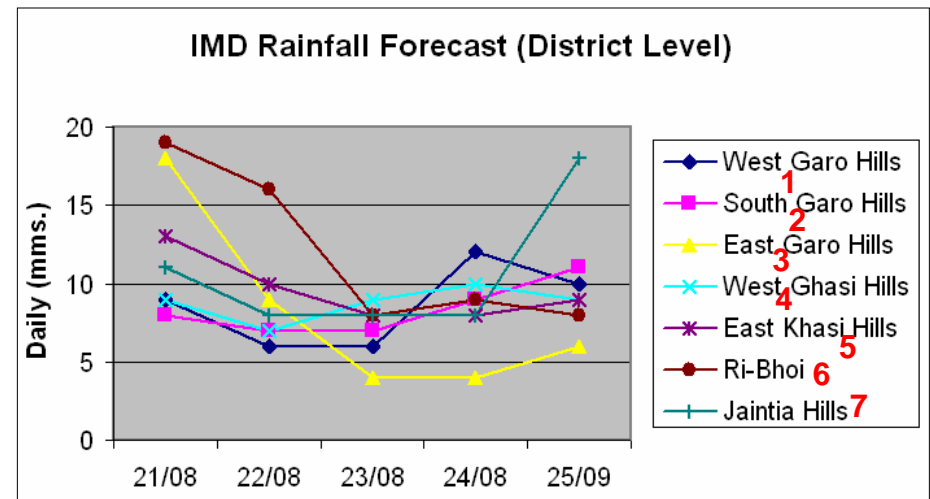
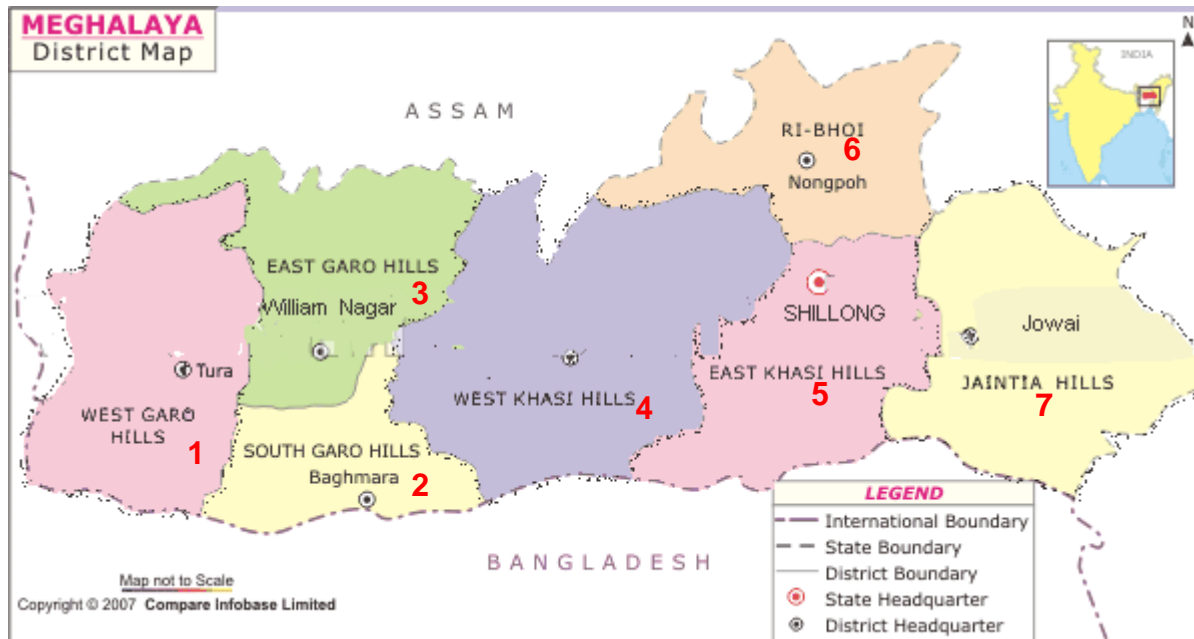
Notes:

1. Rivers in the Northwest of Bangladesh (Bhramaputra basin) are expected to rise in the coming days due to recent heavy rain upstream in Assam's Western districts.
2. However; low to moderate rainfall is forecast for upstream Assam's Western districts from 21st - 25th August.
3. River levels downstream should stabilize or begin to drop thereafter.



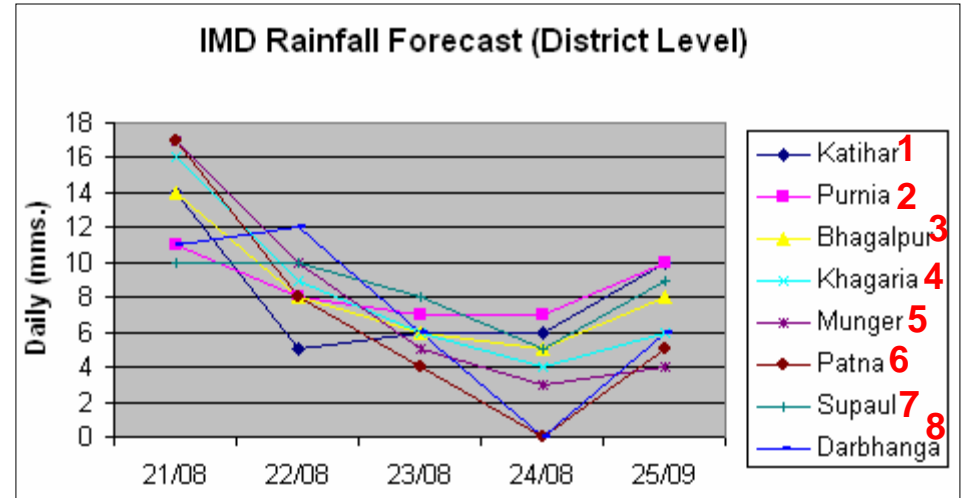
Notes:

1. Rivers in the Northwest of Bangladesh (Bhramaputra basin) are expected to rise in the coming days due to recent heavy rain upstream in Assam's Eastern districts.
2. However; low to moderate rainfall is forecast for upstream Assam's Eastern districts from 21st - 25th August.
3. River levels downstream should stabilize or begin to drop thereafter.



Notes:

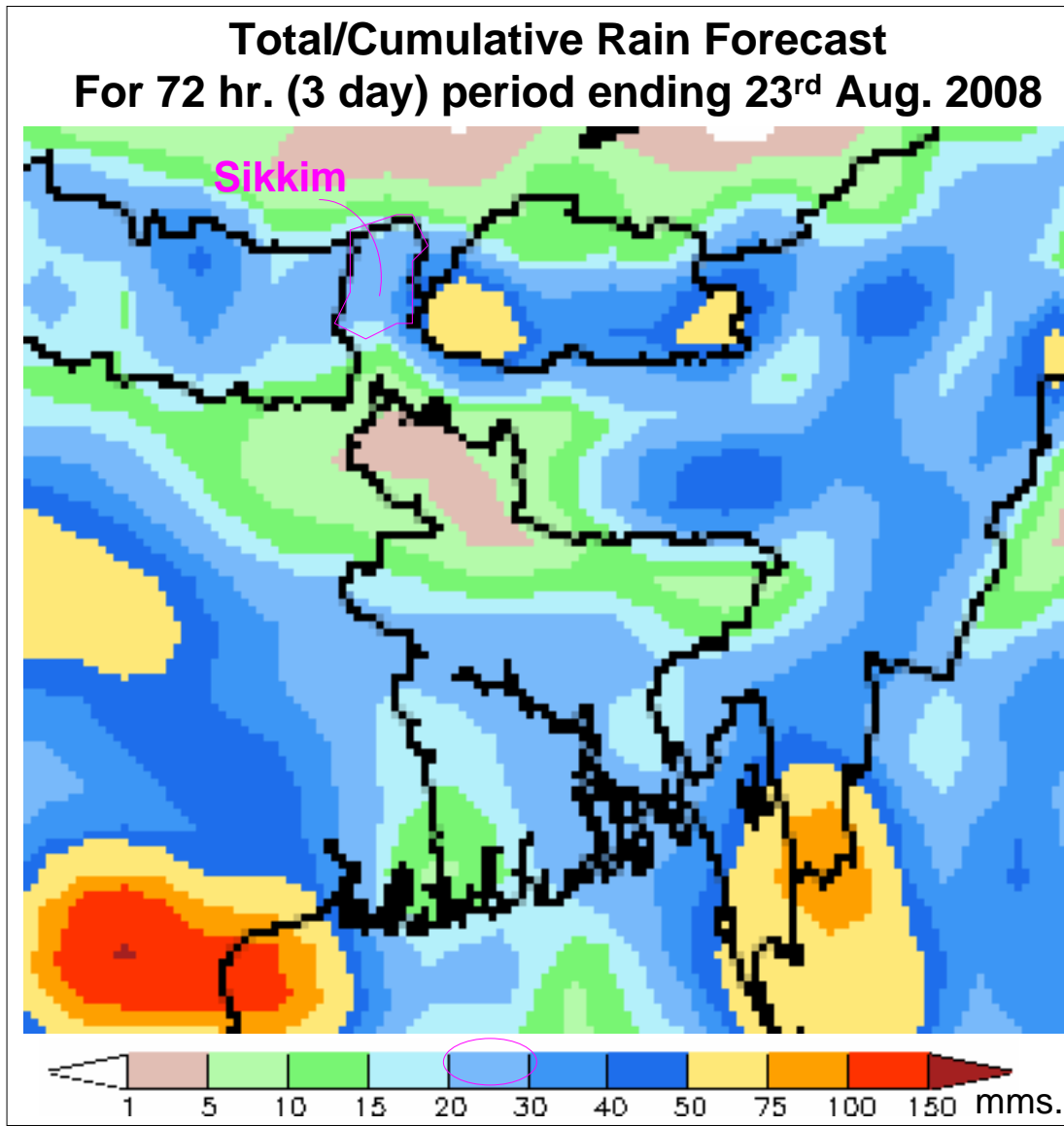
1. Rivers in the **Northeast** of Bangladesh (**Meghna basin**) are expected to rise in the coming days due to recent heavy rain upstream in **Meghalaya**.
2. However; low to moderate rainfall is forecast for upstream **Meghalaya** districts from 21st - 25th August.
3. River levels downstream should stabilize or begin to drop thereafter.



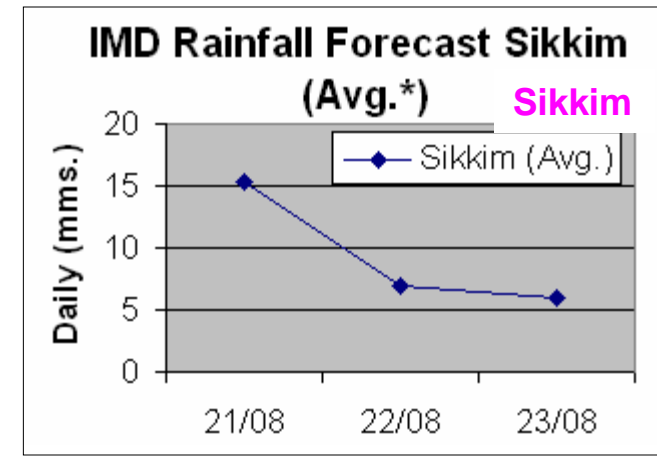
Notes:

1. Rivers in the **West** of Bangladesh (**Padma basin**) are expected to rise in the coming days due to recent heavy rain upstream in **Bihar**.
2. However; low to moderate rainfall is forecast for upstream **Bihar** districts from 21st - 25th August.
3. River levels downstream should stabilize or begin to drop thereafter.

Comparing IMD Forecasts with CPC* Forecasts for same period; Sikkim Example



IMD = Indian Meteorological Department
CPC = USA NOAA Climate Prediction Center



* Sikkim Avg. forecast rain is average of 4 districts;
see earlier slide -2 graph.

Notes:

1. IMD forecast for Sikkim* is 15 mms., 7 mms., and 6 mms. or a total of **28 mms.** for the 72 hr. period ending 23rd August.
2. This is similar to the CPC forecast; showing **20-30** mms.; for the same period.
3. For other upstream neighboring Indian regions; CPC rainfall estimates were similar to or slightly below IMD estimates.

Conclusions

- Rivers in Bangladesh are likely to continue to rise in the coming days; due to past days (recent) heavy rainfall upstream and within Bangladesh
- Rainfall forecast between 21st and 25th August is for low to moderate rains; therefore **if the forecasts are correct**; rivers in Bangladesh should begin to stabilize or fall in the days subsequent to the 23rd-25th.