



AICCRA

Accelerating the Impact of CGIAR
Climate Research for Africa



Flexible Forecast Presentation for Enhancing Anticipatory Actions

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1. IRI's NextGen seasonal and sub-seasonal forecast system

- Makes use of new availability of global ensemble forecast system products, which has the potential to transform climate forecasting at regional and national levels.
 - Enables the global model outputs to be tailored to local/regional data and user-relevant variables and threshold-exceedances.
 - Facilitates routine automated operational rolling forecasts at national and regional level
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IRI's NextGen seasonal and sub-seasonal forecast system

- Shifts NMHS from using SSTs as the only candidate predictor to a more robust approach.
 - Supports transition of seasonal forecast from subjective to objective methods
 - Enables presentation of seasonal forecast in a flexible and user-friendly formats
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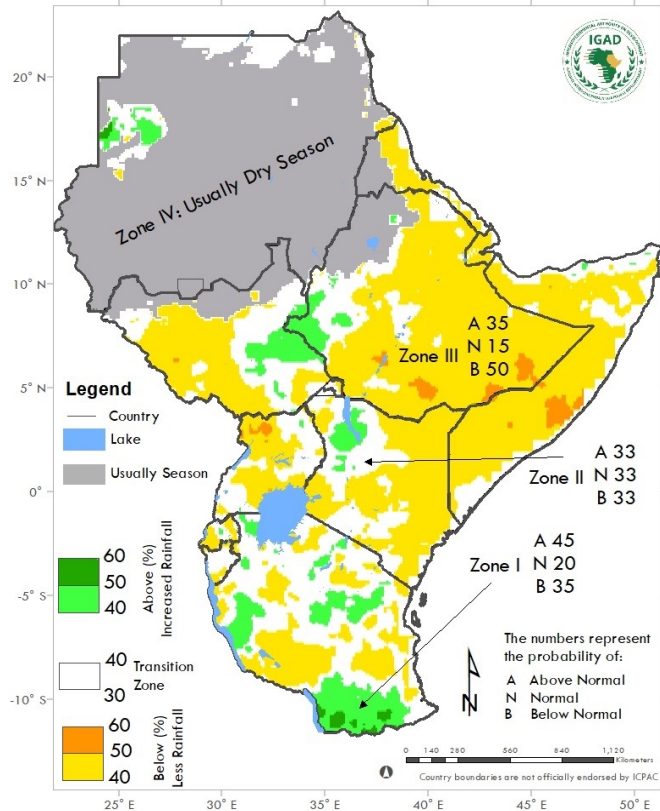
2. Flexible Presentation of Seasonal Forecast.

- Instead of the usual terciles, the new presentation allows users to choose a threshold they are interested in either as percentiles or rainfall amounts

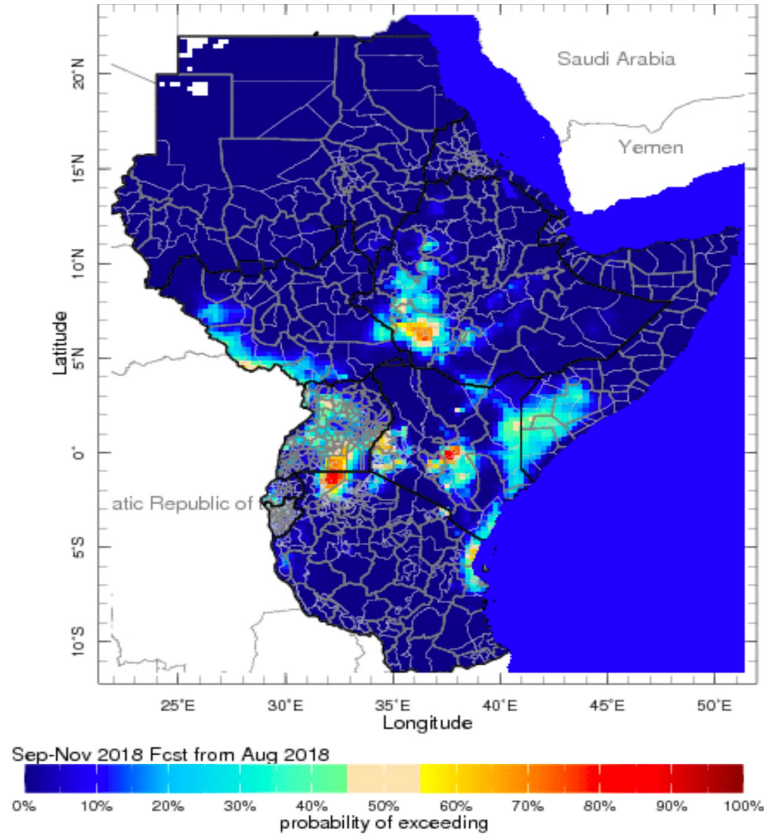
➔ *For instance, one can explore the probability that the total rainfall for the coming season will be above or below a given amount.*

- It is location specific (pixel level), and allows for extraction and comparison for specific location
 - This will provide decision-makers with more specific information for anticipatory action
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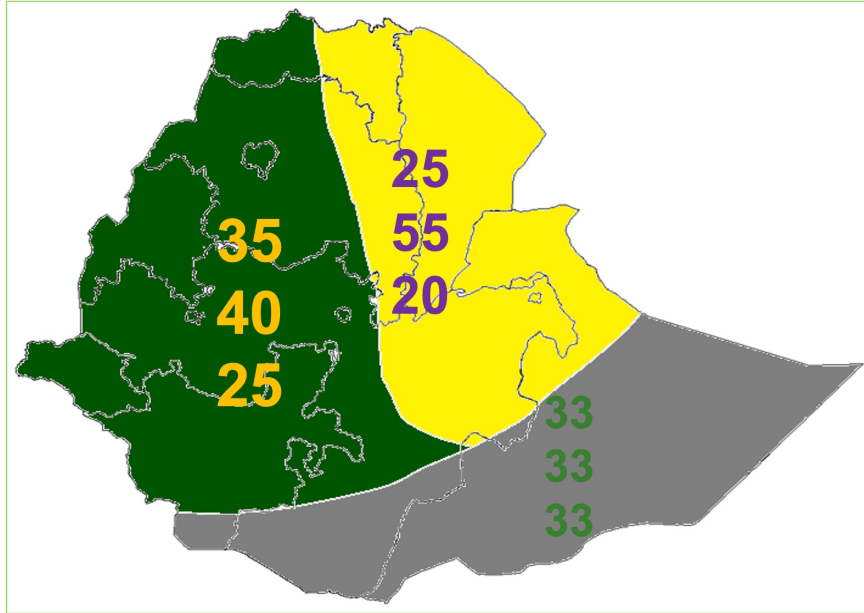
Tercile vs Flexible



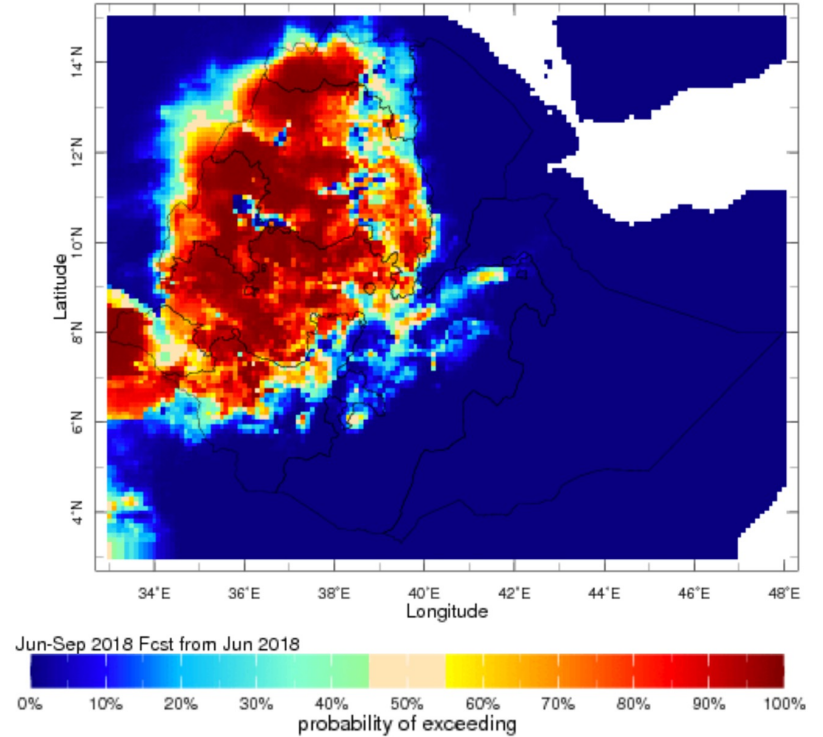
What is the probability that total rainfall for SON will be above 500mm ?



Tercile vs Flexible



Probability of JJAS RR > 750mm



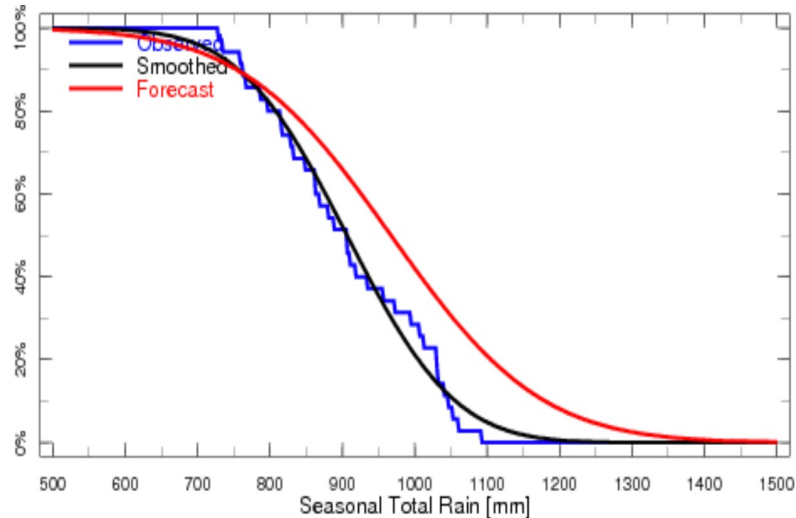
Full probability presentation

located in or near West Shewa, Oromia, Ethiopia

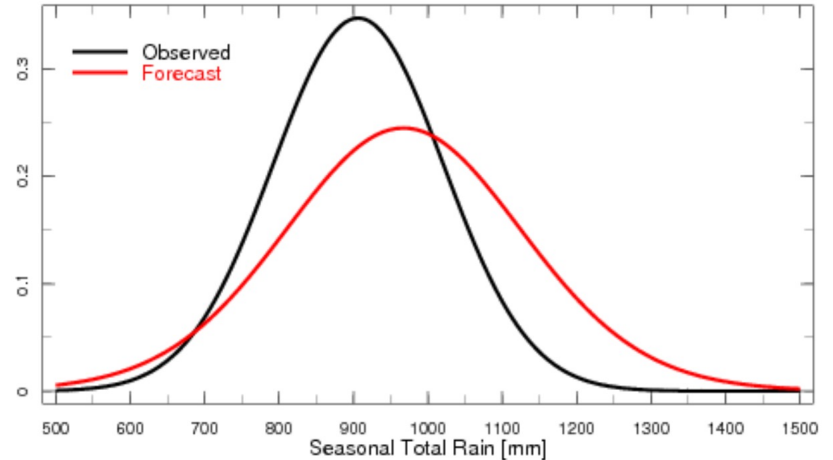


Drilling down to a specific location

Probability of exceedance presentation

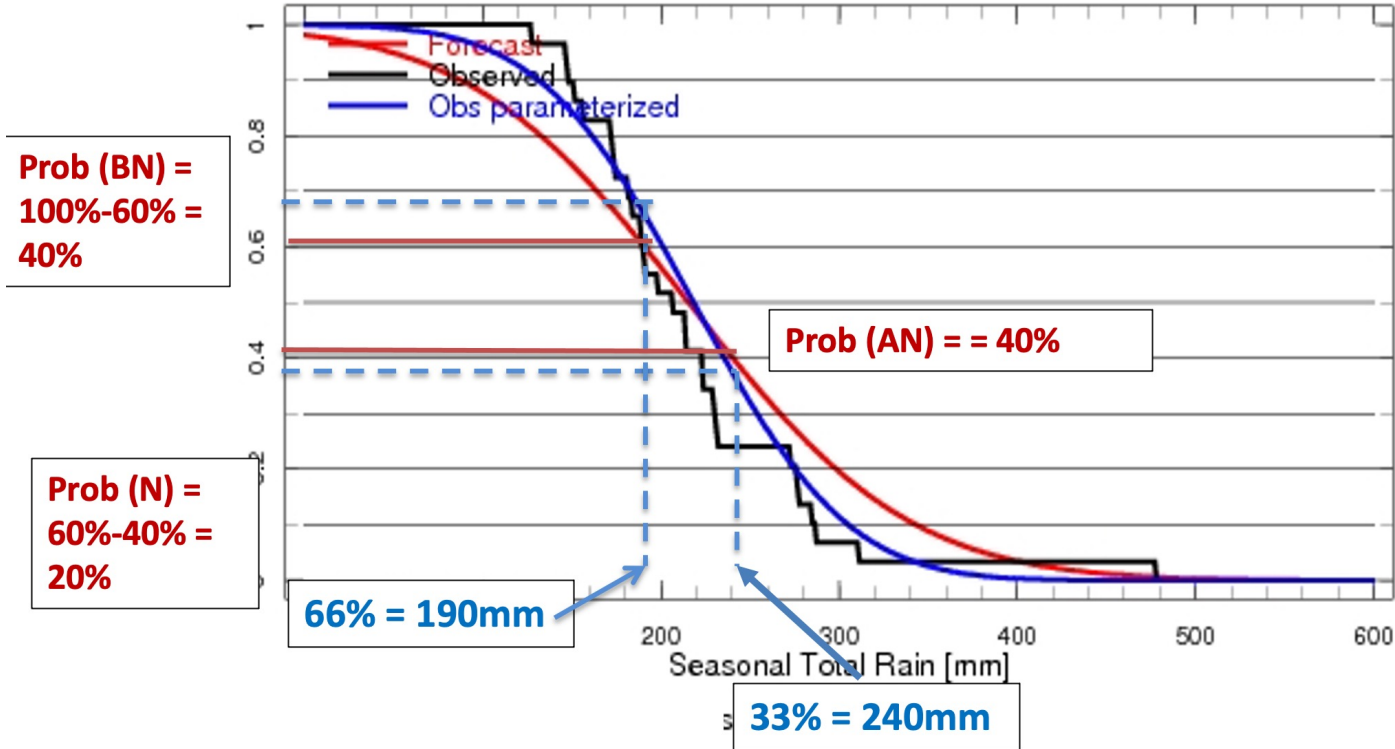


Probability distribution



Converting probability of exceedance to tercile

Forecast information for a



Main challenges

- Uses on NextGen/PyCPT forecast outputs (as opposed to the average of three forecasts used by ICAPC and NMHS)
- NMHS very cautious in promoting it
- Not well exploited





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