

Session 5 Wednesday 27 September GROUP C

Q1.

1. Scale-dependent : 3-7 days (short term), medium range, seasonal, EXTENDED RANGE forecasts.
2. e.g., Climate data store – EU product; 7 months in advance – will be available free of charge soon.
3. Ensemble – uncertainty may grow; lots of data is available – but how much should we really be using? No point using data not available for operational purpose.
4. Forecast has to be consistent with the hindcast; A profound observation from our group is that HYDROSOS must learn from the mistakes of others.
5. Locally available forecasts should be used – WRF type of models (e.g., many countries and regions provide local scale forecasts that are driven by local conditions).
6. Streamflow type of forecasts – how do we relate the meteorologic forecasts ?
7. Capacity building – might favour regional and local NWP driven forecasts.
8. Groundwater – are we able to forecasts the levels/discharges? Perhaps it would be better to just show the current status of the groundwater system.
9. Criteria : must be operational and should work well on hindcast mode. Platform independent;

Q2 .

1. Removing the biases in the data; post processing on the rainfall side – offers opportunities to constrain the uncertainties.
2. Combination of stochastic and physically based methods for forecasting; hybrid methods may be preferable. There is place for statistical techniques to be included inside the dynamic models.
3. Numerous flood forecasts exist – already operational systems exist. Not our ground to explore.

Q3.

1. HYDROSOS must not focus on flood forecasting issues.
2. Short term forecasting (10 day to two week) forecasting useful in irrigation and agriculture.
3. Seven day forecasting system should capture diurnal variation and may have to be run on hourly time intervals ... 30-90 days system need may work more on average conditions and would be useful for water availability forecasts. May be run on the daily time intervals.
4. Spatial scales – river basin scales location and user-demand dependent

Q4.

1. Level of information and data contained in the forecasts.
2. Extent to which the purpose is served.
3. Cross validation of forecasts with observations.
4. Must add value to regional inferences

Q5.

1. Ensemble of forecasts – use any ensemble modelling techniques
2. Preferable to have ensemble of forecasts.

3. Hydrologists are by n large not comfortable with multiple forecasts – the ensemble concept is more popular with the meteorologists.