Continental Scale hydro model inter-comparison for SWOT Teleconference summary 2017 02 07

by R. Edward Beighley and Cédric H. David

In attendance

Ayan Santos Fleischmann, Dai Yamazaki, Ed Beighley, Guy Schumann, Tamlin Pavelsky, Etienne Gaborit, Colby Fisher, George Allen, Cedric David.

Meeting minutes

Cedric: presented preliminary comparison of simulated hydrographs from multiple models. Models results compared for RAPID, CaMa-Flood, MGB against USGS observations.

Guy: Neal has a LISFLOOD model running on the Niger, this might be of help when we address that basin next.

Ed: We need to spend some time carefully looking at the comparisons between each model and the corresponding observations.

Tamlin: It would be good to start combining these model results with the existing SWOT-like observations at continental scale.

George: We could use NARWidth for North America but the river network is very disconnected. This is less so the case for GRWL.

Tamlin: Yes, and the good thing with GRWL is that it is currently being combined with HydroSHEDS which is the dataset that is currently being used within the inter-comparison.

Cedric: What's the status for the Japan meeting?

Ed: Yes, I'll join.

Guy: Not sure, trying to figure it out.

Dai: Yes, I'll be there.

Cedric: Hyungjun and Aaron will also be there. That's at least five of us. Let's confirm and move forward then.

Colby: I might be able to present some VIC routing simulations in a month or two. Probably not next meeting, but likely the following.

Action items

Send HRR model outputs in specified format (Ed).

Add any analysis tools to GitHub site (Cedric)

Discuss potential for other assessment metrics. For example, show variability of streamflow for river reaches captured by SWOT (sample shown as 10% largest rivers).

Next presentation by Guy on rerunning the GRWL depth/slope to get width using Manning's equation. Perhaps also presentation by Dai's postdoctoral researcher on their global data assimilation work in the context of SWOT.