

Pan-WCRP Modelling Meeting's Outcomes for S2S

“Bridging the gap between weather and climate”

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S2S Steering Group Meeting Outcome: Finalisation of the S2S Phase 2 Proposal

1. Proposed research activities (sub-projects)

- MJO Prediction and teleconnections (synergies with WGNE)
- Ocean and sea ice initialization and configuration (synergies with CLIVAR, TPOS)
- Land Initialization and configuration (synergies with GEWEX)
- Aerosols (synergies with WGNE)
- Ensemble generation (synergies with WGSIP)

S2S Phase 2 Proposal (2)

2. S2S Database enhancement

- Continue to maintain and update the current S2S database with current model upgrades and new models, possibly new variables.
- Add the originally-planned ocean variables to the S2S database in NetCDF format.
- Make model ensemble means, model climatology available from the IRI data library to save time and efforts to a large range of users.
- Create a verification and products interactive maprooms using IRI Data Library
- Consider increasing time or spatial resolution, such as including 6-hourly surface variables needed for land-atmosphere studies

S2S Database could be more widely used by weather/climate modelling communities for estimation of systematic errors, representation of processes, multi-model combinations: large number of start dates/ensemble members

S2S Phase 2 Proposal (3)

3. Enhancing operational infrastructure and user Applications

- Research to Operations (R2O) and S2S Forecast and Verification Products Development
 - *Pursue research for testing and developing methodologies for calibration, combination, verification and generation of forecast products*
 - *Coordination with the relevant WMO technical commissions to define the standards and protocols for operational implementation and exchange of S2S forecasts*

Relevant to Topic 8 (MME) discussed on Wednesday

- Real-time Pilot for S2S Applications research & demonstrations
 - *Goal is to demonstrate the value of S2S forecasts to different GFCS sectors*
 - *Real time pilot: Make some derived variables available close to real-time for a limited period of time, such as 1 year.*
 - *Promote interdisciplinary research the development of “Ready-Set-Go” -type S2S applications*

Relevant to Topic 7 (Linking models with users) discussed on Wednesday

S2S Stakeholder Survey

SECTOR	ORGANISATION	INTERVIEWEE	INTERVIEWER
Humanitarian	Red Cross Red Crescent Climate Centre	Maarten van Aalst, Director	Andy/ Karoliina if difficult due to time difference
Research (?)	Universidad de la República, Uruguay	Rafael Terra –	Julia
Water resources	Grand River Conservation Authority (Ontario, Canada)	D. Boyd, Senior Water Resources Engineer	Andy
Transportation	Metrolinx (a government authority charged with integrating urban transportation in the Greater Toronto Area, Ontario, Canada) http://www.metrolinx.com/en/	Q. Chiotti, Senior advisor, Planning & Policy	Brian
Transportation	Ontario Ministry of Transportation (focus on provincial authority's responsibilities for winter maintenance of highway system) http://www.mto.gov.on.ca/english/ontario-511/winter-highway-maintenance.shtml	[M. Perchanok, Senior Manager]	Brian
Public health	Public Health Departments of one or both the Regional Municipality of Waterloo and City of Toronto	[Heat-related program/project managers]	Brian

– A set of semi-structured interviews of potential S2S users is being carried out by WWRP SERA.

– the interviews are a first step in an ongoing S2S-SERA activity in Phase 2, including the annotated bibliography, linkages to impacts work in WWRP-HiWeather, facilitation of meetings, etc toward demonstration projects in selected sectors as part of the proposed S2S real-time pilot, in which some forecast quantities will be made available in real time for a limited period of time.