

Global Approaches

(Science cross-cut, G/L model, Hap)

- Doable collaborative actions in 1-2 years
- Input to synthesis article
- Legacy
- Climate change adaptation – practical response to climate change - assessment

Climate Change

- Statistical evaluation of observations and reanalyses in different climate regions as pertaining to climate models (Koike)
 - Not just model comparisons, but also process studies (Herdies)
 - Quantify uncertainty (land and atmosphere models)
- Metrics for testing models, what data is needed from CEOP to test the scenarios, Are the models sufficient quality (Bosilovich)
 - E.g. WEBS results – Can CEOP ascertain the veracity of model climates and processes?
- testing scenarios, as in drought or other events as in a composite (Ruane)
- RHP connections with local/basin model, CEOP providing a bridge (Stewart)

1-2 years doable action

- RHP Area Average of Multi-model data sets (Bosilovich, Koike)
 - Requires collaborations among modelers and scientists familiar with RHP issues, climate and processes
- Land model working considering GSWP 3, intercomparing model responses to different forcing data (Rodell)
 - Alternatively best case model data comparison
 - CEOP data provides the benchmark (also key hydro data such as river discharge, Trenberth)
- Process studies – diurnal cycles comparison coupled models and offline – leaning toward surface layer turbulence (Michael Ek)
 - Diurnal, annual and anomalies
 - Access to the visualization tool
- Convective episodes in different places – e.g. monsoon composites (Rickus)

Legacy and Input to Synthesis

- Land data assimilation progress
- Multi-model overview – Plus comparison with other GEWEX data – eg land working group (Bosilovich and Rodell)
- HAP seasonal forecast, hydrologic sensitivity (Wood, Lettenmaier)
- Improvement to understanding Arid regions (Koike, Guo)
- Many Centers collaboration
- Legacy – GCIP emphasize the importance of high time resolution in closing the budgets