

WORLD CLIMATE RESEARCH PROGRAMME

JSC39 - Summary of Working Groups' briefings

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WCRP-CAS WGNE

- (Atmospheric) Model development (systematic errors, drag/momentum, surface fluxes, parameterization, model uncertainty, aerosols, exascale computing, verification, dynamical cores, etc)
- Important connections to Core Projects

Recommendations:

- Greater focus on model development cornerstone of WCRP
- Suggestion: WGNE as focal point for (atmospheric) model development (idem for other disciplines)
- Another layer above would add bureaucracy









WGCM/CMIP

- Focus on coupled simulations and projections
- Research foci in all disciplinary areas
- Both model development and coordinated MIP
- Protocols, standards, infrastructures

- Ensure visibility of contribution
- Critical path?
- Research vs operations?
- Ambition vs resources? Sustainability?









WGSIP

- Focus on (sub)seasonal to decadal predictions
- Research foci in disciplinary areas to tap additional skill
- MIP principles and approach
- Close R-O linkages

- Opportunities beyond traditional products
- Work towards common protocols, standards, infrastructures
- Enabling services but not providing them









WWRP-WCRP S2S

- Focus on improving skill at S2S time scale
- Promoting user uptake
- Leverage weather and climate communities
- MIP approach
- Research foci in disciplinary areas
- Co-development: societal and economic applications
- Importance of operational centers
- Data Infrastructure as cornerstone
- Training and capacity building









General considerations

Some ideal features:

- Co-design with stakeholders (e.g GFCS, IPCC)
- Multi-model approach including 'distillation'
- Evaluation verification uncertainty
- Need for disciplinary science, coupling
- Database, infrastructure, protocols, open access
- User applications, training and capacity building
- How far into 'Operations'?
- Critical mass of resources and engagement?
- Model development: across time scales, along the value chain, across disciplines, all?









