

Agenda for the 2nd CORDEX-ESDM Workshop **Buenos Aires July 30-August 1, 2014**

Objectives:

- undertake preliminary base evaluation of results (discussion of indicative method behaviour)
- discuss metrics as per their use for method diagnostics
- case study working from results to real world consequence
- discussing metrics from the perspective of application need
- plan a way to workshop 3

On-site analysis:

Use code to generate from available results:

- annual and seasonal totals / means (climatologies)
- annual and seasonal time series totals (envelopes + means for ensemble data)
- histograms (temp + log precip)

Use these metrics to:

- a) compare attributes of the method approaches
- b) talk through consequences of methods in the context of a use-case
- c) examine (by inspection) the cross-validation periods for events in the tails of the distributions (e.g. 1998 El Nino):

Possible use-case options for discussion (underlined> are perhaps the most practical)

- West Amazon: biodiversity, ecosystem services, hydro-power, water transport, water availability.
- La Plata basin: agriculture, productivity, seasonal onset, saving water during wet periods for dry periods

DAY ONE:

(Transfer of result data sets to Chris Jack before start of meeting, either by email or flash stick)

9 am Session 1: Review (Chair: Benestad)

- Welcome (Bruce / Maria)
- Introductions (Round table)
- WCRP: JSC & New directors [Dave Carlson & Guy Brasseur] (Bill) / Pan-CLIVAR and Pan-Gewex (Bruce)
- US CLIVAR skepticism towards downscaling. (Bill)
- Update on CORDEX-RCM: status / new SAT / RCM “Phase II” (Bill)

Review the CORDEX web pages to be more method neutral (Bill & Bertrand)

- Update on COST VALUE, NCPP, ES-ENES2 (Douglas / Bill / Chris)
- Distillery expert meeting and request for input (Bruce)
- Ethics of data delivery white paper (Bruce)
- Review on ESD Workshop 1 - the launchpad we are coming from (Rasmus)
- Revision of objectives of this workshop, and reminder that this is not a beauty contest but to understand method strengths and weaknesses (Bruce)
- Open discussion of current challenges / accomplishments

11 am TEA (30 minutes)

11:30 am Session 2: Early results (Chair: Benestad)

- Silvina: keynote presentation on RCM (20-30 minutes + 10 minutes question time).
- Presentation of initial ESD results / activities from each individual participant's perspectives - 2-3 slides for 5-10 minutes each max (All)
- Open discussion

Not a 'beauty contest' but looking for commonality of messages about limitations and strengths.

1 pm LUNCH - Maria will have suggestions

2pm Session 3 (Chair: Gutowski)

- Presentation about format conversion software and base metrics software with sample results (ChrisJ) (15 minutes)
- BOG 1: (2 or 3 groups): Use the baseline metrics (plus any other results available). In the group assess / discuss and develop what seems to be headline messages in the results. This looks at two aspects:
 - The cross method differences/similarities and the cross-validation outcomes
 - Implications of the different method's results in the context of "*if this represented reality, then would it obviously impact a decision maker for a hydro-power use case (West Amazon) and for water management in La Plata basin*".

4 pm TEA

4:30 pm Session 4 (Chris)

- BOG 1 continues as needed
- Plenary report back and discussion

After 6 pm DINNER

- Homework: individuals to consider the preliminary interpretations, and some questions posed to facilitate this. We will ask for feedback at the start of the next morning.

DAY TWO

8:30 am Session 5: (Bruce)

- Opening plenary discussion reflecting on findings so far (short)
- Development ideas on metrics from BOG 1's assessment: a Post-it note activity to brain-storm method specific tests / developments that would facilitate cross-method analysis. Include addressing non-stationarity issues and daily/aggregated parameters of daily 24-hr quantities, and ideas on how to "test till it breaks"
- Plenary discussion to synthesize post-it note inputs

10am TEA

11am Session 6: (Bill)

- BOG 2:
 1. What we need to do to better understand sources of uncertainty
 2. What analyses will improve the comparison of method strengths
 3. What methodologies can we evolve to enhance the multi-method deliverables
- Report back from BOG 2 and discussion

1pm LUNCH

2pm Session 7: (Rasmus)

- BOG 3:
 - outline initial papers ideas
 - data management / result dissemination / interaction with GFCS and climate services
 - stakeholder engagement plans
- Report back from BOG 3 and discussion

4pm TEA

4:30pm Session 8: (Douglas)

- Presentation: Controlled vocabulary from COST-VALUE and data reference structure (DRS) - to present and discuss (Rasmus).
- BOG 4: joint ESD-RCM activities - Reflection on RCM vs. ESD attributes (Bill)
 - Methods for comparison with RCMs
 - Steps to better coordinate with RCM community and "CORDEX Phase II"
 - Proposal to the CORDEX SAT
- Report back from BOG 4 and discussion

After 6pm DINNER

Home work for organizers: prepare a proposal for opening session the next day

DAY THREE

8:30am Session 9: (Maria)

- Logistics for travel and airport transport.
- Presentation on a proposal for completing multi-method multi-GCM output analysis, and for broadening the community participation (Rasmus / Douglas?)

e.g. What to do with the results, analyse and compare. Metrics scripts for validation/diagnostics for ESD & RCM. Criteria for assessing results. Validation issues: input from value? (WGCM metrics group and attributes - see <https://earthsystemcog.org/projects/downscalingmetadata/>. Broadening the community of participation. Communication. Proposals to WGRC in context of the WCRP GC.

- BOG 5: Set the stage for the 3rd workshop.

Next steps:

How to access other clumps: US data, European data, Japanese data (Rasmus/Maria/Jose)

Next step priorities / candidate data clumps

Produce output that can feed into impact models?

Which stakeholders?

Refining the experiment design

From WS1 in Trieste:

Exp. 1: Data & 'clump' stations (~50 both precip and temp).

Exp. 2: High density network

Exp. 3: Grids - RCM.

Exp. 4: pseudo-reality.

Tier 1: precip, tmin, tmax

Tier 2. Wind, solar, RH, sub-daily

Tier 3. 'Exotic variables'

- Report back from BOG 5 and discussion

11am TEA

11:30am Session 10: (Bill)

- Discussion on planning for the stakeholder engagement workshop / leverage opportunities

Develop stakeholder engagement plans.

- Action items and responsibilities
- Contributions to the distillery expert meeting
- Forthcoming meeting opportunities

1pm LUNCH

Afternoon: social/sightseeing? Bill guides us around the cemetery?