# Benchmarking and Assessment Working Group (BAWG) Conference Call 3

Wednesday 15th June 12pm GMT/1pm BST

Attended by:

**Apologies in advance:** 

Kate Willett (KW)

Steve Easterbrook (SE)

Peter Thorne (PT)

Victor Venema (VV)

Lisa Alexander (LA)

Ian Jolliffe (IJ)

Lucie Vincent (LV)

Stefan Bronniman (SB)

Claude Williams (CW)

Robert Lund (RL)

#### **Actions from the last meeting:**

KW - circulate Implementation Plan and Terms of Reference - DONE

KW - draft Benchmarking and Assessment WG Terms of Reference for comment - DONE

KW - draft White Paper documenting plans for the Benchmarking Programme - DONE

KW - make some GCM runs available on google docs - NOT DONE

ALL - comment on circulated documents - COMMENTS FROM IJ, VV, LV, SB, CW

#### **Actions from this meeting:**

**KW:** invite David Berry from the Marine Community to join

**KW:** publish Terms of Reference on website

**KW:** to suggest journals to submit to

**CW:** to chat to NWS colleague about downscaling issues

ALL: to post on the blog one (or more if you like) world (Big Question to answer and

appropriate error world/s structure you would like to see with its justification.

**ALL:** to email website improvements to Kate including links, references, documents

**VV:** email example blogsite to Kate

**KW:** investigate page option on blogsite

**Purpose:** Agreement on overall concepts and discussion of big homogenisation questions to address.

#### 1. Progress Update by Kate and anyone else who has anything (10 mins)

- poster presented at EGU (uploaded to website)
- talk presented at MARCDAT by Kate to the marine data community (uploaded to website) lots of interest in benchmarking from marine community and so I would like David Berry to join our group to keep communication between land/marine efforts any thoughts?

Has my vote. Generally thought to be a good idea.

ACTION KW: invite David to join.

- poster abstract submitted to WCRP Open Science Meeting (October) by Kate, to be presented by Steve Easterbrook

Tom Peterson has tipped the wink that this is accepted. As part of four posters on the initiative. He is going to put these geographically in the same place.

LA, PT and SE will be at the meeting.

- Kate to present STI+benchmarking stuff at 4th ACRE Meeting and GCOS meeting in September - anyone else at KNMI on September 21st?

Stefan will attend – a good opportunity for Kate and Stefan to meet

- STI now formally recognised by WMO Congress under the Commission for Climatology

Seeking recognition from metrological body (BIPM) and statistical body (TIES) also - databank progress ongoing

- ITS9 (March 2012) to have a session on STI including benchmarking

PT: I am organizing this. I need four talks from the initiative as a whole. Is anyone from here going? Would be line of least resistance if you were but it is really just for metrologists so I doubt it. My initial thought was that we may not be far enough advanced to talk on this benchmark effort and that a talk on COST HOME results, presumably completed by then which much of this work is modelled upon would be most appropriate?

Good to find out who else is going - someone from Meteoswiss: Mischa Croci-Maspoli

Unlikely to be many going - would need to invite folks specifically I suspect.

- white paper to describe what we are intending to do now in 3rd version
- terms of reference created and circulated
- CASE funding obtained for a PhD studentship from the Met Office

IJ: Has MO approval, but still 2 major hurdles: needs a main academic supervisor and needs to get NERC funding - application in October 2011 (?) for 2012 start. IJ + KW to follow up.

KW: I would like this to be strongly tied to BAWG aims and objectives - we lost David Stephenson as lead though (too busy) so are now searching for a lead supervisor and then NERC funding.

Sounding out potential supervisors - 3 year project so timing isn't essential.

KW: Will get a lead and proposal together and then circulate round the BAWG

### 3. Terms of Reference - can we agree on this? (10 mins)

Agreed. These will be published on the website.

ACTION KW: publish on website

## 4. White Paper - is this easy to understand/do we all agree that this is what we're aiming for? (20 mins)

- Areas still to be finalised 2.4, 2.5, 2.6

General agreement about terminology – analog-known-worlds, analog-error-worlds, discontinuity covers both abrupt and gradual events

Is the aim to submit this to peer reviewed literature? Would like to see a publication ethos for the initiative as a whole. It also makes it more justifiable for folks to spend time on it.

Eventual aim is to put to peer reviewed publication but for now KW sees as a documentation exercise – to be written with publication in mind but not restricted for now. Easier to polish later than maintain two separate documents.

Where? BAMS? JAOT?

ACTION: KW to suggest journals to submit to.

RL: References missing, and avoid "white noise" – we mean random noise here

LV: This will need to be much more detailed in terms of methodology

KW: Downscaling is something we should make sure we get right – I have used a very simple method in the past to move from grid-box to station but we need to investigate existing methods.

CW: NWS colleagues do this and may be able to provide input – how sophisticated does the technique need to be?

ACTION CW: Claude to chat about downscaling issues with NWS contact – may join next call if useful.

KW: Olivier may also have some advice on this.

### 5. What questions do we need to address? (section 2.4 (20 mins))

- KW posted examples of big Qs and appropriate error worlds to answer these Qs. These are essential for leading our creation of error models.

Good start but need to come up with a large population and then winnow down? Needs everyone to input.

Some of the questions need elaboration / clarification.

Variance is a complex issue - not just change in seasonality but also a change in the variance in general.

KW: yes, I have confused these in the Qs on the blog, they are two separate types of variation – annual cycle verses inter and intra-annual variation

ACTION: ALL to provide one (or more if you like) big question and appropriate error world with which to answer that question that you would like to see with its justification. Please can you do this on the blog or email to the group/me. Next call we should select 8 error worlds from these for the first cycle and example pre-release (see above for discussion of early release to get people using and benefitting from the benchmarks).

VV: What is the aim?

PT/KW: three main benefits of benchmarking

- Determining biases and uncertainties
- Helping end users make informed choices
- Accelerate algorithm development (KW: for this reason I would like us to release some example benchmarks (error-worlds and known-worlds) in addition to the official cycle release so that these benefits can be reaped straight away stated in the white paper)

Need a range of complexity, from a null (no discontinuities) world to a worst nightmare world but a number of realistic worlds making the majority, with one 'best estimate'. We need to ensure that these will provide a useful gauge of how well these algorithms perform against our best understanding of the real global data as well as a more specific understanding of where and why they are having difficulties.

CW: Consider using satellite data in future benchmarks to examine areas where there is little surface information.

#### 6. A.O.B. / Next call (5 mins)

Next call proposed in a month or so to:

Choose the questions and design a plan of action – possibly breaking into action groups.

- blogsite - who is/isn't registered as a member?

I fall at the first hurdle. I don't know if I'm registered or not, nor how to respond when asked to 'Select Profile'.

KW: all should be able to comment but you may have to have an email address from one of the listed providers (e.g., gmail). All members should be able to comment and post.

ACTION KW: to investigate posting admin

PT: Can we spruce up the website area a tad as part of my efforts to bring it up to scratch? In particular I was berated at MARCDAT for inadequate linking to other relevant websites. In this context we should link to COST HOME and perhaps other benchmark type efforts in palaeo data reconstruction and radiosondes and perhaps also in other disciplines than climate science. Group members are well placed to suggest.

VV: COST HOME: www.homogenisation.org

ACTION: ALL to email suggested improvements to Kate – these can be links to other efforts, references to relevant journal articles, documents, figures, presentations. This site should be a useful reference point for our group but also any interested party. A list of relevant conferences with who is attending might be useful.

ACTION KW: add all these things to the website

Maybe make better use of a blog? VV has some ideas and will work with Kate.

ACTION VV: email Kate and example blog with page type set up ACTION KW: investigate options of a page set up for the blog

7. Minutes agreed by: PT, KW, VV, ALL