

International Surface Temperatures Initiative

Steering Committee call 6/23/11

9EDT (14 UK, 15 Europe etc.)

Present on call: Peter Thorne (PT), Andrea Merlone (AM), Chris merchant (CM), Kate Willett (KW), Greg Strouse (GS), Rob Allan (RA), Peter Stott (PS), Michael de Podesta (MdP), Blair Trewin (BT), Jayashree Revadekar (JR), Antonio Posollo (AP), Xiaolan Wang (XW), Richard Chandler (REC), Jay Lawrimore (JL)

Apologies in advance: Matilde Rusticucci (may join late), Albert Mhanda (technical issues)

1. Andrea Merlone (Meteomet lead) www.meteomet.org

MdP had requested a consideration of:

- * Who is paying for the research
- * The activities being undertaken, particularly those which relate to the assessment of the metrological uncertainty of meteorological measurements of surface temperature.
- * Time scales

There exists a Memorandum of Understanding between BIPM and WMO as of April of last year. Consultative committee on thermometry recommended encouraging NMIs to collaborate. EUROMET, 2010 call on environment topic. 117 proposals were received and 18 passed first stage, 9 funded. Meteomet will start October 2011. Biggest European consortium with many countries taking part. 18 countries involved at present. 29 collaborators. 65 deliverables. 4 work packages. Includes development of new instruments. Work package 3 includes ground based instruments and traceability / calibration Pressure Temperature and Humidity. Give a look at the historical data with software tools and methods to ascertain irreducible uncertainties. Fundamental instrumental uncertainties. 2 workshops planned.

KW: Who from meteorology involved?

AM: NMSs largely. Manufacturers. Vaisala, Meteo France, MeteoSwiss, JMA, Slovenia, Spain, NOAA. Any association willing to join can do so. Intention is to become a tool for meteorologists.

MdP: There haven't historically been links between the two communities. Hopefully a way to better integrate.

AM: Need to open the door to collaborations - was stressed by WMO and BIPM.

AM: One workshop may be joint with other workshops.

2. Chris Merchant (Edinburgh University)

Summary of a newly funded NERC (UK funding body) proposal for a research network in surface temperature. Two page summary has previously been circulated to committee members.

This funded proposal comes from a NERC opportunity to promote international opportunities and increase collaboration.

Links between general domains of temperature measurement, land, ocean, ice, remote sensing and in-situ. Brings together those communities.

2 resources: i) Workshops and meetings. ii) Small scale projects - case studies, write up.

Some travel support potential and visiting scientist exchanges.

3 year project. One workshop per year. - extendable for a further 2 years if successful

First meeting June 2012.

Year 1 - to establish main challenges of in situ and satellite surface temperature observations

Year 2 is concentrating on Arctic domain. - hosted by Danish Meteorological Institute

Year 3 joint exploitation over land of in-situ and remote sensing - hosted by Karlsruhe Institute?

(collaborations beyond the three Primary Investigators and their institutes)

Need to bring in other expertise (metrological etc.) but space will be tight initially - getting the right balance from the community at meetings will be key.

Years 4 and 5 (tentative) - urban and continuity across e.g. coastal zones

Year 1 generic workshop. Engaging with pre-existing initiatives such as ours is useful. open to recommendations for participation and subteams

Answering big questions is the key suggested topic set. 60-70 participants envisaged.

Advertising this initiative is a current challenge.

PS: Uncertainties are a key challenge. How do you combine these? Scope: does it stretch to free atmosphere or just surface?

CM: Surface only.

PS: How do we communicate uncertainties and make them usable?

CM: Long process of discussion and engagement. No simple answer. Can't be prescriptive?

PS: Extend to users?

CM: Slightly up for grabs at present.

REC: A network like this would play a good coordinating role. There is duplication of effort globally. We need to avoid this duplication. Can this reduce that redundancy?

CM: Its certainly a possible aim.

Both guest speakers were thanked for their time and their projects strongly encouraged.

3. Review actions from previous meeting (peter)

Governance

ACTION: PT to iterate one issue over text clarity with PS and then post the governance document and recognize formal adoption by the steering committee.

Done. Document posted at www.surface temperatures.org

Databank

ACTION: Jay to pursue African involvement in these activities with Albert.

Pending. JL has in addition spoken to some folks at WMO on a recent visit who may be able to help.

ITS9

ACTION: PT to contact GS offline formulate a plan and circulate to all.

Done. See later item.

Meteomet engagement

ACTION: MdP will invite Andrea Merlone to give a presentation on our next call.

Invite sent, presentation on call given.

WCRP OSC

ACTION: PT, KW, JL to solicit poster abstracts for session C13. PT to submit abstract for the oral session.

DONE. Tom Peterson advises posters are accepted although formal notification is still pending. Oral presentation acceptance / rejection is still pending

Steering committee communication strategy

ACTION: KW to investigate wiki hosting options.

KW: sorry - not done yet

ACTION: KW to send details of oknfpad to PT to set up for next call.

Done

ACTION: PT to ask for volunteers to chair future calls.

Not done. Volunteers for next call and future calls? None forthcoming. Volunteers are still welcomed.

ACTION: KW, RA to ascertain interest amongst the European representatives in first instance in side meeting at ACRE meeting in Netherlands in September.

Unlikely sufficient interest but Kate will give a talk on the initiative at this and have several 1-2-1 chats with folks in various working groups as time permits (there for a day)

Implementation Plan

HIGH PRIORITY ACTION: ALL to provide feedback on current draft of implementation plan by mid-May.

Comments received from Richard Chandler and Blair Trewin. Redraft sent to Jay and Kate for comment. Revised draft was circulated prior to the call.

WMO Congress

ACTION: PT to work with Simon Gilbert to ensure that the data request portion of the UK contribution is acceptable to RA, JL, TP, Richard Crouthamel.

A submission was in the end rushed so only checked by KW and PT

4. Activities Update

4.1 Steering committee / general (peter)

WMO Congress

The UK delegation raised the initiative within congress. I believe that text regarding formal WMO recognition, reporting through the Commission for Climatology and also text requesting data submissions to the databank was adopted.

RA: ISTI website Hosting the IEDRO/ACRE/WMO DARE DVD - Rick Crouthamel?

PT: Waiting for a response. Quite happy to post it but want to have their blessing.

BT: Impression was that there wasn't a great deal of progress on data availability, more about coordination.

MARCDAT III

PT, RA and KW all attended this marine community meeting in Frascati, Italy and Albert Klein Tank was a representative on the organizing committee for us. Talks on the initiative as a whole (PT) and benchmarking (KW) were well received. There was a plenary session on how to interface marine and land surface efforts. KW rapporteured this. Several marine community representatives who were at the Exeter meeting were surprised not to have heard any updates and said website needed better linkages. We should perhaps consider engaging with the Exeter workshop participants. My hope was that we could combine this with circulating the accepted submission to the Bulletin of Amer. Met. Soc.

RA notes: An ACRE In Box feature has been accepted for publication in the Bulletin of Amer. Met. Soc. and is available online as a electronic pre-publication, this refers to SurfaceTemperatures.org

PT notes the BAMS piece has been accepted as a meeting report. Discussion item added to section 5 to discuss this outreach issue.

KW summary of principal outcomes: Land-Marine Cross cutting recommendations:

- Multiple independent efforts to characterise bias, uncertainty and estimates of multiple variables are essential to building confidence in both communities
- Widening our spread of expertise is also desirable – software engineers, statisticians and metrologists can be very useful additions to project teams.
- Mechanisms to share expertise and information between those working in the land and ocean domains should be developed. Information could include key personnel and publications, guidance material and user requirements.
- The practice of exchanging ideas and new papers between land and ocean communities should be fostered.
- It is desirable to include representation from the other community on key committees and working groups. A first step should be a marine community representative on the Benchmark and Assessment Working Group.

- Effective coordination across the marine climate observing system should be developed.
- The need for formal GCOS marine climate reference sites should be investigated.
- A compilation of user requirements of marine data and recommendations of preferred instrument selection and practices has been found valuable by the land community and should be considered by the marine community.
- Coastal data is of interest to both communities, and not always managed the same way in different countries. An example is that many German coastal stations observe waves and so would be relevant to ICOADS.
- The value of providing climate summaries and indices in a consistent way across land and ocean should be investigated.

KW: marine community were very receptive to our being there and our thoughts and ideas throughout. We do need to identify who is who/who does what across both communities

RA: discussion of funding issues on the last day after drop out of Climate Data Modernization Programme funding (run out of NCDC, but funding not in 2010 budget (was an earmark)).

PT: suggestion from floor of proposal to National Climatic Data Center to resurrect but we're unlikely to get CDMP funding back - instead after discussion agreed to have a more sustainable forward looking approach utilising multiple partners, crowdsourcing, WMO trust funds, interational oversight committee - have previously been too reliant on a single funder that was not guaranteed.

PS: need clear outline of value of data recovery - this is underpinning climate science

PT: Vaguely recall Climate Services related WMO meeting later this year - paper submission to this?

ACTION: PS/BT to find out when such a WMO Climate Services meeting might be
ACTION: RA and PT with PS to lead paper submission on data rescue, digitization and pull through to be made (possibly by the UK delegation) to a WMO Climate Services meeting if it is to occur.

KW: should link this with marine community too.

PT: RA has cross-linkages.

Global Climate Observing System

Adrian Simmons (Chair, GCOS Steering Committee) has requested a formal update for the upcoming GCOS Steering Committee this September. We have agreed to do this and will draft a 2 sider status update in the coming weeks. Kate has agreed to present at the meeting on our behalf.

PT and Matt Menne will be visiting NIST 6/28-29. Will update on next call.

4.2 Databank (Jay)

Databank continues to be populated with additional data from different sources. Submission guidelines and data request letter are in advanced stages of preparation. A submission (with no guarantee of success) was recently submitted to NOAA in support of crowdsourcing activities via CICS (PT's employers).

JL: continuing to add more stage 1 daily and monthly (only) and convert to stage 2. Working on a mirror site - test site up and running. Working on Data submission guide to help people submit data. Databank working group Terms of Reference in circulation now.

4.3 Benchmarking (Kate)

Benchmarking group has been working to winnow down on accepted definition of the problem and is starting to think about experimental design. Terms of Reference documented and accepted - upload to website pending. White paper drafted documenting concepts and methods. Presentations at EGU, Marcdat given and submitted to WCRP Open Science. Kate to attend COST HOME meeting in Hungary, October. PhD Met Office CASE studentship funding secured but still need University lead and NERC funding. David Berry invited to join the working group.

PT: Note that blogs exist for both working groups - please feel free to contribute.

REC: Email with Victor Venema about how to create. How urgent is a response?

KW: Would be useful to retain engagement.

website - <http://www.surface temperatures.org/benchmarking-and-assessment-working-group>

blog - <http://surftempbenchmarking.blogspot.com/>

5. Outreach activities

Much though I (PT) hate the idea of 'branding' with various talks and conferences coming up it felt of use to take the plunge and have a logo. NCDC graphics team have helped to design a prototype. Once acceptable this will be propogated for use including websites, blogs etc. as feasible. What are acceptance criteria?

KW: Logo is important. I like this one but it does look a bit like a great ball of fire. I think there are pros and cons of using the surface temperature record in the logo. PRO - its to the point. CON - it may imply that new products from the databank are somewhat predetermined. Getting across the key things like global, open, traceable would be good if possible.

REC: Logo is a really good idea, very helpful. Liked the one PT sent.

JL: Like the one we were sent.

PS: NCDC graphics team are professionals?

PT: Yes, so we can make changes to this easily.

MdP: can see that using the surface temperature could be easily misconstrued

REC: could extend further back using paleodata

XW: Can we show the global pattern of trends (like the one in Kate's logos?) instead of the global mean temperature series?

KW: Use annual cycle?

AP: keep it very simple as it could be very small

JL: Climate Reference Network - basically just used the aronym

ACTION: PT and subgroup (JL, AP, XW, MdP, PS, REC) to iterate logo design to an agreed version. Then circulate for approval.

5.1 Conferences

ITS9 (Peter) - California, March 2012

We will try to instigate a session at this on surface temperature initiative activities. This needs four talks. I will provide an invited paper on the initiative and process to date including perhaps some examples. Matt Menne has agreed to give a talk on the NCDC pairwise algorithm. Expressions of interest received from Antonio and Blair. Also COST HOME (benchmarking) have asked Matt Menne whether he can present on their behalf. We may also want a databank paper in this set. All submissions must create papers by 12/15. If there are more than four then the 'spillover' submissions are posters. Abstracts are due by 7/15 so looking for specific guidance here as to which to pursue and whether we should pursue any additional angles and then PT will solicit submissions based upon agreed outcomes.

Any talk or poster has to have a 6 page paper prepared/submitted to AIP (American Institute of Physics) journal by December 2011

(Greg Strouse) There are plenty of people who are in temperature metrology and engineering, but not in climate science, who are interested in learning more about the global temperature records, how they are reconstructed, spliced together, and accessed for accuracy/uncertainty. Many people at ITS9 will fit that description. I hope that many climate scientists who are working on the temperature record would likewise welcome an opportunity to learn more about how instrument temperature is done in other applications.

I think we are offering a fair amount of exposure with a Plenary talk and two following-on parallel sessions. We could possibly make all of those happen on the same day if that helps. I can almost guarantee that these sessions will be well attended by the general symposium audience.

Additionally, Michael Kuehne (BIPM Director) will be giving the Keynote Address. He will be attending the week long conference. He is interested in strengthening the BIPM WMO ties.

PT: overview talk by Phil Jones?

KW: David Parker?

MdP: high value in overview talk

GS: opportunity for a small closed extra meeting on the Monday

PT: talk from M&P addressing the issues with surface temperature record from a metrological measurement perspective would be good.

ACTION: PT to solicit requisite minimum of 4 abstracts for the oral session at ITS9. By 7/15

Congress of the International Statistical Institute, Dublin, 22-26 August
Richard to give presentation in a session entitled "Trust, Risk and Uncertainty"
2 page paper required by end of May – flexible (fortunately!)

KW: European Climate Data Management Workshop, Edinburgh, October
<http://www.metoffice.gov.uk/conference/ecs-n-workshop/> - should we have representation there?

PT: If someone is going then generic poster would be good but no need for specific attendance

PS: will talk to John Prior

RA: NMSs attend

PT: more data rescue side

ACTION: PS/RA/KW to ascertain what involvement to have at the European Climate Data Management Workshop and if necessary who to go

COST HOME meeting - Hungary, October - Kate to attend with other members of the Benchmarking and Assessment Working Group.

American Geophysical Union Annual Conference - San Francisco, December 2011 - not essential but is anyone going anyway who could present a poster?

5.2 Website (Peter)

Several working groups and task teams already have actions to help improve completeness and usefulness of this website, but additional constructive suggestions to PT are very welcome. We need the site overall to be useful for us but also to engage others and informative to the general public. We collectively own this and it should not just be to PT to maintain / provide content.

KW: A list of who does what in the land community for reference by other communities (marine, satellite etc.) or is this a bit risky? I was thinking of skills such as homogenisation, quality control, uncertainty quantification, data rescue etc.

PT: concern that we would be being seen to support some scientists over others

KW: how about listing publications under each of these umbrella skills/issues groups - names then given by default

BT: publications better than names

REC: How do we engage the public? Factsheets? FAQ? In lay terms. Certain amount of work to prepare.

KW: Would make it clearer.

PT: Resource – where would this come from?

KW: each take responsibility for writing a paragraph on one issue?

MdP: Give talks to the public. One addresses why we know what we know. Do you want to share?

ACTION: MdP to share his presentation,

Do we need generic materials posted? An overview powerpoint available for use? A brochure? Posters?

KW: YES! A set of generic posters/presentations for the STI and working groups would be really useful. Perhaps a less scientific/more branding poster/flyer would also be useful to have put up at various conferences/noticeboards.

ACTION: PT / KW / JL to prepare generic poster, powerpoint etc and distribute before next call.

5.3 Papers

In general I (PT) believe we need a publication ethos for the initiative as a whole. We should be pro-actively planning to publish papers on significant work undertaken in support (databank / benchmarking) as well as overviews etc. Thus far understandably we have been focussed on the overview type papers but I think it worth also touching on future plans.

BAMS In-Box submission
Accepted as a meeting report.

Metrologia piece
First draft circulated. Second draft underway.

TIES journal piece
This will be the write-up of the talk given at the International Statistical Institute meeting (see above) - Richard to write.

Significance piece
Is this still planned? Ian Jolliffe was the lead.

ACTION: Richard to contact Ian Jolliffe and find out whether posited significance submission is still planned to go ahead.

Possible papers for databank and benchmarking
Jay and Kate to update on plans

KW: Concepts and Methodology paper for benchmarks and as new methods are developed shorter more focussed papers may be submitted on these e.g., assessment methods.

JL had left the call by this stage due to a diary conflict

5.4 BAMS paper follow on

The appearance of this piece in AOP (Advance Online Publication) affords an opportunity to both re-engage Exeter participants with an update on progress to date and an opportunity to perhaps engage with all or some of the media that have been previously engaged (Economist, Nature, UK press). What do we want to say? How? When? Who will be responsible for taking this forwards? General discussion with a view to some well defined action(s) that are ready when the paper is available in advanced online publication. Probably ties with website refresh and other areas in this section.

KW: Media press release when databank is initially released? When first benchmarks are released? I think we need something major to report for this.

Call was now nearly two hours in so was agreed to do this offline,

ACTION: PT to draft a plan for engagement when the BAMS piece appears and circulate to all for comment.

6. Formal Recognition (Peter)

Assuming eventual adoption of text we are now officially recognized by WMO and to report to CCI. We need similar formal recognition from TIES and BIPM.

REC: We were waiting on governance documentation.

PT: These are now posted.

ACTION: REC to take forwards TIES recognition of the initiative.

GS: Michael Kuhne visit was useful. CCT will be incorporated shortly.

PT: We need formal recognition and reporting mechanism

ACTION: GS to take forwards BIPM recognition of the initiative.

Q. Can we provide a WMO / CCI logo on the website to reflect this recognition?

Similarly for BIPM / TIES down the road?

7. Implementation Plan (Peter)

New version was circulated prior to call. GCOS gives us a hard deadline of September to complete and publish online. Discussion of what remaining issues are and how we will decide it is acceptable for publication. I assume as its an internal document its up to us to decide this.

All on call agreed that we could adopt this ourselves as an internal document and that it was close to complete.

BT: Explicit mention of metadata in the databank section is missing.

ACTION: PT/JL/KW to have a final edit of the Implementation Plan

ACTION: ALL two weeks to comment on next draft and unless objections are raised it will be posted online.

8. AOB

I realized that a member of the public had asked whether we have a mailing list. Such a list would be technically feasible to set up but is it something we should pursue at this stage. Would we have just one list or perhaps several lists? They'd work rather like the group email alias for us.

KW: Get regional summary on each call?

ACTION: KW/PT to approach people from specific regions prior to next call for a short regional presentation.

Next call: September 7th 8am.