

2022 GHP Review

Benjamin and Mike

Kudos and Major Achievements (1)

Baltex continues to produce - 30 papers in a special issue, Conference, summer/winter schools. Connecting scientists with stakeholders on climate change through fact sheet document published Sept 2021. Internally assessing, looking for gaps and new challenges The geo-political situation in the Baltic area is not affecting the work of Baltic Earth

There was a suggestion to have an evaluation for RHPs. This should include statistical metrics

GWF - GWF Observatories, 76 sites, funded through 2029. Had an annual open science meeting May 22, Next will be in May 2023. Connecting science with indigenous knowledge.

The GWF Planetary Water Predictive Initiative is applying Canadian models globally. They are working closely with WMO and UNESCO. They have Mentoring and Career Development activities across the program. GWF has secured funding to maintain its observatories until 2029.

TEAMx – Funding “bottom up”. TEAMx Observation Campaign (2024-25) planned, reviewed and under revision. Aircraft involvement included. BAMS paper published. Doing km scale modelling - 40 days in winter and 40 days in Summer

Kudos and Major Achievements (2)

GPCC – New data added (Brazil, Canada, Poland Iran, Kenya) and two sets of correction factors available. V2022 to be available Aug 2022. About to use AI for quality control

GRDC – data policy updated and now included online, and new data portal enhancing the dissemination of data. Data User Policy integrated into data request. Supports UNESCO IHP and Friends-Water Community; GCOS/TCOP

Ulrich is on last retirement extension, and is transitioning his responsibilities

ANDEX - Implementation plan submitted and accepted, and lots of progress and activities including an ANDEX White Book

Thanks to Cedric David (JPL) for a very inspiring discussion and update on water related remote sensing and new concepts

And lastly - Kudos to Francina and Ali for their leadership!

Project Updates (1)

PannEx transitioned to a Network, and progressing, Leadership transition

TPE – Science plan has been received and is under review

INARCH – open special issue (ESSD). Developed a common observation period (ongoing now) with several additional sites added (2022-24), data management system in place

AsiaPEX – Review paper sent to BAMS. science plan has not been submitted.
Connecting with WCRP monsoon panel

USRHP - Regular virtual meetings, science plan is very drafty, but meeting here has spurred some thoughts for organization and moving forward

Project Updates (2)

dET CC – Trying to generate interactions among the RHPs – 2 science meetings, diverse group of researchers and also resource managers. 4 Working groups defined. Field campaign at the end of March in Spain. Regular workshops and outreach

Global Flood CC proposed – Developed a survey (26 responses), community workshop planning for 2023 then develop a cross cut proposal to GHP

Monterrain – high altitude precipitation, build upon INARCH and TEAMx, find a name(s), leverage Year of Precipitation

Central Asia RHP/Network - brainstorming/proposed - region North of Afghanistan, agriculture vulnerable to climate change

GHP Speed Dating Takeaways (Swipes?)

GLASS

- dET-CC and Irrigation-CC are obvious forms of collaboration
- Prospect for collaboration on Flood-CC can be also considered on some relevant processes (e.g. precipitation recycling etc.)
- Climate models are better than NWP models as far as irrigation is concerned

GASS

- Diurnal cycle of precip is important for activities such as Flood CC
- Representation of land surface in atmospheric models GASS uses
- Benchmarking and intercomparison precip products (km-scale vs. coarser models)
- LS4P what is the impact of the precipitation scale 4km/1km on hydrologic processes
- Water availability in clouds to have a notion for "potential precip"

GDAP

- Accessibility to GDAP consistent data sets for RHPs
- Benchmarking precip products including radars (phase is also important)
- Closure of GDAP data sets over RHPs, and comparison with local budgets
- Explore information content of satellite products such GSMAP and IMERG
- Need to consider radar data too

Brainstorming on Regional Budgets

Graham mentions still need to develop/improve regional budgets

Much more data now than in previous global regional evaluations

Tristan's NASA project to develop optimized global water and energy budget monthly maps

Mike has some regional results under this project regarding transport and convergence

GHP considering the need for a GDAP liaison

Mike's SSG term *should* end after the next meeting

Will need regional expertise/input/collaboration

To Dos for GHP

Maintaining Institutional Knowledge - Perhaps through a “Fact Sheet” type living document, including best practices

High Level Overview - Each project has a two sentence statement of goals/objectives

Update WWW Page?

Peter suggesting an RHP Conference, hosted by Baltex