IPWG 2016
Validation Working Group

Chairs: Elena Tarnavsky and Viviana Maggioni

Participants: RAAJ Ramsankaran, Alexis Berne, Chris Kidd, Luca Ciabatta, Christian Massari, Yolande Serra, Sana Khan, Matias Alcoba, Pierre Kirstetter, Marc Schröder, Jana Mendrok, Annakaisa von Lerber, Shoichi Shige, Udo Schneider, Bożena Łapeta, Rafał Iwański, Marielle Gosset, Alexandre Supply, Cheng-Ta Chen, Jacqueline Boutin, Christian Kummerow, Gail Jackson*, Walt Petersen*

(*) invited to contribute relevant expertise upon recommendation by WG participants

Action 1

- Involve more nations in the IPWG validation effort
- Promote participation from countries in under-represented regions (e.g. Asia, Africa) through follow-up with the relevant National Meteorological Agencies (NMAs), e.g. Indian Met Department (IMD)

Who: RAAJ Ramsankaran, Marielle Gosset, Elena Tarnavsky
Report to group: April 2017 (update every 6 months)

Action 2

- Assessment of uncertainty associated with satellite precipitation products
- Start with a simple approach (e.g. by climate classification over land; by cold SST regimes, ITCZ, etc.; by the Tropical Moored Array (TMA) over the tropical open ocean; and by OceanRAIN for high-latitude oceans)

  Note: Action 2 team to receive a 3-questions survey

Who: Viviana Maggioni, Pierre Kirstetter, Sana Khan, Marielle Gosset, Christian Massari, Luca Ciabatta, Chris Kummerow, Luca Brocca, Yolande Serra

Report to group: April 2017 (update every 6 months)

Action 3

- Continue L2/swath validation
- Interface with the H-SAF community who have existing protocols for L2 validation
- Bridge the gap between L2 and L3 products

Who: Pierre Kirstetter, Bozena Lapeta
Report to group: April 2017 (update every 6 months)

Action 4

- Snow validation protocols
- Promote collaboration between the rain and snow validation community

Who: Pierre Kirstetter, Annakaisa von Lerber, Alexis Berne, Gail Jackson, Walt Petersen
Report to group: April 2017 (update every 6 months)

Action 5

- Develop and apply validation procedures for rainfall over the tropical open ocean (cold SST regimes, ITCZ, etc.) and high-latitude ocean using Tropical Moored Array (TMA) and OceanRAIN observations, respectively
- Continue the effort on applying the 'standardized' inter-comparison procedures for rainfall (starting with existing metrics on the IPWG web site) and using GPCC as a baseline:
  - Time step: Daily/Monthly
  - Spatial resolution: 1-degree
  - Metadata provided: information on number of gauges per grid cell, quality control criteria, etc.

Who: Chris Kidd, Udo Schneider, Elena Tarnavsky, Yolande Serra
Report to group: April 2017 (update every 6 months)

Recommendations for CGMS

Main Recommendation: Maintain existing *in situ* observation networks, promote access to existing networks that are currently not accessible, and explore new sources of *in situ* observations

- Continue efforts of GV and promote new ones especially in data sparse areas (e.g. global open ocean regions, Africa, Asia)
- Reiterate the need for institutional support to develop IPWG validation sites over China and India
- Raise support from IPWG and WMO/EUMETSAT to promote access to commercial microwave links from telecom companies in Africa
- Encourage IPWG participation of African and other under-represented countries through training sessions/courses, summer schools, etc.