

Assessment with 11 elements (five to be discussed today, six to be discussed tomorrow) to be conducted over the next two years.

Leads volunteered (were volunteered) last November, to start.

Today, each lead will present:

- one slide that lists the questions and/or themes and/or hypotheses that are the most important to address in that element of the assessment
- one slide that lists the studies and analyses and comparisons that have been done so far by the community
- one slide that lists the gaps, i.e. the analyses and comparisons that still need to be done.

Each short presentation will be followed by group discussion,
during which you are invited to

- Add/modify list of questions
- Add/modify inventory of existing analyses
- Add/modify list of gaps

- 1- **Standard quality assessment** - leads: T. Kubota and H. Masunaga:
catalogue with summary descriptions; inter-comparisons; regime-sorted statistics; quality + traceability (including WDAC doc+ FIDUCEO);
- 2- **Uncertainty** – leads: J. Turk and P. Kirstetter:
uncertainty metrics (detection, estimation); intrinsic uncertainty (sensitivity); algorithm limitations;
- 3- **Consistency** – leads: A. Behrangi and DB Shin:
water and energy budgets consistency; regional budgets; ancillary datasets (description and assessment for robustness);
- 4- **Evaluation of analysis data from models** – lead: H.-J. Kim:
performance metrics; model scales (spatial and temporal);
- 5- **Ground-based data** – lead: C. Kidd:
sources (including weather radar where available); calibration and uncertainty characterization of sources, including polarimetric ground radars;

- 6- **Validation in regions without ground measurements** –lead R. Ferraro:
consistency with other remotely sensed data at weather scales; consistency with reanalysis
- 7- **Variability and trends** – principal lead: R. Roca and F.J. Tapiador:
sub-seasonal, seasonal, annual, inter-annual; extremes and the ability to capture them faithfully; correlation with climate indices;
- 8- **End-user (hydrological) applications** – leads: TBD
phenomenological assessment (consistency with agricultural indices, etc); latency issues;
- 9- **Effective resolutions** – leads: E. Foufoula-Georgiou and C. Guilloteau:
spatial and temporal scales at which the products can be used / compared;
- 10- **Programmatic recommendations** – lead: V. Levizzani:
product sensitivity to satellite constellation configuration, to instrument capability and performance, including ground/airborne instruments;
- 11- **Extremes rainfall** – lead: R. Roca:
A dedicated and focused assessment of extreme precipitation, cross-cutting with all the other elements.