

WP 4: Scientific Combination Service

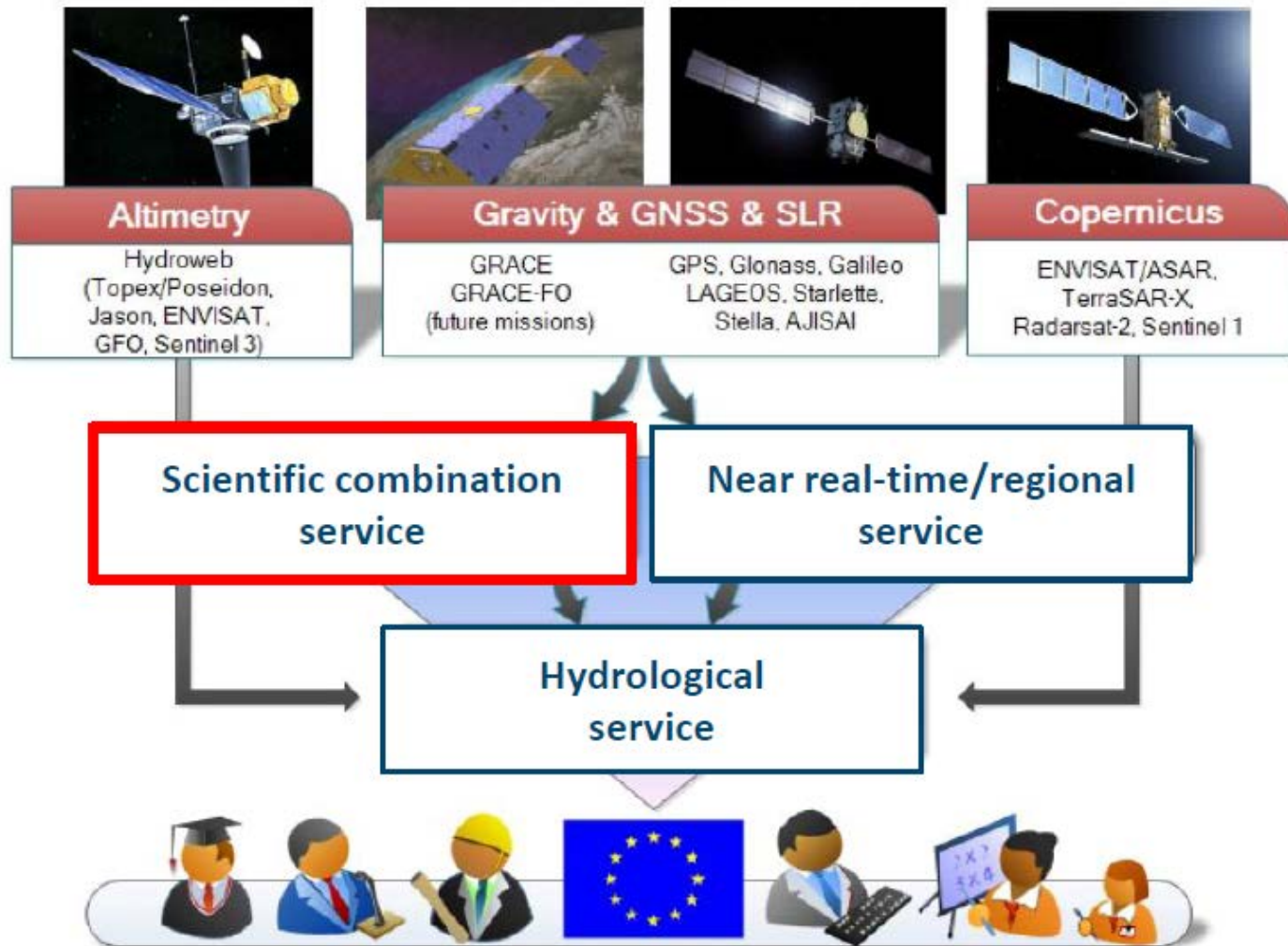
Uli Meyer

EGSIEM Final Review Meeting

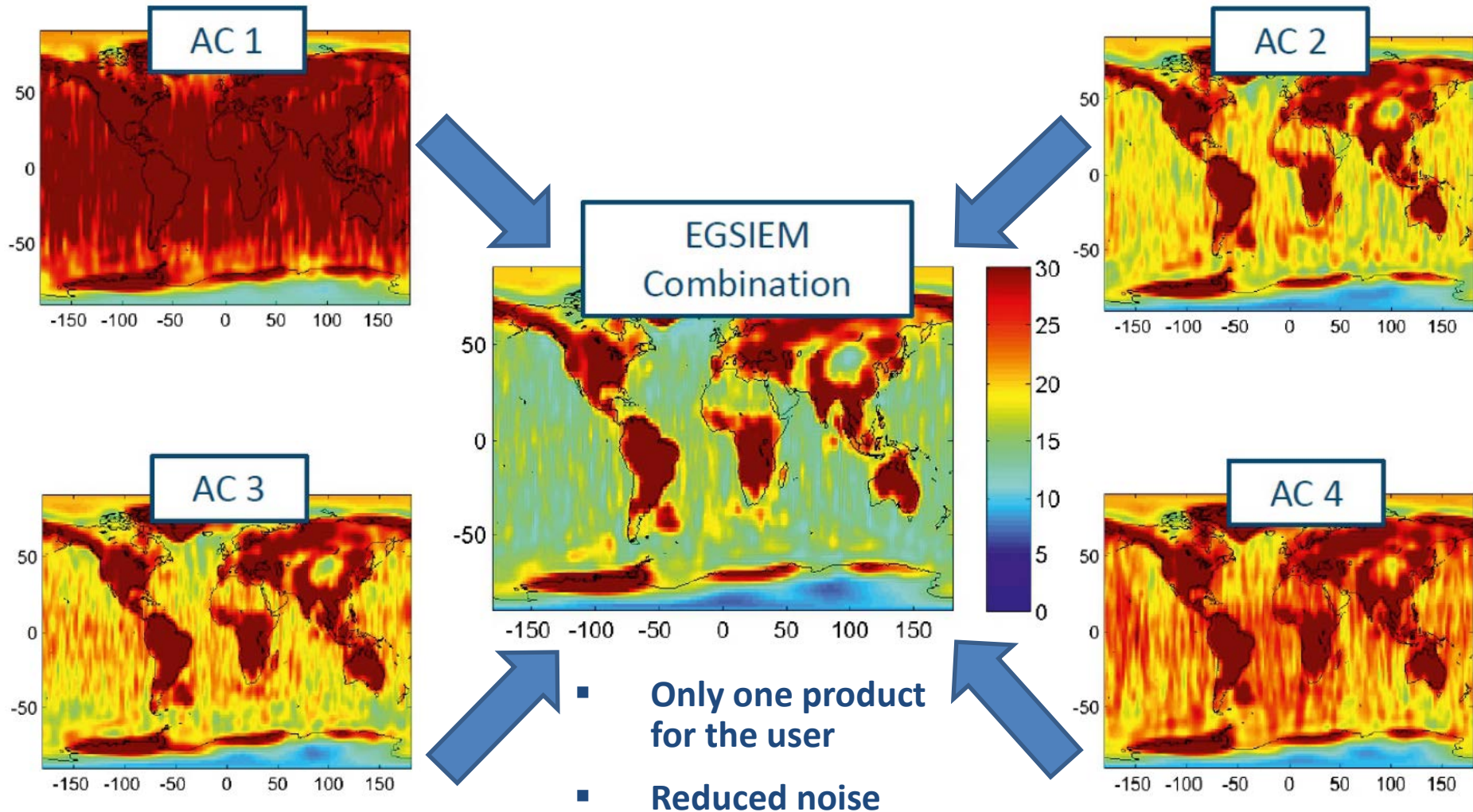
Bern

February 8 / 9th, 2018

EGSIEM: one project – three services



Scientific Combination Service



Scientific Combination Service

- The EGSiem combination service provides monthly GRACE K-band gravity fields combined on normal equation (NEQ) Level.
- To ensure consistency, a set of common standards for reference frame, Earth rotation, force model and satellite geometry were defined.
- Analysis centers (ACs) are free to apply their own processing strategy and choice of background models.

Why combine results based on the same observations?

Errors in GRACE monthly gravity fields are still dominated by analysis and background model noise, not observation noise => AC-specific errors are reduced by combination!