

Water for the Food baskets of the world

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Progress and achievements

Modelling activities:

Convection permitting modelling is on-going to explore various questions :

- Snow packs and their contribution to water resources.
- Role of low topography in the lateral redistribution of water.
- Impact of irrigation on ABL and convection triggering

Field Campaign:

- The LIAISE field campaign has been postponed to July 2021.
- Instruments funded by ESA, CNES and NASA could be added.
- Modelling activities will continue meanwhile.











Community building

The topic of water management and usage as a non-negligible process of the continental water cycle is now accepted by the geophysical community.

- ESA had two calls for remote sensing of irrigation in 2019 (detection and quantification).
- Work is on-going to add land-surface models into the AgMIP inter-comparison.
- Sonali P. McDermid is organizing a group of hydrologists, agronomers and climatologist to develop a common strategy to address irrigation in ESMs.
- This inter-disciplinary group has already held town-halls at AGU and AMS. An Aspen Global Change Institute workshop is planned for 2021 white Climber Council

Links to the WCRP Strategic and Implementation Plans

- The human dimension esp. water management is central to understanding the continental water cycle (GEWEX).
- This activity is particularly relevant at the regional scale (CORDEX, WGRC, RHPs).
- This trans-disciplinary activity will allow to better understand the needs for Subseasonal-to-Seasonal of water managers (S2S).
- Water for food-baskets is a topic in full interaction with social sciences as the system responds to our information.









