

International Earth Surface Working Group - IESWG

IESWG-5 Helsinki, FMI Finland 26-28 Sep 2023

<https://confluence.ecmwf.int/display/~pad/IESWG-2023>

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Goal:

Coordinate recommendations and actions from the IESWG, focus on current and emerging environmental observations of the Earth surface

Objectives of the IESWG include (for full details see [IESWG ToR](#)):

- Use of Earth Observation (EO)-data for **Cryosphere and Biosphere**;
- **Land Data Assimilation Systems (LDASs)** both current state and recent developments;
- Advancing **radiative transfer** and **emissivity/reflectivity/scattering-emission model development**;
- Advance **coupled data assimilation**

Form **actions** which address reported issues and our ability to support recommendations

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Recent activities of the IESWG include holding a **virtual seminar and discussion series**:

<https://confluence.ecmwf.int/display/~pad/IESWG-2021+Seminar+series>

23Sep2021 Snow ice and cryosphere-atmosphere interaction

21Oct2021 Vegetation and land-atmosphere fluxes

18Nov2021 Soil moisture, river-discharge and water cycle

4th IESWG meeting was convened 05-06Apr2022:

<https://confluence.ecmwf.int/display/~pad/IESWG-2022>

Full plenary notes from the workshop and the seminar can be found on the links above.

The IESWG-4 plenary identified a need for reporting and documentation of issues with in-situ surface observations.

<https://confluence.ecmwf.int/display/SNOW/Operational+in+situ+snow+reporting+issues>

One of the **critical observation gaps** was regarding **Snow Water Equivalent (SWE)** observations, for which new missions are being planned but at present is critically underrepresented in the EOS.