

3RD GCOS JOINT PANELS MEETING, ECMWF, BONN, GERMANY, 26-30 JUNE 2023

Cross Panel Group "Air-sea & Air-land Fluxes"

Session 1: Tuesday 27 June - 11:00-13:00

Session 2: Thursday 29 June - 09:00-10:30

Lead(s): Liz Kent, Darren Ghent, Meghan Cronin

Chair(s): Peter Thorne

Secretariat Support: Caterina Tassone

Background

GCOS IP Action B9: Improve estimates of latent and sensible heat fluxes and wind stress. The activities identified in this action for this group are:

1. Improve and extend in situ measurements needed to estimate surface fluxes, with the objectives of improving accuracy and better defining the uncertainties of those measurements and calculated fluxes.
2. Extend sites with co-located measurements of direct turbulent and radiative fluxes and variables required to estimate turbulent surface fluxes targeted at improving parameterisations of air-sea exchange and air-land exchange.

Background Material:

- Draft of paper when available

Importance of cross panel work

Air-sea and land-air fluxes are cross-cutting through the domains

Expected Outcomes

In Bonn: Outline agreed and possibly a 1st draft of a report that will provide a response to activities 1. and 2. of Action B9 and that can be used as justification to NMHS, Research organizations for the extension of the existing observation networks.

Longer term A plan to produce for the establishment/maintenance/extension of a global network of reference stations for ECVs needed to calculate surface heat, moisture and momentum fluxes.

Running of the session

10-15 panel members, including the leaders working collaboratively to write the 1st draft of the report

Prepare report back to plenary (2 slides) showing the results of the discussion against the expected outcomes, and the commitments from the panels, with actions along a timeline and assigned responsibilities.