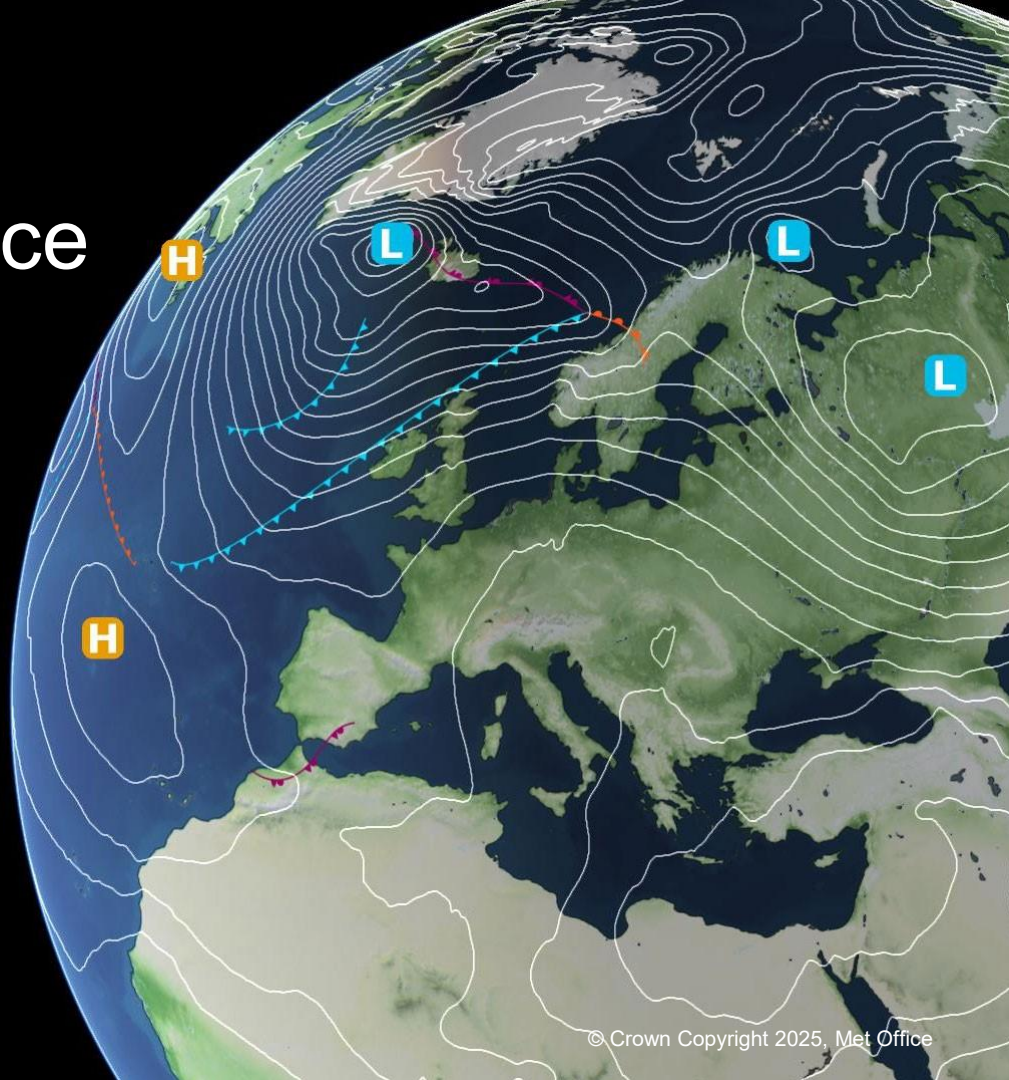


Update from the Surface Module

John Edwards
JULES Science Meeting
September 2026
Reading



- Little scientific development over the past year with the move to GitHub
- JULES is now at <https://github.com/MetOffice/jules> with release notes at <https://metoffice.github.io/jules/vn8.2/index.html>
- See also <https://github.com/MetOffice/simulation-systems> , <https://metoffice.github.io/simulation-systems/> and https://metoffice.github.io/simulation-systems/WorkingPractices/working_practices.html
- Forthcoming autumn release: <https://github.com/MetOffice/simulation-systems/discussions/675>. Code review deadline 25th September

- Former tickets become issues that generate pull requests
- First surface issue in the new system is currently under review:
<https://github.com/MetOffice/jules/issues/139> -- Calculate bare soil evaporation separately over irrigated and non-irrigated soil
- Aspiration to make progress on outstanding
<https://code.metoffice.gov.uk/trac/jules/ticket/1516>, negative snow

Ancillary Development

- Significant work on ancillary data over recent years
- Regional ancillary suite now supports more LULC data
 - ESA CCI (300 m) – the default
 - World Cover-MODIS (100 m). Underlying resolution is 10 m
 - CORINE (100 m). Only covers Europe
- More orographic data
 - SRTM at 90 and 30 m
 - Copernicus DEM at 90 and 30 m
 - GMTED2010 + RAMP2 (1 km)
 - ASTER

- Forthcoming in the version on GitHub
 - New LAI sources
 - MODIS at 500 m
 - Copernicus 1 km data
 - Alternative soil data
 - SoilGrids2.0

Surface Module Leaders

- Rich Ellis has stepped down, so we have a vacancy
- The management structure of JULES is being reorganized
- We will decide how to proceed in the light of the new structure