

The OpenIFS project

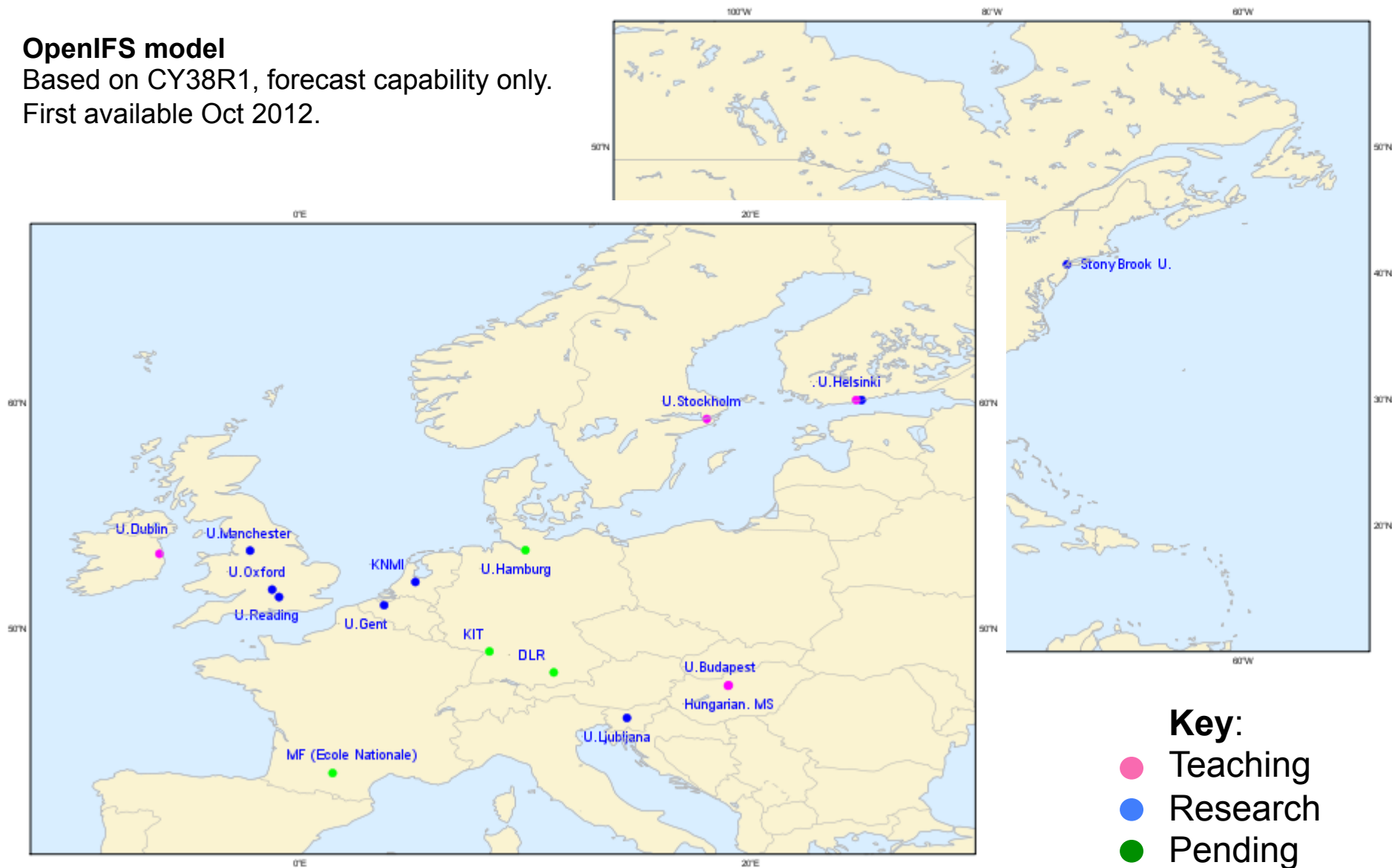
- Initial phase (3 yrs):
 - Investigate the benefits of providing a supported version of IFS to ECMWF member states and the international academic community.
 - Engage with limited number of early users for research and teaching.
- Motivation
 - Increase research and educational use of IFS.
 - Enable new methods of collaboration.
 - Improve recruitment.
- Resources
 - Glenn Carver (numerical aspects), Filip Vana (physical aspects)
 - Usual community model support such as wiki documentation, FAQ etc

OpenIFS Licensees

OpenIFS model

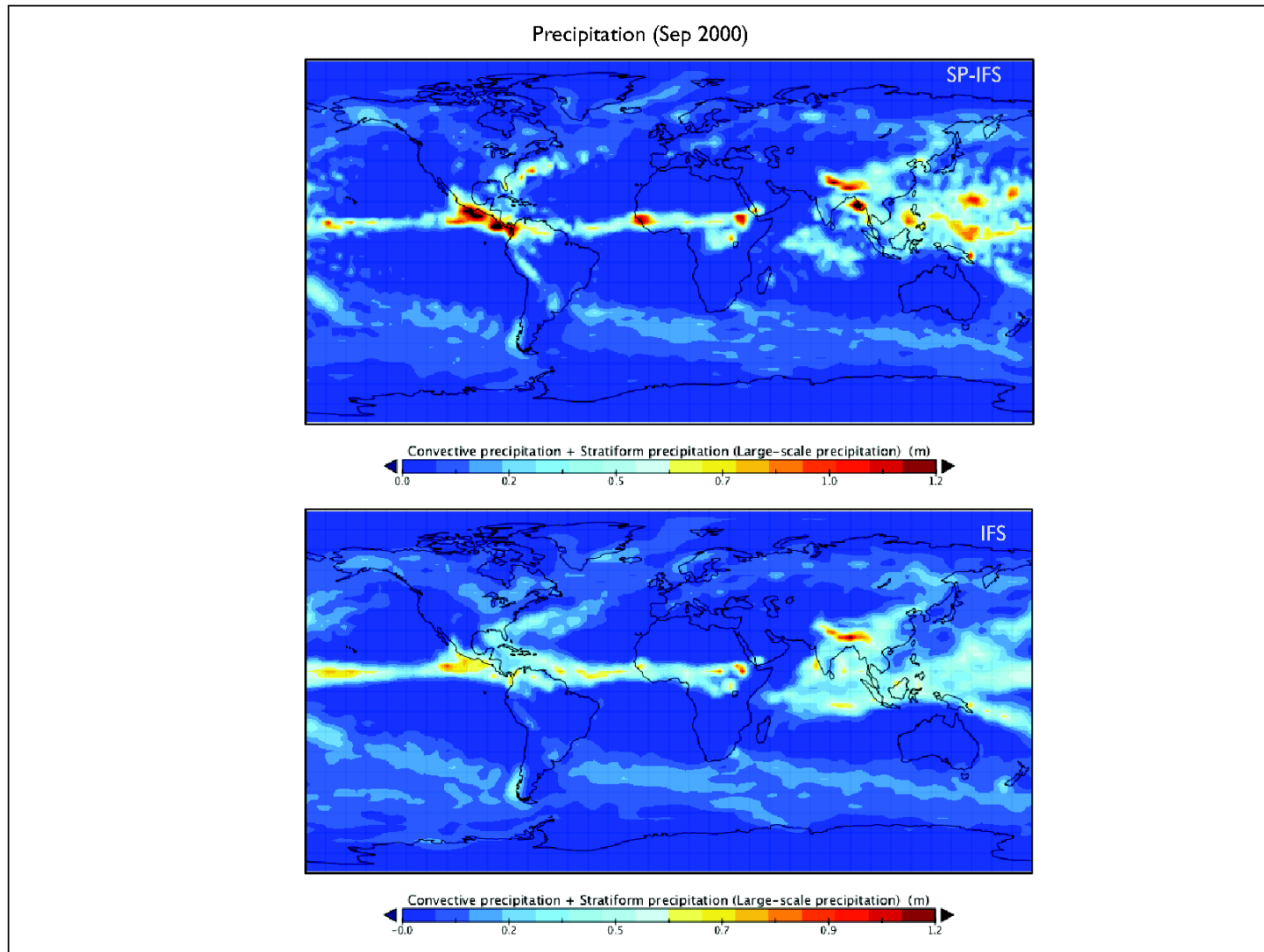
Based on CY38R1, forecast capability only.

First available Oct 2012.



OpenIFS research highlight: Super-parametrization

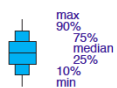
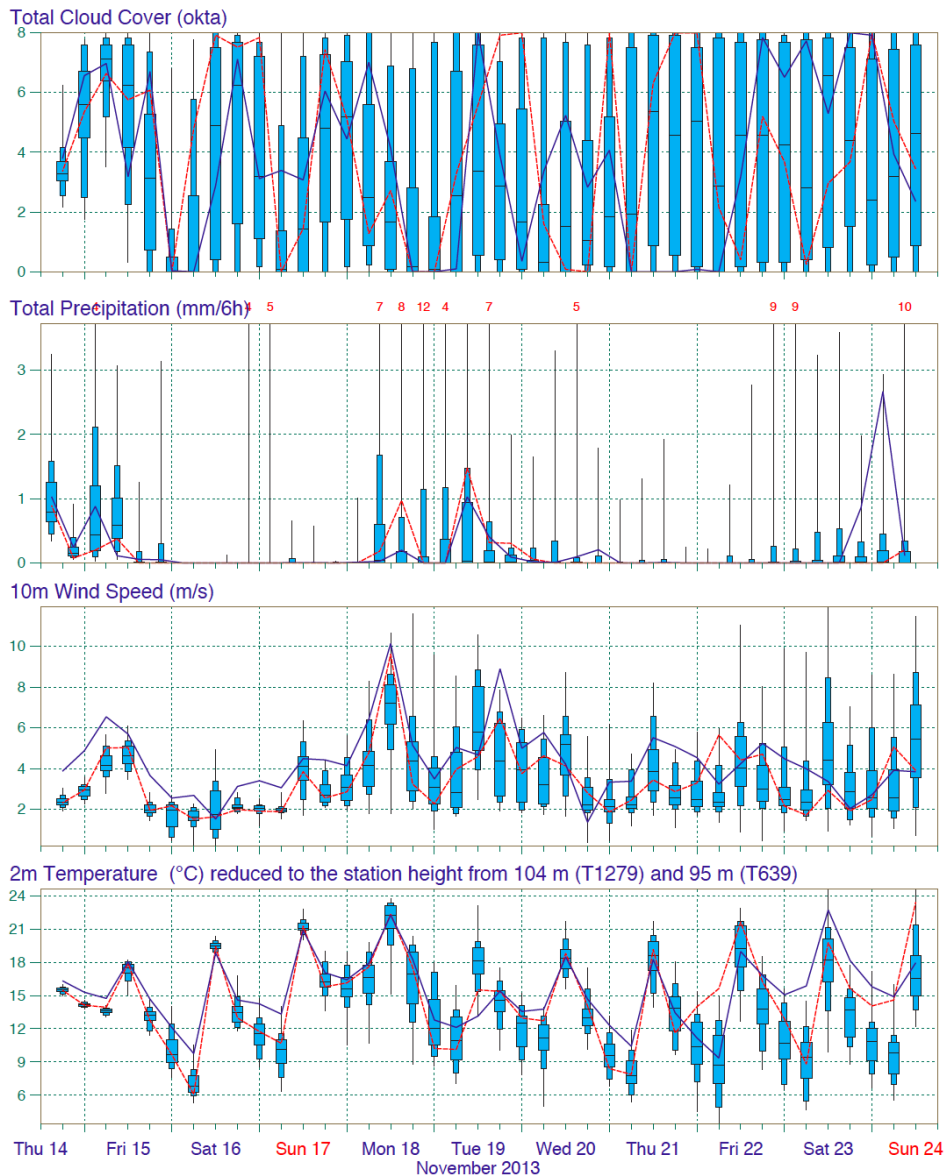
Comparison of monthly mean precipitation using T42 OpenIFS with (top) and without (bottom) the 2D cloud resolving model.



Courtesy of Prof Marat Khairoutdinov: StonyBrook University

Status and future plans

- Project status
 - OpenIFS paper presented to SAC and TAC October 2013.
 - Limit on licenses to remain until after consideration by December Council.
- Training and education
 - First OpenIFS user workshop took place at University of Helsinki 2013
 - Significant interest from number of institutions in developing advanced NWP training using OpenIFS and Single Column Model.
- Research
 - Active research with OpenIFS on: super-parametrization, normal mode initialization, water vapour transport, scalability.
 - Good support key to ensuring “takeup” of model and incorporating results of research into future versions of IFS.



EPS Control(31 km) High Resolution Deterministic(16 km)