

Programme

6th OpenIFS User Meeting, 22nd – 26th May, Barcelona Supercomputing Center

MONDAY 22nd May – Introduction Day

08.30 – 09.00: Registration

09.00 – 09:15: Welcome by MK/AH and BSC organising team

09.15 – 09.30: Welcome by Francisco Doblas Reyes, Director of Earth Sciences, BSC
Welcome by Stephen English, Deputy Director of Research, ECMWF

Morning Topic: Intro to OpenIFS for new users, current developments (Talks)

09:30 – 10:30: Overview of OpenIFS: What is OpenIFS?

10.30 – 11.00: Coffee time

11.00 – 12.00: Richard Forbes - Physical processes in the IFS/OpenIFS
covering both 43r3 and new developments in 48r1

12.00 – 13.00: Start of Computer Practicals:
First steps with OpenIFS: exploring the model installation

13.00 – 14.00: Lunch

Afternoon Topic: Intro to using OpenIFS (Computer Practicals)

14.00 – 15.30: First steps (cont):
How to run OpenIFS and control model behaviour with namelists

15.30 – 16.00: Coffee

16.00 – 17.00: Next steps: Control run
Setting up a forecast experiment with OpenIFS (no chemistry case)

17.00 – 19:00: Social icebreaker / Welcome drinks
First Floor Terrace at BSC

TUESDAY 23rd May - General Met and Chemistry

8.55 – 9.00 – Brief intro about the day

Topic: General Meteorology with OpenIFS (Contributed talks)

9.00 – 9.30: Victoria Sinclair – Aqua-planet simulations with OpenIFS to investigate how extra-tropical cyclones may change in the future

9.30 – 10.00: Guokun Dai – Influences of stratospheric warming on Ural blocking events in winter

10.00 – 10.30: Pirkka Ollinaho – OpenIFS ensembles and a process-level model uncertainty representation in CY43R3, backporting development updates from IFS CY46R1

10.30 – 11.00: Coffee time (check with BSC)

Topic: Atmospheric chemistry in NWP (Talks)

11.00 – 11.45: Johannes Flemming – CAMS, Atmos composition in NWP (remote)

11.45 – 12.30: Vincent Huijnen – Atmospheric composition in OpenIFS

12.30 – 13.00: MK/AH – Intro to using OpenIFS/AC (in prep for after lunch)
Resolve any technical issues in prep for afternoon session

13.00 – 14.00: Lunch

Topic: Chemistry modelling (Computer Practicals)

14.00 – 15.30: Run OpenIFS/AC control case – gas phase chemistry
- Sensitivity – chemistry on vs off

While the model runs: Presentation by Iain Russell & Sandor Kertesz on Metview (remote)

15.30 – 16.00: Coffee

16.00 – 17.00: Metview plotting for the OpenIFS/AC model outputs (Practical)

WEDNESDAY 24th May – Aerosol and NWP

8.55 – 9.00: Intro to day

Topic: Modelling of Aerosol (Talks)

9.00 – 9.45: Anthony Jones – On the role of aerosol in NWP (remote)

9.45 – 10.15: Lorenzo Silvestri – Environmental conditions for Saharan dust intrusions and their influence on Medicanes development: testing the case of Medicane Qendresa by using OpenIFS/AC

10.15 – 11.00: Coffee

11.00 – 11.45: Samuel Rémy – Aerosol in OpenIFS/AC and CAMS and NWP (remote)

11.45 – 12.30: Tommi Bergmann – Overview of the new M7 aerosol code
Overview of double moment schemes and plans

12.30 – 1300 – Aerosol discussion

13.00 – 14.00: Lunch

Topic: Aerosol modelling in OpenIFS (Computer Practicals)

14.00 – 14.45: Aerosol Practical (control) and sensitivity

- Set off run with AER aerosol

MK: Initial data production (while model runs)

14.45 – 15.30: Presentation about the OpenIFS Data Hub (general) and Licensing changes

15.30 – 16.00: Coffee

16:00 – 16:30: Metview with Aerosol practical

- Allocated less time than previous day as model usage will now be a bit more familiar

Time TBC Evening – Social Dinner

Fiskebar, Passeig d'Ítaca, 3 08039 Barcelona
<https://grupotragaluz.com/restaurantes/fiskebar/>

THURSDAY 25th May – EC-Earth: Climate and OpenIFS

08.55 – 9.00: Intro to day

Topic: Climate interactions modelling (Talks)

9.00 – 9.45: Klaus Wyser – Overview of EC-Earth and Plans

9.45 – 10.15: Montserrat Costa Surós – Aerosol-sensitive Ice Nucleation Parameterizations in the EC-Earth3: evaluation and climate impacts

10.15 – 11.00: Coffee

11.00 – 11.45: Carlos Pérez García-Pando – BSC research activities + composition-climate interactions

11.45 – 12.30: Anna Agusti Panareda – Carbon cycle in the IFS (remote)

12.30 – 13.00: Visit of Mare Nostrum

13.00 – 14.00: Lunch

14.00 – 14.30: Abhishek Savita – ECMWF-OpenIFS Climate Sensitivity to Horizontal Resolution and Time Step

14.30 – 15.00: Daniel Köhler – Using OpenIFS to study the impact on mid-latitude circulation in scenarios of future polar sea ice

15.00 – 15.30: Coffee

Topic: Future for OpenIFS

15.30 – 16.00: Update on the next release OpenIFS 48r1

16.00 – 16.30: Discussion of future user needs (Part 1)

FRIDAY 26th May – Future for OpenIFS continued

9.15 – 9.30: Intro to day

Topic: Machine Learning applications

9.30 – 10.15: Mihai Alexe – Machine learning for NWP and atmospheric composition:
current status and outlook (remote)

10.15 – 11.00: Coffee

11.00 – 11.30: Clément Bouvier – A large ensemble of baroclinic wave simulations generated
with OpenIFS@home

Topic: Future for OpenIFS (continued)

11.30 – 12.30: Discussion of OpenIFS future (Part 2), machine learning and composition

12.30 – 13:00: Summary and close

12.30: FINISH