

Training course, “A hands-on introduction to Numerical Weather Prediction Models: Understanding and Experimenting”

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European Centre for Medium-Range Weather Forecasts (ECMWF)

ECMWF is an international organisation with

- 23 Member States
- 12 Cooperating States

ECMWF's role is to address the critical and most difficult research problems in medium-range NWP that no one country could tackle on its own

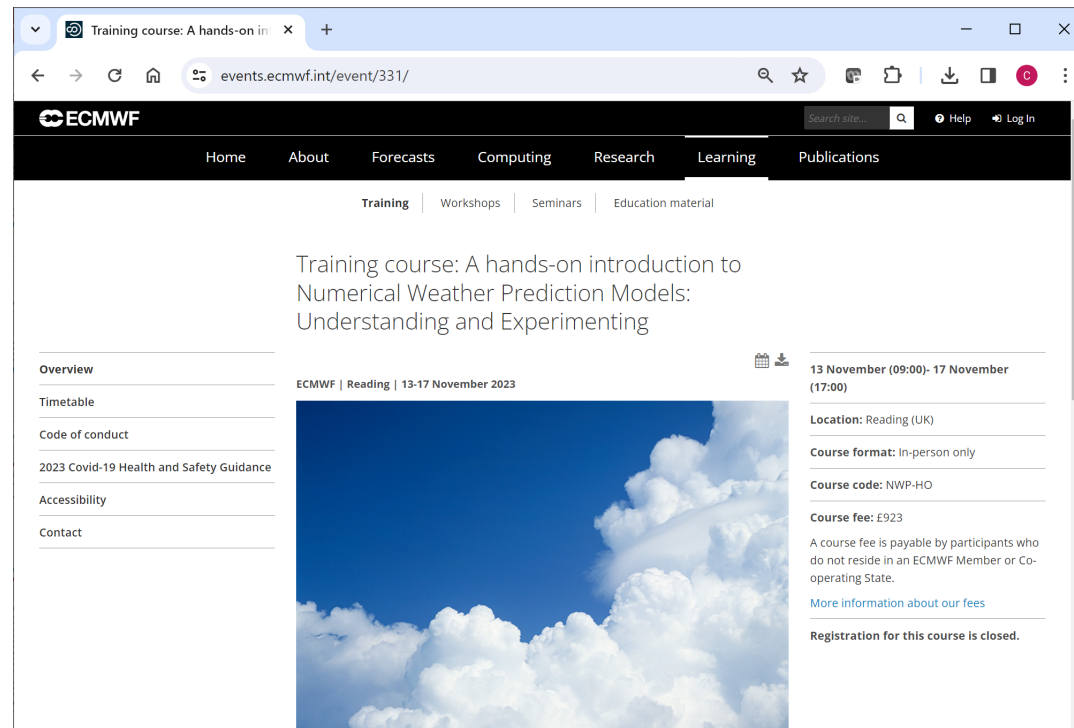
Three sites in UK, Italy and Germany

- Both research institute & 24/7 operational centre
- Established in 1975
- Advanced training = one of ECMWF strategic activities



NWP training course: A hands-on introduction to Numerical Weather Prediction Models: Understanding and Experimenting

- Course webpage: <https://events.ecmwf.int/event/331/>
- ECMWF training: <https://www.ecmwf.int/en/learning>
- eLearning resources <https://learning.ecmwf.int/>



The screenshot shows a web browser displaying the ECMWF event page for the training course. The page title is "Training course: A hands-on introduction to Numerical Weather Prediction Models: Understanding and Experimenting". The event is scheduled for 13-17 November 2023 in Reading, UK. The course format is in-person only, and the course code is NWP-HO. The course fee is £923. The page also includes a sidebar with navigation links such as Overview, Timetable, Code of conduct, 2023 Covid-19 Health and Safety Guidance, Accessibility, and Contact. A large image of a blue sky with white clouds is featured on the page.



The certificate is titled "Training Course" and is issued by ECMWF. It certifies that "XXX" participated in the training course, "A hands-on introduction to Numerical Weather Prediction Models: Understanding and Experimenting", held at ECMWF on 13 - 17 November 2023. The certificate notes that the course consisted of 36 hours of lectures and practical sessions. It is signed by Andrew Brown, Director of Research, on 17 November 2023. The ECMWF logo is visible in the bottom right corner of the certificate.

TRAINING COURSE

ECMWF

Training Course

This is to certify that
XXX

Participated in the training course,
A hands-on introduction to Numerical
Weather Prediction Models: Understanding
and Experimenting

held at ECMWF on
13 - 17 November 2023

The course consisted of 36 hours of lectures and practical sessions.

Andrew Brown
Director of Research

17 November 2023

ECMWF, Shinfield Road, Reading RG2 9AX, UK. Tel: +44 118 949 9000

General Housekeeping

Access to Centre

- Please sign in/out each day at reception

Personal belongings

- Do not leave any personal belongings at ECMWF outside office hours.
- We recommend that you do not leave valuables unattended in the classroom or any other part of the building.
- ECMWF will not take any responsibility for items lost at the premises.

Smoking

- Smoking is not allowed inside the building. Please ask at Reception Desk and you will be directed to the outside smoking area.

Enquiries

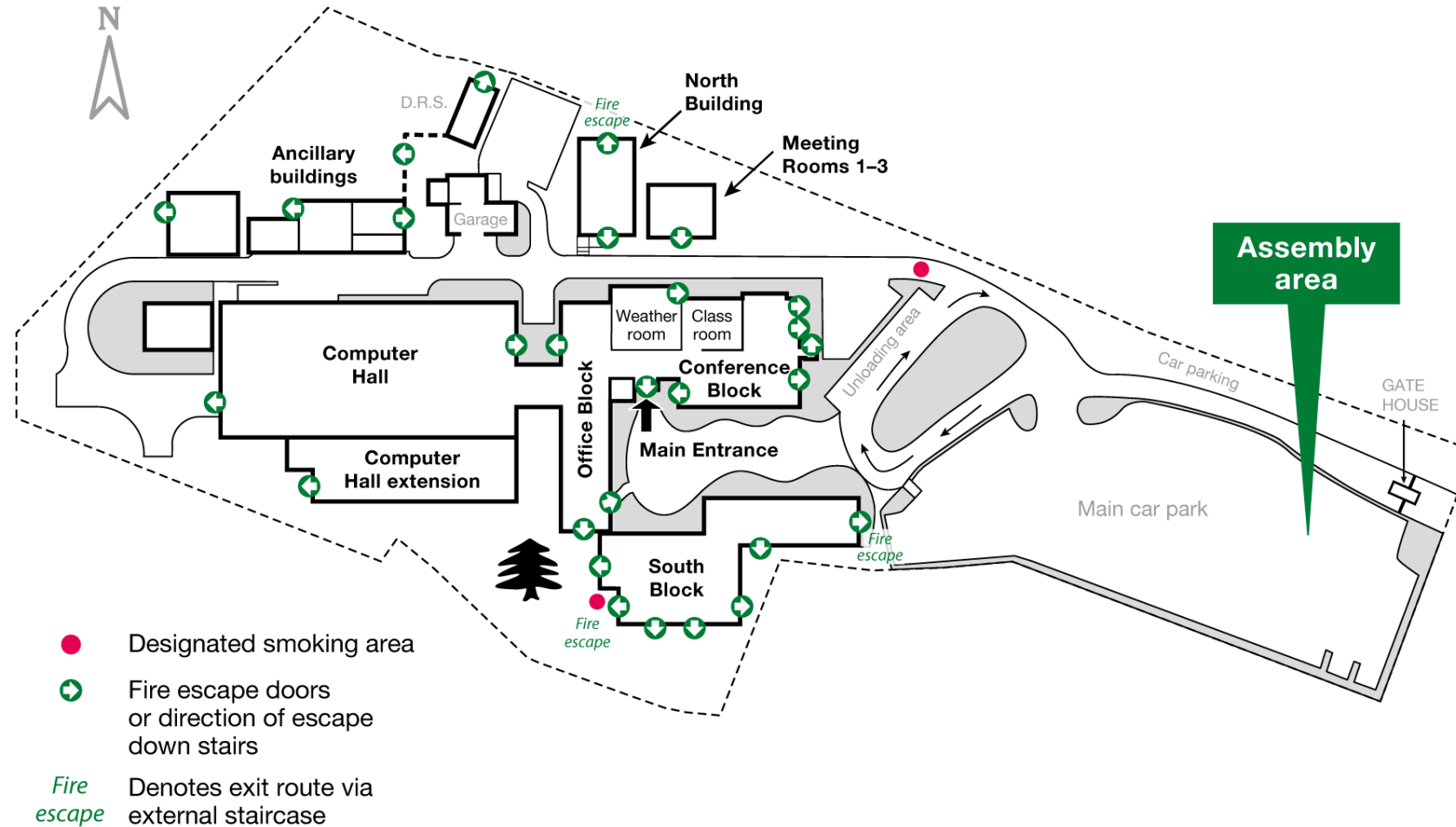
- If you have any questions, please contact the Reception Desk who will liaise with the course organisers.

Make the most of the training!

- Please don't check emails on the computers, or on other devices 😊
- There are no stupid questions!

General Housekeeping

Fire Escapes and Assembly Area



Restaurant

- The restaurant provides the following daily services:
 - Light breakfast from 08:00
 - Lunch: hot counter choices, salads, sandwiches, soup and desserts.
- Please speak to the restaurant staff if you have any special dietary requirements.
- The restaurant can only accept chip and pin and contactless card payments.
- Coffee/tea will be supplied during the breaks as specified on the programme.

	Monday 13 Nov	Tuesday 14 Nov	Wednesday 15 Nov	Thursday 16 Nov	Friday 17 Nov
08:30*	Registration opens				
09:10–10:15	Welcome, course overview, introductions Andy Brown, Marcus Köhler, Adrian Hill	Intro to Physical Processes in the IFS Richard Forbes	Spectral transform method Andreas Müller	Analysing results from perturbation experiments Marcus Köhler	Radiative processes ECRAD Robin Hogan
10:15–10:40	Group photo		<i>Coffee break</i>		
10:40–11:45	Building blocks of the forecast systems at ECMWF Sarah Keeley	Introduction to ecCodes and GRIB Paul Dando	Intro to the dynamical core Michail Diamantakis	Surface processes, Lake model, Climate files Margarita Choulga	10:15–11:30 Networking event & Drop-in 11:30 Using the OpenIFS Data Hub Marcus Köhler
11:45–11:55			<i>Comfort break</i>		
11:55–13:00	Getting started with the OpenIFS model Marcus Köhler	Intro to Metview and Python API Iain Russell & Sandor Kertesz	Perturbation experiments – Code Modifications Marcus Köhler	ERA-5 Overview & CDS demonstration Hans Hersbach, Angel Lopez Alos	Presentations and discussion Course certificates
13:00–14:00			<i>Lunch</i>		
14:00–15:05	Intro to Parallel Programming OpenMP vs MPI Iain Miller	Plotting our results Iain Russell, Sandor Kertesz, Marcus Köhler	A day in the life of a model developer...	SST experiments Sarah Keeley	
15:05–15:20			<i>Coffee Break</i>		
15:20–16:50	Submitting our first experiment Marcus Köhler	Planning and submitting perturbation experiments Marcus Köhler	A day in the life of a model developer...	Group work on results	
	<i>Ice breaker</i>		<i>Self-funded dinner</i>		

*all times are Reading local time (GMT)

ECMWF, Shinfield Park, Reading, Berkshire, RG2 9AX, UK

Social dinner:
Shinfield Arms Pub.