

Workshop Content

Workshop 1: The first workshop will introduce participants to an approach for assessing climate risk. This will include identifying climate hazards and their associated business impacts. The session will introduce the UK Climate Projections (UKCP18) and explain how the course will support and enhance the e-learning modules and participant understanding.

Workshop 2: In the second session, the focus will be on assessing risk in the current climate and the data sources that can be used to do this. Participants will explore different data sources and their limitations, developing an understanding on how different hazards can or cannot be easily assessed, and when further datasets or more sophisticated analysis may be required. The final part of the session will look at how to prioritise different hazards to structure the risk assessment approach.

Workshop 3: The final workshop will present an opportunity for participants to get direct support and advice on the e-learning content and tasks, including a discussion and Q&A session with a UKCP18 scientist. The session will cover different methodologies that can be used to assess a hazard in the future climate and examples of different Met Office projects using these techniques. Finally, participants will be given examples of how to communicate climate data to various audiences, with a discussion on the key elements and requirements for effective communication.

E-learning:

The e-learning is a comprehensive, interactive interface that will provide participants with an introduction to the underlying science of climate models and how they are developed. The content consists of eight modules relating to climate projections, specifically focusing on UKCP18 and how to correctly use the projections. A breakdown of the modules is provided below.

Note: The e-learning modules are to be completed in independent study time before or during the course week. Participants will need a recommended minimum of 2 days study time to complete the e-learning. This is an additional to the 3 half day workshops. Please take this into consideration when booking onto the course and ensure you also block out time in your working week to complete the e-learning. It is at the discretion of the participant to complete this at a time of their choosing.

To get the most out of the course, it is recommended that the first four modules are completed before the course or at least before the second workshop (access will be provided one week before the first workshop). All eight modules should be completed before the third workshop. This will ensure participants can make the most of the opportunity to get feedback and support on the content and tasks.

Module breakdown -

Get Started Using Climate Information

- Describe your need for climate information
- Know how to select the most appropriate information channel
- Understand key elements of climate information and how to find it
- Interpret the risk matrix and adaptation cycle

Introduction to Climate Models

- Differentiate between observed data and climate model data
- State the capability of models and the impact of resolution

Introduction to Scenarios

- Distinguish between different scenarios used in UKCP and when you would use them

Introduction to Marine Projections

- Understand more about the various components of marine projections
- Understand the components of marine projections, identifying the particular uncertainties attached to these
- Understand the impacts of marine projections for small islands

Introduction to Uncertainty

- Distinguish between different types of scenarios and when you would use them
- Appreciate what types of uncertainty are explored in the different UKCP products

Comparing UKCP09 with the Latest UKCP Projections

- Differentiate between UKCP09 and the latest UK Climate projections
- Explain what is new in the latest UK Climate projections

Appropriate Use of Projections

- Recognise the importance of the appropriate use of climate model data alongside the scientific limitations and caveats associated with them
- Associate the model credibility with model performance in terms of how the models compare to observations and subsequently the need for bias correction

Using the right UKCP Data for My Application

- Review example tasks and undertake a task putting learning into practice