MOOC
Machine Learning in Weather & Climate

TRAINING PROGRAMME

TIER 1: ML IN WEATHER & CLIMATE
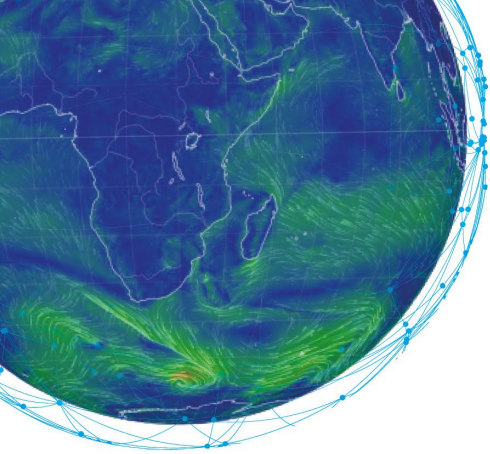
MODULE		DURATION	LAUNCH DATE
Introduction to ML in Weather & Climate		1h30 e-learning 3 webinars	09/01/2023
OPTIONAL MODULES	Observations	1h e-learning	16/01/2023
	Forecast Model	1h e-learning 1 webinar	23/01/2023
	Data Assimilation	30mn e-learning	30/01/2023
	Post-Processing	1h e-learning	06/02/2023
	Computing	1h e-learning	13/02/2023

TIER 2: CONCEPTS OF MACHINE LEARNING

Introduction to data handling	1h e-learning 1 webinar	20/02/2023
Regression and decision trees	1h e-learning 1 webinar	27/02/2023
Deep learning architectures	1h e-learning 1 webinar	06/03/2023
Uncertainty & generative modelling	1h e-learning 1 webinar	13/03/2023

in partnership with

Physic-informed machine learning	1h e-learning 1 webinar	20/03/2023

TIER 3: PRACTICAL ML APPLICATIONS IN WEATHER & CLIMATE

TRAINING PROGRAMME

SPECIALISATION OPTIONAL MODULES

Observations	1h e-learning Meet the Expert Webinar	27/03/2023
Forecast Model	1h e-learning Meet the Expert Webinar	
Data Assimilation	1h e-learning Meet the Expert Webinar	03/04/2023
Post-Processing	1h e-learning Meet the Expert Webinar	
Ocean & Climate	1h e-learning Meet the Expert Webinar	10/04/2023
Operational Meteorology	30mn e-learning	10/04/2023

University of Luxembourg
Competence Centre