CODE FOR EARTH

Innovation • Collaboration • Open Source Coding

Code for Earth Day 2024

FINAL EVENT 2024

18 September 2024
in ECMWF, Reading

	Time	What	Goal of the project	Participants
	09:00 09:05	**Welcome**		*Athina Trakas and Esperanza Cuartero, ECMWF*
	09:05 09:15	**Welcome address**		*Florian Pappenberger, ECMWF*
	09:15 09:25	**ECMWF introduction**		*Joern Hoffmannn, ECMWF*
	09:25 09:30	**Code for Earth introduction**		*Athina Trakas and Esperanza Cuartero, ECMWF*
Session 1 09:30 - 10:45	09:30 09:55	**AirQuality Urban View**	Goal: to improve the visualisation of air quality insights to enable more informed public health decision-making in European cities	*Eloi Codina, Adrià Fenoy, Óscar Hernández*
	09:55 10:20	**Optimizing CDSAPI Dataset Retrieval**	Goal: to improve the data retrieval journey for users of the Climate Data Store (CDS)	*Andrei Cotor, Catalin-Ionut Albu*
	10:20 10:45	**CDSAPI Request Check**	Goal: to improve the data retrieval journey for users of the Climate Data Store (CDS)	*Irina Roxana Sucoverschi, Thomas Edward Calloway*
	10:45 11:15	**Coffee break**		
Session 2 11:15 - 13:00	11:15 11:20	**IFAB introduction**		*TBC*
	11:20 11:45	**KGB-TruthGuiding**	Goal: to enhance the existing ECMWF assistant chatbot by providing more interactive, engaging and explainable answers	*Quoc Viet Nguyen, Duc Thinh Ngo, Thi Hai Yen Vu, Nhat Minh Dao, Vu Hoang Anh Pham*
	11:45 12:10	**Project Polly**	Goal: to assist in the extraction of complex weather information for use by both technical users and non-technical users	*Christopher Drowley, Nadia Skifa, Kaitlyn Natasha Ries*
	12:10 12:35	**HydroGap-AI**	Goal: to apply machine learning solutions to data for hydrological analysis and decision-making	*Konstantinos Plataridis, Yiannis Kontos, Konstantinos Perifanos*
	12:35 13:00	**XAI for Weather Forecasting Models**	Goal: to develop explainability techniques and approaches of transformer embeddings for weather forecast (AIFS, PanguWeather)	*Mihaela Caian, Andrei Gherasim, Adrian Berlic*
	13:00 14:00	**Lunch**		
Session 3 14:00 - 15:40	14:00 14:25	**ML-BEES**	Goal: to improve the performance of ECMWF's current land surface Machine Learning model prototype	*Yikui Zhang, Till Fohrmann, Johannes Leonhardt, Mohamad Hakam Shams Eddin*
	14:25 14:50	**CAMS-nb-Charts**	Goal: to help users plot CAMS forecast charts based on their needs via Jupyter notebooks	*Xenofon Karagiannis*
	14:50 15:15	**CAMS Verisualiser**	Goal: to visualise CAMS verification data in a flexible and easier way	*Hakan Deniz Kale, Yavuz Arda Orak, Elif Rana Arslan*
	15:15 15:40	**Tales of dry lands**	Goal: to understand how to visualise trends and explore complex climatic patterns of droughts via Jupyter notebooks	*Xenofon Karagiannis, Georgios Begkas, Lucy Colley, Madiha Abbas, Marina Caporlingua*
	15:40 16:10	**Coffee break**		
Session 4 16:10 – 17:15	16:10 16:35	**vAirify**	Goal: to help improve the air pollution forecast model to be more responsive	*Tim Johnson, Sebastian Steinig, Mike Walker-Rose, Max Nyamunda, Ben Ell-Jones, Luke Vincent, Richard Strange*
	16:35 17:00	**SunVizor**	Goal: to enable the solar energy community to visualise data before downloading	*Sergio Castillo Pérez, Irma Riádigos Sánchez, John alberto López Hernández, Jon Ander Zapirain Manrique, Xabier Elberdin Robles*
	17:00 17:15	**Wrap up**		*Athina Trakas and Esperanza Cuartero, ECMWF*