

What is KAIROS?

In ancient Greek the word kairos means 'the right, critical or opportune moment'. In modern Greek kairos means 'weather'.

KAIROS perfectly captures the essence of the project, as it aims to provide the right stakeholder with critical weather information at the opportune moment.

Consortium



Zurich Airport



The project is supported by the SESAR 3 Joint Undertaking and its members.

KAIROS

Unlocking the potential of AI-based weather forecasts for operational benefits

www.kairos-eu.com



The aim of the project

KAIROS will improve the accuracy and lead time of meteorological information provided to the aviation community by using artificial intelligence. This will mitigate the impacts of weather on flight operations.

The KAIROS AI-based weather prediction platform will be an enabling technology to unlock further operational efficiencies within the airspace system.

Improving the predictability of weather phenomena:



Convection



Turbulence



High altitude ice crystals



Low visibility



SO₂/Dust

Objectives

- **Produce AI-based MET forecast:** applying artificial intelligence algorithms on available forecast and observation weather data to improve the prediction of several weather phenomena impacting aviation.
- **Assess operational benefits of AI weather forecasts to aviation end-user:** analysing the potential impact of improved weather information on aviation operations, the AI-based forecast will be integrated with decision-support platforms currently used by aviation stakeholders across the airspace system.

