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



























⊋UNISPHERE



Zurich Airport





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

KAIROS

Unlocking the potential of Al-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



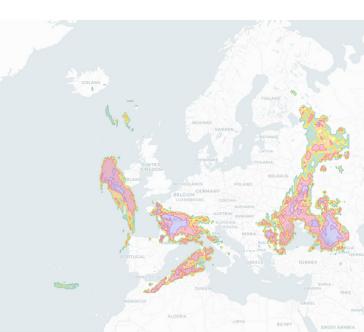
Low visibility



SO₂/Dust



- Produce Al-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.





Artificial Intelligence for aviation