



CICONIA

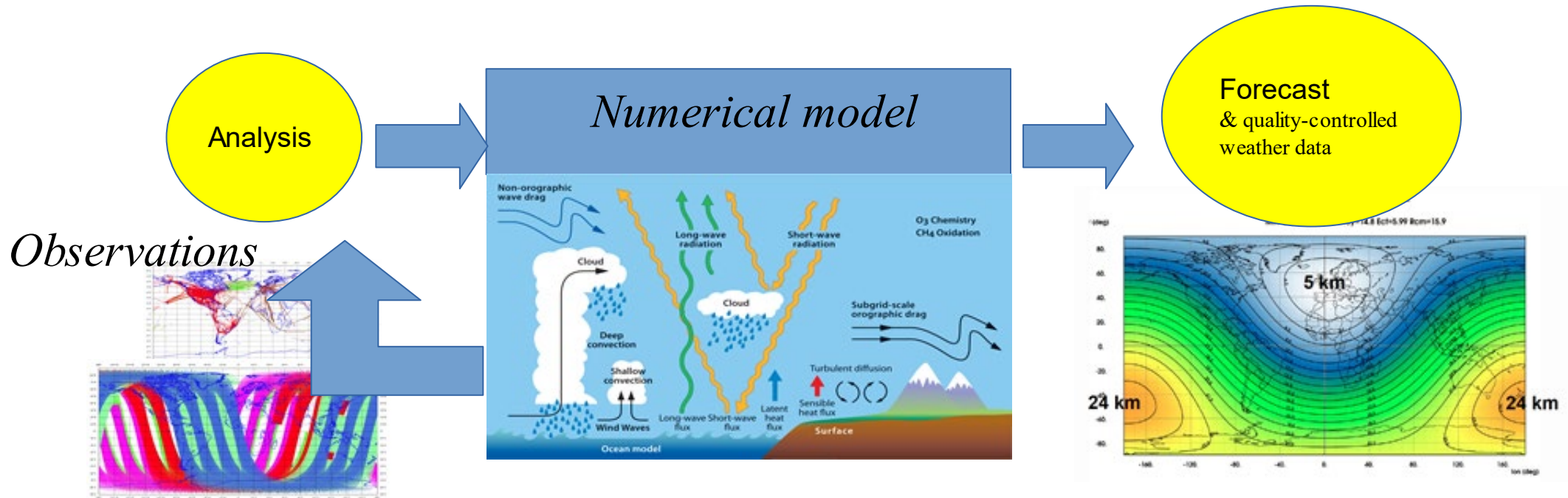
Climate effects reduced by Innovative Concept of Operations

1. Improve weather forecasting capabilities,
2. Improve climate impact assessments,
3. Define potential Concepts of Operations in planning to execution phases,
4. Assess and Demonstrate the operational feasibility with fast-time and human-in-the-loop simulations, and flight trials.

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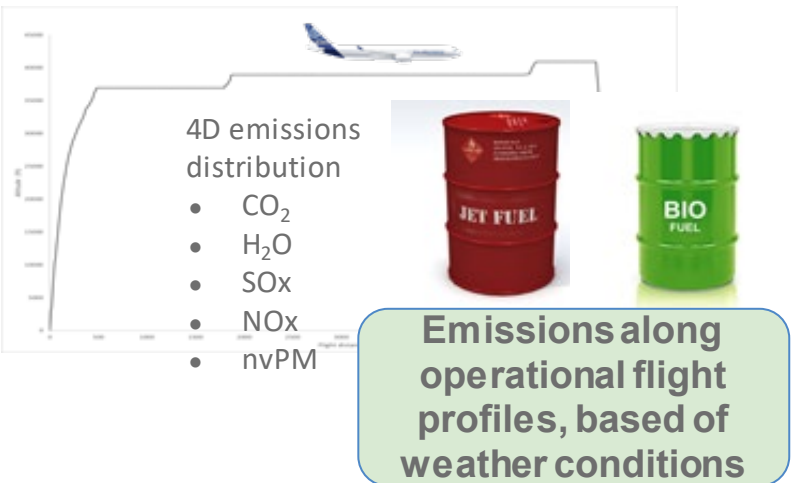


1. **Improve weather forecasting capabilities**, and provide technical enablers definitions and recommendations that will feed a better understanding of the stakes,

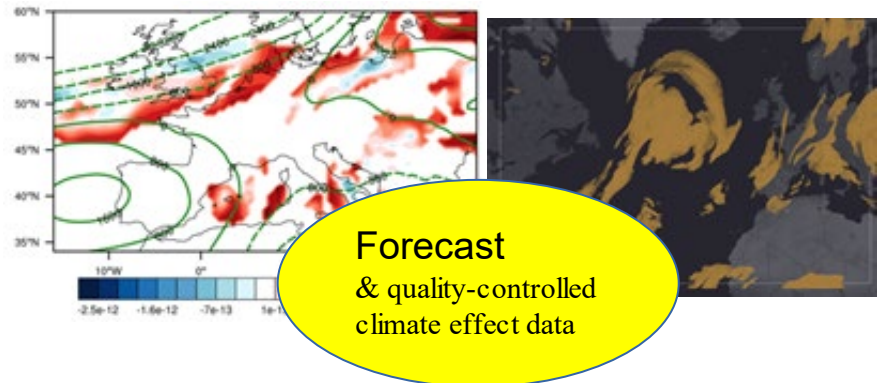
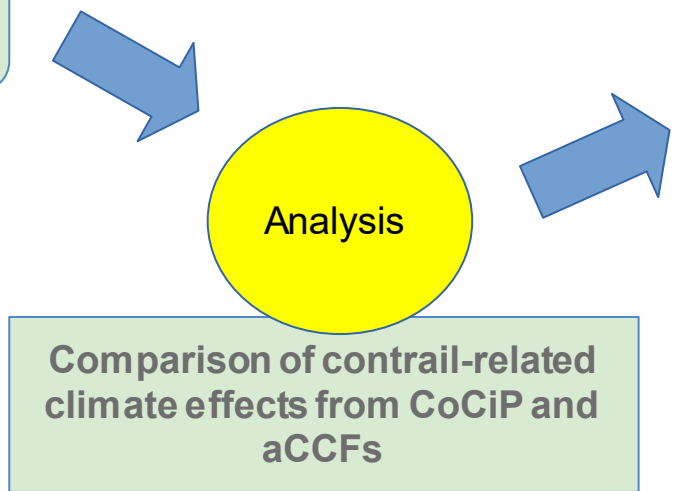


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2. Improve climate impact assessments, at aircraft trajectory level and larger-scale traffic,



Emissions along operational flight profiles, based of weather conditions



Provision of MET Service enabling climate optimised flight planning

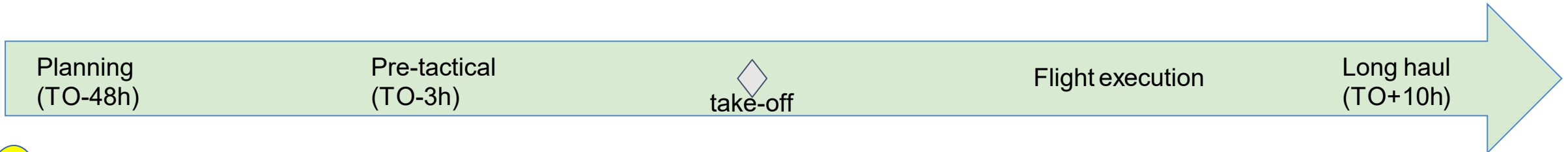
Operational use

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3. Define and assess potential **Concepts of Operations**

4. **Demonstrate operational efficiency**, including climate effect and economics (fast-time and human-in-the-loop simulations & flight trials)



CONOPS

Dispatch: How to design a Flight Plan integrating climate impact estimation

Pilots: What level of adaptations when fuel load cannot be changed anymore

ATC: What level of adaptations linked to observations and forecast

Network: How to avoid new types of congestions



CICONIA Roadmap



EU ETS MRV milestones



CICONIA milestones

KoM (July 5th) Review 1 (T0+9m) Review 2 (T0+21m) Final Maturity Gate

CICONIA will **define the level of forecast service achievable** to support operational climate effective decisions

CICONIA will examine the **accuracy of assessing the climate impact** of contrails and non-CO2 emissions from individual flights

CICONIA will **choose a metric** that addresses both CO2 and non-CO2 climate effects

CICONIA will **measure the efficiency of various operational mitigations** options, for environment and economics

Second wave of SESAR project towards large scale deployment.

CICONIA 2?, ...



Thank you!

And happy to discuss further details on the booth