

Poster P1.1.6

ESA Project eo4alps / AlpAirEO

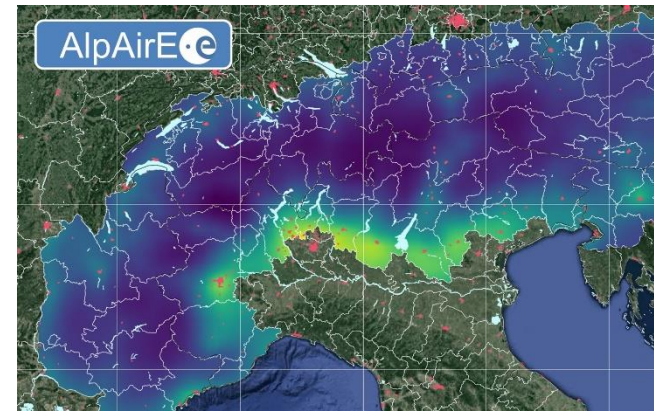
Frank Baier, Lorenza Gilardi, Oleg Goussev, Elena Kalusche, Thilo Erbertseder



Knowledge for Tomorrow



AlpAirEO: Health Risks by Air Pollution – a Service for the Alpine Region



Project goals

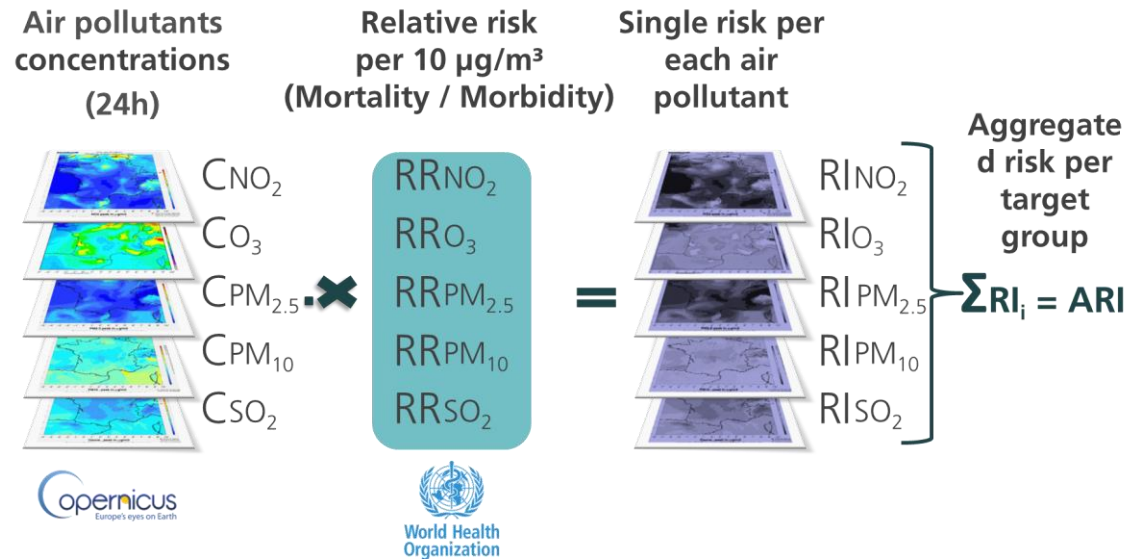
1. Assess **the needs of health communities** in the alpine and neighboring regions;
2. Assess **the state-of-the art on data already provided**;
3. Exploit **remote sensing (CAMS and Sentinel data)** and **in-situ instruments (EEA monitoring stations)** data in combination **with other environmental and health data** to support the **impact assessment** of **environmental stressors** on **human health**;
4. Provide a **quantification of the exposure** to **environmental stressors** of the Alpine population;
5. Provide an **assessment of additive effects** of exposure to **mixtures of air pollutants**;
6. Provide a **freely accessible web-based service**, capable of **providing information of the current status and forecast of air quality** and the **associated increased health risk at local level**.



AlpAirEO: Health Risks by Air Pollution

– a Service for the Alpine Region

Calculating health risk from ambient pollution



AlpAirEO benefits

- **Forecasts and Long-term archive** for time records and maps (calendar tool)
- **Surface concentrations** for NO_2 and $PM_{2.5}$ from Sentinels
- **Health burden assessments** based on population density
- **Concurrent trend analysis** for pollutants, health risk and meteorological parameters

