







### **Major Achievements**







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- Development of a world-class system for PME for
  - Daily air quality monitoring from satellite for the Kingdom
  - Daily 72 hour air quality forecasting for the Kingdom by combining data and models
  - Demonstration of street-level air quality forecasting for Jeddah



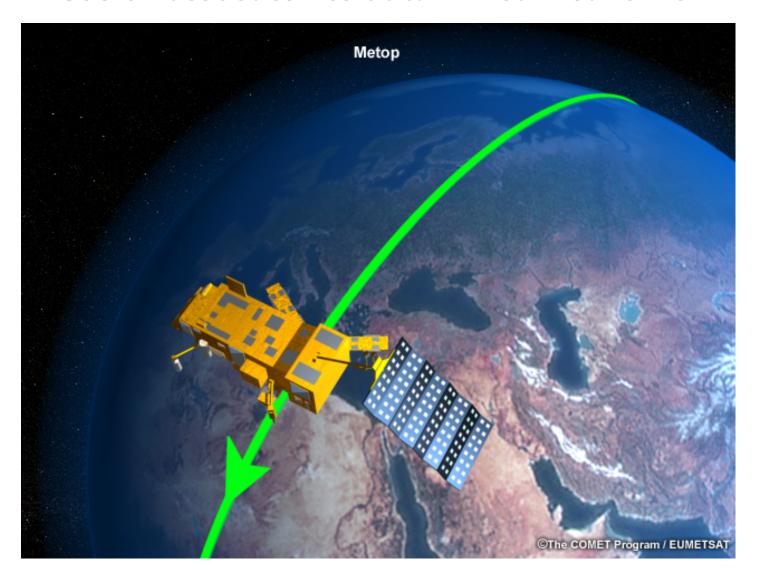




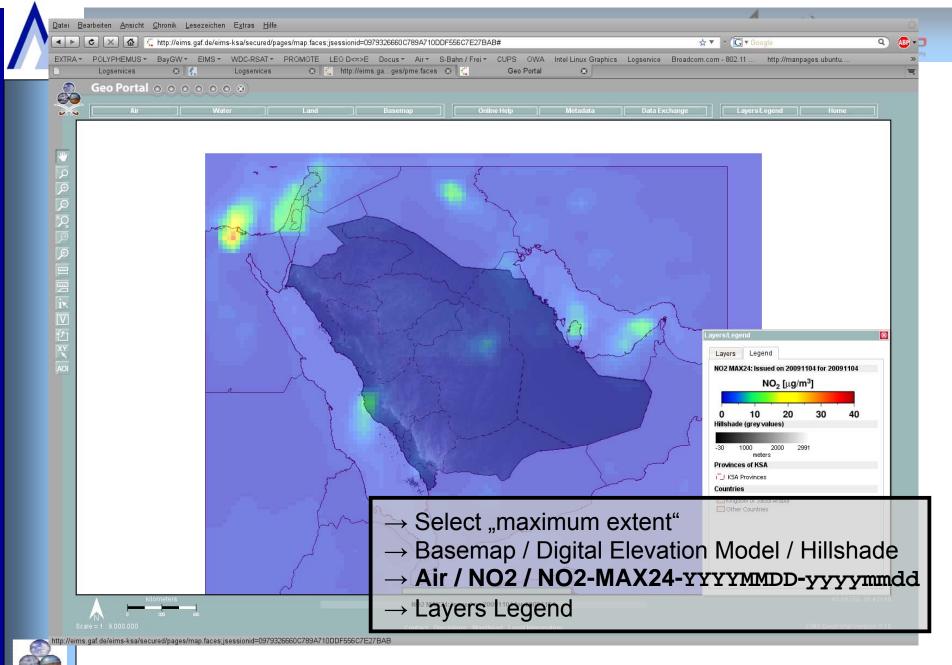




#### Use of best satellite data in near-real time







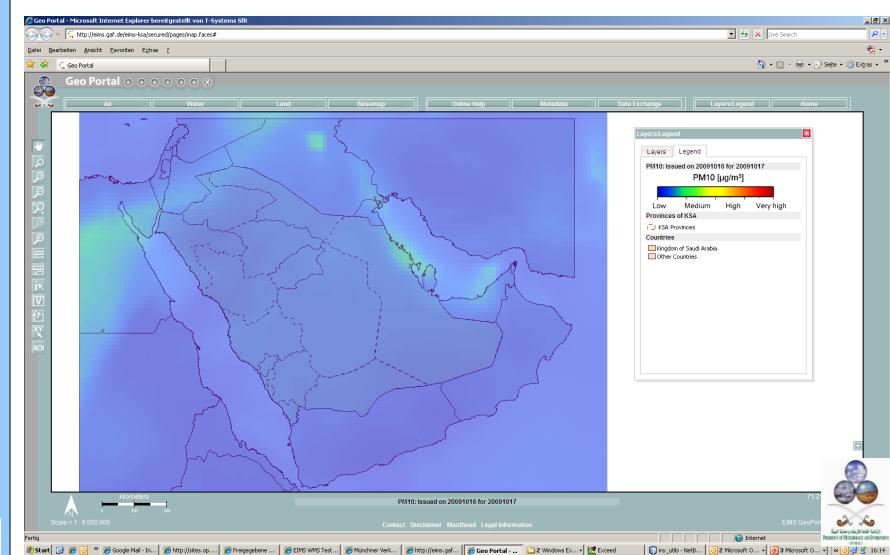








#### Daily PM10 forecast and monitoring







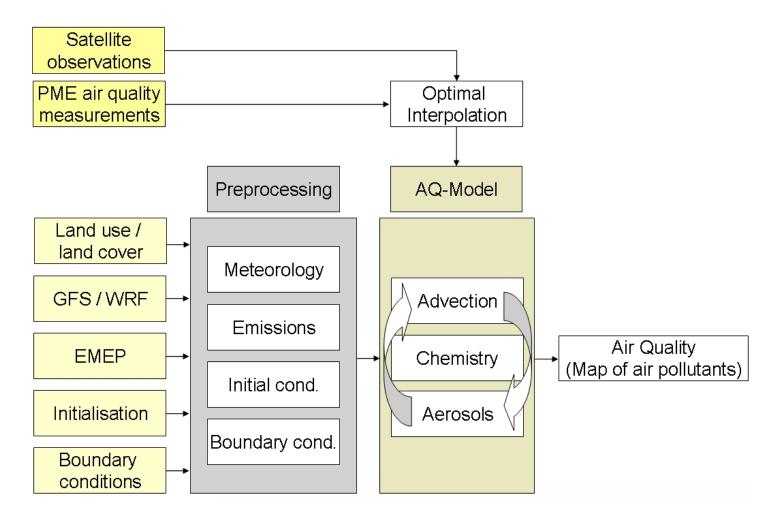








## Cutting-edge data assimilation and modelling scheme inlcuding all relevant physics and chemistry



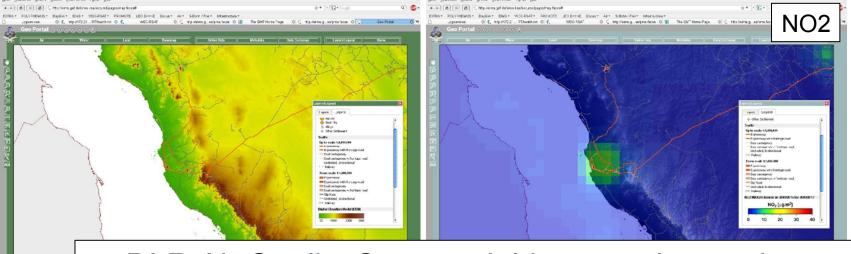


#### **Summit GeoServices**

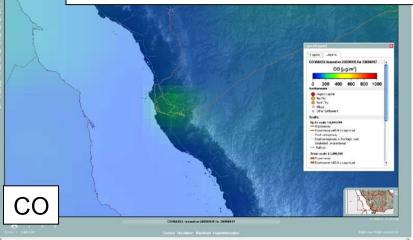


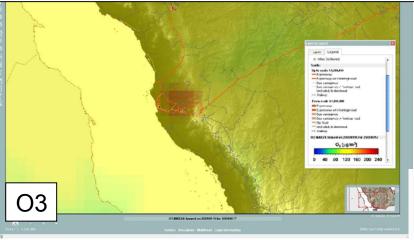






→ DLR Air Quality System yields a consistent picture when regarding chemistry and transport of air masses.











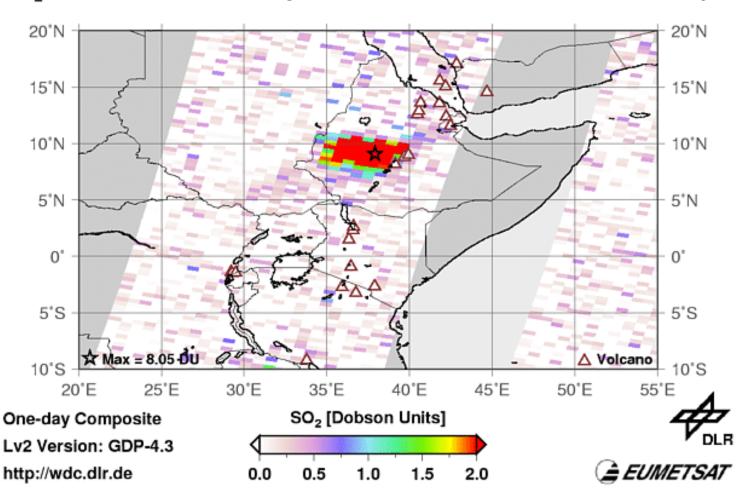






#### **Volcanic Activity Monitoring in near-real time**

GOME-2 / MetOp SO<sub>2</sub> Vertical Column Density Jun 30, 2009 Ethiopia





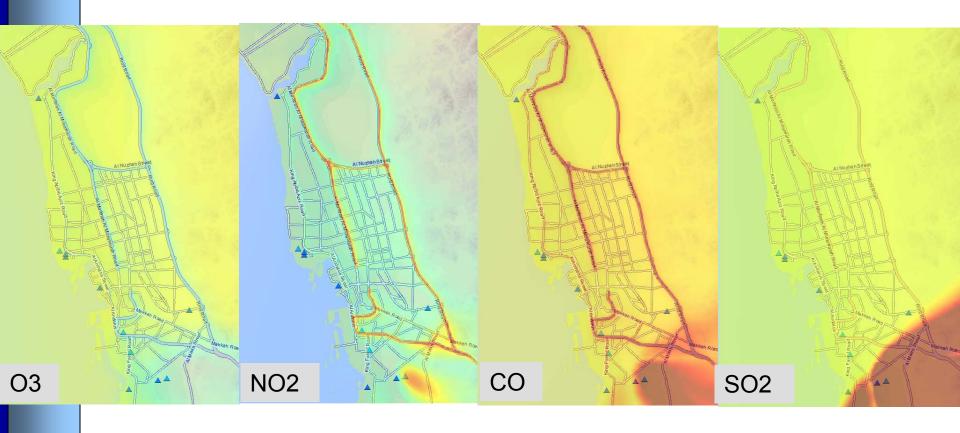








#### Demo for Jeddah street-level forecasting of Air Quality



Spatial resolution of < 10m 72 hour forcasts



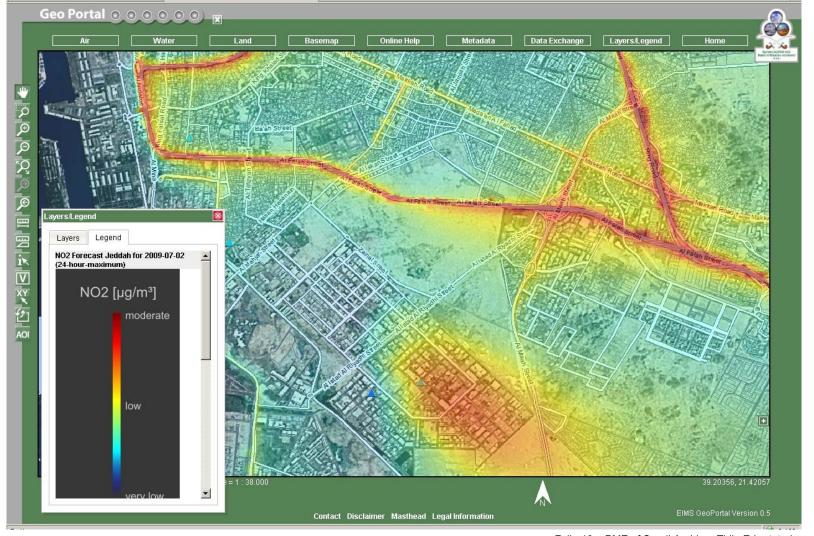








#### Demo for Jeddah street-level forecasting of Air Quality



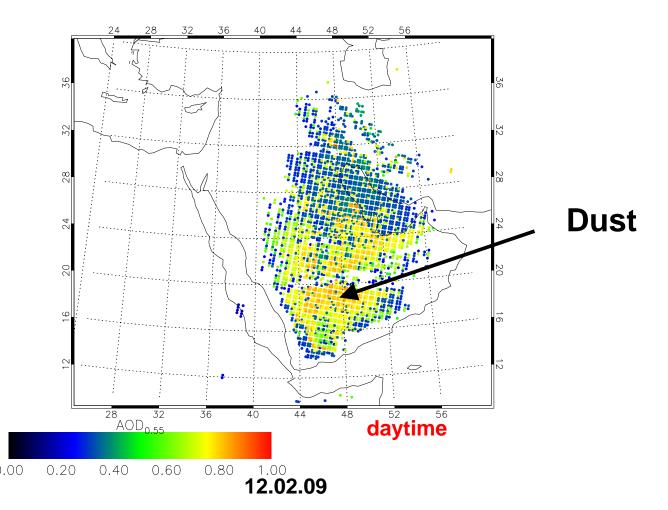








# Demo for new dust storm monitoring, eyery day - day and night - 25 years













#### **Development of Business Processes and Trainnig**

- Health sector information services
- Personalised services for people at risk
- Public information services
- Support to national reporting
- (Dust storm warnings)











#### **Major Achievements**

- DLR world renowned center for satellite and environmental technology
- High commitment to support PME in their tasks and duties
- Air Quality Service to facilitate daily work in PME
- We are looking forward to further collaboration

