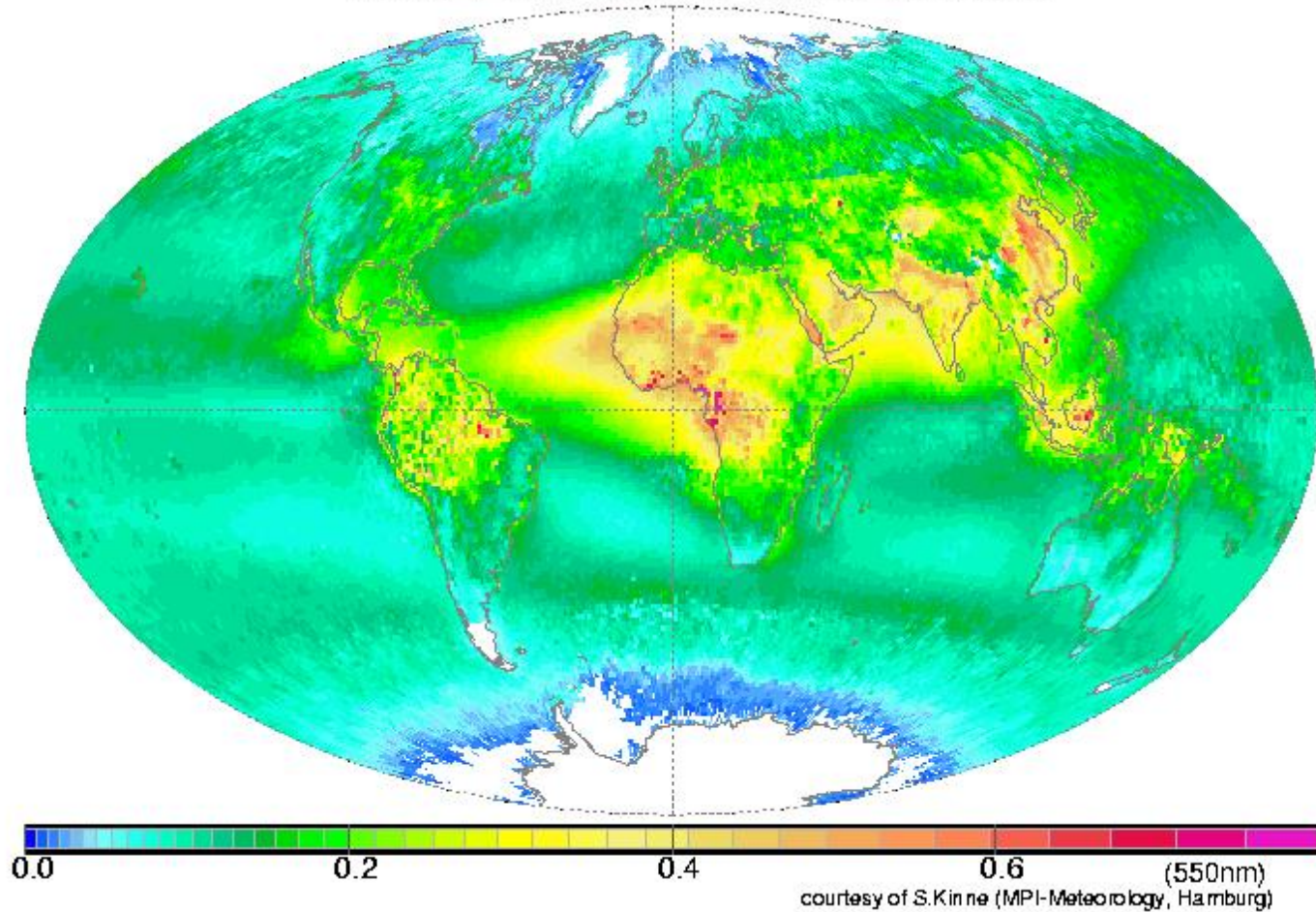


# Operational Global Aerosol Observations and Analysis Is Coming: So Far Only In Research Mode

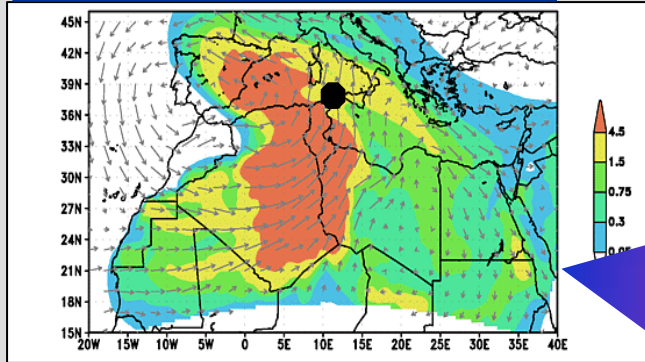
SATELLITE COMPOSITE of AOD



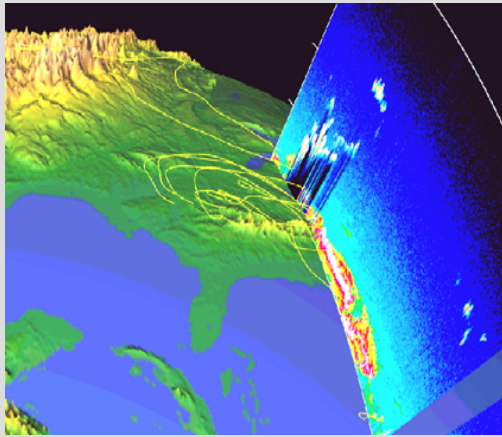
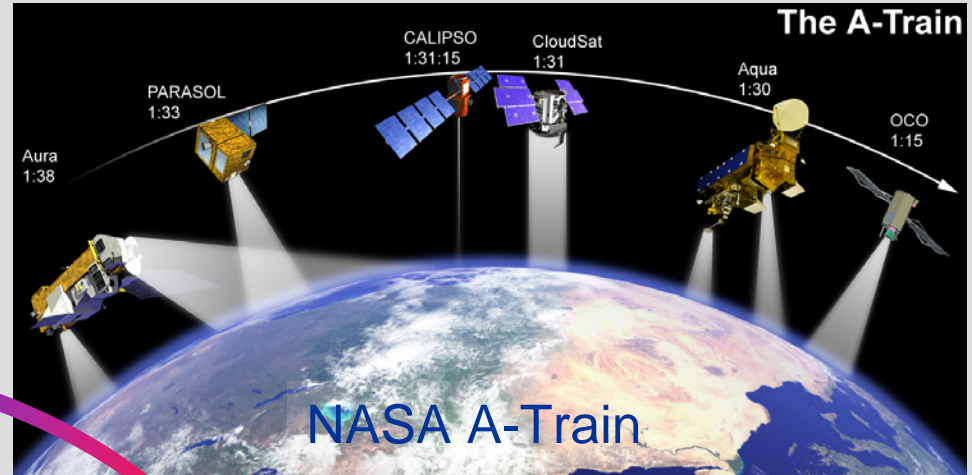
**A best estimate of the global distribution of annual average tropospheric aerosol optical depth (AOD) compiled by combining data from six satellites (operating for limited periods between 1979 and 2004). Observations for a region were selected using ground-based AOD observations as guidance ( courtesy of S. Kinne MPI, Hamburg, Germany ).**

# OBSERVATIONS: Satellites, Aircraft and Surface Networks

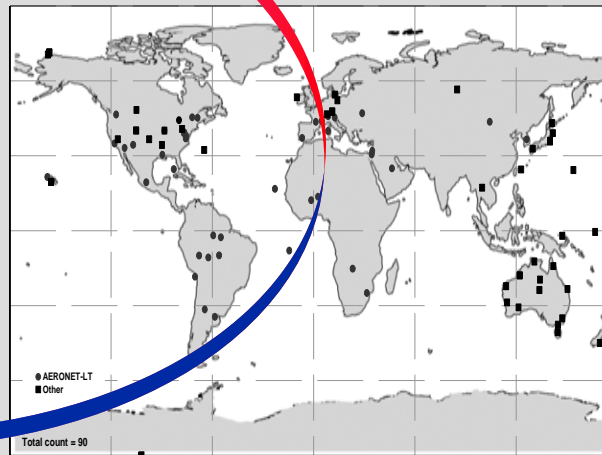
## Forecast/ Reanalysis



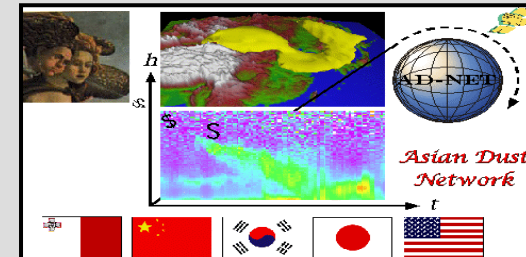
18 UTC, 7 May 2002 30-hr forecast



CALIPSO Aerosol Lidar



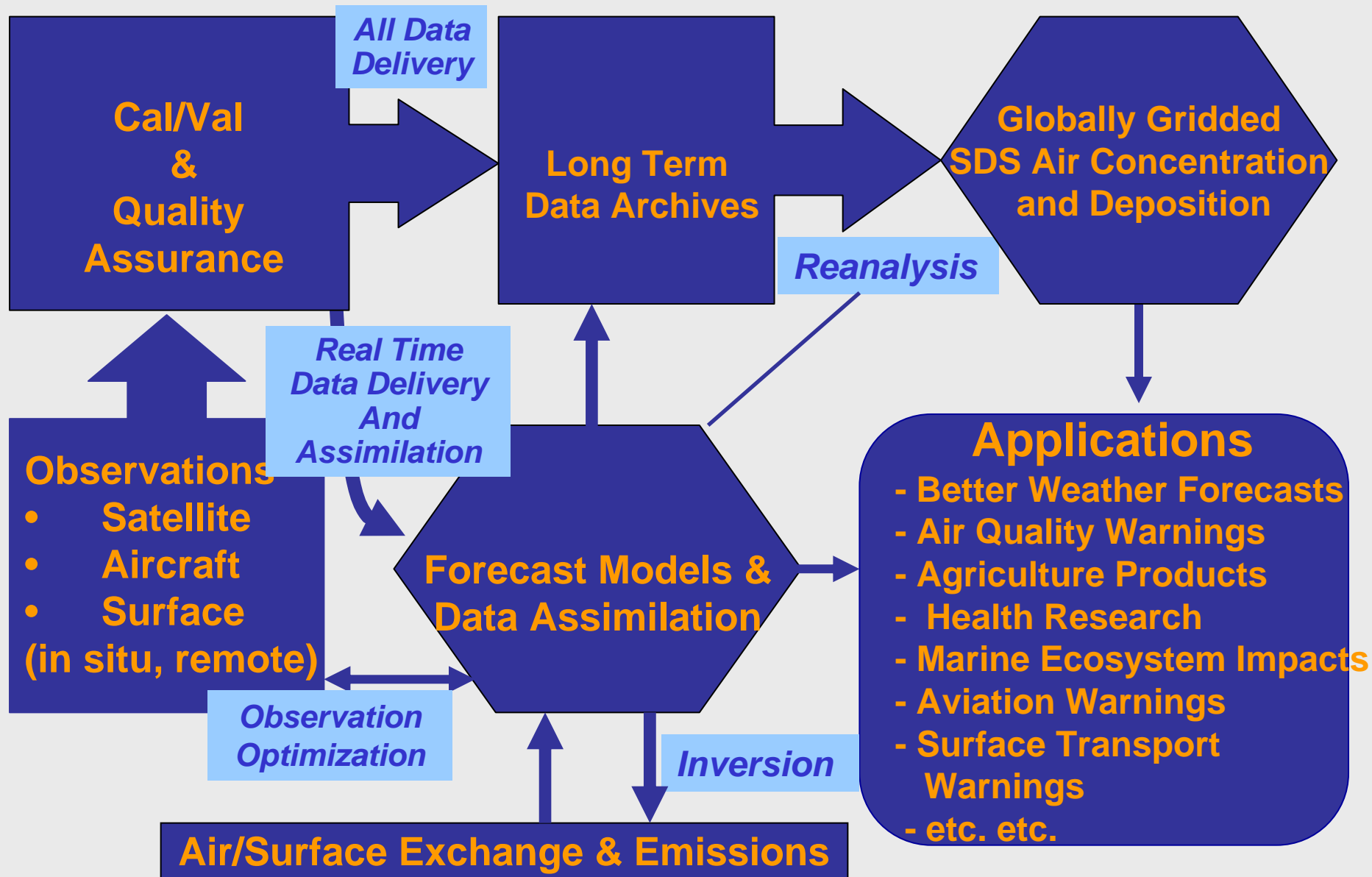
GAW/AERONET  
Aerosol Remote  
Sensing Stations



Asian AdNet

# Global Aerosol Observing and Analysis System

## GAOAS



# Year of Tropical Convection

## YOTC

The realistic representation of tropical convection in global atmospheric models is a long-standing grand challenge for both numerical weather prediction and climate projection.

- An intensive period (year!) of coordinated observing, modeling and forecasting with a focus on organized tropical convection, its prediction and predictability,
- Exploit the vast amounts of existing and emerging observations, the expanding computational resources and the development of new, high-resolution modeling frameworks.
- Construction of a comprehensive global database of satellite data, in-situ data and high-resolution model analysis and forecasts (AEROSOLS???)
- Benefit from coordination of ongoing and planned international programmatic activities, and collaboration among the operational prediction, research laboratory and academic communities.
- Motivate a new generation of scientists to tackle key challenges.

Joint WCRP–WWRP/THORPEX Activity

# Two Suggestions for Consideration BY The Group

1. Establish a GAOAS Secretariat at a major research centre to coordinate and fill gaps coordinating with WMO-GAW and IGBP/IGAC programme. Start by contributing to a WMO Experts Meeting On GAOAS in Switzerland in 2009 organized by the GAW Scientific Advisory Group on Aerosols.
2. Include aerosols in YOTC?!!