

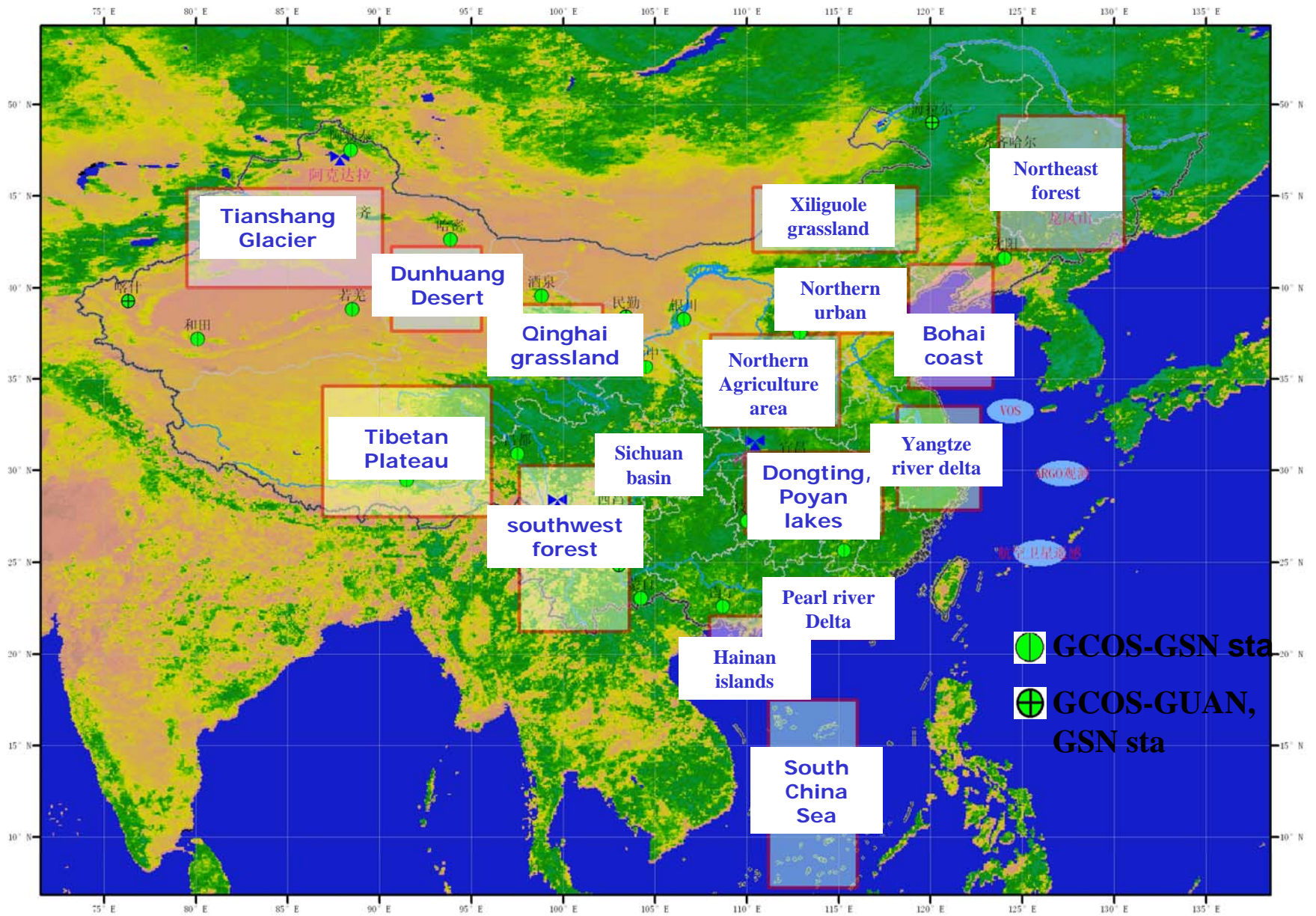
# Earth Observation in China: Planning of China Climate Observation System (CCOS)

**Ailikun**

**International Program Office (IPO)  
of Monsoon Asia Integrated  
Regional Study (MAIRS)**

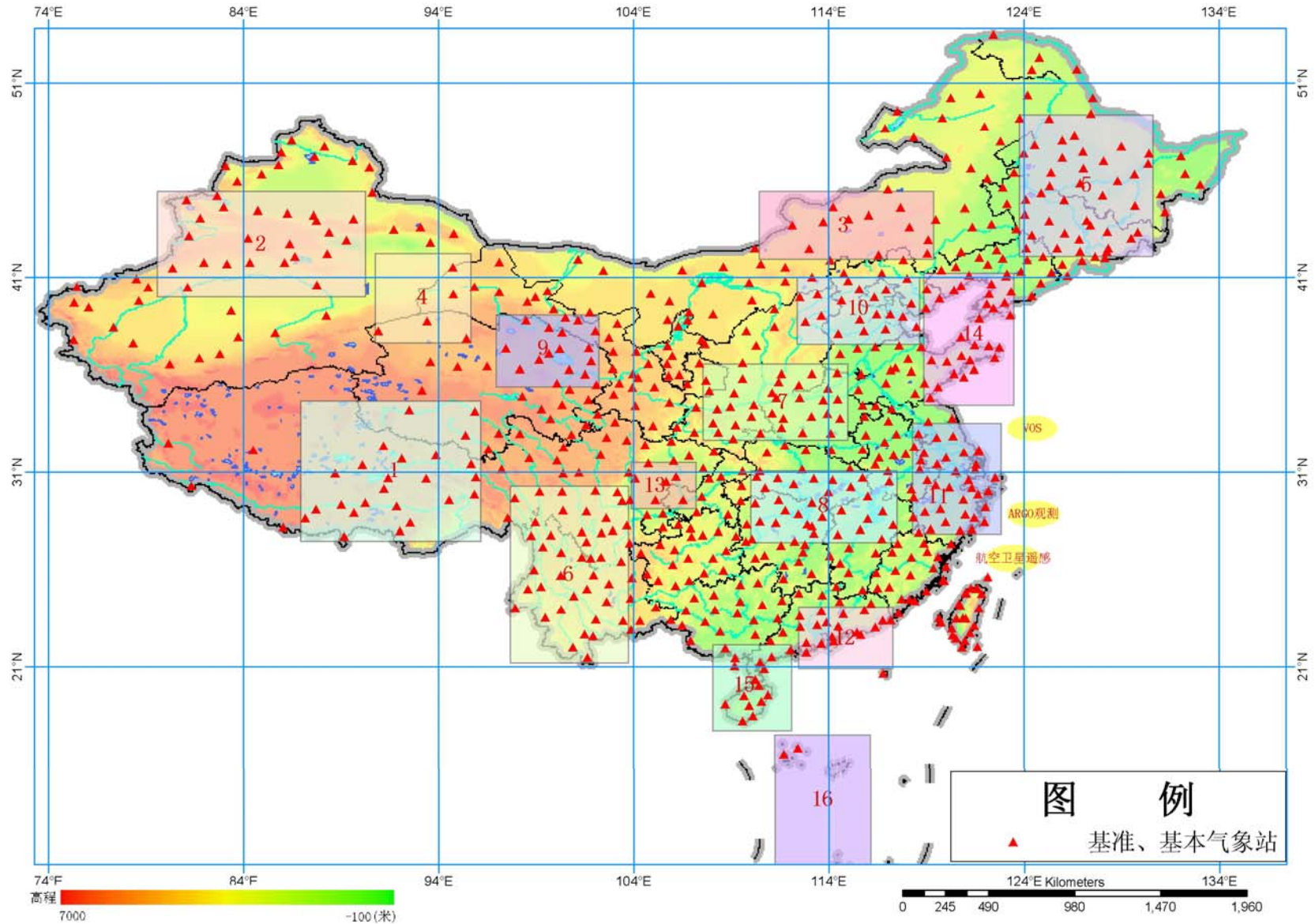
**Institute of Atmospheric Physics,  
Chinese Academy of Sciences**

**China Climate Observation System (CCOS) will be leaded by Chinese Meteorological Administration, collaborating with Administration of Environmental Protection, Ministry of Hydrology, Chinese Academy of Sciences, Ministry of Forestry, State Oceanic Administration, Ministry of national land resource and others.**

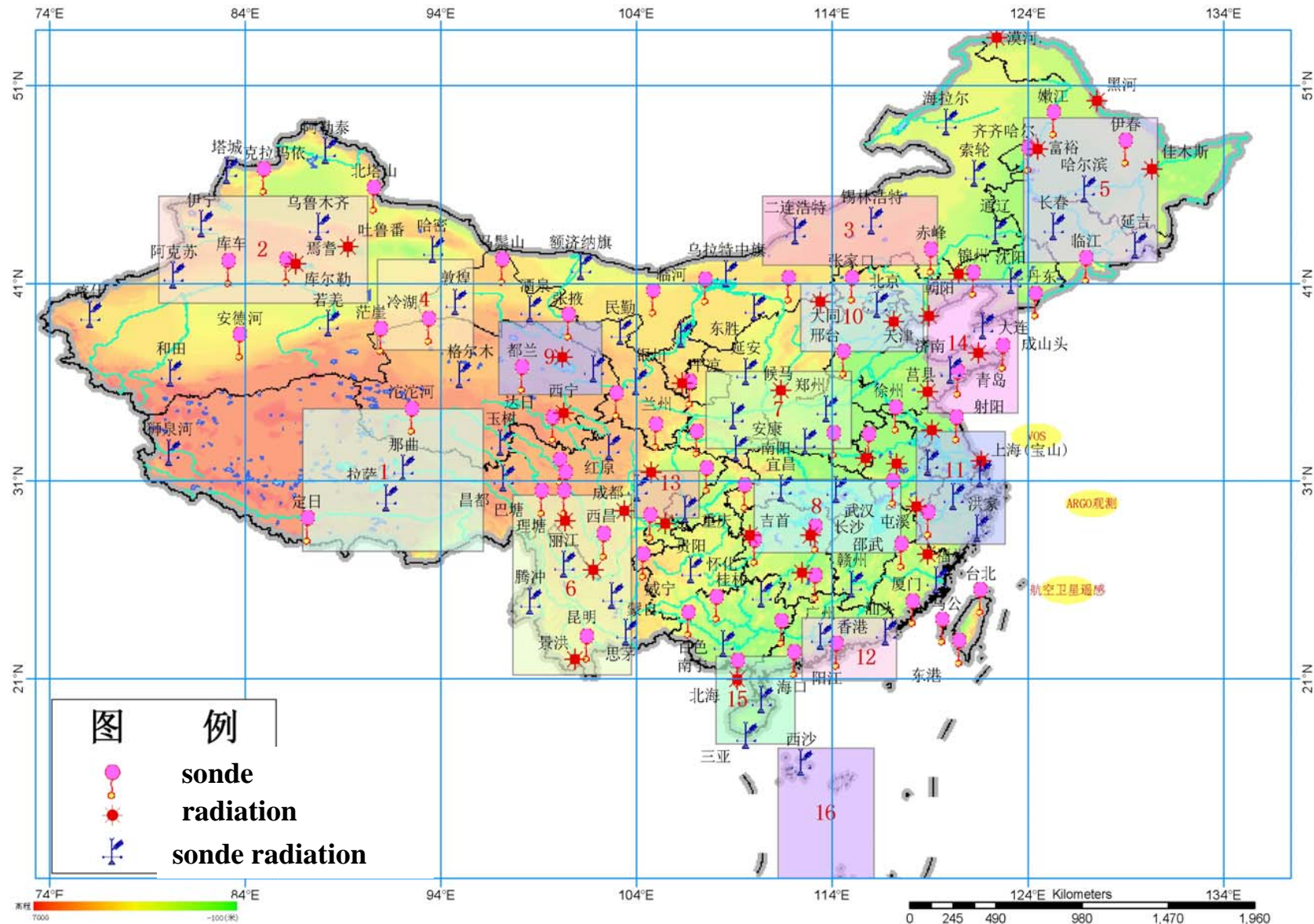


**CCOS observation network(16 typical regions)**

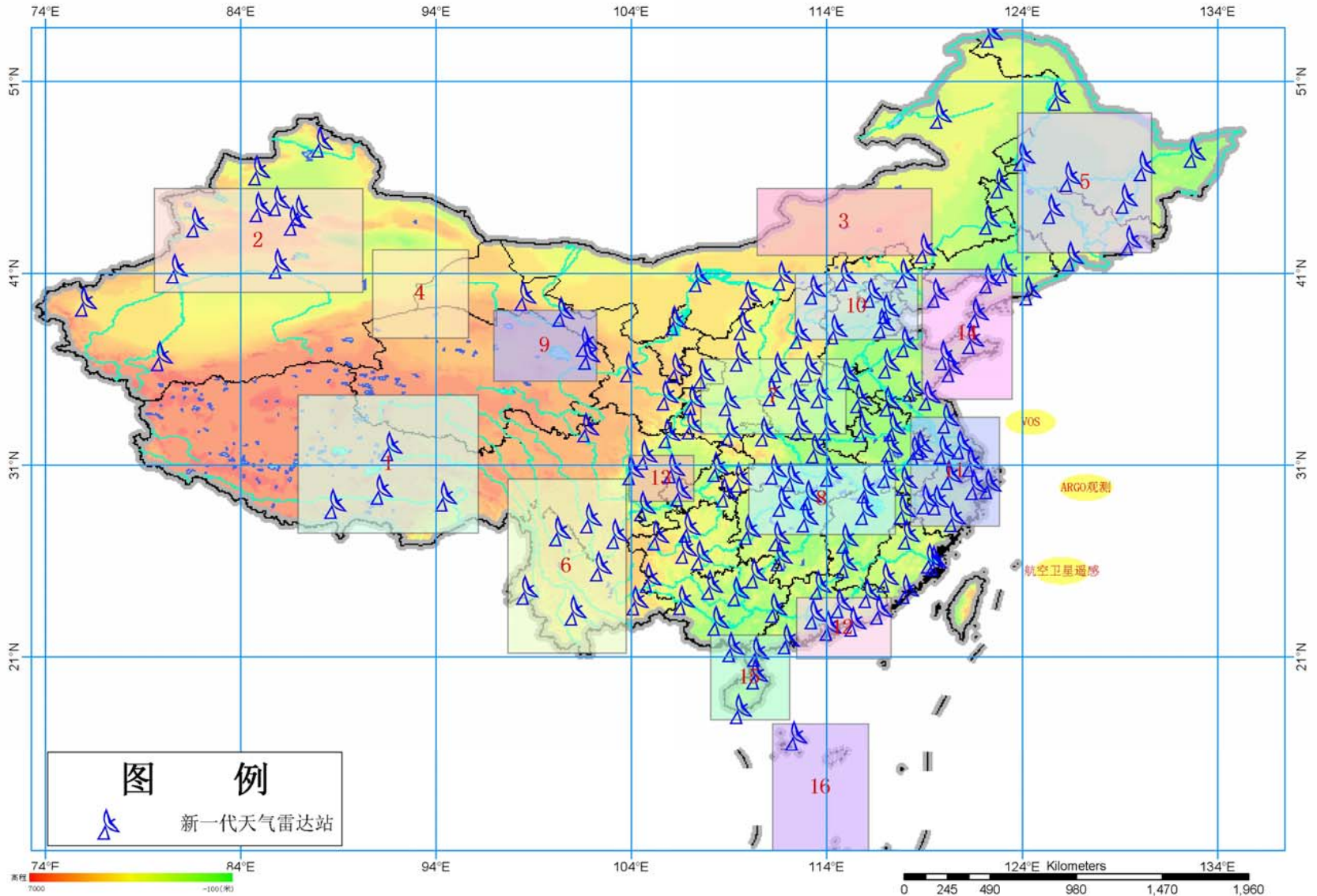
# Distribution of meteorological observation stations (720 CMA), 143 WMO ref. sites



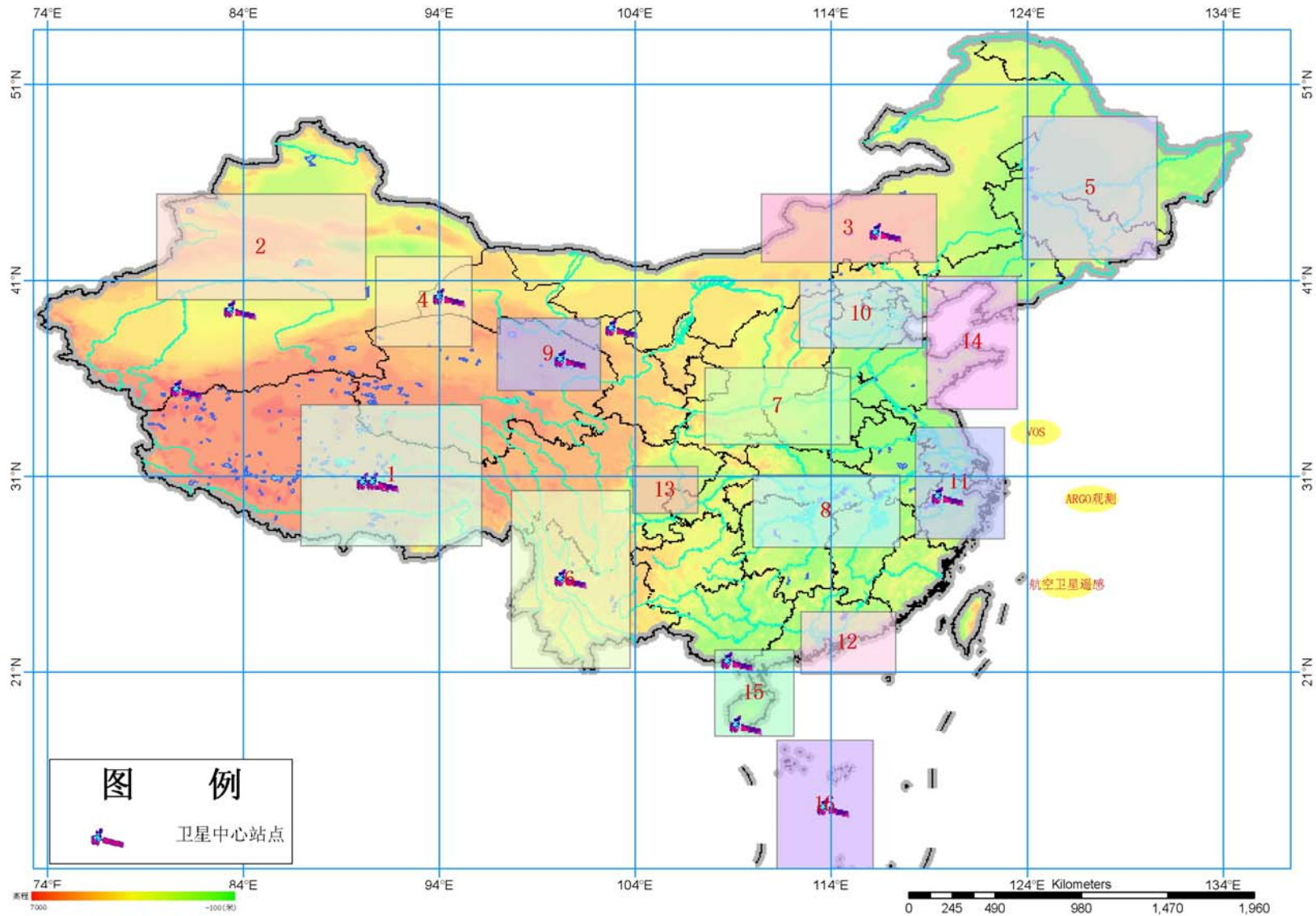
# Sonde (124) and Radiation(98) observation(CMA)



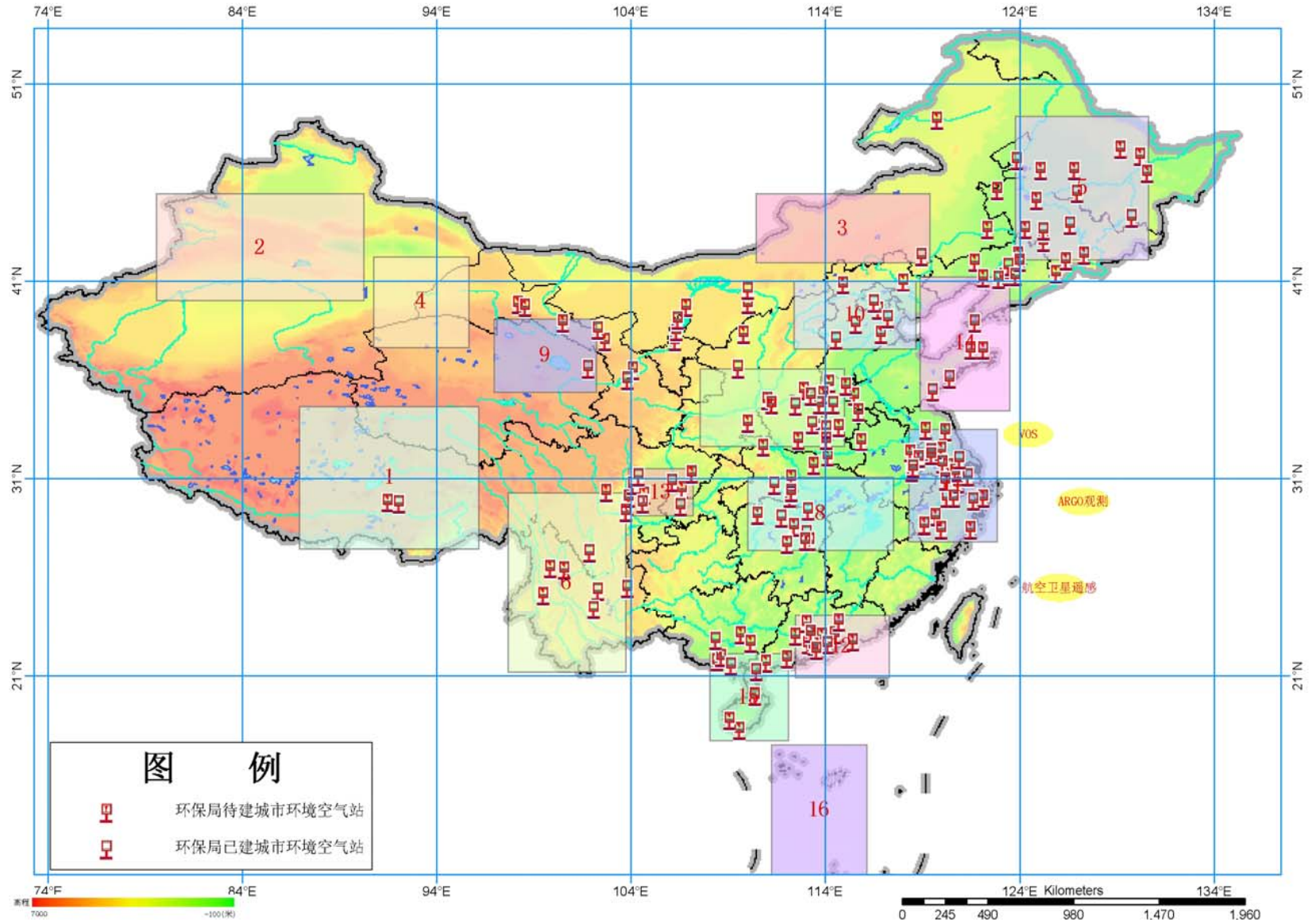
# Radar network(126 now, 32 under planning, CAM)



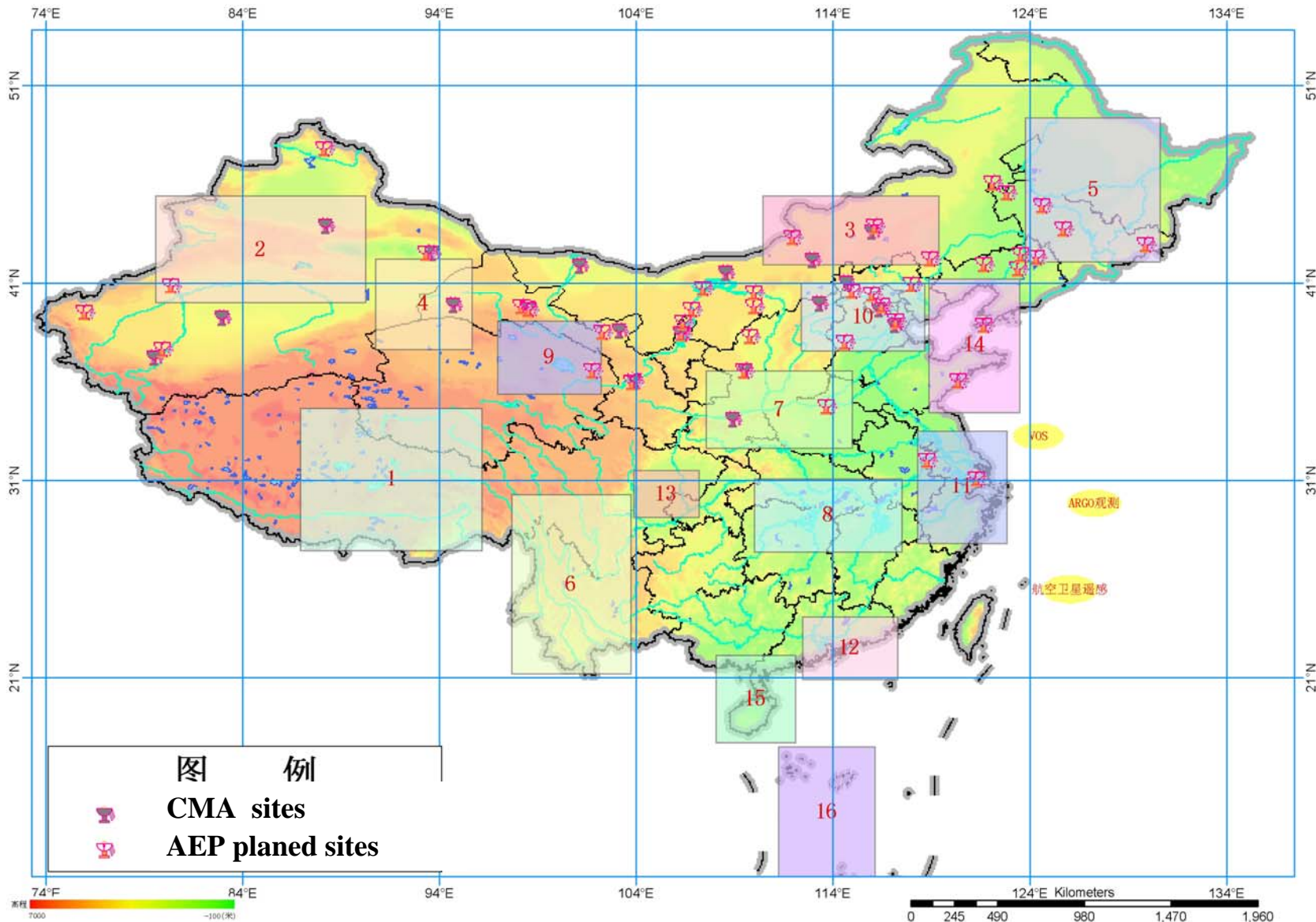
# Satellite Receiving and Validating points (13, National satellite center, CMA)



# Urban air quality observation(70 now, 93 under planning by Administration of Environmental Protection)

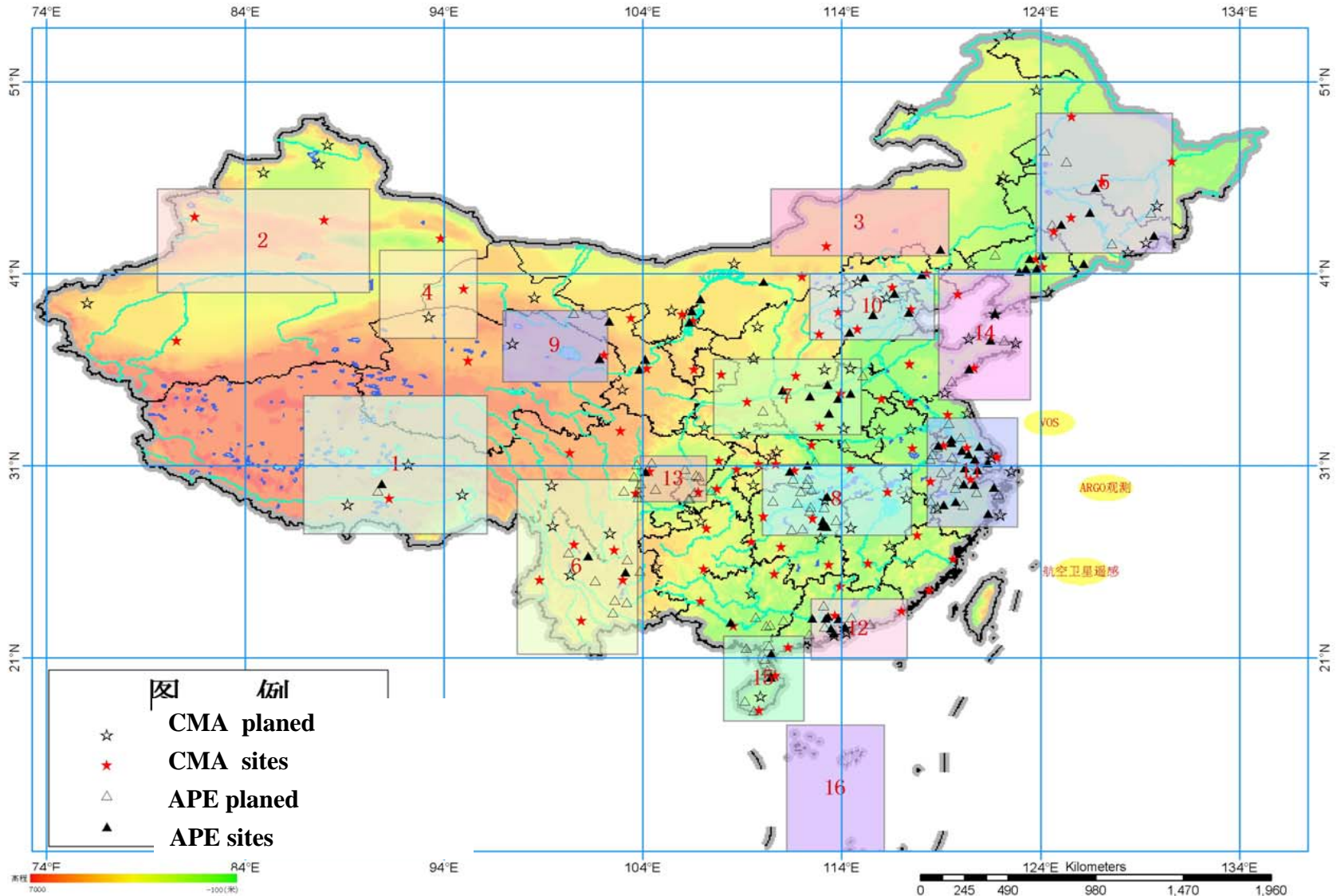


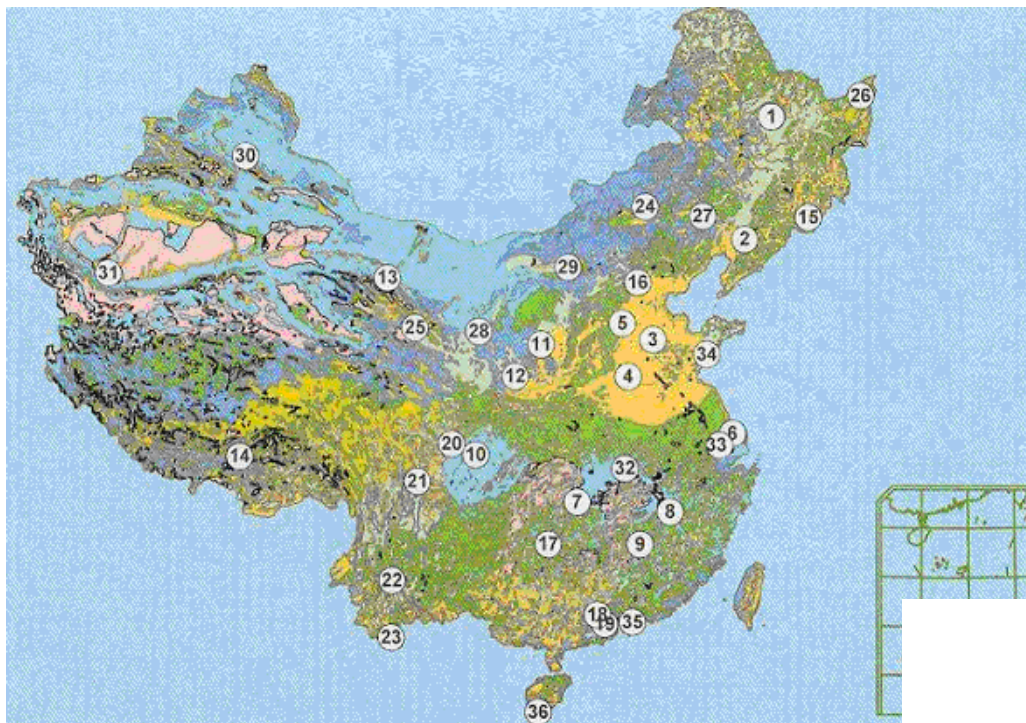
# Dust storm observation, CMA 19, AEP 42 (under planning)



# Acid rain observation

91 CMA、67 under planning by CMA、70 AEP、83 under planning by AEP



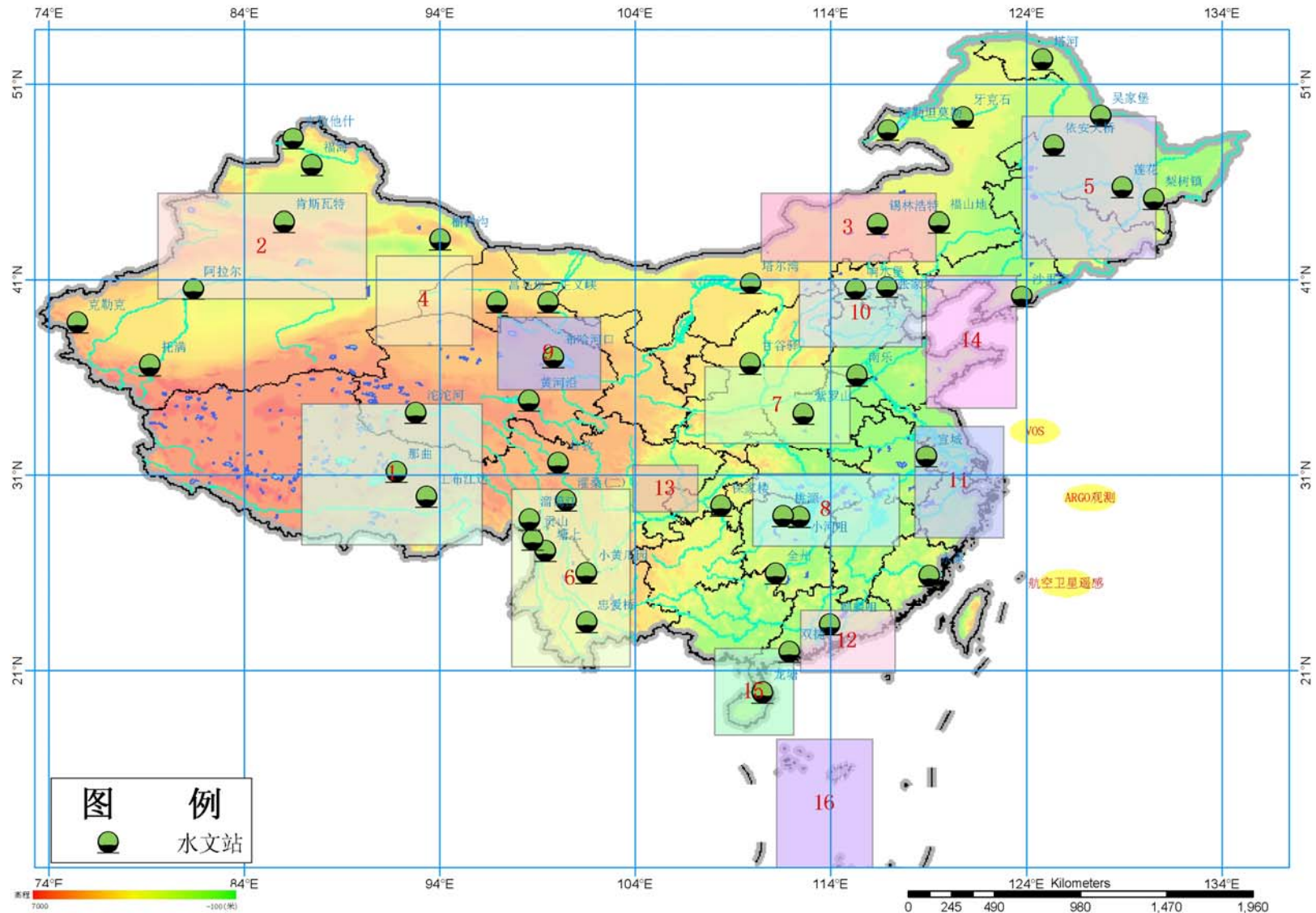


**China Ecosystem Research Network (CERN), 36, Chinese Academy of Sciences**

**China forest ecosystem research network, 14, Ministry of Forestry, 12 planned**



# Hydrological Observation Stations(46, Ministry of Hydrology)



# Advantages of CCOS

- ✚ CMA has most well-developed observation network in China, more than 3500 stations distributed all over the country.
- ✚ Natural disaster monitoring, especially flood and drought, will be enhanced significantly.
- ✚ CMA will follow the WMO observation and data standard. (CCOS will be closer to global standard? Not only the meteorology field, but hydrology, agriculture, forestry, environmental protection fields).
- ✚ CCOS is very positive on data opening and sharing, China will be more open at data sharing issues.

## Points Still not Clear

- The more in-situ observation stations the better, it is true? How to bring more satellite information into CCOS is not clear.
- How does CMA collaborate with other organizations is not clear, especially for overlapping observations items.
- Need more and active contributions from other Ministries and Administrations
- How to keep the balance between observations for operational works and scientific researches.