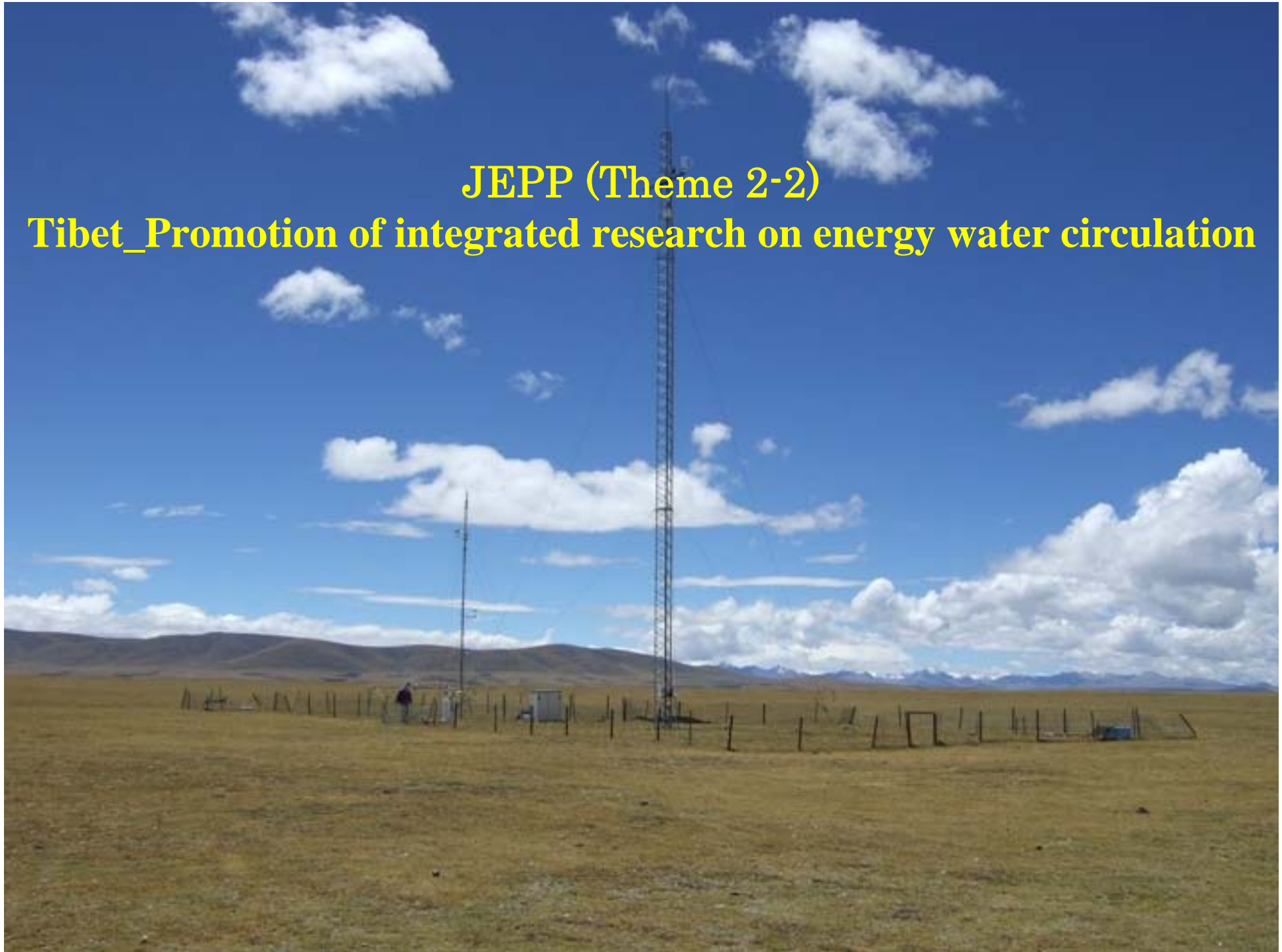


JEPP (Theme 2-2)

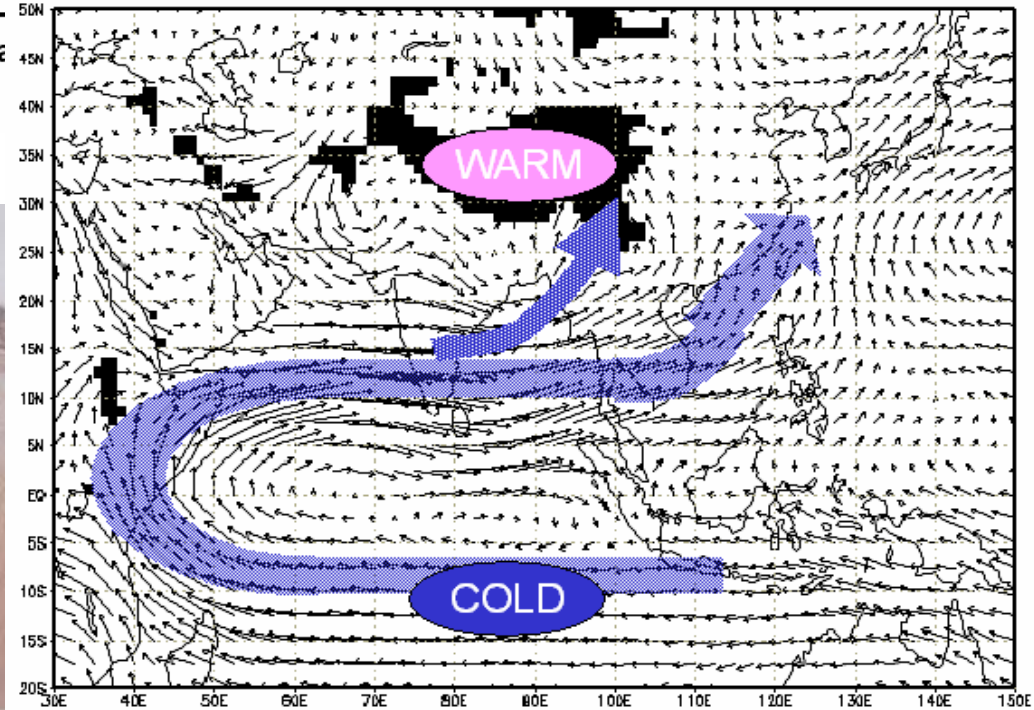
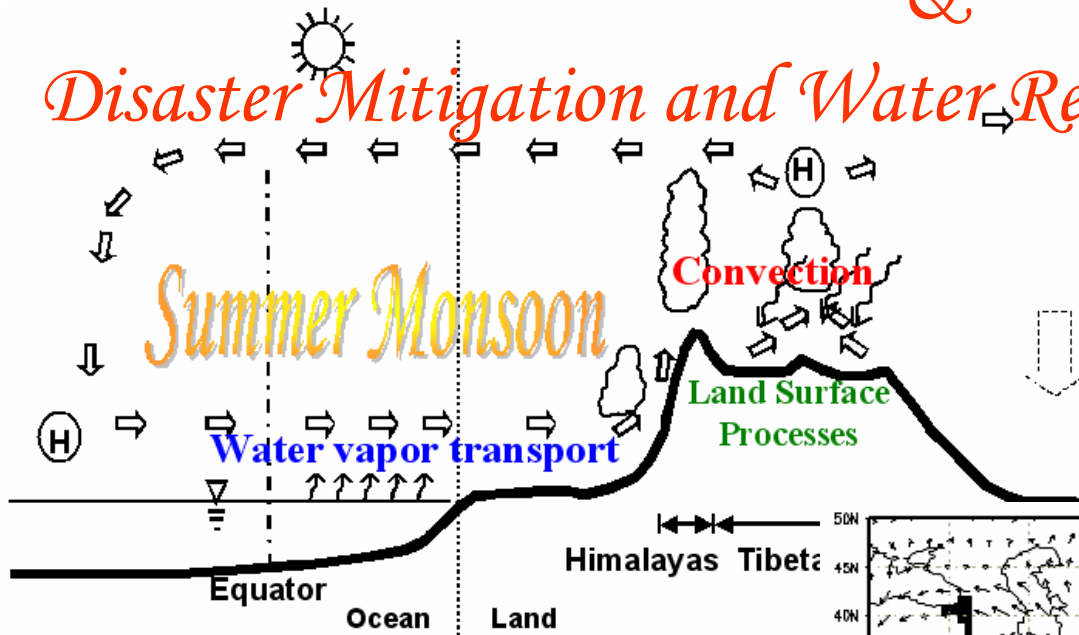
Tibet_Promotion of integrated research on energy water circulation



Energy and Water Cycle over the Tibetan Plateau

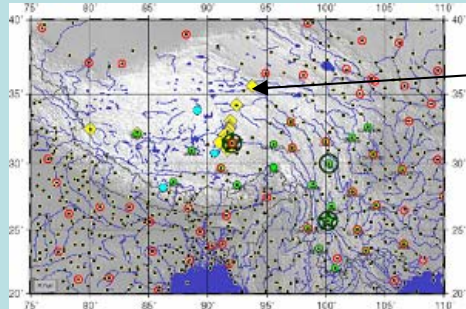
&

Disaster Mitigation and Water Resources in Monsoon Asia



Japan Earth observation Promotion Plan (Theme 2-2) Promotion of Integrated Observation Study of Energy/Water Circulation over the Tibetan Plateau

Establishment of land base stations in data sparse area

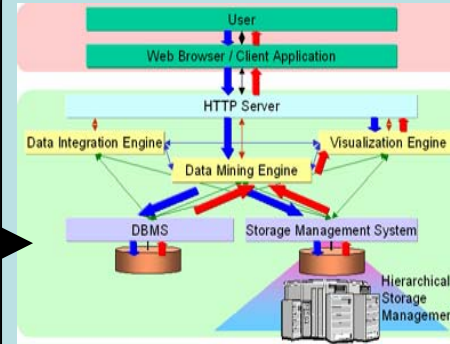


A new site near D66 (Aug. 28, 2006)

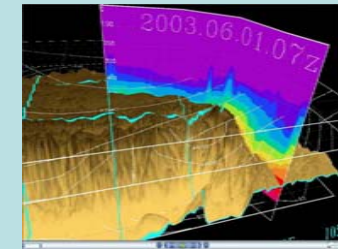


In addition to the operational stations, research stations in GAME/ Tibet and Camp/Tibet are updated for the longer and continuous observation. Twenty four GPS stations for precipitable water, three PBL tower and a profiler are now being constructed.

Integrated Database System



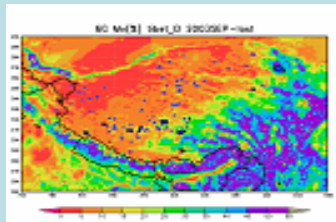
3-D Visualization



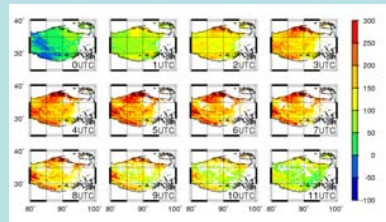
State of arts information technology is applied to implement a sophisticated database system to store and to use land-based and satellite data interactively.

Satellite Data Archive and Use

Soil water content (SSM/I)

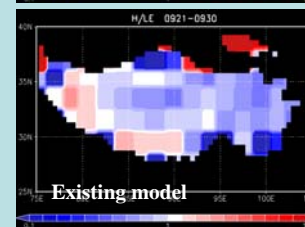
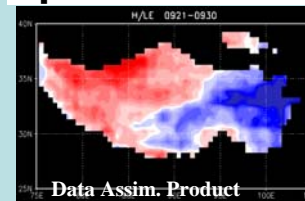


Surface heat flux (FY2C)



The satellite data are collected from various polar orbit satellites. In addition the data from the Chinese geostationary satellite, FY2C, are received and archived, which are used to produce surface temperature and various land surface fluxes.

Energy/Water cycle estimation/ prediction with data assimilation

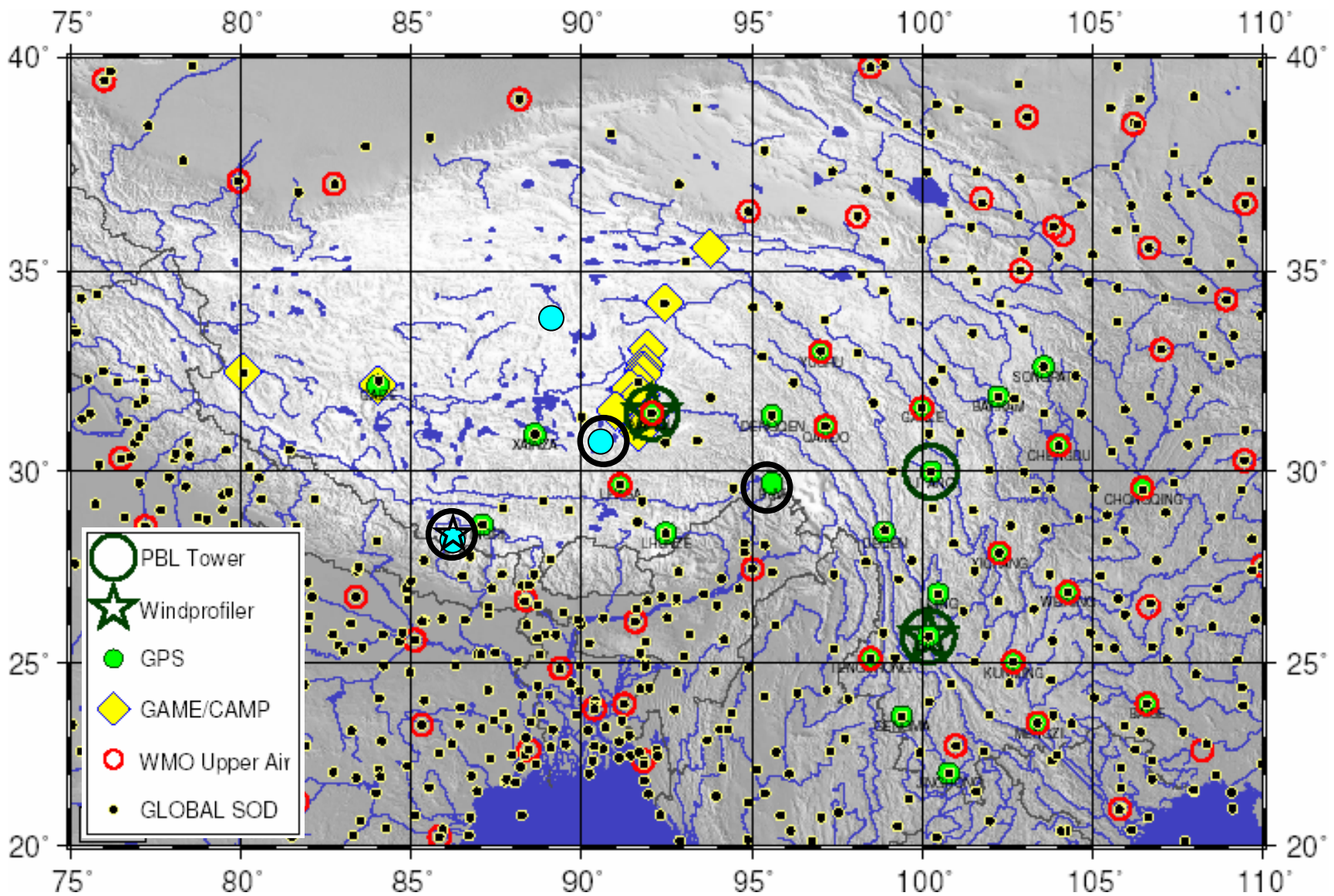


An application of integrated database system. The assimilated soil water content (upper panel) shows clear west-east contrast as compared with existing analysis (lower panel).



Toward the better prediction and the mitigation of meteorological and hydrological hazards !

WMO Obs.(○) + GAME/CEOP Obs.(◇) + JICA/GPS(●) + CAS(●)



2005-2007

JEPP_TIBET

GAME/CEOP Sites
Satellite data archive
processing



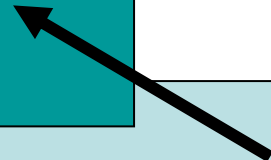
Integrated Data Archive

2005-2009

**JICA (CAMS/CMA)
(JP-CHINA joint project)**

GPS_precipitable water Obs.(26)
PBL Tower (incl. Turbulence, 3)
Wind Profiler (2)
AWS (7+and other opr. AWS)

**Monitoring and Research Platform
(MORP) by
Institute of Tibetan Plateau/CAS**



参考:中国科学院青藏高原研究所

ナム湖観測塔



チョモランマベース観測塔

