JMA/GPV Database and Local Wether Prediction/Simulation System



About the archive

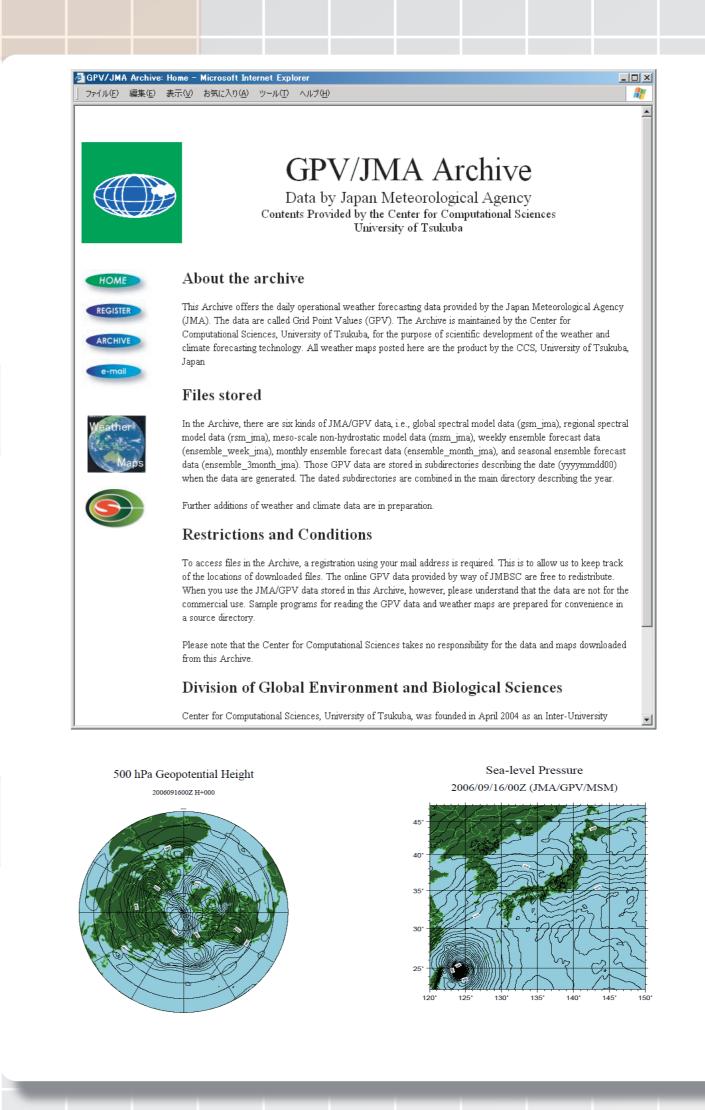
The Archive offers the daily operational weather forecasting data provided by the Japan Meteorological Agency (JMA). The data are called Grid Point Values (GPV). The Archive is maintained by the CCS Univ. of Tsukuba.

Files stored

In the Archive, there are six kinds of JMA/GPV data, i.e., global spectral model data, regional spectral model data, meso-scale spectral model data, and weekly ensemble forecast data. Further additions of weather and climate data such as 25-years Japan Reanalysis (JRA25) data are scheduled.

About the WRF model

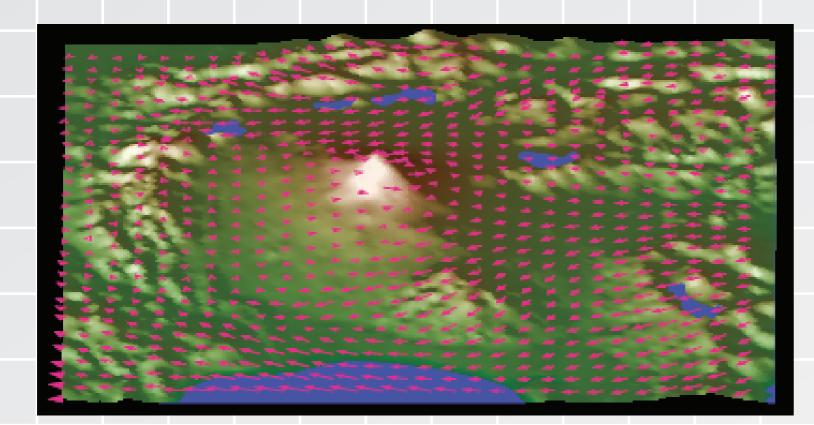
The Weather Research and Forecasting (WRF) model is a new programming code for the numerical weather prediction and simulation. WRF is suitable for various phenomena whose scale ranges from tens meter to thousands kilometer.



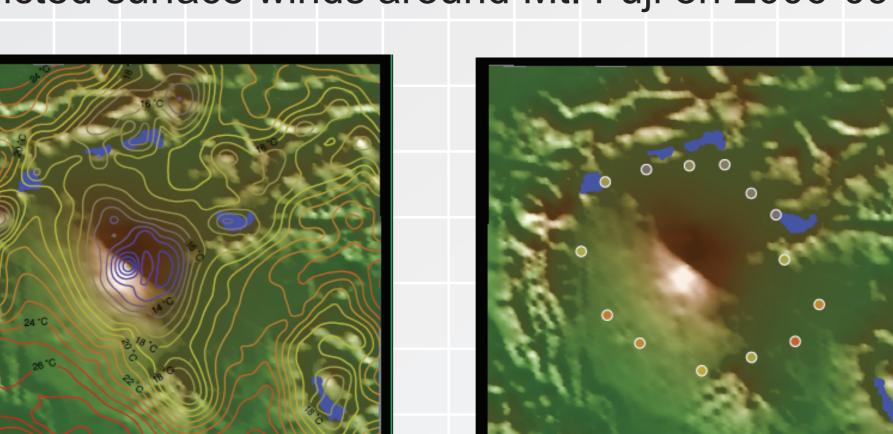
Local weather prediction/simulation system of Univ. Tsukuba

Collaboration between our group and NCAR has been developing the local-scale weather prediction and simulation system using WRF on the PACS-CS. The JMA/GPV data is used as the input data such as initial and boundary values. In this case, meso-scale spectral model data is used.

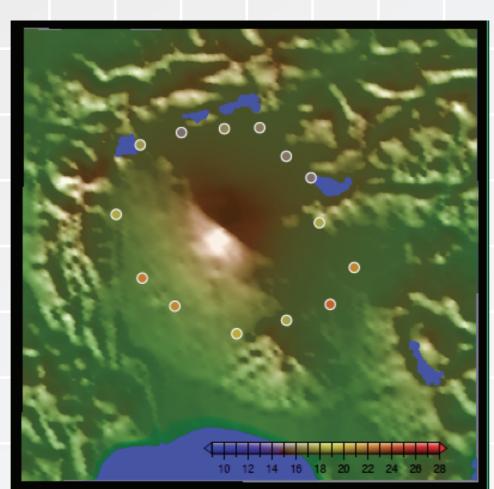
NCAR: National Center for Atmospheric Research, USA



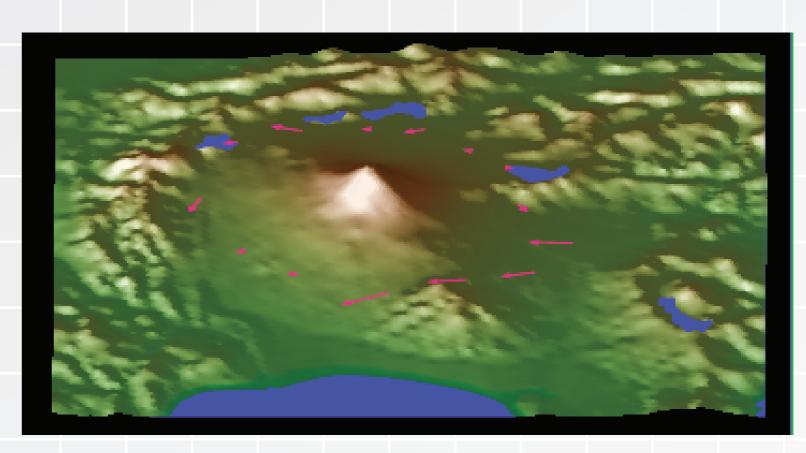
Predicted surface winds around Mt. Fuji on 2006-09-16



Predicted surface air temperature



Observed surface air temperature



Observed surface winds







Field experiment at the foot of Mt. Fuji