



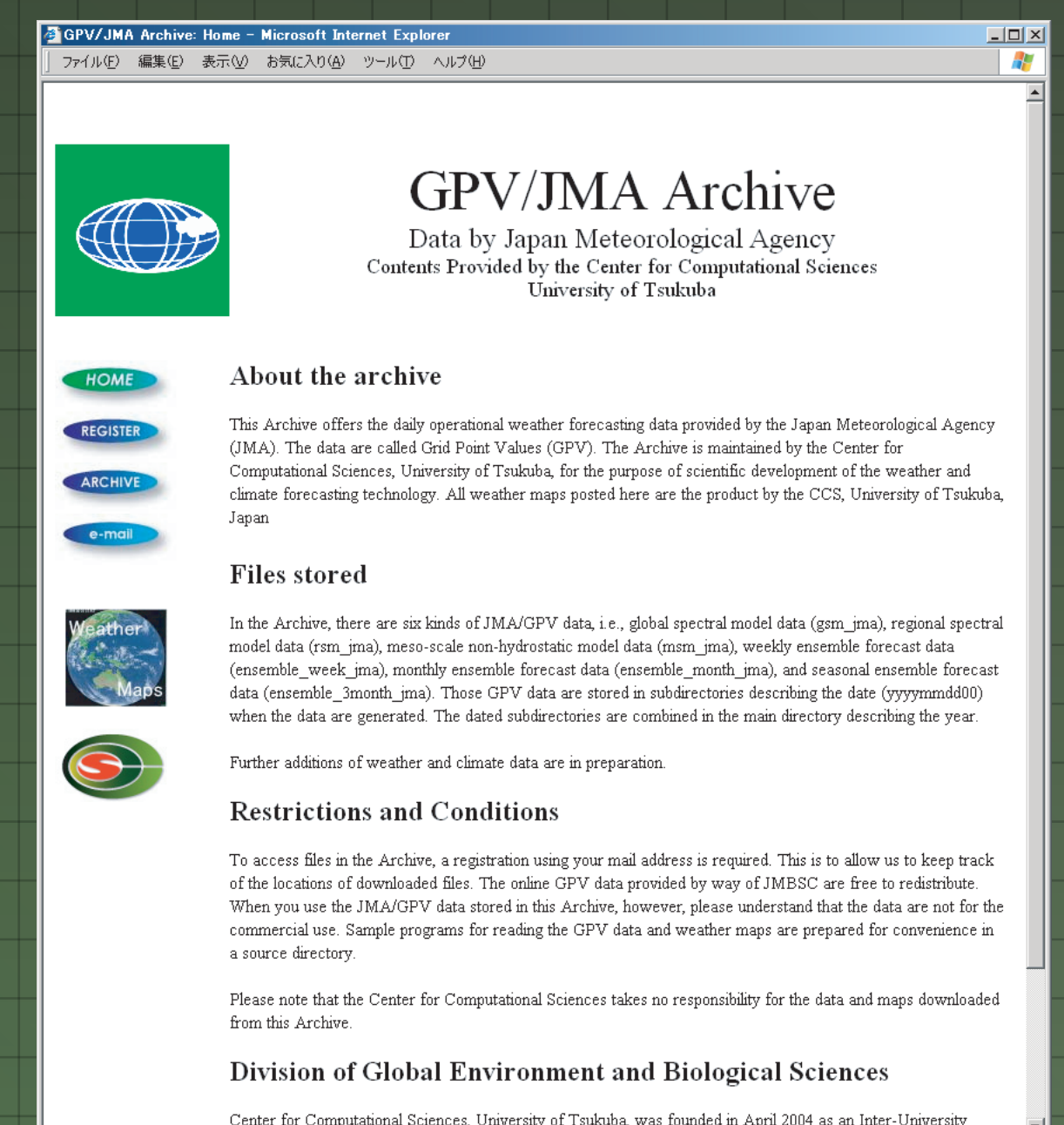
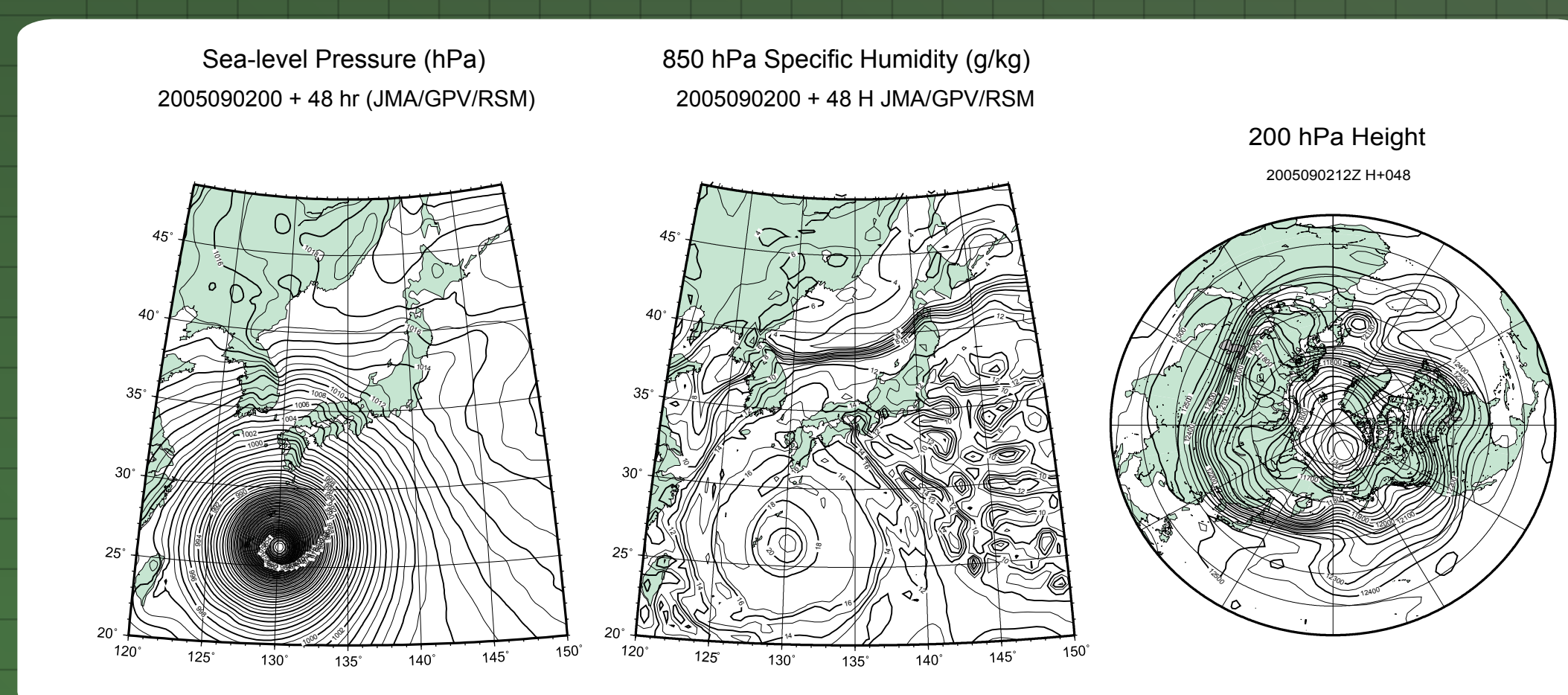
# GPV/JMA and ILDG Database Demonstrations

## Real-time weather forecasting data: GPV/JMA

This database offers real-time grid-point-values (GPV) of numerical weather prediction data by the Japan Meteorological Agency (JMA) for the purpose of scientific development of the weather and climate forecasting technology. The data includes GSM (global), RSM (regional), MSM (meso), and Weekly ensemble predictions, and is distributed worldwide.

### Sample weather maps

Illustrated are weather maps for Typhoon 14 approaching Japan on 5 September 2005 as seen by the surface pressure map. Specific humidity map shows the characteristics of typhoon, tropical cumulus convections, and stationary front in one map.



URL for GPV/JMA Archive  
at CCS Univ. of Tsukuba  
<http://gpvjma.ccs.hpcc.jp/~gpvjma/>

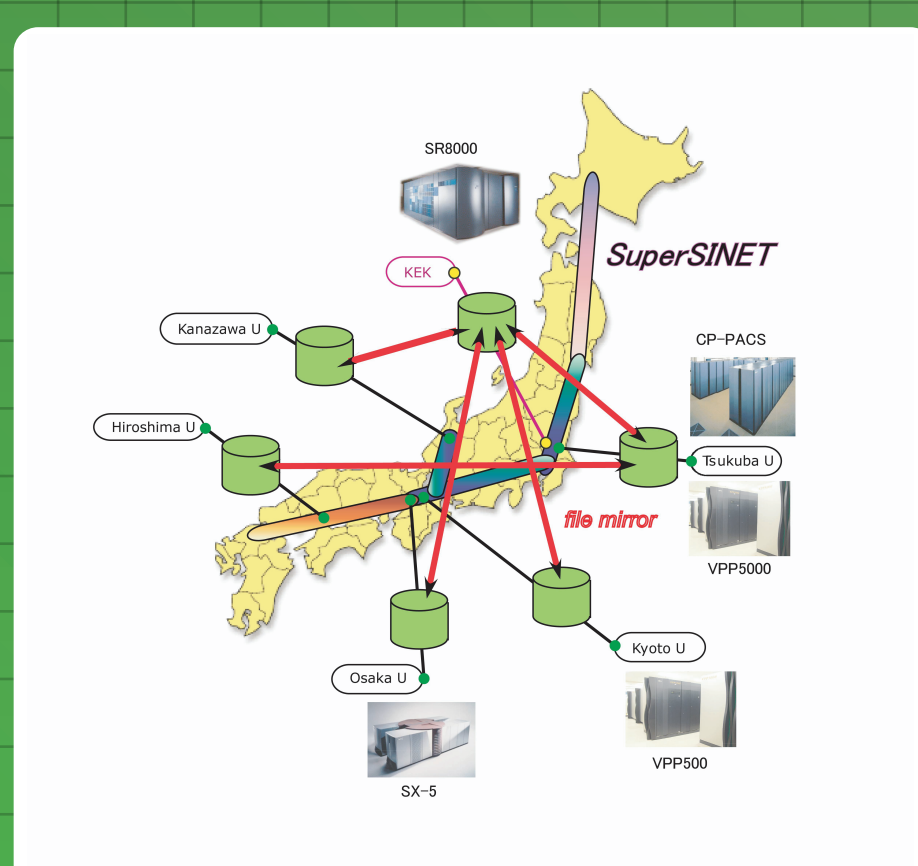
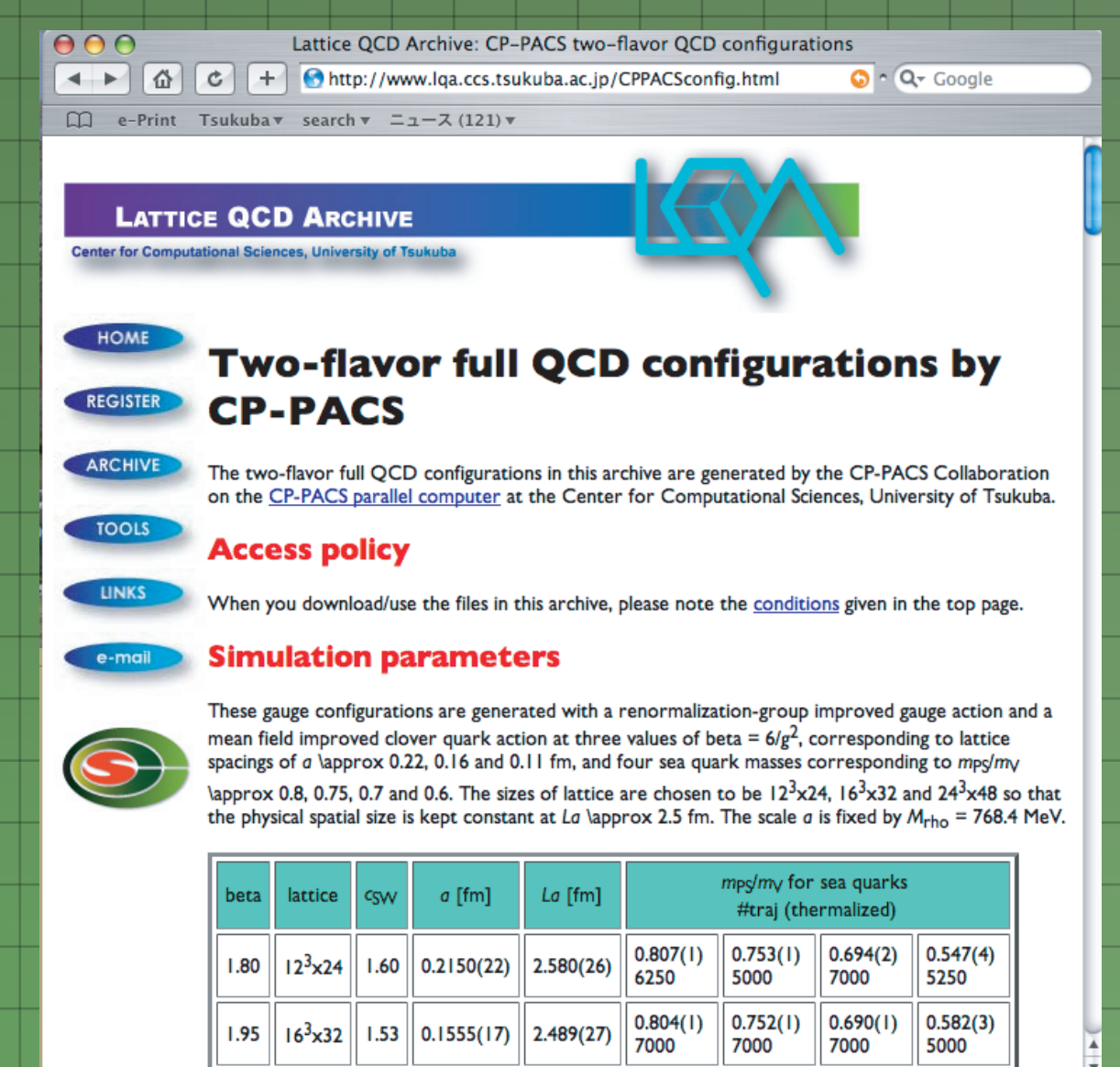
## International Lattice Data Grid (ILDG)

ILDG is an international project to develop a grid of datagrids for sharing lattice QCD configurations world-wide. Design of QCD configuration markup language was finished in June 2004. WSDL definition of interface among regional grids is almost completed. Developing middleware is now in progress. <http://www.lqcd.org/ildg>

### Lattice QCD Archive (LQA)

This Archive stores the two-flavor full QCD configurations generated by the CP-PACS parallel computer at the center for Computational Sciences. Datasets consist of about 8000 configurations stored in 1.5 TB disk space.

CP-PACS and JLQCD collaborations are currently generating 2+1 flavor full QCD configurations. We plan to add them to the Archive. The LQA is designed to serve as a Japan gateway to/from the other sites of ILDG in Europe and USA. The query system will eventually allow world-wide search and retrieval of configurations stored in ILDG. <http://www.lqa.ccs.tsukuba.ac.jp>



### HEPnet-J/sc

HEPnet-J/sc is a network of NAS storages and supercomputers for lattice QCD using SuperSINET, which is a 10Gbps network backbone connecting major universities and institutions in Japan. QCD configurations are mirrored among six sites. HEPnet-J/sc is also expected to work as an infrastructure for the ILDG Japan Grid.