http://www.ccs.tsukuba.ac.jp/



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.







This 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 Center for Computational Sciences, University of Tsukuba, for the purpose of scientific development of the weather and climate forecasting technology. All weather maps posted here are the product by the CCS, University of Tsukuba, Japan

Files stored



In the Archive, there are six kinds of JMA/GPV data, i.e., global spectral model data (gsm_jma), regional spectral model data (rsm_jma), meso-scale non-hydrostatic model data (msm_jma), weekly ensemble forecast data (ensemble_week_jma), monthly ensemble forecast data (ensemble_month_jma), and seasonal ensemble forecast data (ensemble_3month_jma). Those GPV data are stored in subdirectories describing the date (yyyymmdd00) when the data are generated. The dated subdirectories are combined in the main directory describing the year.



Further additions of weather and climate data are in preparation.

Restrictions and Conditions

To access files in the Archive, a registration using your mail address is required. This is to allow us to keep track



of the locations of downloaded files. The online GPV data provided by way of JMBSC are free to redistribute. When you use the JMA/GPV data stored in this Archive, however, please understand that the data are not for the commercial use. Sample programs for reading the GPV data and weather maps are prepared for convenience in a source directory.

Please note that the Center for Computational Sciences takes no responsibility for the data and maps downloaded from this Archive.

Division of Global Environment and Biological Sciences

Center for Computational Sciences, University of Tsukuba, was founded in April 2004 as an Inter-University

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.