

Technical Progress Report on the Global Data-processing System for 2002

Country: Republic of Uzbekistan

Centre: RSMC Tashkent

1. Highlights

Several changes were introduced into the data-processing system in 2002.

2. Equipment used by the Centre

2.1 *Computer types in use:*

HP9000 Workstations - Volume of the disk subsystem:
9.3 x 2 gigabytes = Σ -18.6 gigabytes.
Operating system : HP-UX 10.0

Pentium-type personal computers using Intel processors (Pentium, Pentium MMX, Pentium II, Pentium III)
Operating systems : MS Windows 95/98; NT; 2000; SCO Unix 5.04;
Linux RedHat 5.1

2.2 *Printers:*

A4 matrix printers; A3 matrix printers; A4 black and white laser printers;
A4 colour laser printers; Colour ink-jet printers; A1 black and white plotters;
A1 colour plotters.

2.3 *Data switching equipment*

3. GTS data and products used
SYNOP, TEMP, PILOT, RADOB, GRID

4. Data entry system
Automated

5. Quality control system
Quality control for information issued by the Centre as maps is done visually. There is no quality control for digital information.

6. Monitoring of the observing system
Monitoring of the surface data is carried out at the national level.

7. Forecasting system

7.1 *System operation timetable and forecast ranges*

Forecast results in GRID format are converted into forecasts for air routes, which are disseminated among the Republic's main airports four times a day as telegrammes.

7.2 *There is no system for medium-range forecasts (4-10 days).*

7.3 *Short-term forecast system (0-72 hours)*

7.3.4 Operational methods for the application of NWP products

In 2002 an automated system of NWP for air routes was introduced, based on a Pentium PC, for the Republic's main airports. 0000 and 1200 UTC GRIB code data are used as outgoing data forecast information.

Air route forecasts include data on wind, pressure, geopotential and temperature components in standard isobar areas, as well as data on tropopause and maximum wind parameters.

8. Forecast product validity verification

Was not done.

9. Future plans

An automated system will be introduced from 2003 to 2005 for the calculation of weather parameters in the free atmosphere, zones of heavy precipitation and atmospheric fronts with a horizontal resolution of 75 kilometres on the basis of regional hydrodynamic atmospheric models for Central Asia, using the workstation.

In 2003 an information base will be created in the PC for hydrodynamic atmospheric modelling (reception, decoding and verification of GRIB code information, objective analysis of weather parameter fields (geopotential, temperature, wind, humidity, pressure at sea-level), archiving information in GRIB code format and synoptic data in KN-01 code, and surface weather maps).

(Translator's note: KN-01 is the Russian original code name; it might stand for "kniga nablyudatelya", which would translate as "observations registry" or "observations logbook".)

10. References

1. Vailert, V. G., The Interpretation of Forecasts of the World Weather Centres for Aeronautical Meteorology, SANIGMI, 1998, issue 156 (237), pp. 148-152.