

# THE MINISTRY OF ENERGY OF THE REPUBLIC OF KAZAKHSTAN

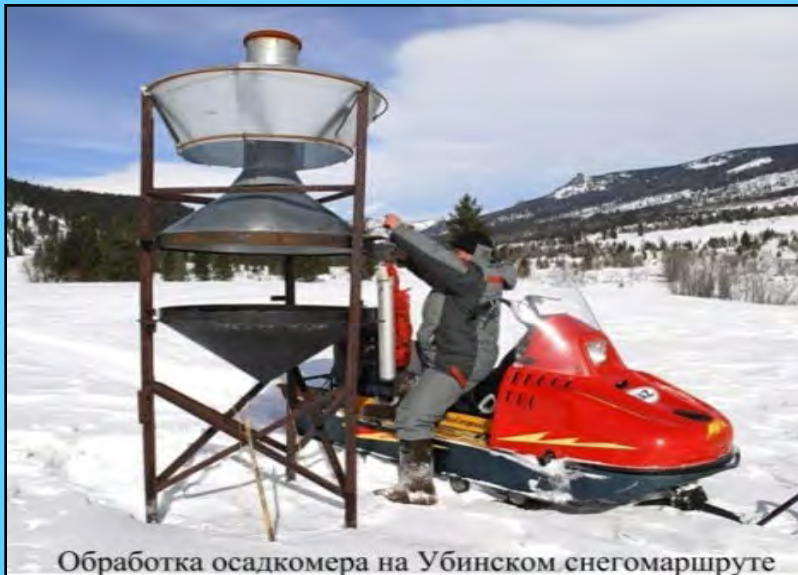
## The National Hydro-meteorological Service of Kazakhstan



Astana, 2015

# The State Hydrometeorological Monitoring

- 325 meteorological stations
- 9 aerological stations
- 203 agrometeorological posts.



Обработка осадкомера на Убинском снегомаршруте



# THE METEOROLOGICAL NETWORKS

- 325 meteorological stations(MS), of which at **131** MS were installed automatic meteorological stations( AMS111-II, MAWS301, MAWS110, AMS111).
- 68 automatic stations with no station staff.
- 83 international data exchange stations daily transmit information to the World Data Center;



# DATA COLLECTION, PROCESSING AND STORAGE

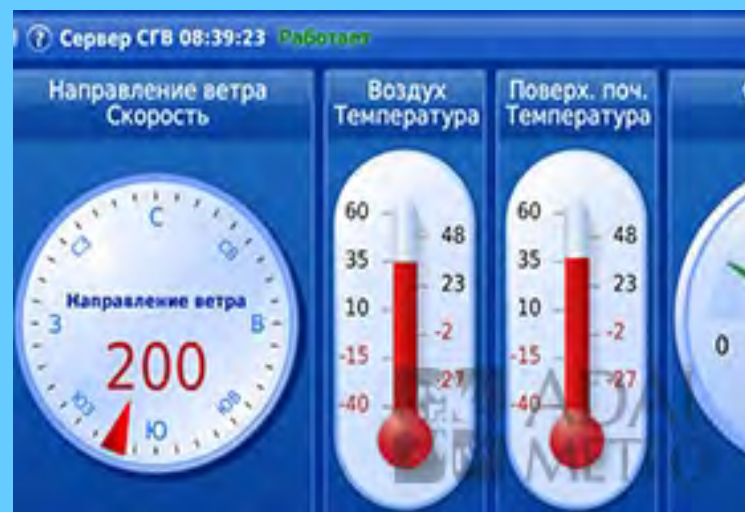
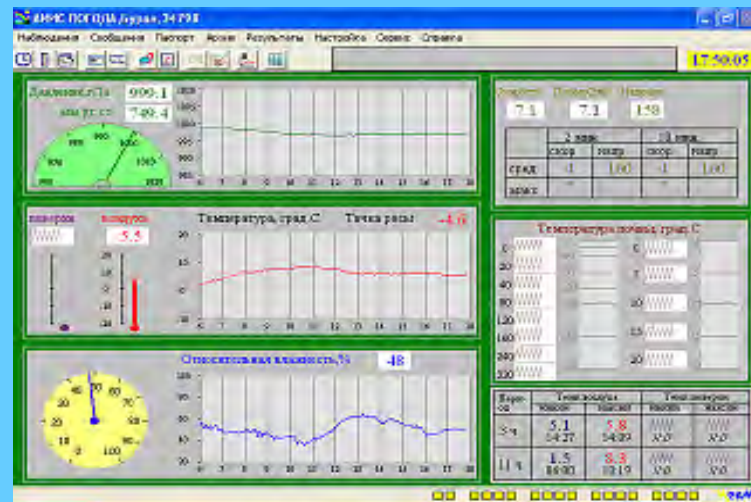
1) Processing of the results of observation in the AIS "Weather" and "ARM-meteo at MS and sending the regime information to the regional branch in the format of TCM;

2) The primary data quality control in the software "Person MIS" in the regional branches;

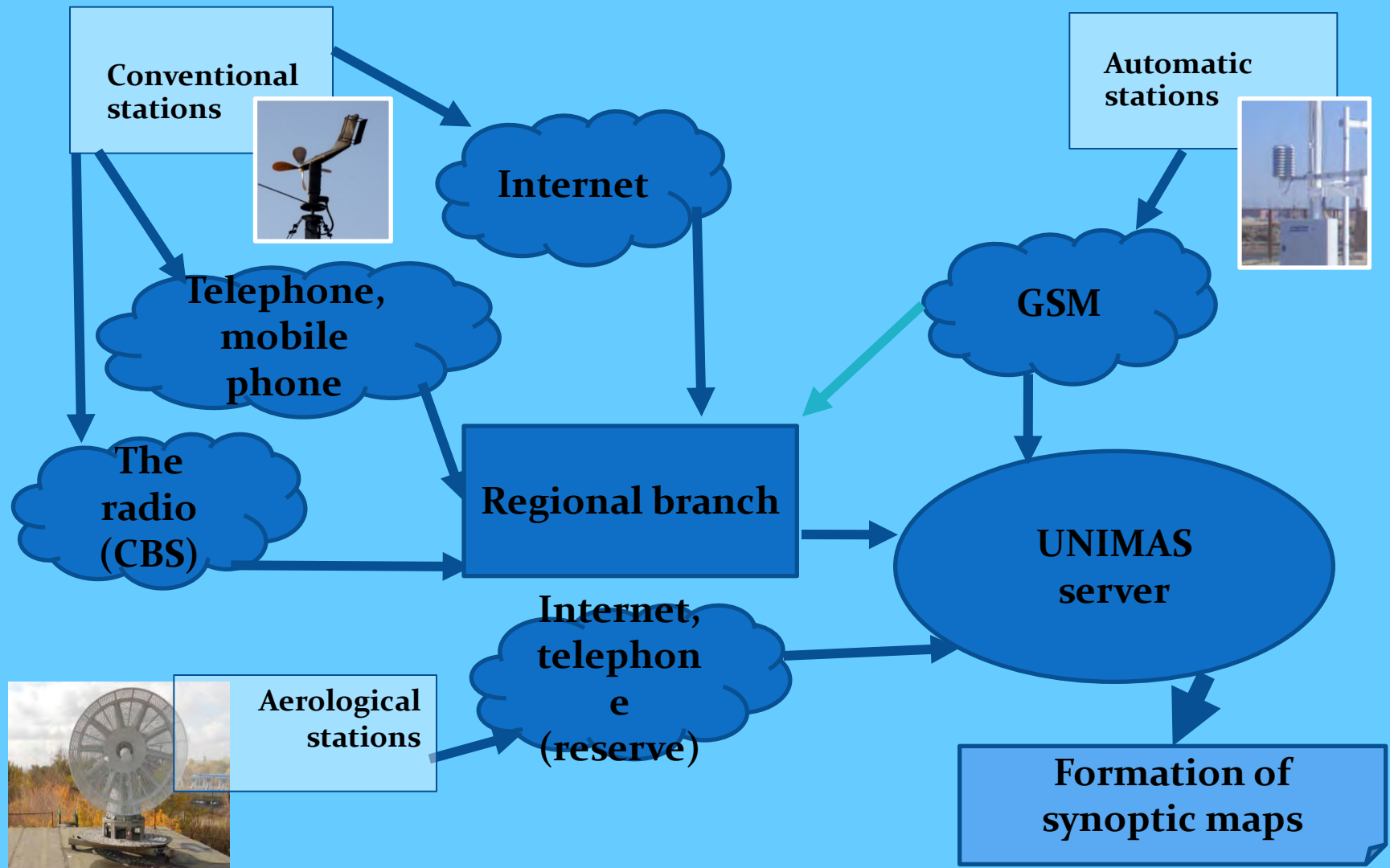
1) One-minute data collection in the Climate System

2) Data collection (CLDB / UDCS) of Integrated Meteorological System IMS (MicroStep-MIS);

3) Data processing and quality Control in the IMS (Quality control (QC))



# The transmission scheme of operational information from meteorological network



# THE AEROLOGICAL NETWORKS



**6 aerological stations (AS) have been modernized between 2006 and 2012 (Small aerological radars MARL-A (Russia) were installed instead of the old sensing systems AVK-1).**

**In 2014, 3 AS were modernized: Aktobe, Karaganda and Zhezkazgan (modern complexes GRAW (Germany) were installed instead of AVK-1).**

**These complexes are fully automated ensuring reliability and ease of use.**



# THE AGROMETEOROLOGICAL NETWORKS

Agrometeorological Monitoring is conducted at 203 observation points

Where 115 of them meteorological stations and 88 agrometeorological posts, 16 of which are automatic

Soil moisture is determined at 124 observation points



- In 2013,
  - 74 posts with agrometeorological observations were modernized;
- In 2014,
  - the agrometeorological network was equipped with the new device and vehicle:
- *DELTA (England) is used for soil moisture measurement, 34 pieces*  
*Mopeds model ZiD-50-02 (cargo), 51 pieces.*





***The Republican State Enterprise  
"Kazhydromet"***

***[www.kazhydromet.kz](http://www.kazhydromet.kz)***

**Thank you for  
attention!**