

Introduction of FENGYUN Meteorological Satellite data reception in Tajikistan

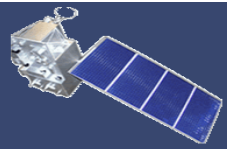
Agency for Hydrometeorology

Muhiddin Yakubov

Head of Communication &

Information Systems Centre

meteo.muhiddin@gmail.com

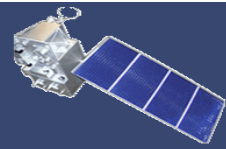


CONTENT

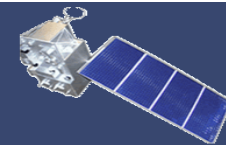
- 1) SWAP
- 2) FY-2H\FY-4A
- 3)Tajikistan Monitoring System



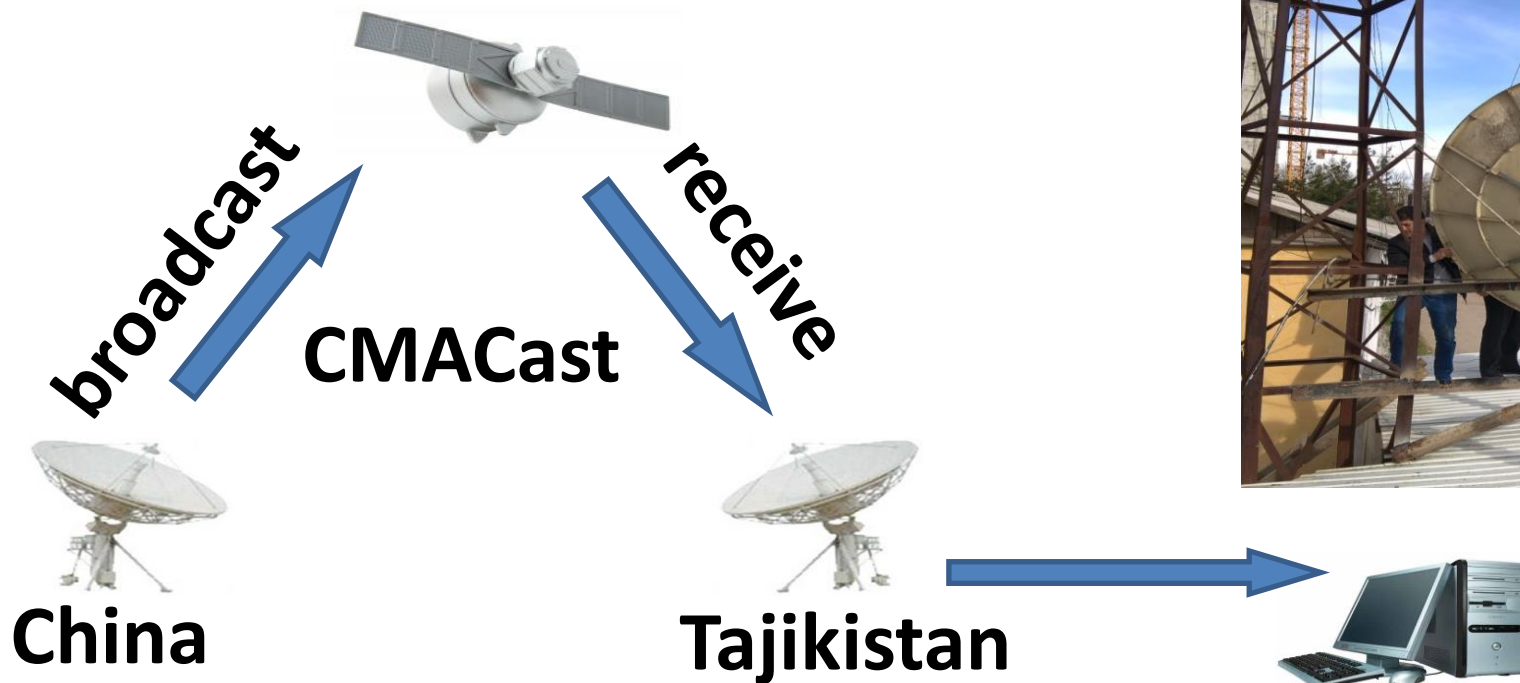
Tajik NHMS and CMA

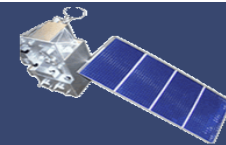


- In 2009, a system for receiving satellite products was provided from the CMA to the TajikHydromet.
- In 2012, the system was completely updated, CMA installed 3 new computers and a receiver (HTD RSEA-100)
- From 2012 to 2015, everything worked and the weather forecaster department actively used for forecasting.
- After some time, it stopped receiving data from the satellite, large trees grew around the satellite dish and built tall apartment buildings, preventing the satellite dish from receiving data.
- In 2017, engineers from CMA changed the location of the satellite dish and updated the program, data began to flow.

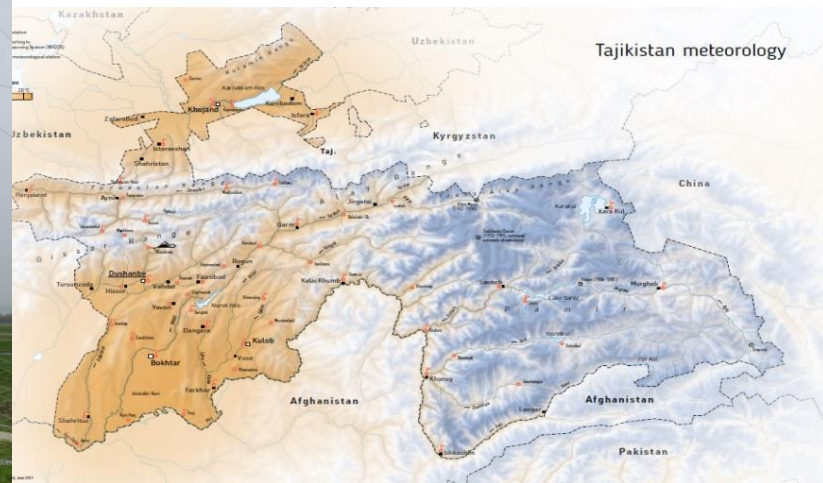


3. How we can get satellite data?

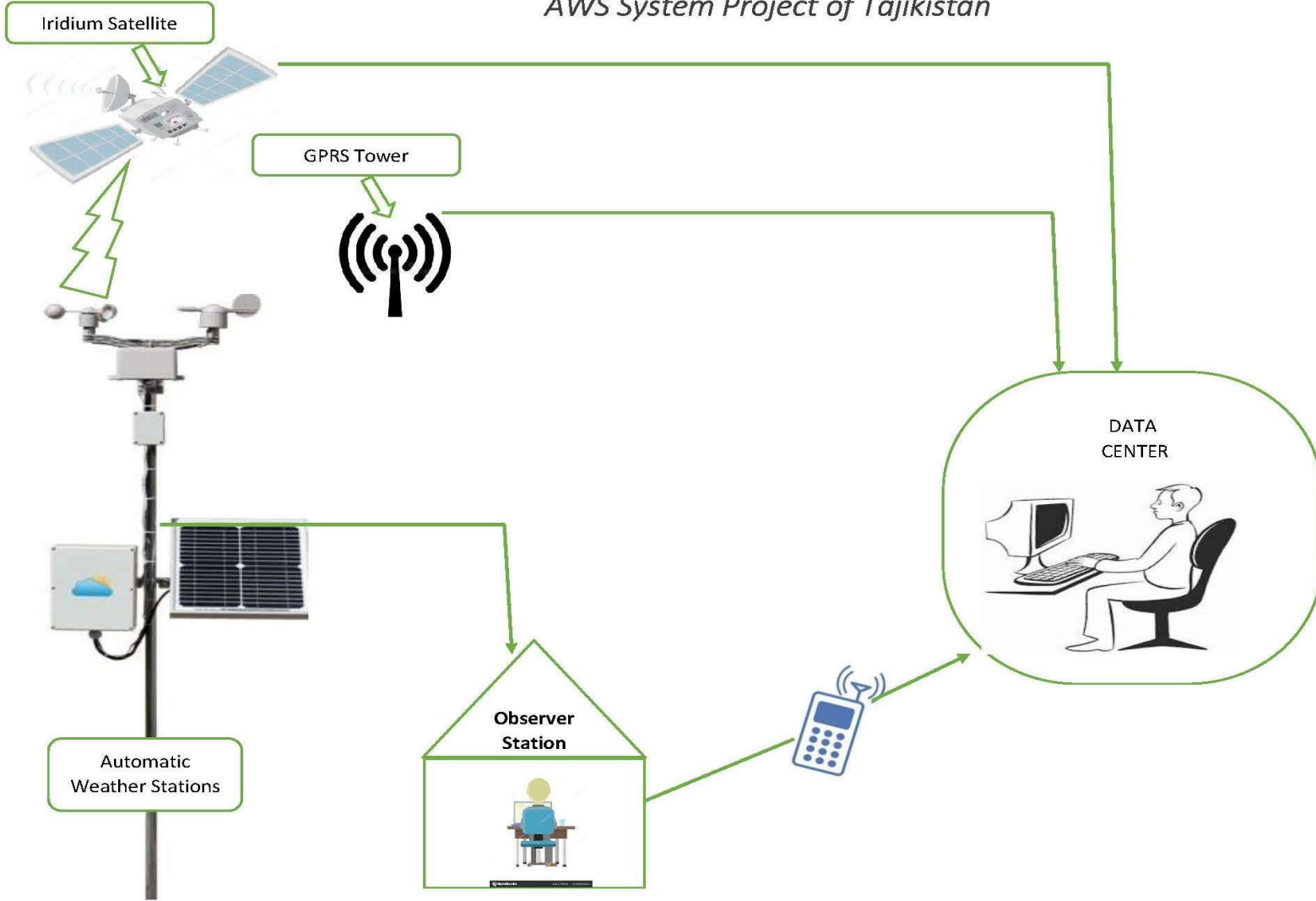




As part of the Hydrometeorological Services Modernization project, in 2016 – 2018, 54 Weather Stations were automated and 16 automated Hydrological stations.

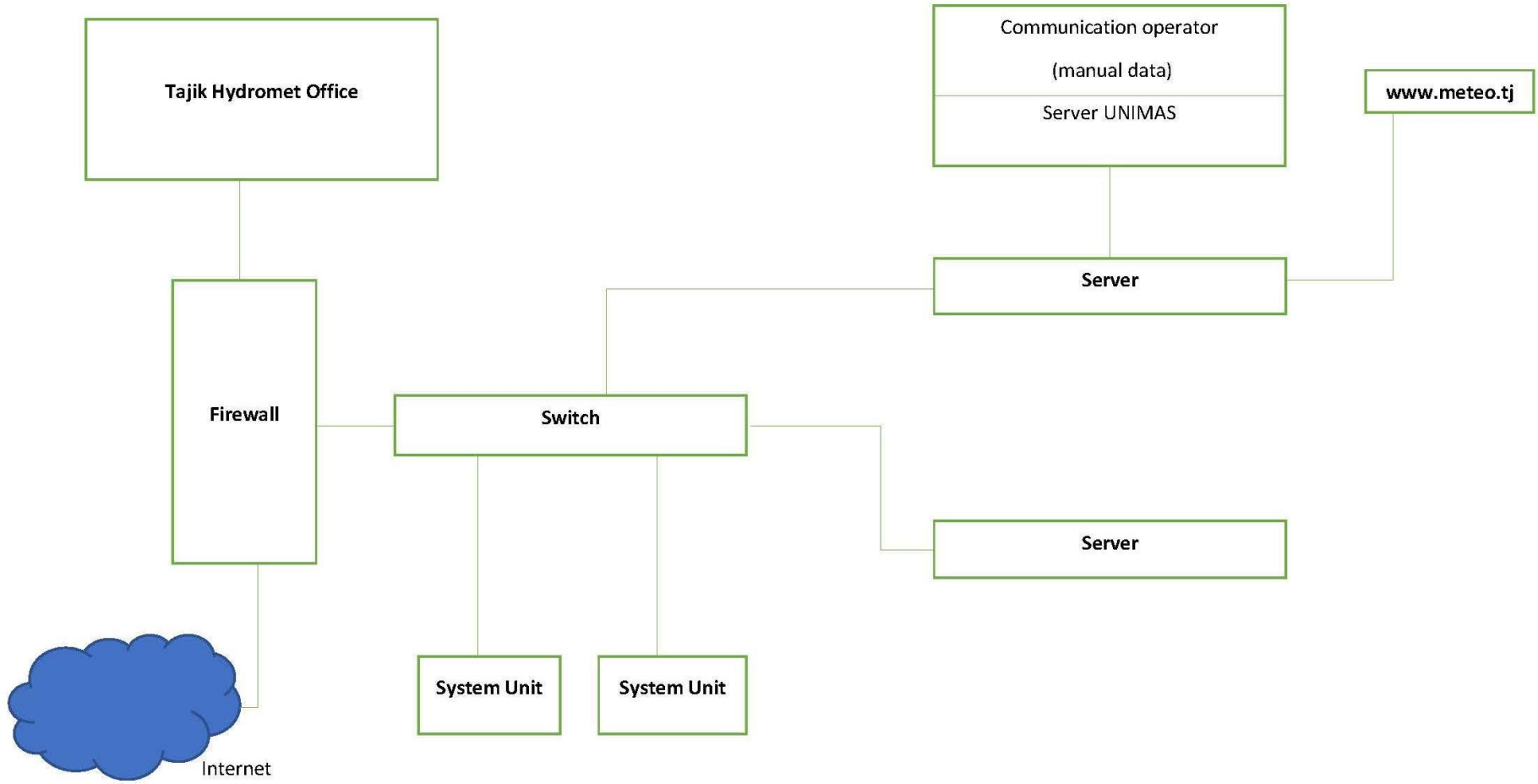


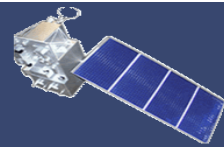
AWS System Project of Tajikistan



Logical layout of Network configurations by model equipment
Logical layout of connections of computer and network equipment

Scheme of connection computer and network equipment





Screenshot from the Interface with parameters

Central Data Acquisition Centre

Центр Сбора Данных Наблюдений



Станции

Параметры | Главная | Графики | Таблицы | Паспорт |

МС Исанбай

МС Ирты

МС Искандеркуль

МС Истаравшан

МС Исфара

МС Ишканим

МС Кайракумское водохранилище

МС Калайлабиоб

МС Каракум

МС Кутуб

МС Кургам-Дюбе

МС Ляхш

МС Мадрушкаг

МС Майбура

МС Музиевобод

МС Мургаб

МС Назобод

МС Нижний Пякжк

МС Палос

МС Пролетарский

МС Пякжк

МС Пякжкюент

МС Рашт

МС Рушан

МС Савноб

МС Сангистон

МС Санглок

38957: МС Ишканим

18 апреля 2018 г.

Показать измерения за последние

24 часа

6 часов

12 часов

24 часа

2 суток

3 суток

4 суток

1 неделю

2 недели

4 недели

5 недель

Автоматические наблюдения

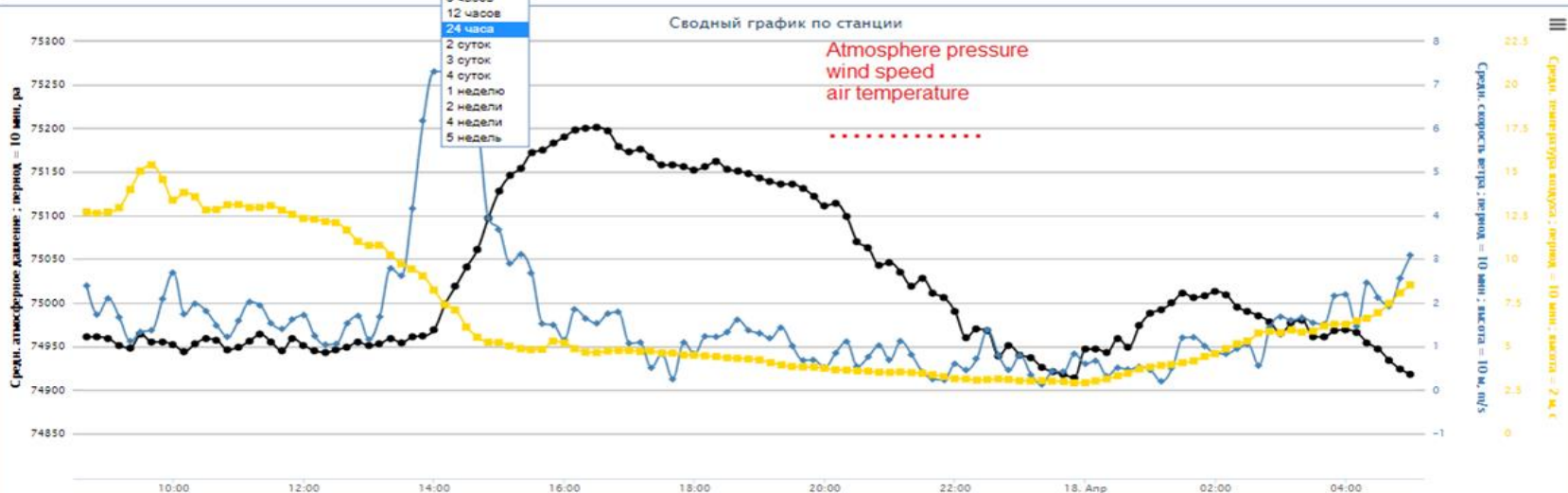
UTC

Обновить

Показать сводную таблицу данных

Сводный график по станции

Atmosphere pressure
wind speed
air temperature





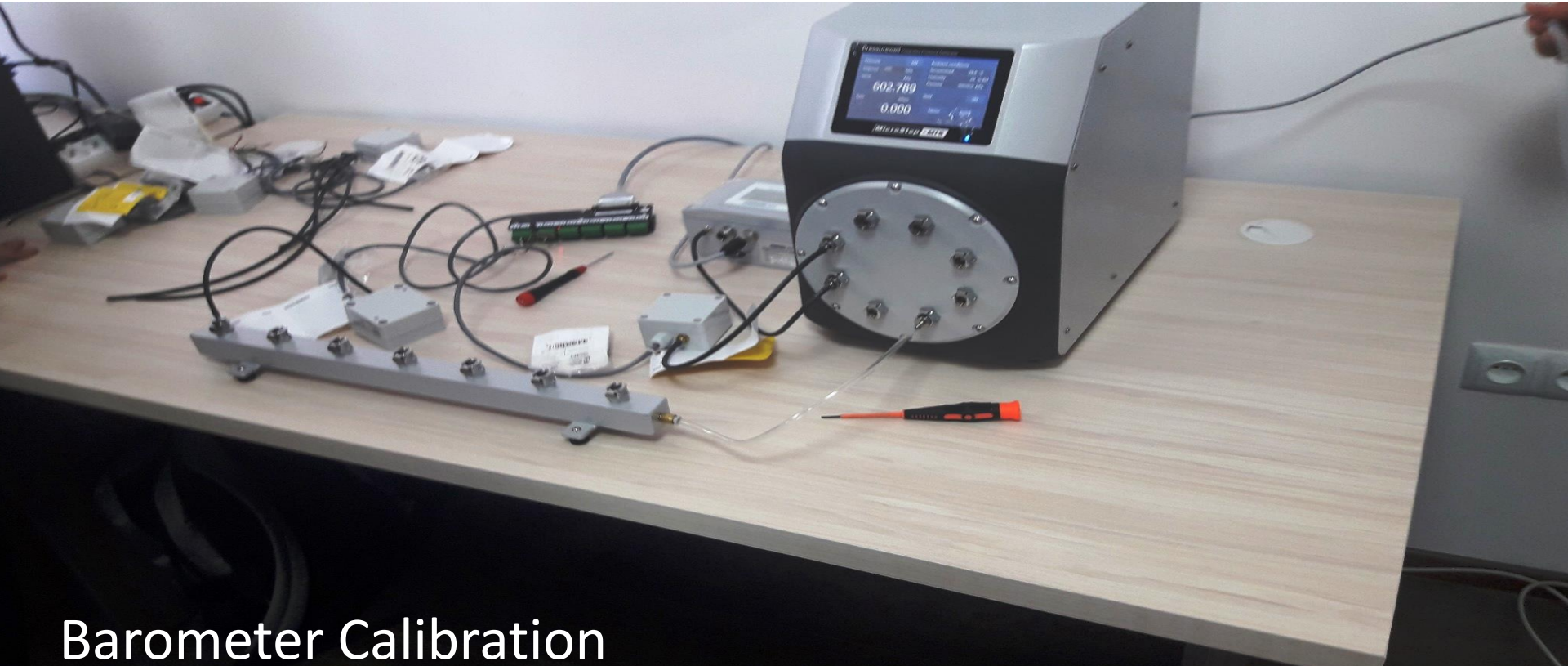
Calibration of meteorological and hydrological instruments (sensors)

Until 2018, we sent for calibration to other countries for calibration of meteorological and hydrological instruments (sensors).

Thanks to the modernization project, everything necessary was acquired and the employees were trained for two weeks so that we ourselves could calibrate our devices that we have, as well as a certificate that the sensor was calibrated



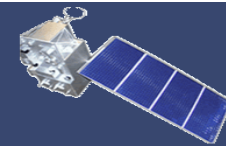
NHMS staff training process



Barometer Calibration



The resources used for the preparation of weather forecasts



1) Ground-based data (52 meteorological stations);

2) SYNOPTIC map:

Surface map

The ring map

Absolute topography;

Relative topography;

3) predictive maps

Forecast maps of SC below 400MB

Field pressure and geopotential height

Field humidity (at-700)

Field of winds (at-200), etc.

4) Meteograms NWP:

KMA

JMO

KMO

ECMWF

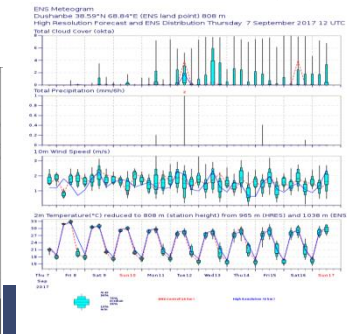
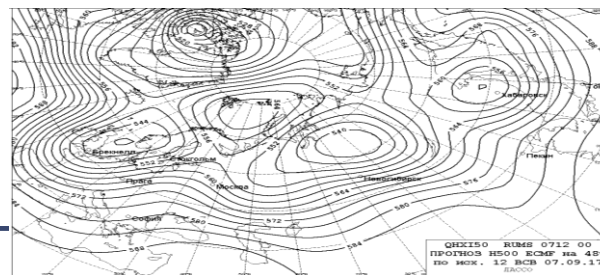
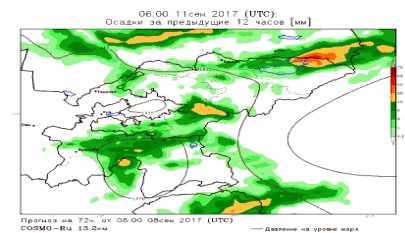
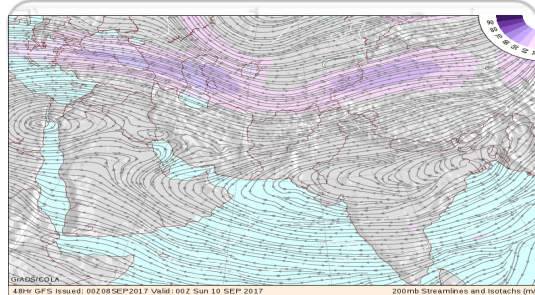
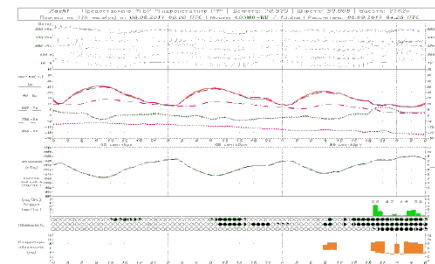
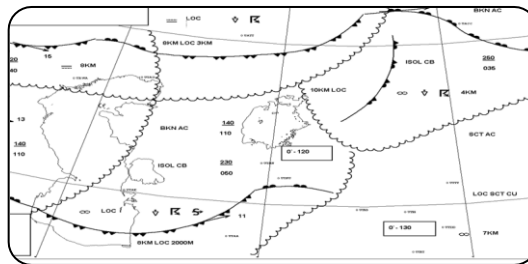
COSMO-CA, etc.

5) Satellite information:

EUMETSAT

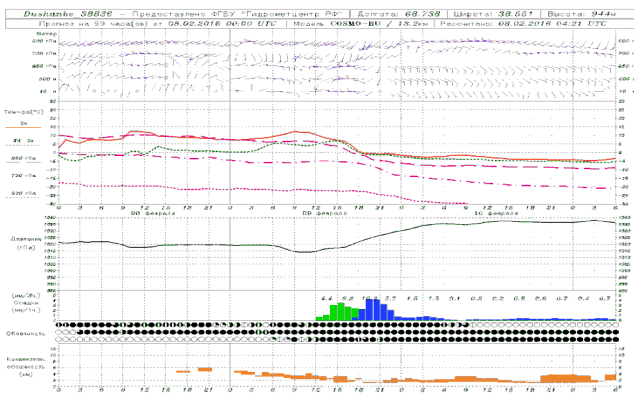
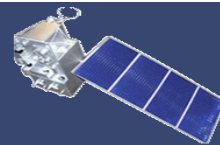
FY-2H (China) online

FY-4A (China) online

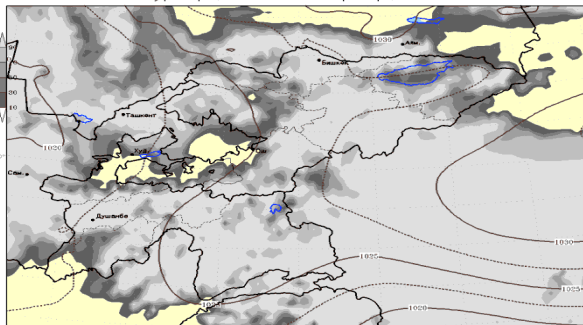




Products COSMO

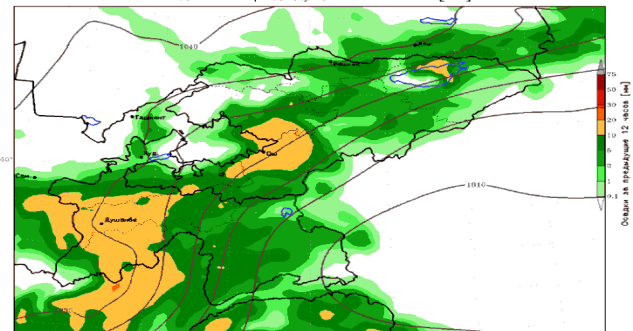


00:00 20Фев 2016 (UTC):
Р ур.моря, облачность ср. яр., Осадки

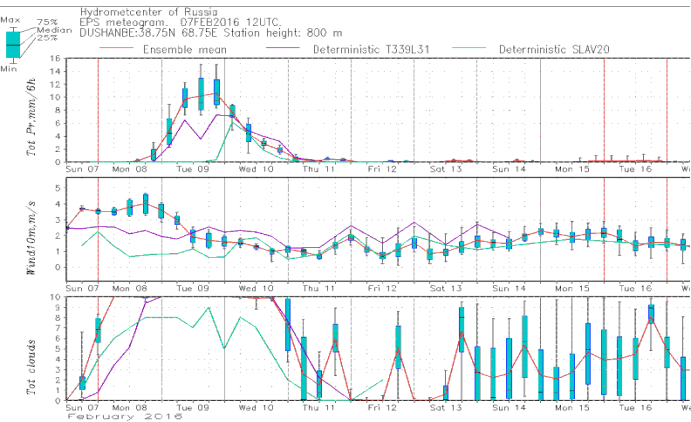


Прогноз на 0ч. от 00:00 20Фев 2016 (UTC)
COSMO-RU 13.2км

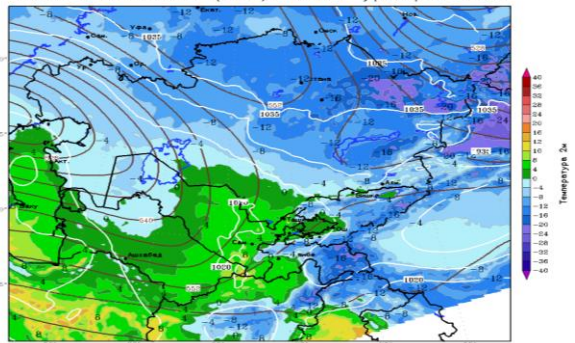
06:00 10Фев 2016 (UTC):
Осадки за предыдущие 12 часов [мм]



Прогноз на 48ч. от 06:00 08Фев 2016 (UTC)
COSMO-RU 13.2км

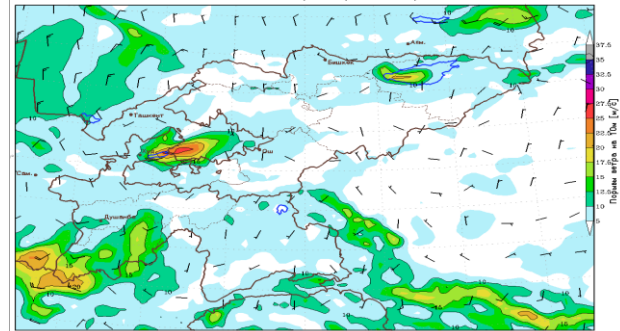


00:00 20Фев 2016 (UTC): T2м, Р ур.моря, H500

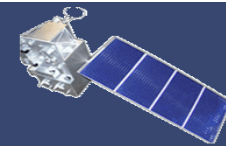


Прогноз на 0ч. от 00:00 20Фев 2016 (UTC)
COSMO-RU 13.2км

18:00 09Фев 2016 (UTC): Ветер на 10м



Прогноз на 36ч. от 06:00 08Фев 2016 (UTC)
COSMO-RU 13.2км



Thank you for your attention!



2019-2021 – Year of the Tourist