

National Space Agency of the Republic of Kazakhstan



**JSC «NATIONAL COMPANY
«KAZAKHSTAN GHARYSH
SAPARY»»**

Optical and radiotechnical devices of the “Sary-Shagan” complex (Priozersk town)



Benefits:

- the object is in the longitudinal gap between European and American observation points;
- number of clear (up to 280 suitable for optical measurements) nights during the year;
- geographical longitude of the facility is close to one of the distribution maxima of satellites on GEO and space debris;
- To monitor and control the significant amount of space objects in the area from 10 to 135 of East longitude
- The absence of man-made illumination (distance from the city), that significantly increase penetrating power of the equipment when using aperture optics of small diameter.

Quantum-optical system "Sazhen-S"

QOS "Sazhen-S" allows solving the following tasks:

precision metering, monitoring, identification and tracking of space systems for various applications;

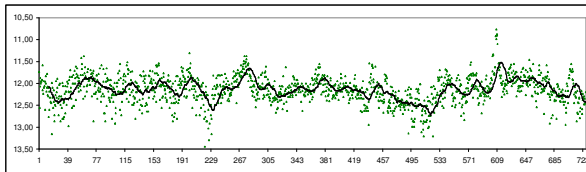
efficient obtaining of the coordinate and photometric information on geostationary orbit (GEO) and high orbital space objects;

Maintaining the catalog of large debris and spacecrafts (SC) located in the area of control and periodical issuing of the catalog of geostationary satellites;

Data exchange between local and foreign centers of data processing.

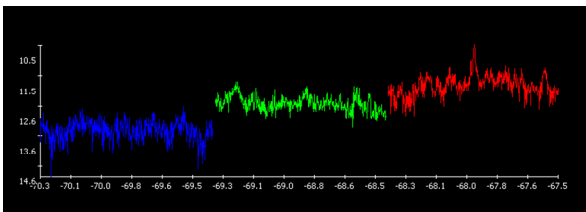


Conducted works

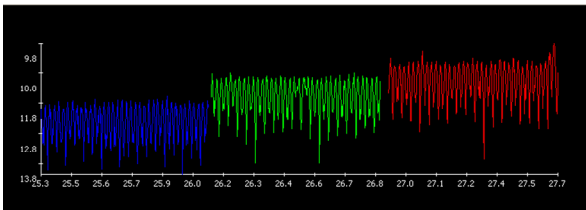


Providing coordinate and photometric information about selected space objects to perform tasks of forecasting, detection, tracking of dangerous situations in the area of geostationary and highly elliptical orbits.

2012. 10.11. Object 00001C 26054 Booster IABS

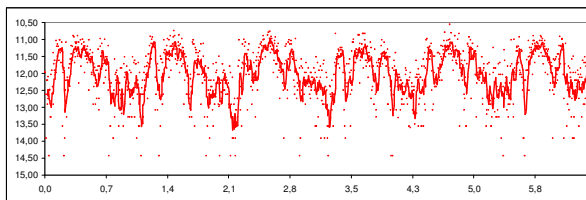


2012. 10.11. Объект 00001C 26054 Разгонный блок IABS



2010. 07.21. 06022D Booster of Kazsat 1

2010. 07.21. 06022D Разгонный блок объекта Kazsat 1



2010. 07.25. 68081E; 03432; USA; Transtage 5, filter R

2010. 07.25. 68081E; 03432; USA; Transtage 5 фильтр R

Our partners

Branch Limited Liability Company «Astrophysical Institute named after Fesenkov, JSC “National centre of space research and technologies, Kazakhstan
(joint works on monitoring of the space)

Astronomical scientific centre «Project – technology» (Keldysh Institute of Applied Mathematics), Russia
(providing of coordinate and photometric information about selected SO to perform the tasks of forecasting, detection and tracking of dangerous situations in the geostationary and highly elliptical orbits)

«EADS ASTRIUM» (France)
Modernization of QOS «SAZHEN-S»
(monitoring of SO up to 17 magnitude stellaire including the space debris), modernization and application of antenna system THA-57
(to monitor low orbit space objects)



Thank you for the attention!

www.gharysh.kz