

Svetloe Radio Astronomical Observatory

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Abstract

This report provides information about changes in the Svetloe Radio Astronomy Observatory (SvRAO) status in period spanning after the last IVS report. The activities during 2005, the current status, and future plans are described. During 2005 a number of maintenance and upgrade activities were performed at SvRAO. An optical fiber line was put into operation.

1. Introduction

Svetloe Radio Astronomical Observatory (SvRAO) was founded by the Institute of Applied Astronomy (IAA) as the first station of Russian VLBI network QUASAR. VLBI network QUASAR has been described in [1].

Sponsoring organization of the project is Russian Academy of Sciences. SvRAO is located at the Karelian Neck near Svetloe village about 100 km north from St. Petersburg. The basic instruments of the observatory are 32-m radio telescope RTF-32 and technical systems provided realization of VLBI observations.

During last year Svetloe observatory regularly participated in various radio astronomy programs including VLBI and single dish observations of quasars and planets.



Figure 1. Svetloe Observatory.

2. Participation in the IVS Observing Program

Table 1 summarizes the sessions performed during 2005.

Table 1. The list of IVS sessions observed at SvRAO in 2005.

Session	IVS-R4	T2	EUROPE	E3	CONT05	R11	Intensives
Total	26	2	3	11	15	9	14

3. Radio Telescope

- Geodetic survey session was done for accurate tie between the radio telescope and SVTL GPS marker. The data is being processed.
- New electrical facilities have been installed: UPS System Galaxy 3000 (20kVA).
- Put into operation remote video control for radiotelescope and facilities control room.

4. Outlook

Our plans for coming year are the following.

- Participation in IVS R4, T2, EURO, E3 and RVD observing sessions.
- Upgrade of rail by means of replacement of the concrete under it.
- To participate in domestic VLBI–1,35 sm observations.

References

- [1] Finkelstein A., Ipatov A., Smolentsev S. Radio Astronomy Observatories Svetloe, Zelenchukskaya and Badary of VLBI Network QUASAR. In: IVS 2004 General Meeting Proc., eds. N. R. Vandenberg, K. D. Baver, NASA/CP-2004-212255, 2004. P. 161–165.