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RadioAstron Newsletter
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Russian version of the Newsletter can be found here:
http://www.asc.rssi.ru/radioastron/newsletter/newsl_rus.pdf

Spectr-R in-orbit tests continue

Many things have happened since the previous Newsletter which reported on the space radio telescope deployment. Science payload and service systems of Spectr-R were successfully turned on. Technical details can be found here:
<http://www.asc.rssi.ru/radioastron/news/news.html>

In particular:

- The H-maser (atomic clock) was turned on and internal test has shown that the clock works properly, its stability is reported to be within the specs.
- Tests of "VIRK", the system which includes high-gain 1.5-m diameter antennae and is used to contact with the tracking station in Pushchino, continue. The so-called "open loop", the tone signal at 8 GHz, was successfully detected in Pushchino and is being used to perform Doppler measurements of the orbit parameters. The 15 GHz tone signal was also successfully detected.
- Today, the first system temperature measurements were performed for the Australian-made 18 cm astronomical receiver while the space telescope was pointed on a cold sky; the system temperature is estimated to be about 42 K which is close to receiver's specifications.

Plans for the near future:

- VIRK pointing correction measurements and 15 GHz data link tests,
- performance measurements for all the other astronomical receivers of the 92, 6, and 1.3 cm bands,
- Cassiopea A first light single-dish radio astronomical observations including space radio telescope efficiency measurements.

With best regards,
Nikolai Kardashev (nkardash@asc.rssi.ru)
Yuri Kovalev (yyk@asc.rssi.ru)

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