

Observations of G25.65 on the space-ground interferometer RadioAstron

- Observations: 29 Sep 2017 12:00 UT – 16:00 UT
- Space-VLBI segment: 13:10 UT – 14:00 UT
- Telescopes: RA + Torun + HartRAO + Simeiz (partly)
- The projected baseline length during space-VLBI session: 9.07 – 9.22 ED for RA+Hh and 8.51 – 8.67 ED for RA+Tr.
- The corresponding angular resolution: 23.9 μas for SRT+Hh baseline and 25.5 μas for RA+Tr baseline.
- Fringe was detected both on RA+Hh and RA+Tr baselines with SNR = 15.9 and 26.6 respectively.

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- The corresponding linear size of emitting region at the distance of 2.08 kpc is **0.05 AU (5.38 Solar diameters!)**.
- This linear size can be considered as the upper level of the real size of the emitting region. This is the best achieved linear resolution for Galactic H₂O masers at the moment.
- Processing of the data is in progress now.