On Near-Term Space-VLBI Mission VSOP-2

Talk Outline:

VSOP Short Review

VSOP-2

Science and Instrument

Aim:

To let EVN-VLBIers to remember Space-VLBI, and to join,
HALCA Launch & Deployment
• Feb. 1997 •
HALCA and VSOP

Highly Advanced Laboratory for Communications and Astronomy

Apogee 21,000km
6.3 hours orbit

The ISAS satellite HALCA and the Usuda 64m antenna conducted their first observation of the quasar PKS1519-273 at a wavelength of 18cm. The spike shows the elements at the VSOP correlator in Mitaka, NAO. This is a major step forward in our understanding of the universe.
VSOP with HALCA

- The first successful imaging space VLBI mission
- AGN environment and jet physics
  - Structure and kinematics of jet in AGN
  - Absorption near the core and study of torus structure
  - Existence of high brightness temperature sources

Beamwidth 100 Rs at 5 GHz for M87

5-years jet monitor

Jet Structure

Plasma Torus in absorption

HST Image

VSOP Image

Plasma Torus absorption

Beamwidth 100 Rs at 5 GHz for M87