http://niipp-moskva.ru/ppt/booklet_IPIE_int.ppt

Russian adaptive optics imaging of satellites

Major implementation results

Altay Laser/ Optical Center (lower site), affiliated branch of FSUE IPIE

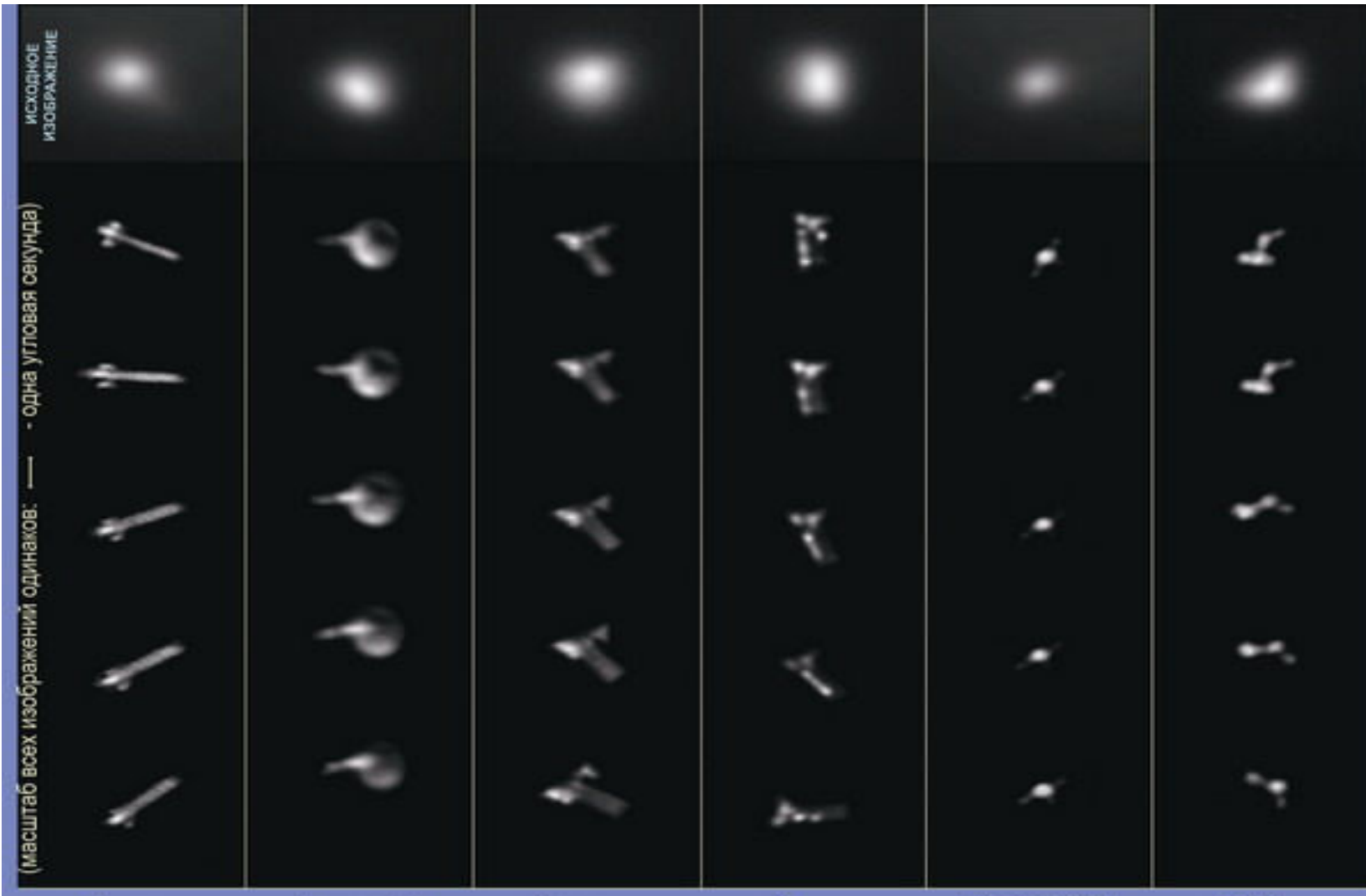
Purpose:
Precision ranging and angular measurements of navigation spacecraft for in-flight calibration of radio-frequency measurement system

Parameters:
Ranging of spacecraft on orbits as high as 36,000 km, with an RMS of 0.3-0.5 cm; angular measurement accuracy - 2 arcsec.
Photometry of spacecraft with star magnitude up to 12-13; accuracy - 0.2 star magnitude units.

The site is located in Zmeinogorsk region of the Altay territory, allowing observation of launchers starting from the Baikonur launching site.

Experimental adaptive optical system on the Altay Laser/Optical Center

For the first time in Russia, a 28-channel adaptive optical system has provided spacecraft images.



Aura	Lacrosse2	Uars	Terra	Cosmos 2084	ERS2
14.08.05	14.08.05	14.08.05	14.08.05	04.08.05	02.08.05
00,42mck	21,22mck	01,43mck	20,22mck	23,56mck	20,09 mck
УМ 67	УМ 51	УМ 71,8	УМ 85,5	УМ 70,9	УМ 78,5
Д 720 км	Д 816 км	Д 675 км	Д 712 км	Д 548 км	Д 823 км