

LLAMA : A BRAZILIAN-ARGENTINEAN RADIOTELESCOPE IN THE ANDES

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Figure 1. LLAMA Band 5 receiver cartridge receptor, which is now being tested in Groningen



Source: <http://www.iar.unlp.edu.ar/llama-web/pictures.htm>

A 12 m diameter radiotelescope for mm/sub-mm waves will be installed at a site at 4800 m altitude in Argentina, to perform research in different areas, like Astrochemistry, Solar Physics, studies of extragalactic jets from black-holes, star formation and VLBI (Very Long Baseline Interferometry), among others. The antenna will be installed at 20 km from San Antonio de los Cobres, Salta province, at about 150 km from the ALMA interferometer. The VLBI experiments will be done with nearby other radiotelescopes like ALMA, ASTE and APEX, and also with very distant ones.

The antenna has been constructed and will be shipped to the telescope site. The road to reach the high altitude site has been opened and is being consolidated. A cryostat has been constructed in Japan with room for 3 cartridge-like receivers. Two cartridges receivers (band 9 and band 5, ALMA definition) have been mounted inside it, and first tests have been successful. The tests are being carried at Groningen, Holland. The whole set of drawings of the optical-like system of mirrors to bring the energy to the receivers have been concluded, and first steps of mechanical construction of the "optical" system are being made.

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