Instituto Nacional de Técnica Aeroespacial





Robledo de Chavela DSE Space Complex (MDSCC)

Introduction

The Robledo de Chavela complex, also known as the MDSCC (Madrid Deep Space Communication Complex), forms part of the NASA deep space network (DSN) and tracks space missions in orbit around the Earth and deep space missions. The Complex has been operational since 1965.

Activities

- Transmit and receive information from NASA'S deep space probes, such as: Cassini in orbit around Saturn, Mars Exploration Rovers on the surface of Mars, and Mars Odyssey in orbit around Mars, etc.
- · Collaborate with other space agencies by receiving and transmitting data from deep space probes to the Earth (SOHO probe, ESA Ulysses and Mars Express, the JAXA NOZOMI probe, etc)
- Participate in satellite launch phases
- Collaborate in radioastronomy programmes

Equipment

The complex is formed by five stations:

- DSS 61 with a 34 metre antenna, currently assigned by NASA for use as a radiotelescope for educational purposes in the framework of the PARTNeR programme being run by the INTA LAEFF
- DSS 63 with a 70 metre S and X band antenna for communications with deep space probes very far from Earth. Also used for astronomy observations in the S, X and K bands.
- DSS 65 with a 34 metre X and Ka band antenna for interplanetary missions
- DSS 66 with a 26 metre S and X band antenna for missions close to Earth
 DSS 54 with a 34 metre X and Ka band antenna for interplanetary missions
- DSS 55 with a 34 metre X and Ka band antenna for interplanetary missions

Contact

comercial@inta.es