

Project Matienzo

The objective of Project Matienzo was to measure cosmic radiation using Gamma Centaur rockets and instrumented stratospheric balloons launched from the Matienzo Base in Antarctica. The balloon-borne instruments provided measurements comparable to those made by the rockets. For comparison with the Antarctic data, similar instrumented balloons were launched from the CELPA (*Centro de Experimentación y lanzamiento de proyectiles Autopropulsados*) in Chamental, La Rioja, Argentina. The two locations are separated by 3,950 km.

The rocket and balloon instrumentation was developed by the *Laboratorio de Radiaciones y Electrónica* of the IIAE (*Instituto de Investigaciones Aeronáuticas y Espaciales*). The rockets were designed and built in Córdoba, Argentina by IIAE's *Grupo Desarrollos Espaciales*. The balloons were provided by the UNT (*Universidad Nacional de Tucumán*).

There were five Antarctic launches in Project Matienzo:

6 Feb 1965: 1130 hrs launch of Gamma Centaur rocket #014
6 Feb 1965: 1900 hrs launch of Gamma Centaur rocket #016
7 Feb 1965: 1400 hrs launch of UNT balloon G1
8 Feb 1965: 1400 hrs launch of UNT balloon G2
8 Feb 1965: 1903 hrs launch of Gamma Centaur rocket #015.

One conclusion of the Project was that cosmic radiation intensity at approximately 40 km altitude was around five times greater than what was observed at the surface.