

Measurements of shielding effects and nuclear abundances on board the International Space Station in the Lazio-Sirad and Altriss Experiments.

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In this work, we examine the effect of shielding on the nuclear abundance and particle flux on board the International Space Station. The first measurements were performed during the Italian Soyuz 2 mission (Lazio-Sirad experiment, April 2005) using a set of multi-material (nextel, nomex, polyethylene) tiles placed in the angle of view of the Sileye-3/Alteino experiment. Subsequently, the ESA Altriss project (begun in 2005) continued and extended these measurements in a long duration campaign to perform these observations at different points inside the Russian section of the station. Various sets of dosimeters (shielded and unshielded) are being used in parallel with the active detector. In this work, we will discuss the results of the Lazio-Sirad and the first measurements of the Altriss campaign.