RELATIVE NUCLEAR ABUNDANCES IN ISS WITH ALTCRISS EXPERIMENT

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The Altcriss project aims to perform a long term survey of the radiation environment on board
the International Space Station. Measurements were performed with active and passive devices
in different locations and orientations of the Russian segment of the station. The goal is to
perform a detailed evaluation of the differences in particle fluence and nuclear composition due
to different shielding material and attitude of the station. The Sileye-3/Alteino detector is used
to identify nuclei up to Iron in the energy range above \( ' 60 \text{ MeV/n} \). Several passive dosimeters
(TLDs, CR39) are also placed in the same location of Sileye-3 detector. Polyethylene shielding
is periodically interposed in front of the detectors to evaluate the effectiveness of shielding on
the nuclear component of the cosmic radiation. In this work we will discuss results obtained
with active and passive detectors in various location of the station during expedition 12 to 16.