Variation of dose quantities from CR-39 detectors onboard ISS Russian segment: etching and angular correction

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We performed the radiation monitoring experiment for passive radiation dosimeters as a part of the BRADOS experiment on the International Space Station (ISS) in 2004. Five dosimeters boxes with passive detectors from IMBP and NIRS were exposed on the Russian segment of the ISS during the period of the BRADOS II space experiment sessions from Jan. 29 to Oct. 24 in 2004. The dosimeter package consists of TLDs, Glass detectors and CR-39 detectors with some Al targets. In this study, we employed CR-39 detector named HARTZLAS TD-1 and verified the variation of LET spectra by several bulk etch conditions (multi-step) from 5 - 53 μm at the same position of a TD-1 detector. All etch pit was traced at each step of etching time. We also verified correction methods of incident angle dependence on track registration sensitivity of TD-1 detector. The preliminary results on variation of dose quantities from CR-39 detector will be presented.