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Quasistable radiation belt in the slot region

Johannes Labrenz (1), Sönke Burmeister (1), Thomas Berger (2), Günther Reitz (2), Bernd Heber (1), and Rudolf Beaujean (1)

(1) CAU Kiel, Germany, (2) DLR, Cologne, Germany

MATROSHKA is an ESA experiment under leadership of DLR Cologne.
The radiation exposure inside a human phantom is measured by active and passive detectors. The DOSimetry TELescope (DOSTEL) was built at CAU Kiel in cooperation with DLR Cologne; it consists of two Si-semiconductor detectors forming a telescope.
Count rates as well as energy deposit spectra are measured by this instrument. MATROSHKA is on board ISS since January 2004. The active instruments were operating during the first mission phase (MTR1) where the phantom was mounted outside the ISS from February 2004 to august 2005. In 2008 the active instruments were operating again in another mission phase (MTR2b). During (MTR2b) MATROSHKA was mounted inside the Service Module of the ISS. The DOSTEL measurements shows the expected transits through the inner radiation belt (SAA) over the South Atlantic and transits through the outer radiation belt at the highest geomagnetic latitudes. In Sept. and Oct. 2004 an additional radiation belt in the so called slot region appeared. In this work the measurements of this quasi stable slot region belt will be presented and compared to results of other experiments.