

## On two-dimensional distribution of trapped protons from solar cell degradation of the Akebono satellite

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We have been studying on L-shell distribution of energetic ( $>10$  MeV) protons from solar cell degradation of Akebono satellite orbiting in the inner magnetosphere. We obtained more compact distribution of the trapped protons than given by the AP8 and AP9 models. In our previous study (Miyake et al., 2014; 2015), we assumed that proton flux varies along the field line in the same rate as in the AP8 model. If the flux is more confined around the equator, the L-shell distribution may be possibly widen and the difference from the previous models can be smaller. Recent observation of the Van Allen probe has showed that quite anisotropic distribution of pitch angle which leads to spatial distribution confined near the equator (Selesnick et al., 2014). Thus, we introduce some different variation along the field line and seek the best-fit to the observed degradation of solar cells.

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