

Reply to Referee's Comment:

The question seems to revolve around 2 areas of confusion.

First, the use of the subscript "eq" to indicate that it is the equatorial pressure. The purpose was to communicate that it is at the equator that we actually calculate the pressure anisotropy. We agree, however, that this may be confusing so we agree to leave it out.

Second the definition of the symbols f and F in the equations. We suggest that to try to avoid this confusion, we suggest the following:

The pressure anisotropy shown in Figure 3 is defined as

$$A = \frac{P_{\perp} - P_{\parallel}}{P_{\perp} + P_{\parallel}}$$

with

$$\begin{Bmatrix} P_{\perp} \\ P_{\parallel} \end{Bmatrix} = \int_{-1}^{+1} d \cos \alpha \begin{Bmatrix} \sin^2 \alpha \\ 2 \cos^2 \alpha \end{Bmatrix} \left(\int_0^{\infty} dE \sqrt{\frac{2E}{m}} F(E, n, \cos \alpha) \right)$$

where α is the ion pitch angle, E is the ion energy, n is the ion density, m is the ion mass and $F(E, n, \cos \alpha)$ is the number flux per unit area, energy, time, steradian. This definition is derived from Braginskii (1965) and is consistent with previous formulations, e.g., Lui et al. (1987).