

This directory has the materials used for the following paper

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Title :

**Statistical study of non-adiabatic energization and transport in Kelvin-Helmholtz vortices at Mercury**

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Directory : Field

KH filed in the unnormalized value are stored.

File contains following values :

x[m], y[m], t[s], Bx[T], By[T], Bz[T], Ex[V/m], Ey[V/m], Ez[V/m], Vx[m/s], Vy[m/s], Vz[m/s], density [cc]

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Directory : Particle

particle data for each species, each region (magnetosheath, magnetosphere) at given time are stored.

The file number is corresponding to the those of field data.

tag number of particle, x, y, mu, bz, x0, y0, initial\_mu, phase angle, Ex, Ey, pitch angle

list\_los\_msp : particles picked up in the magnetosphere region

list\_los\_tra : particles picked up in the transient region (= magnetopause)

list\_los\_sh : particles picked up in the magnetosheath region

2 files starting with "pcodem" are used to trace a particle. 2152 is for the case of northward IMF, dawn side, and 152 is for the case of northward IMF, dusk side.