



MGS observations of the magnetic field draping around Mars

Mathew Beharrell and Jim Wild

Space Plasma and Radio Science Group, Physics, Lancaster University, UK. (m.bharrell@lancaster.ac.uk)

The MGS-MAG mapping-phase data set, comprising 7 years (4 Martian Solar years) of measurements, is utilized to give a statistical picture of the draping of the IMF around Mars. A notable change in the distribution of draping directions is observed during winter, when the highly draped and mass-loaded magnetic field is often directed anti-sunward, in contrast to the predominant sunward direction during other seasons. In addition to the seasonal variation, the dependence on MTC (i.e. sub-solar longitude) is also investigated.