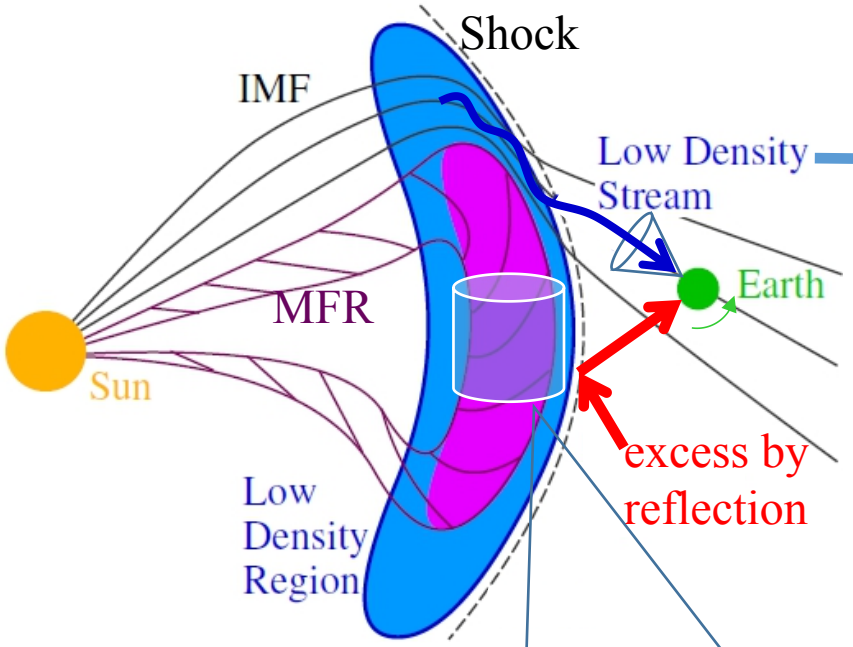
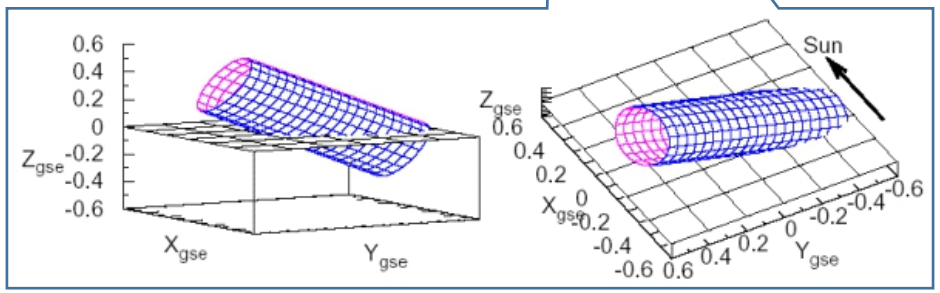
Network observation of high-energy CR with GMDN

Monitoring all sky with multi directional detectors. ⇨ Capable of observing hourly fluctuation of CR intensity and anisotropy (= CR flow).

→ study of { **loss-cone precursor decrease**
larger scale magnetic structure of a CME

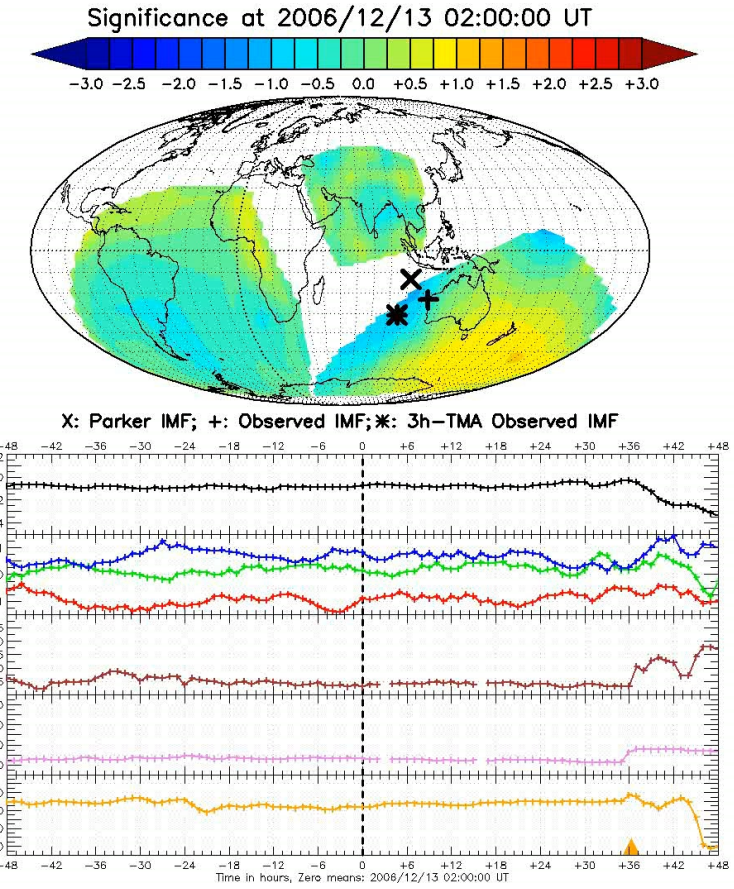
MFR approaching





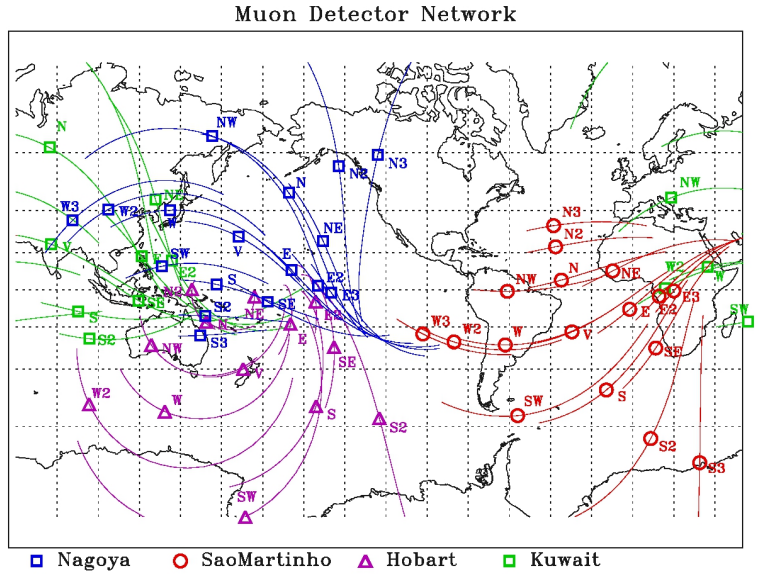
The **B×▽n** drift anisotropy allows to infer the partial MFR geometry (Halloween event in Oct. 2003, see Kuwabara+ JGR 2009).

ex. of loss-cone precursor in 2006.12.
Fụshishita+ ApJ 2010.



animation © R.R.S.Mendonça

Viewing directions of GMDN



Need : enlargement of sky coverage above North America.

→ **more detailed information**

Continuation

→ **deeper understanding and better forecasting of Space Weather.**