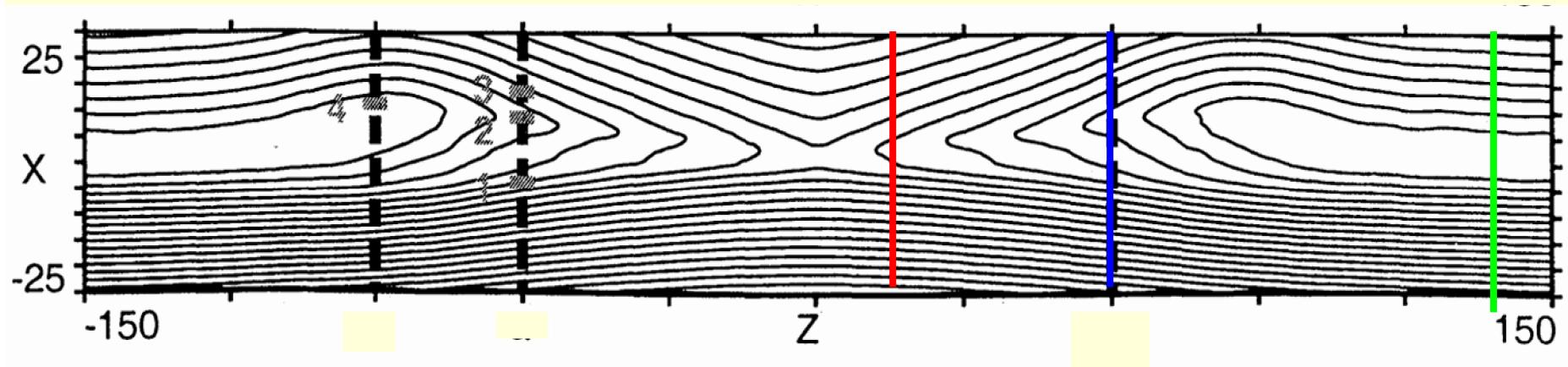


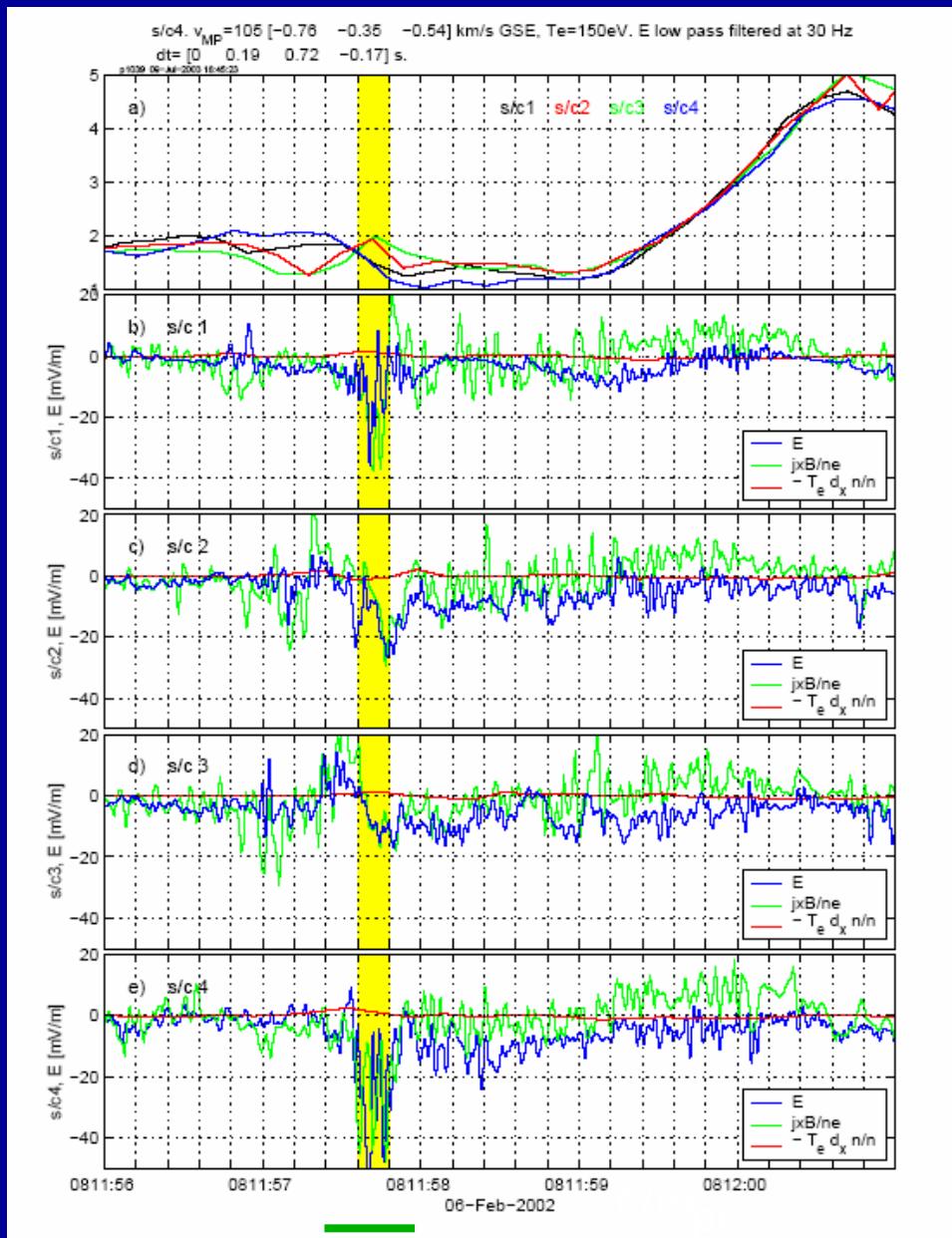
Reconnection and Finestructure at the Magnetopause

M. André

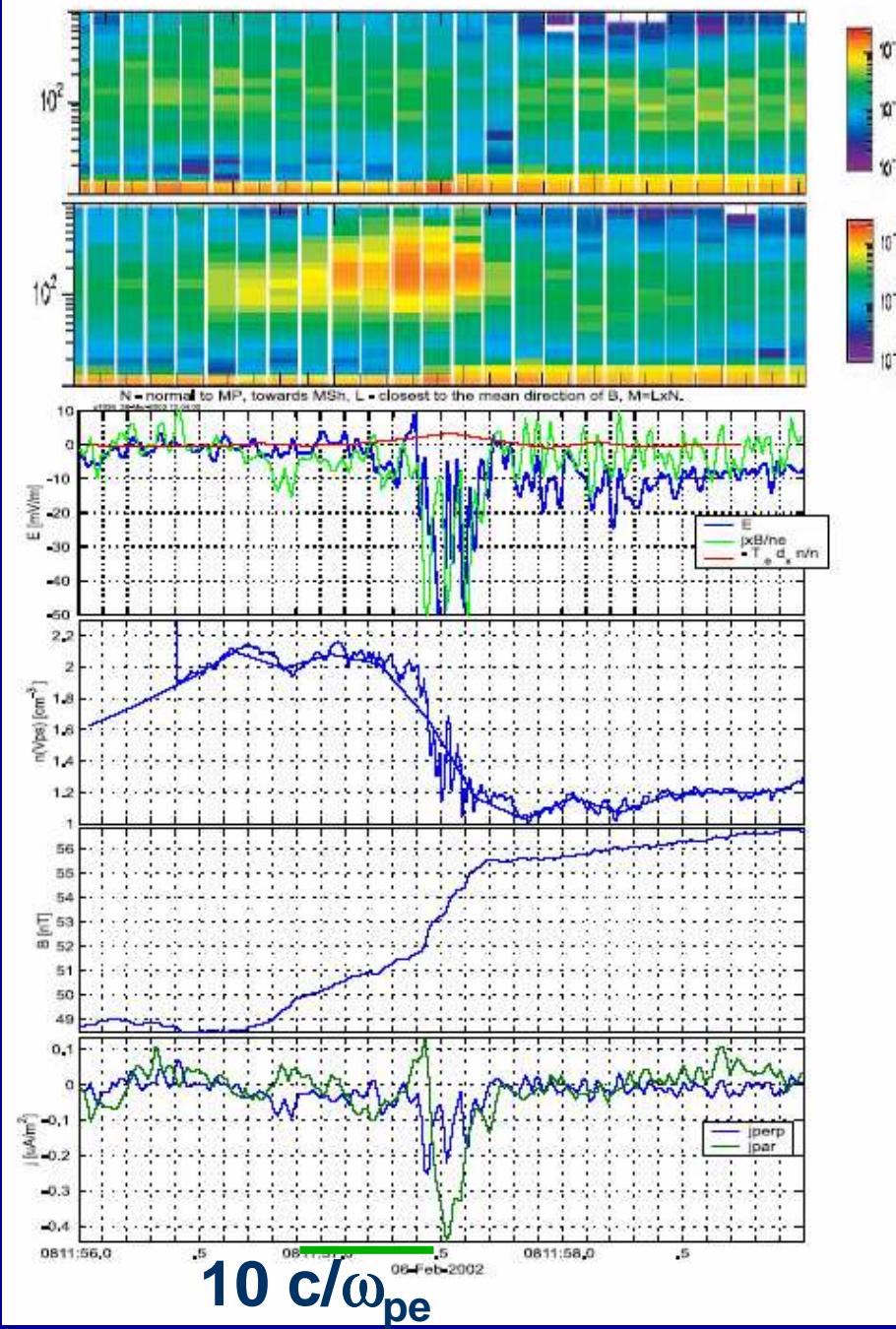
EFW, CIS, DWP, FGM, PEACE,
STAFF, WBD, WHISPER

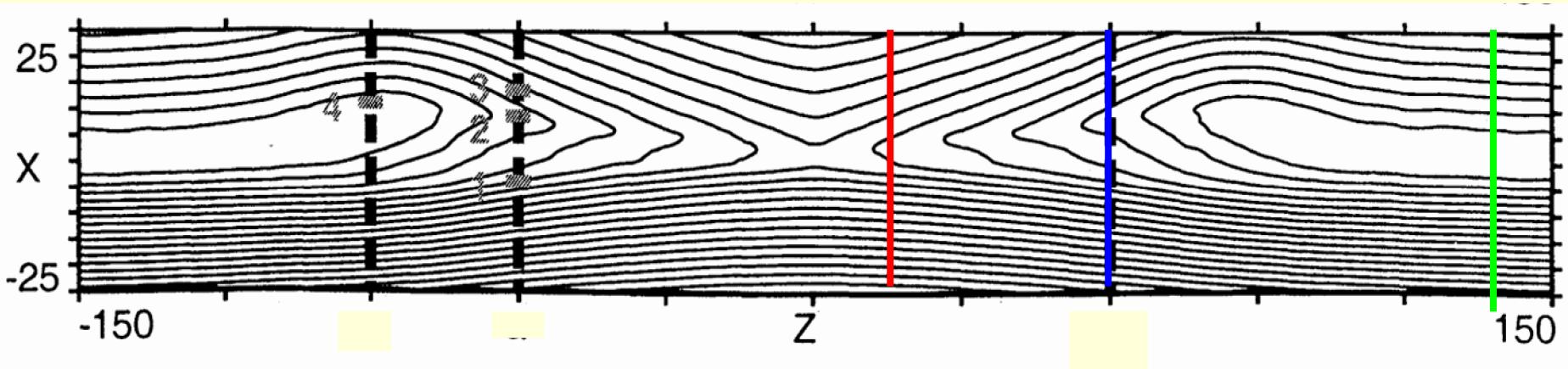


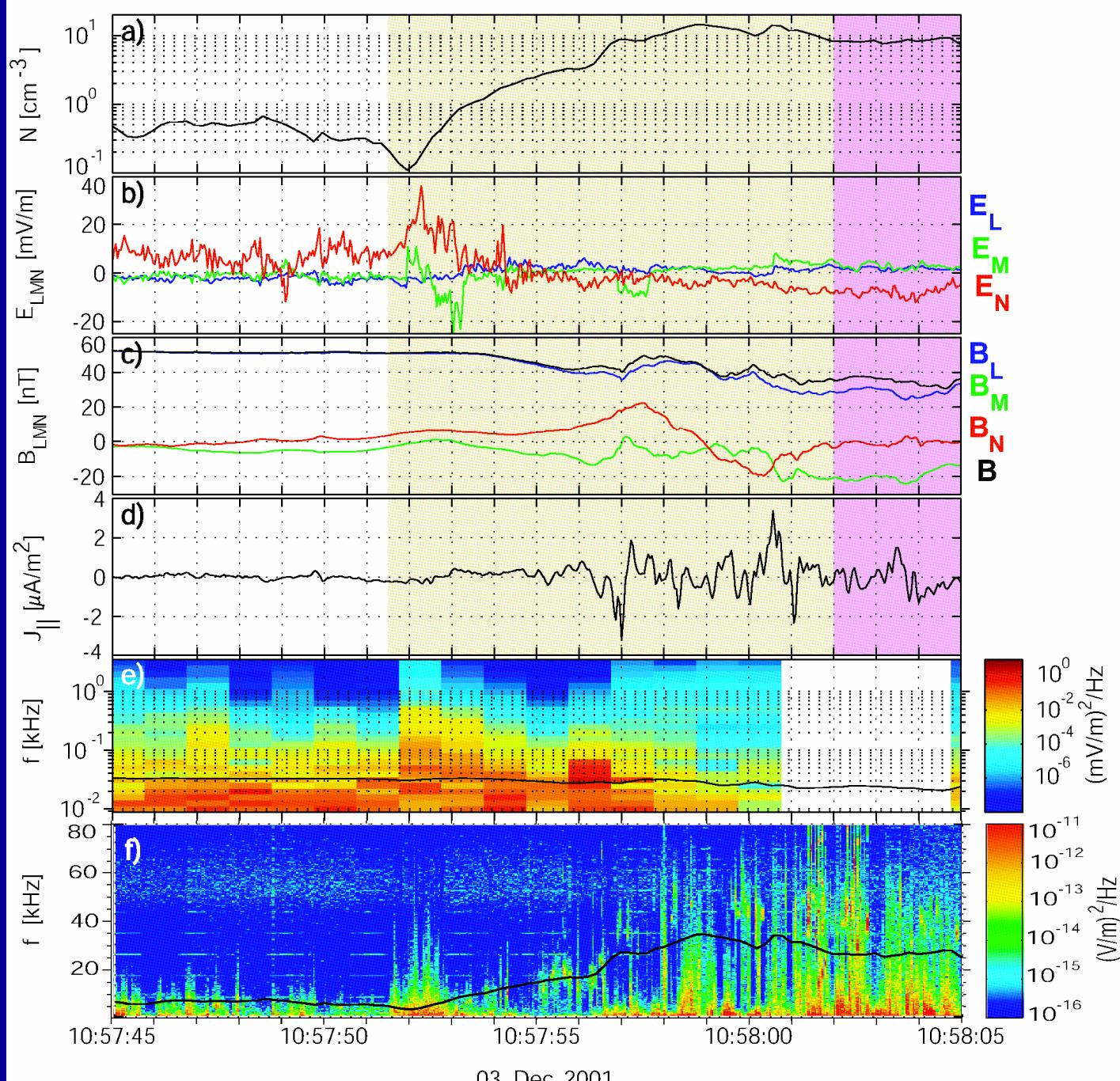
Nakamura & Scholer, JGR, 2000

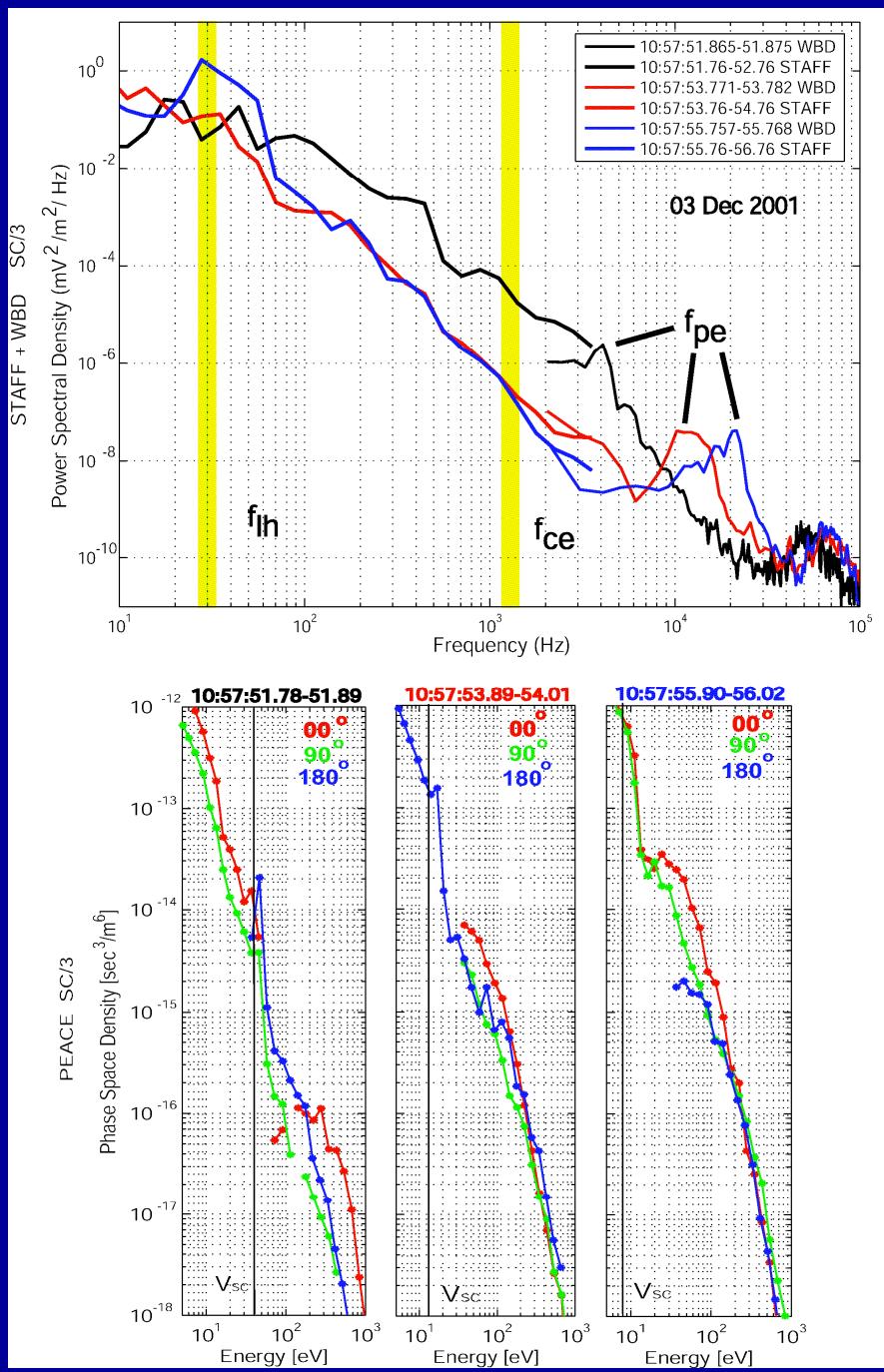


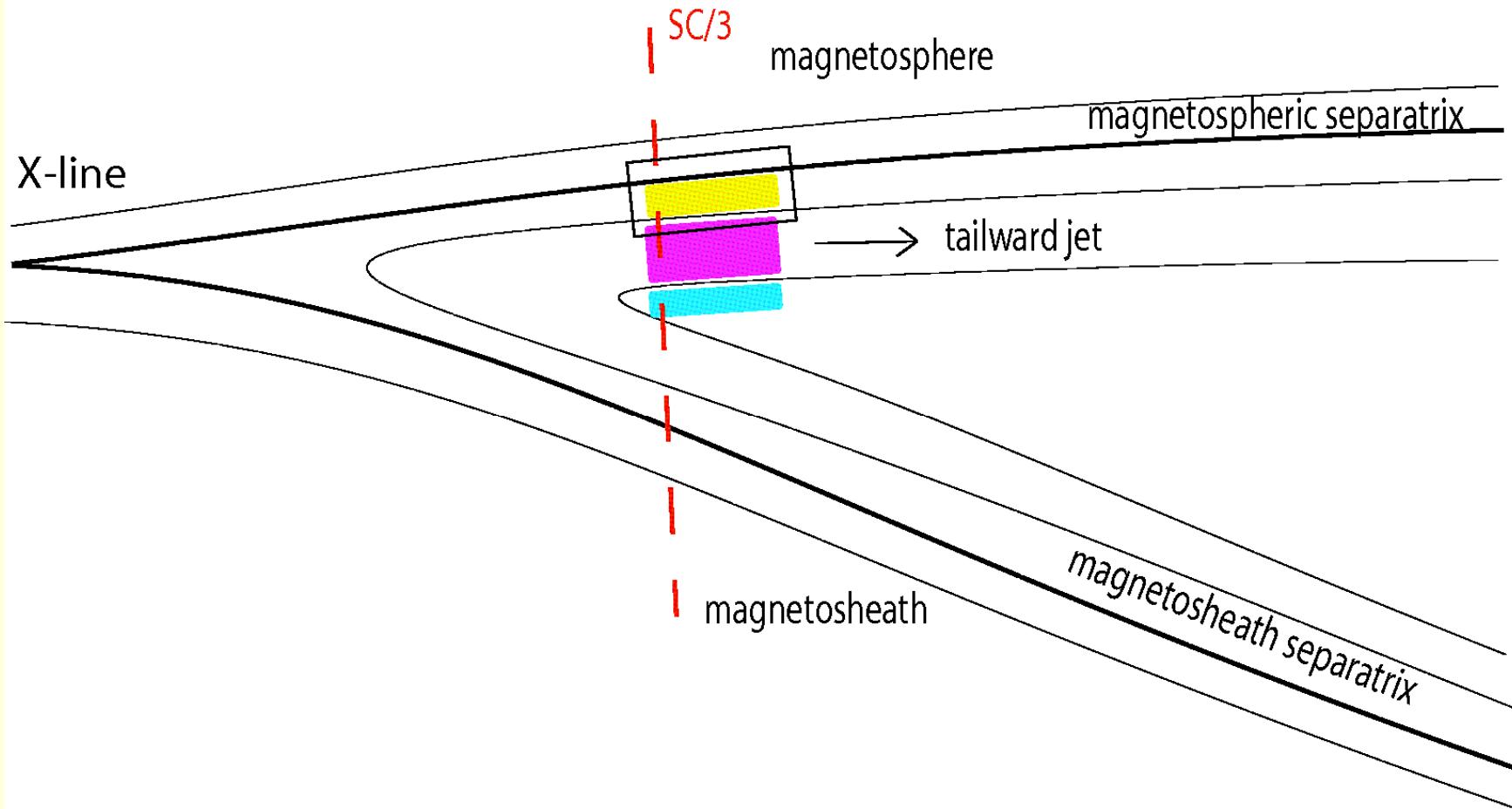
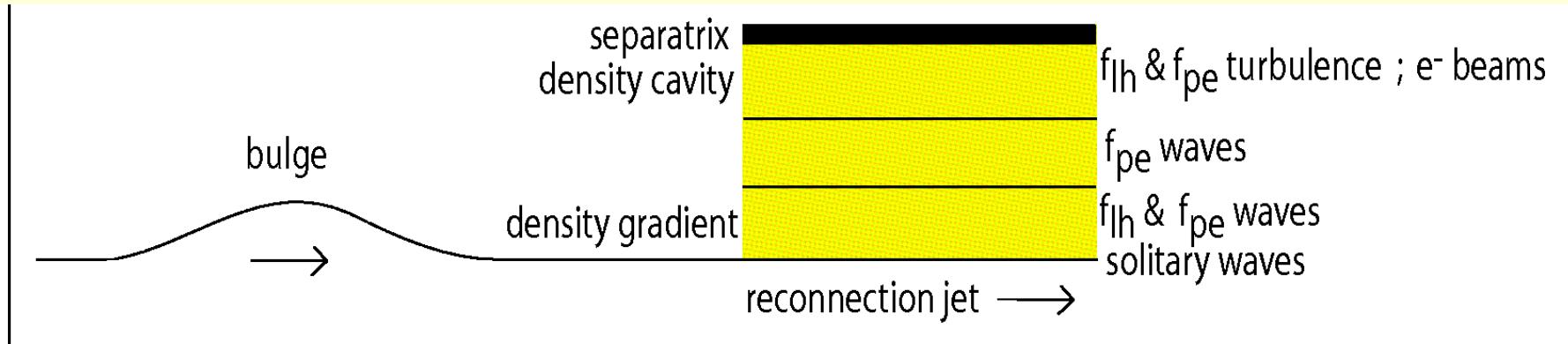
$10 c/\omega_{pe}$

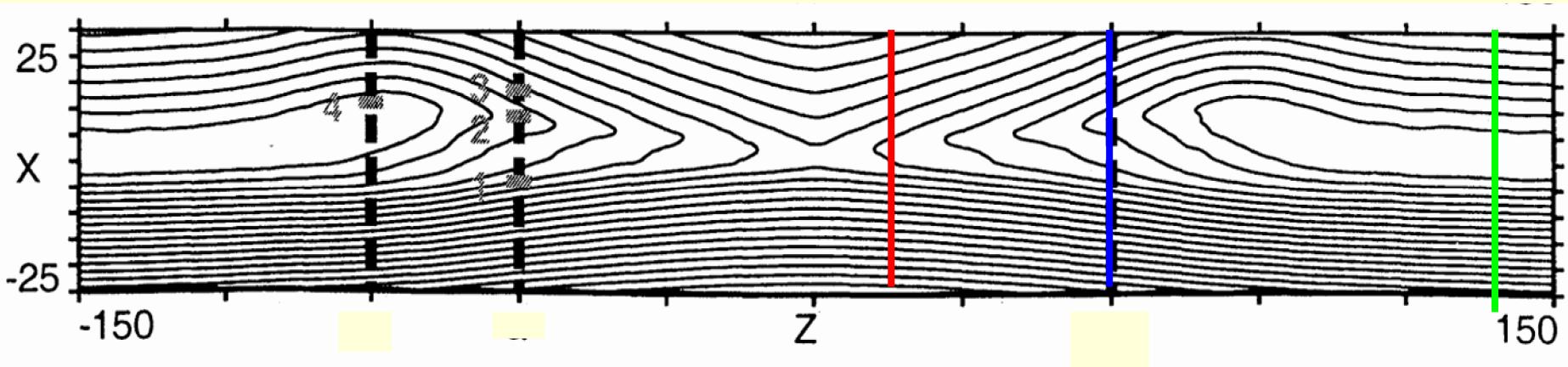


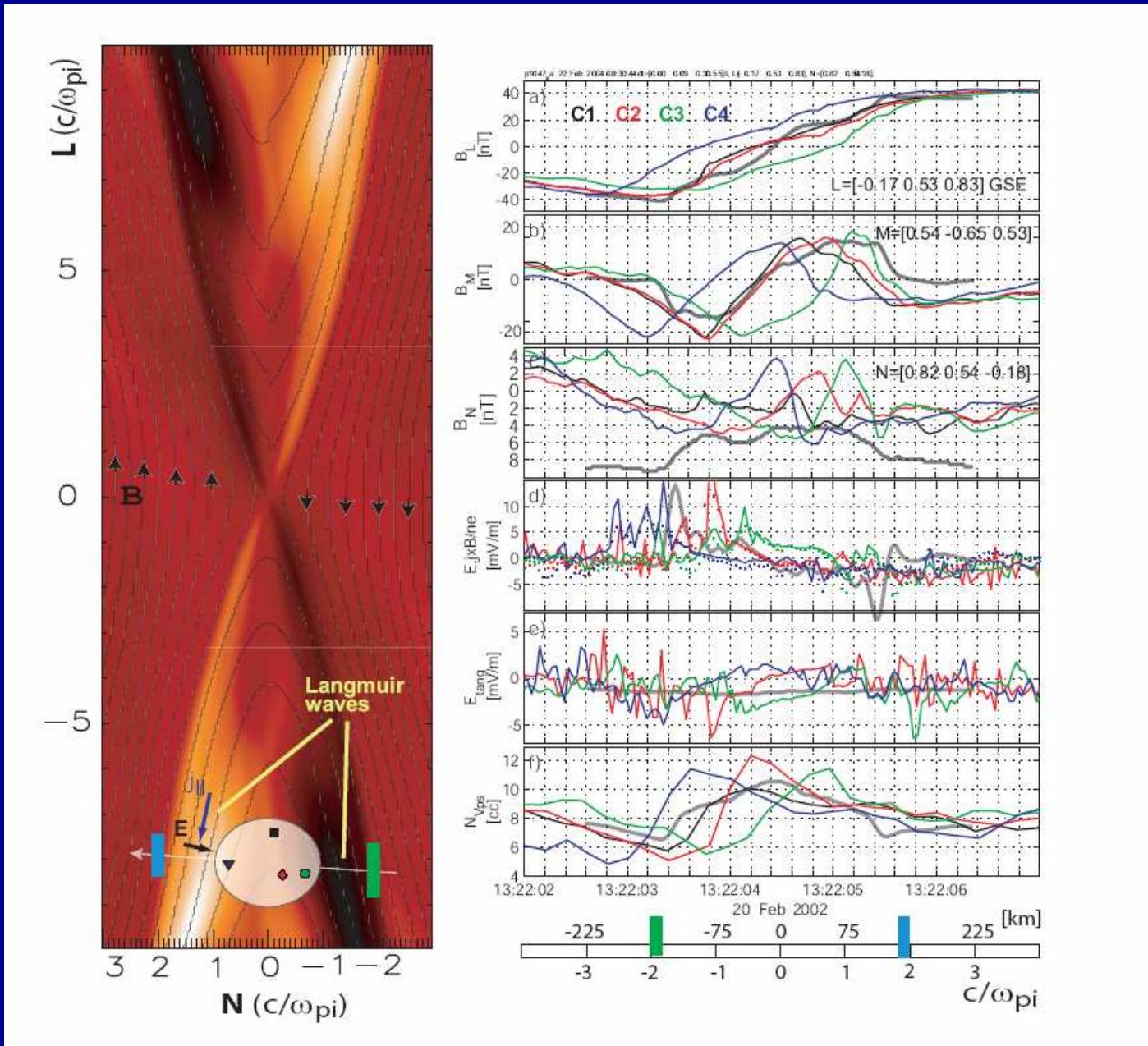


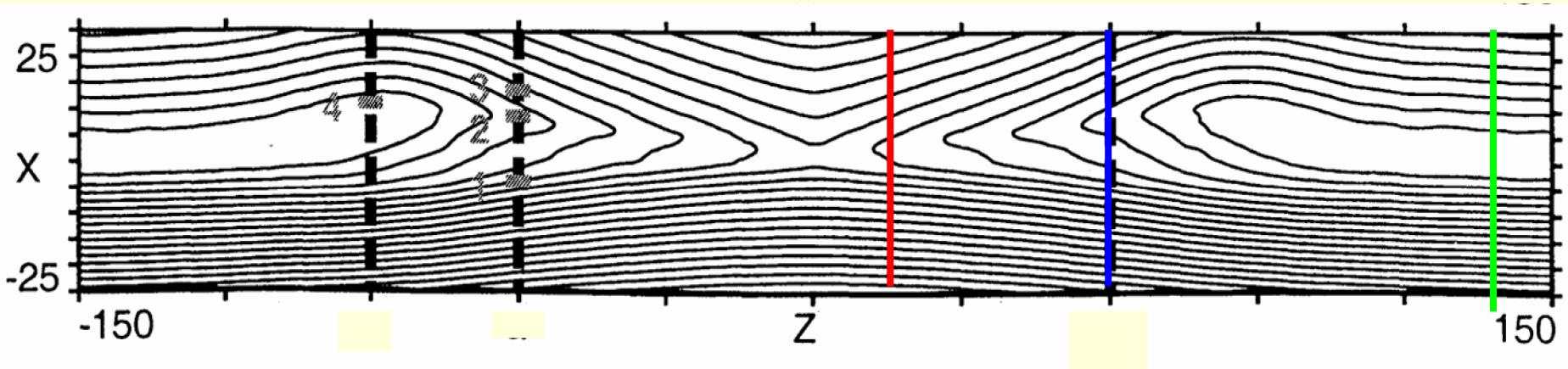


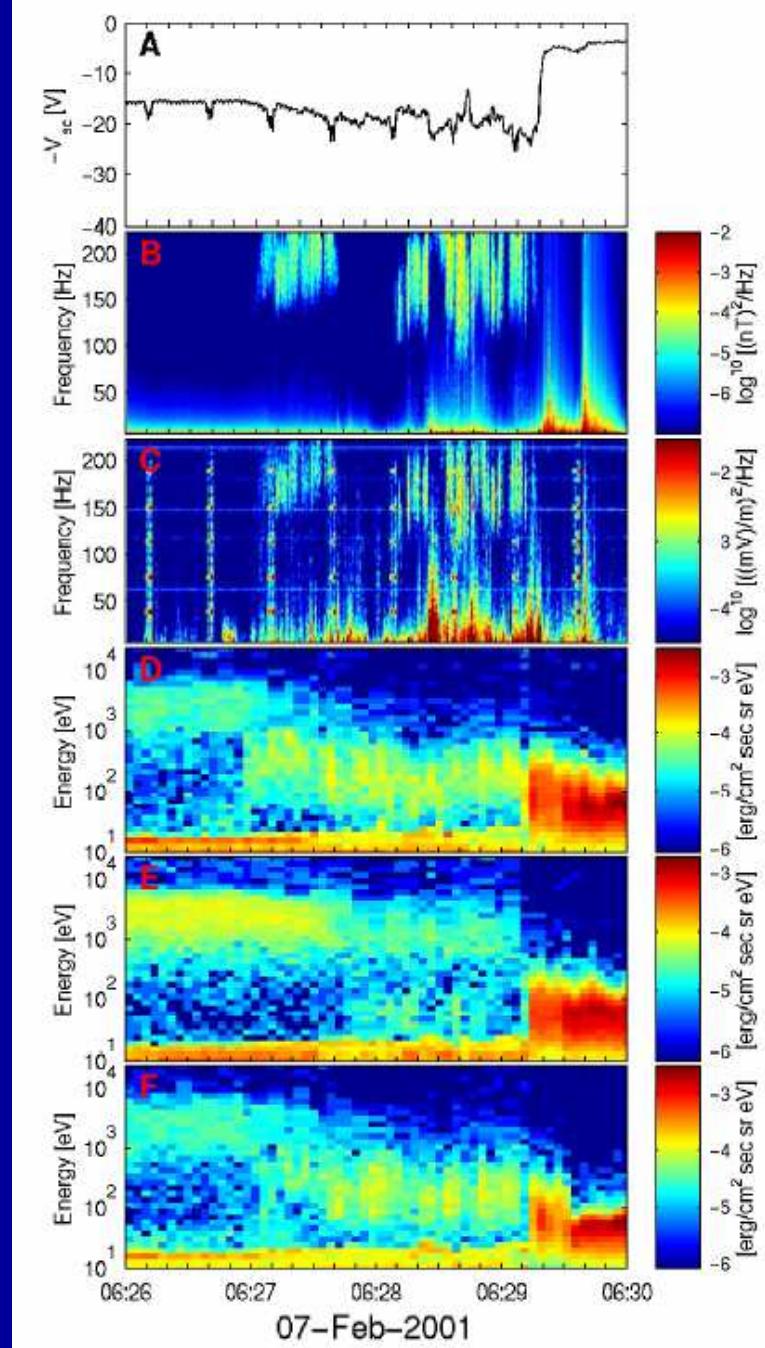


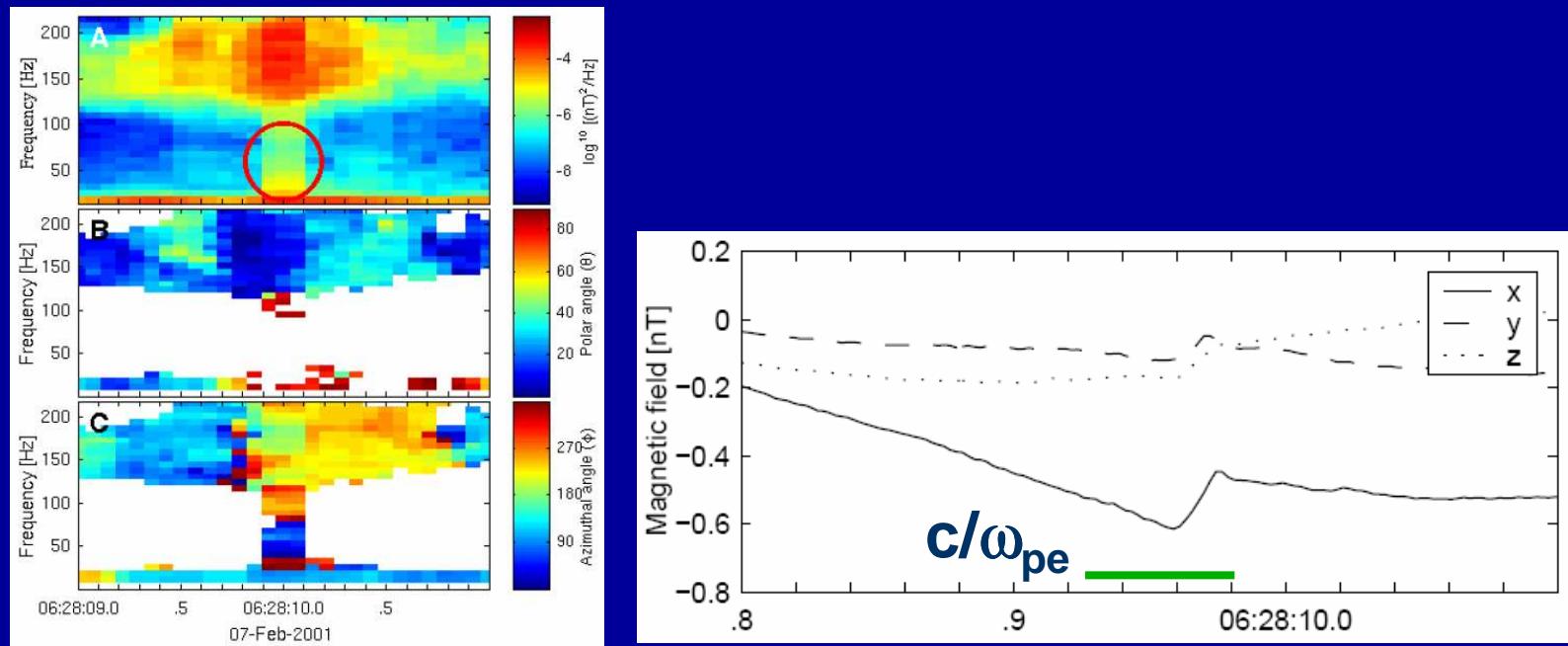
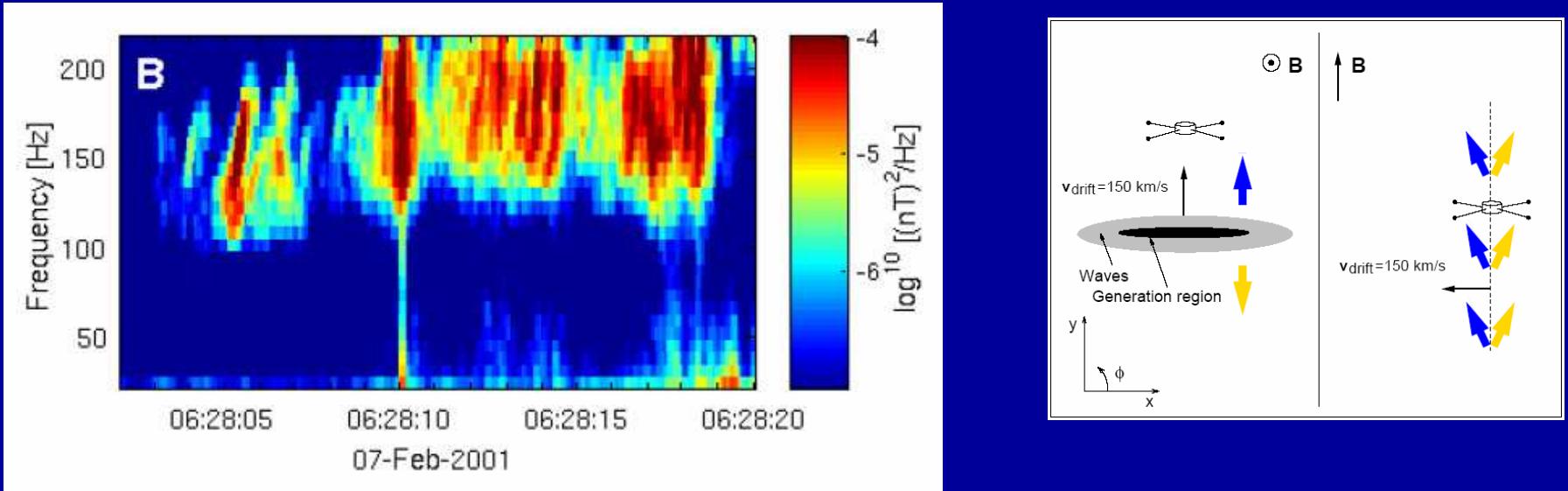












Relevant Papers and Posters

- *Near diffusion region*

Structure of the magnetic reconnection diffusion region...

Vaivads et al., Phys. Rev. Lett., 2004

- *Intermediate*

The structure of the separatrix region...

Retinò et al., submitted to GRL, 2005

- *Far away*

Thin electron-scale layers at the magnetopause

André et al., GRL, 2004

- *Inside the magnetopause*

Electron-scale structures indicating patchy reconnection...?

Stenberg et al., submitted to Ann. Geophys., 2005

Posters Today

- Canu A search for electron scale structures...
- Khotyaintsev Electric structure of an FTE...
- Stenberg Electron-scale structures....

Summary

- Separatrices (less than ion scale) far away from the diffusion region (>100 ion scales)
- Much finestructure (electron scale, Debye legth) in the separatrices also far away from diffusion region
- Intermediate scales (ion, several times electron scale) likely to extend for long distances,
small scales (electron, Debye) often locally generated
- Direct coupling to the diffusion region likely also well inside the magnetopause

