

# Observational properties of foreshock cavitons

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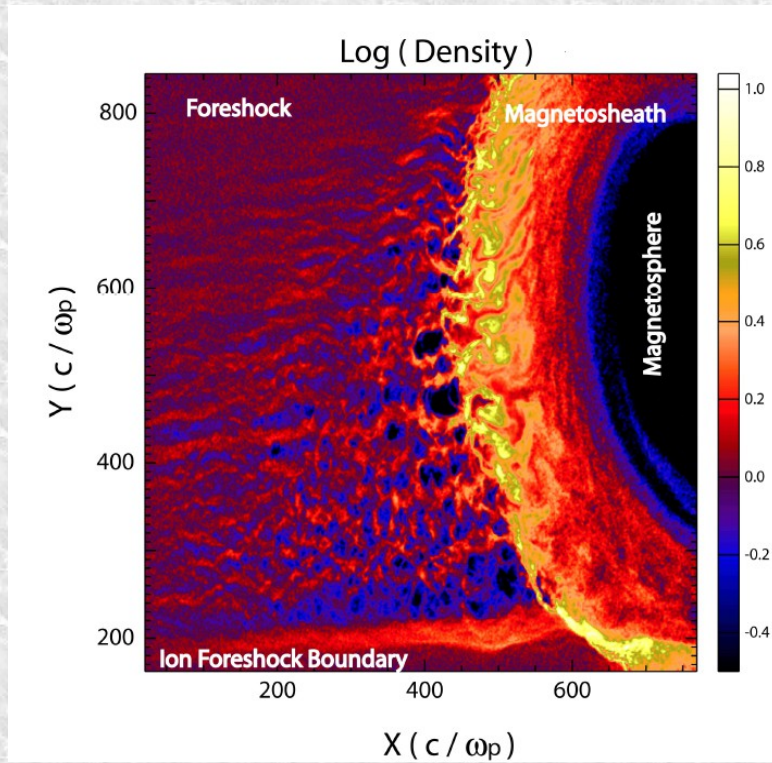
**Collaborators:**

X. Blanco-Cano, B. Lavraud, N. Omidi, C. T. Russell, I. Dandouras, K. Meziane, J.-A. Sauvaud

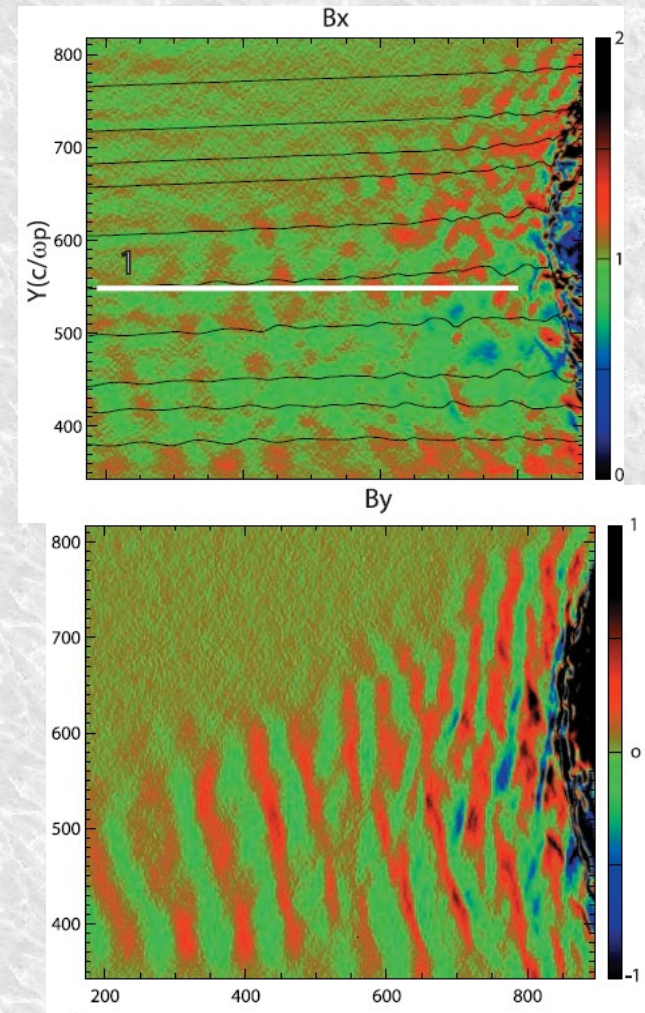
Geospace Revisited: a Cluster/MAARBLE/Van Allen Probes Conference  
Rhodes, Greece,  
15-20 September 2014

# First predictions

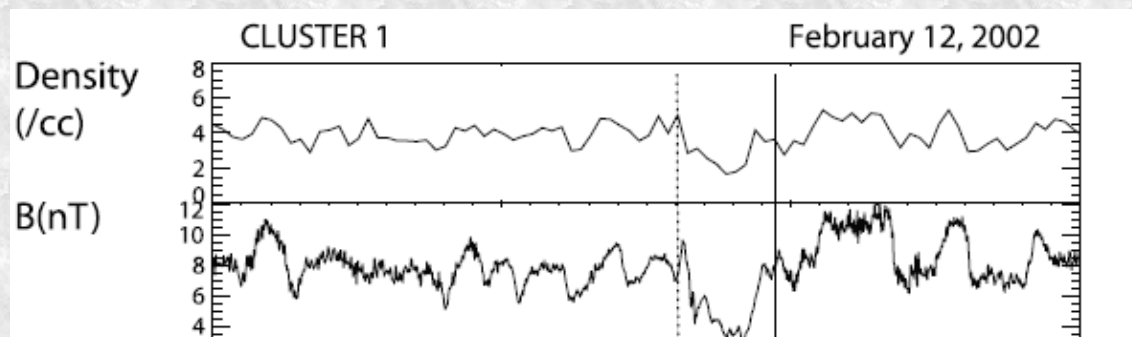
1) Omidi, 2007



2) Blanco-Cano et al., 2009

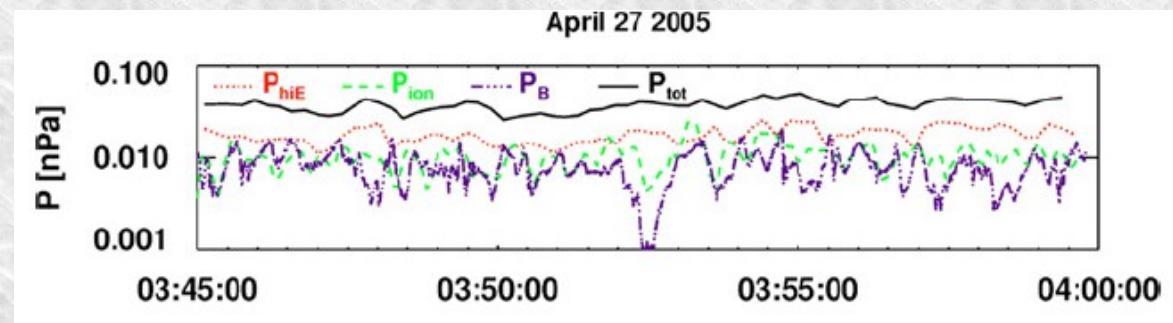
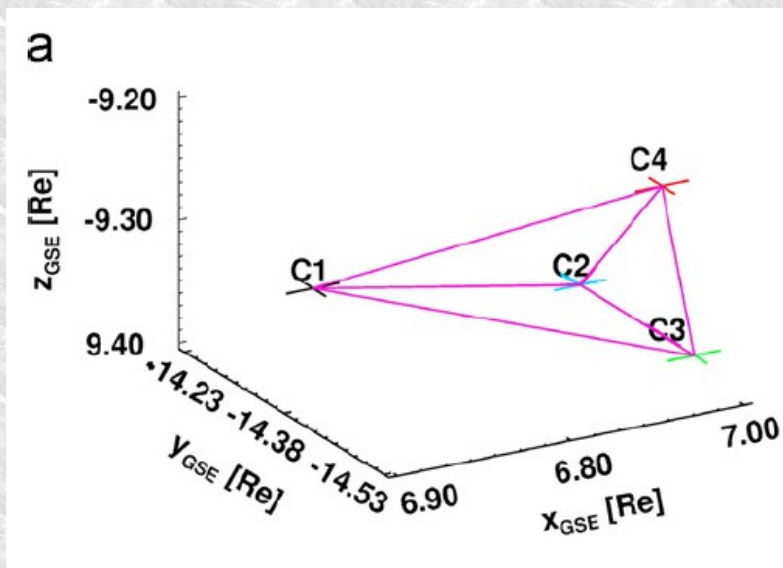
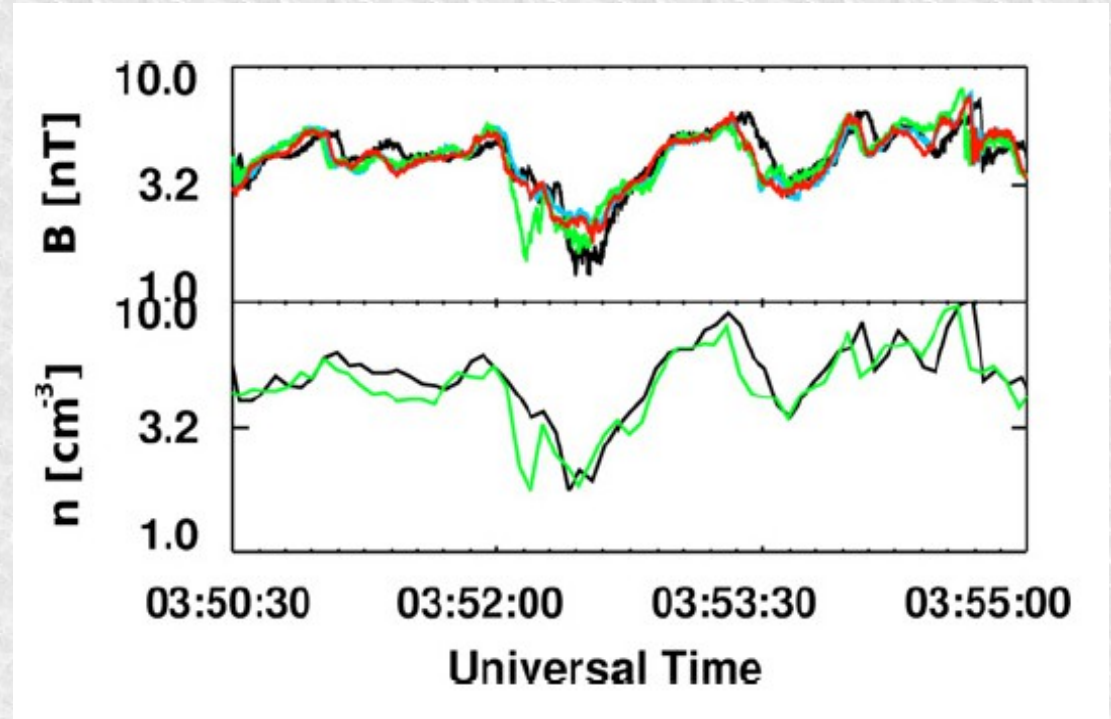
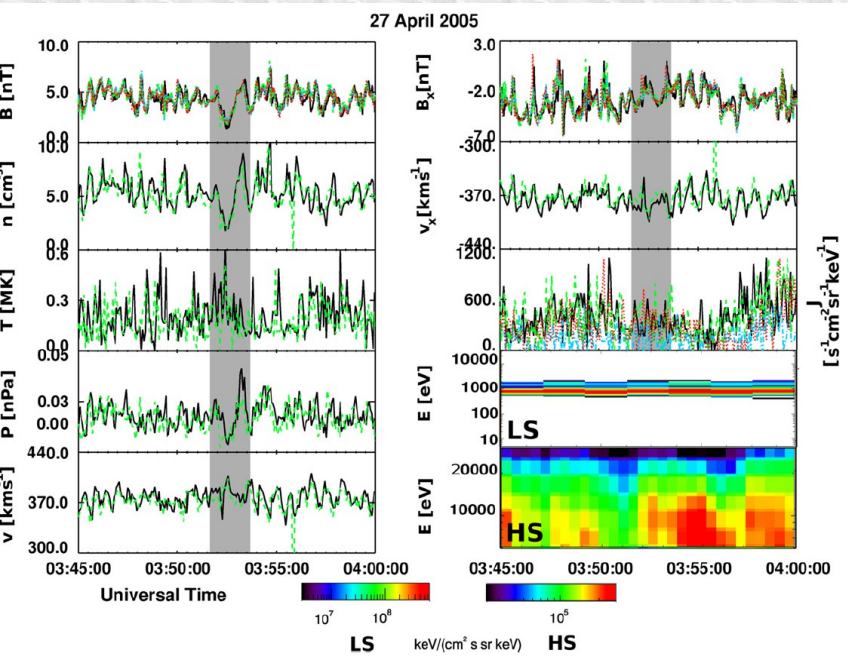


3) Blanco-Cano et al., 2011



# Multi-spacecraft observations

Kajdič et al., 2011

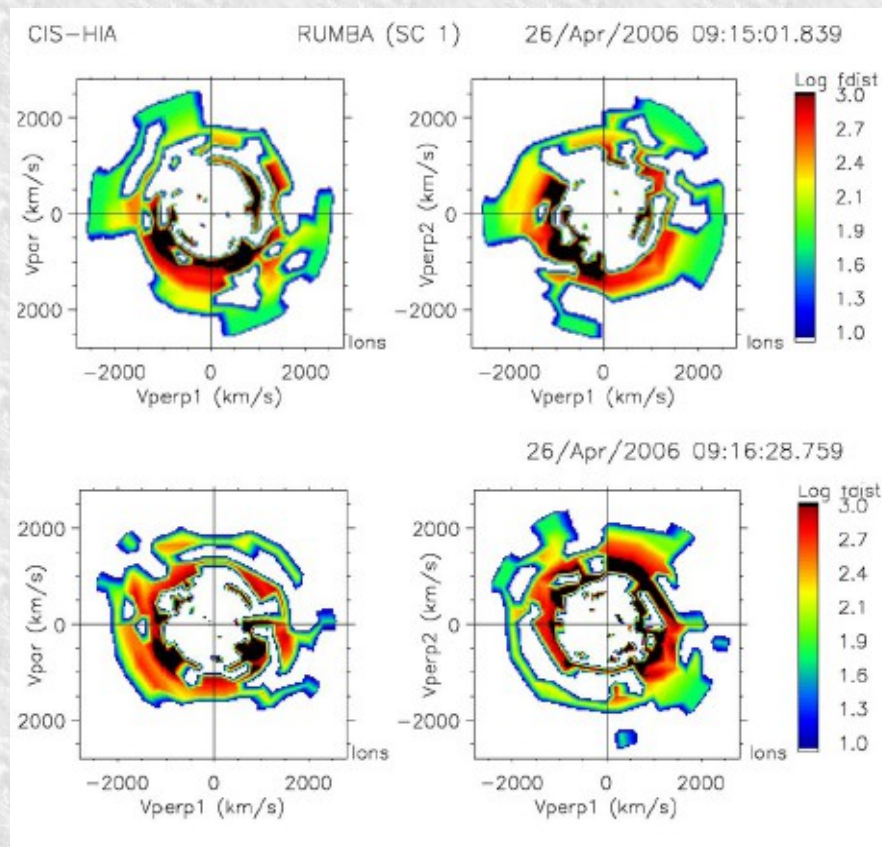
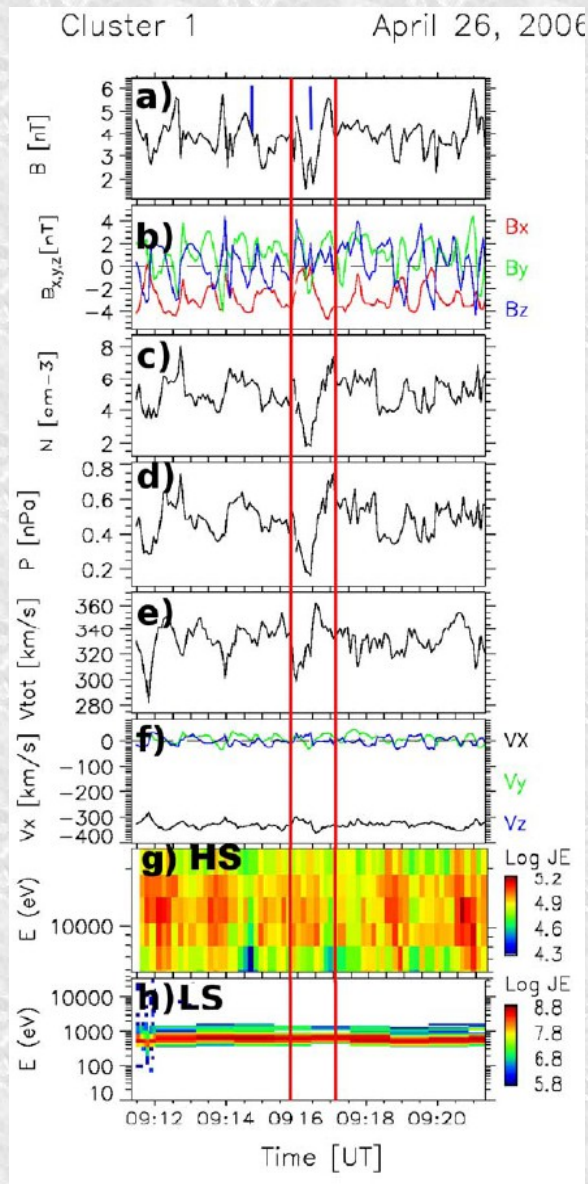




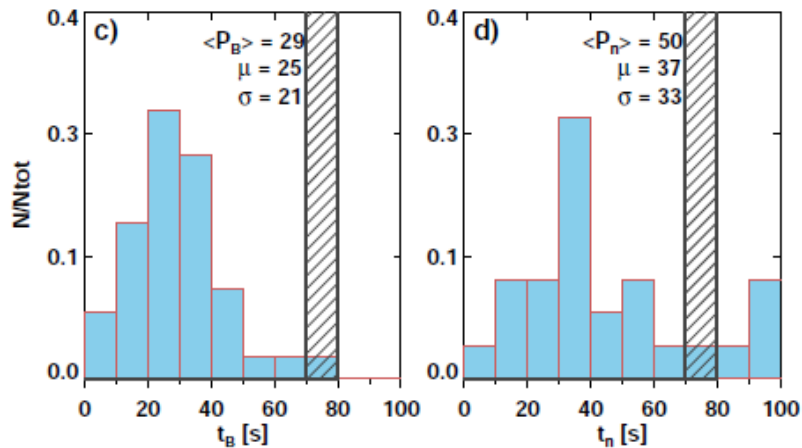
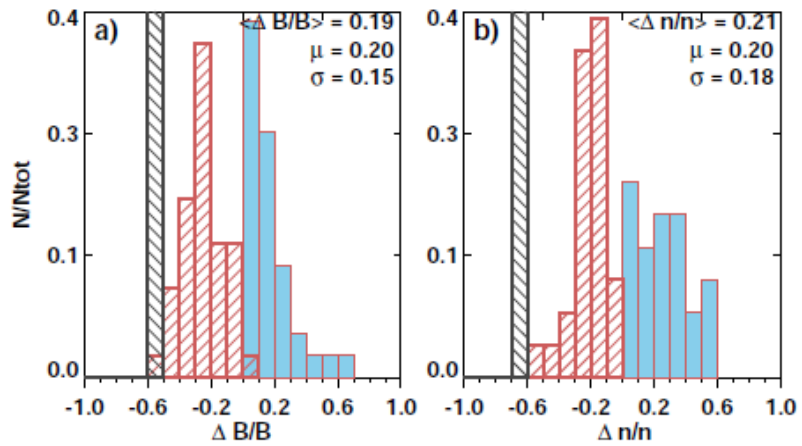
# Caviton statistics

## I. Case study

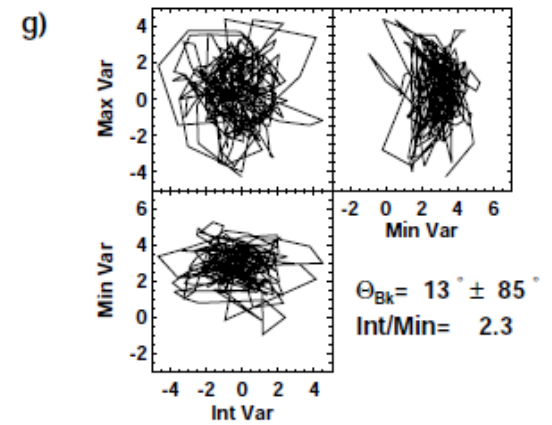
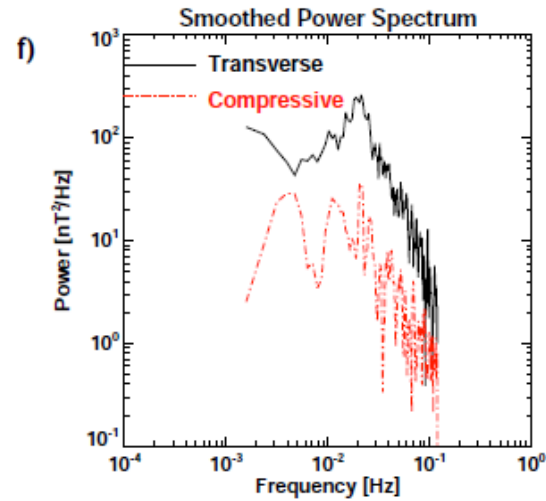
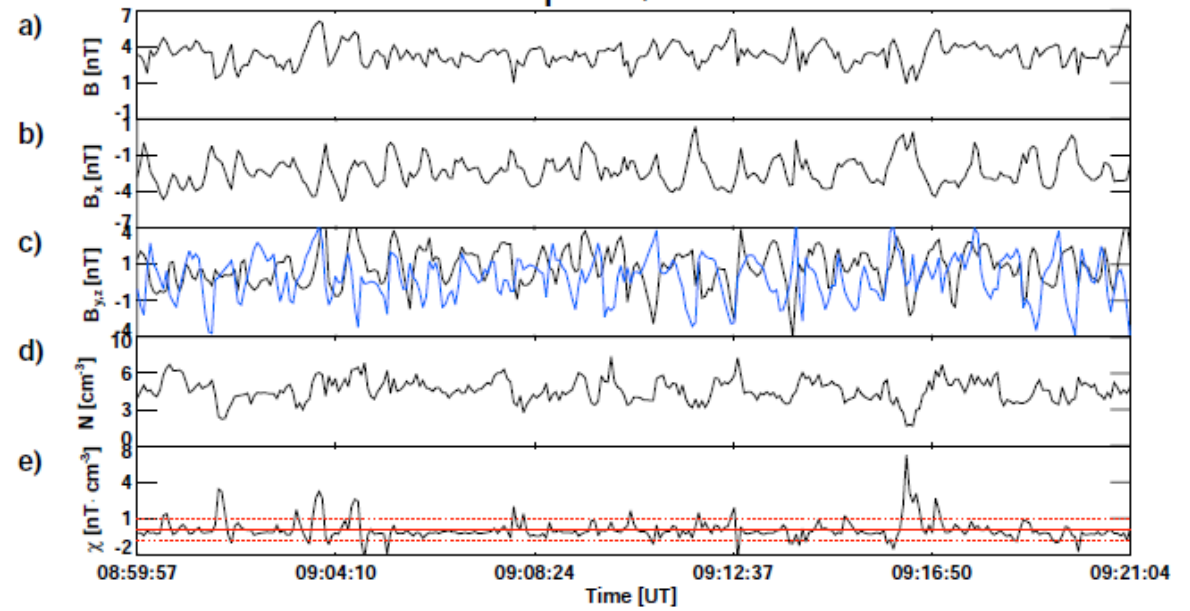
Kajdič et al., 2013



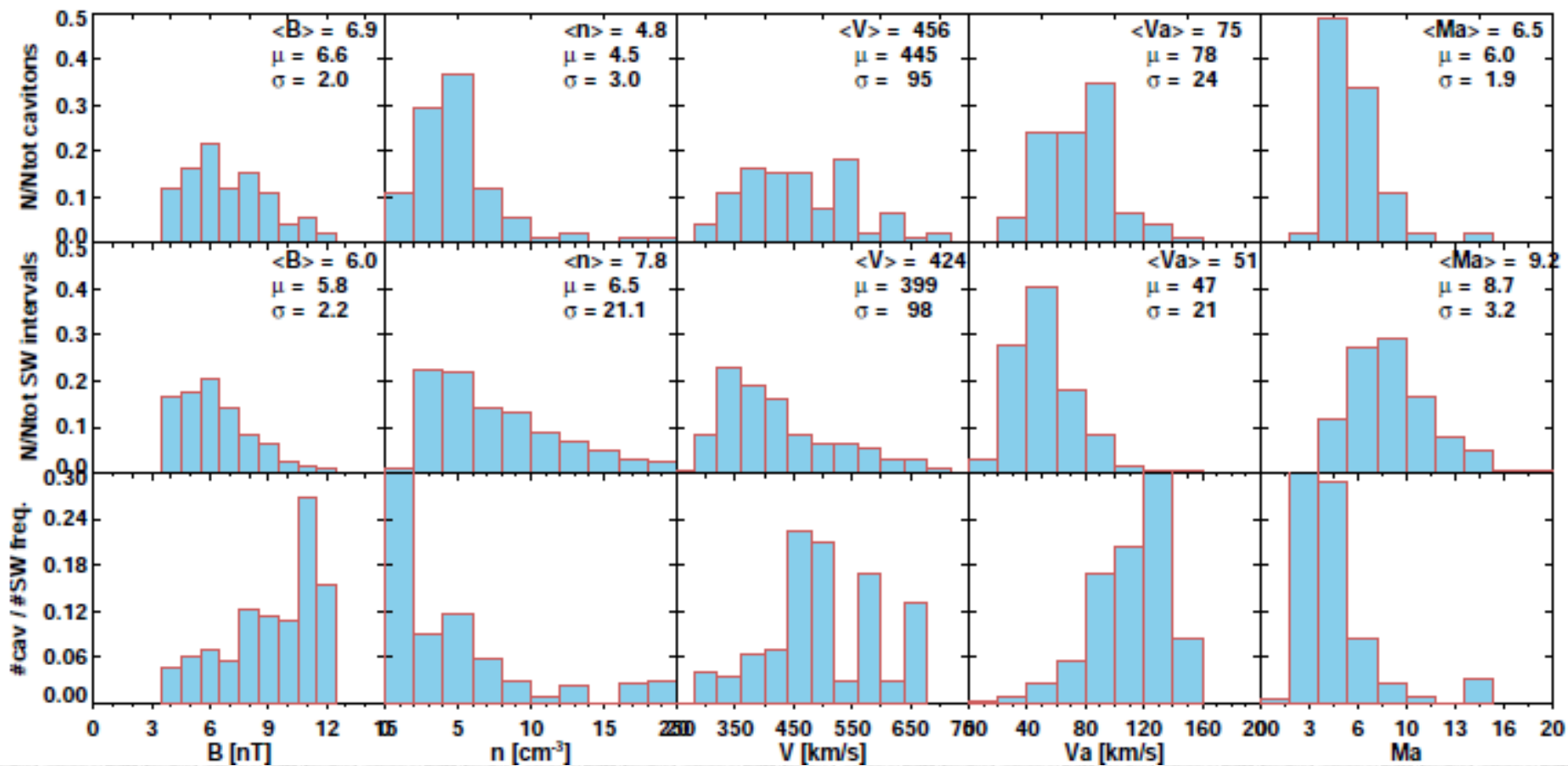
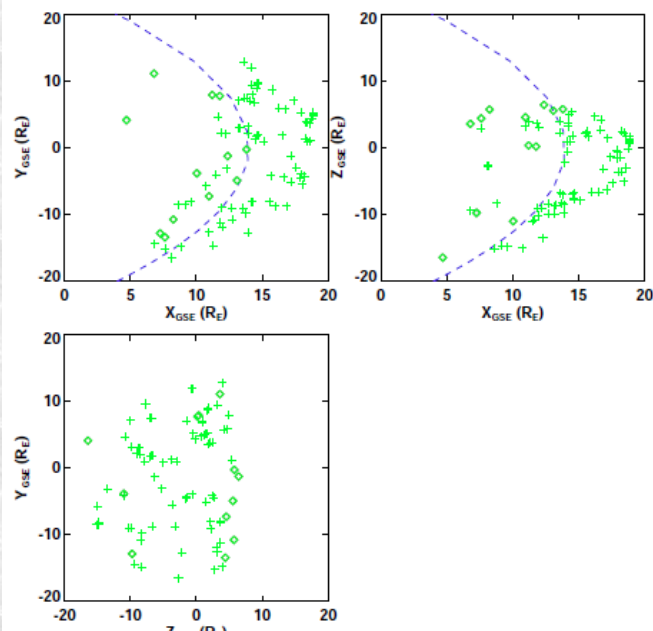
## II. Comparison with ULF waves



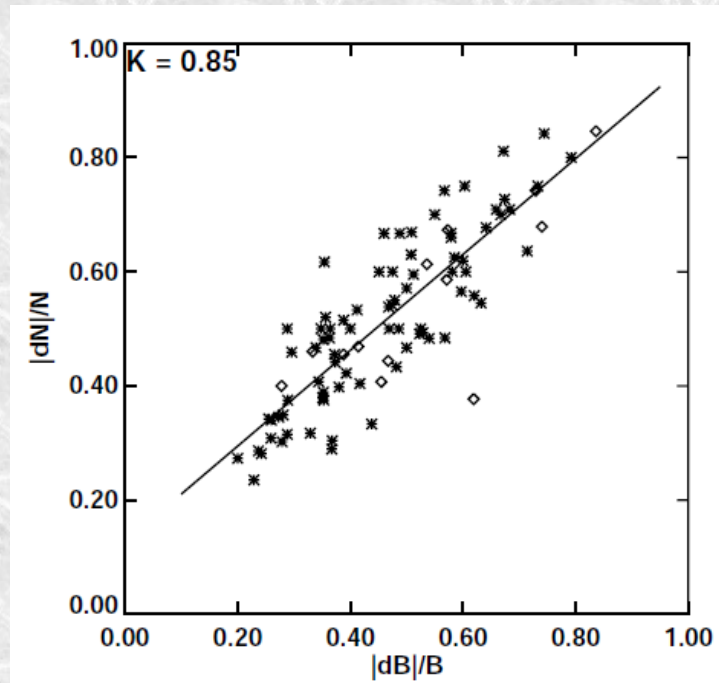
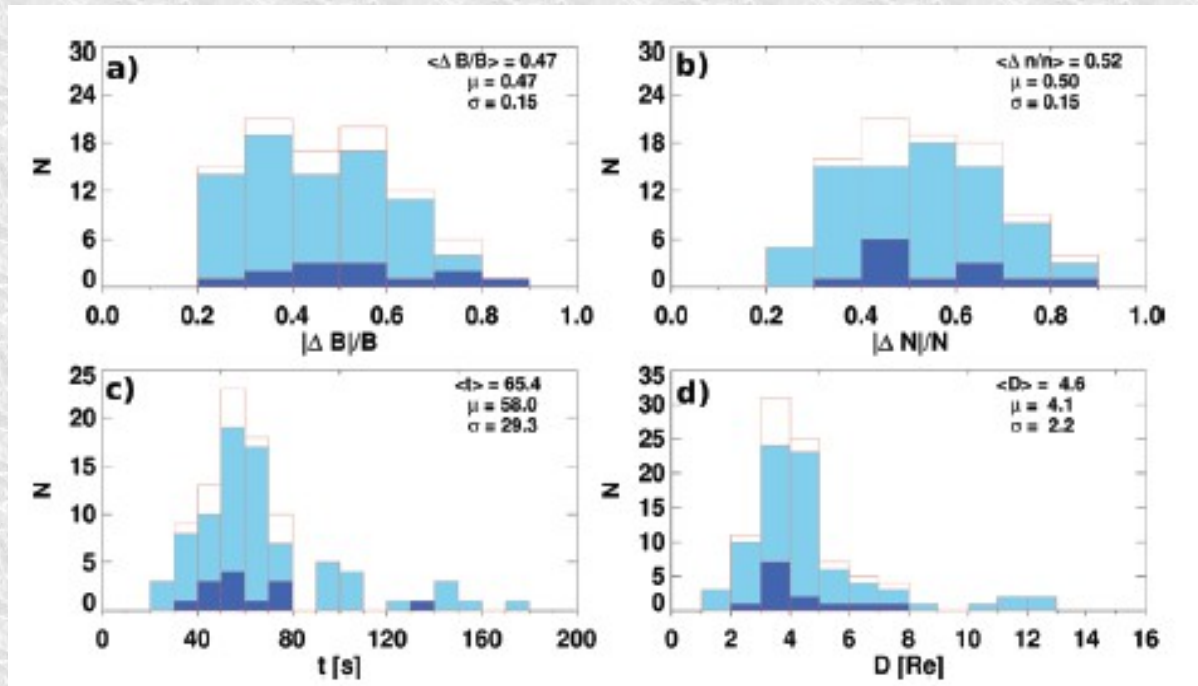
April 26, 2006



### III. SW and IMF conditions



## IV. Observational properties

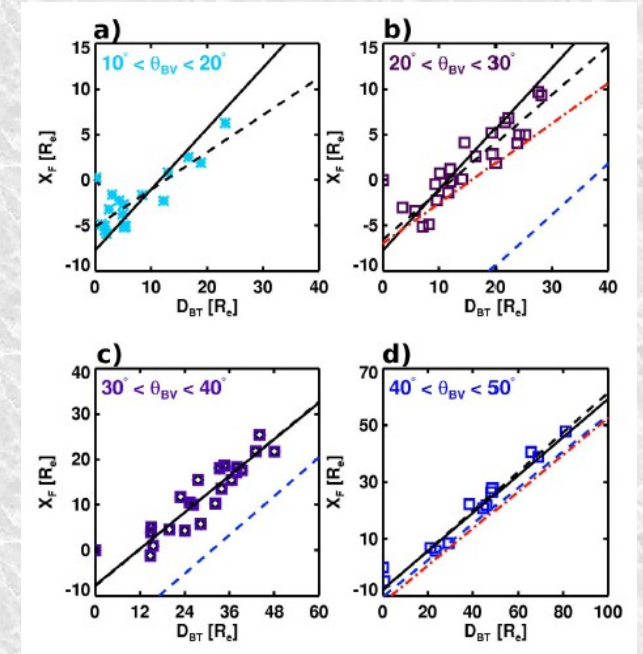
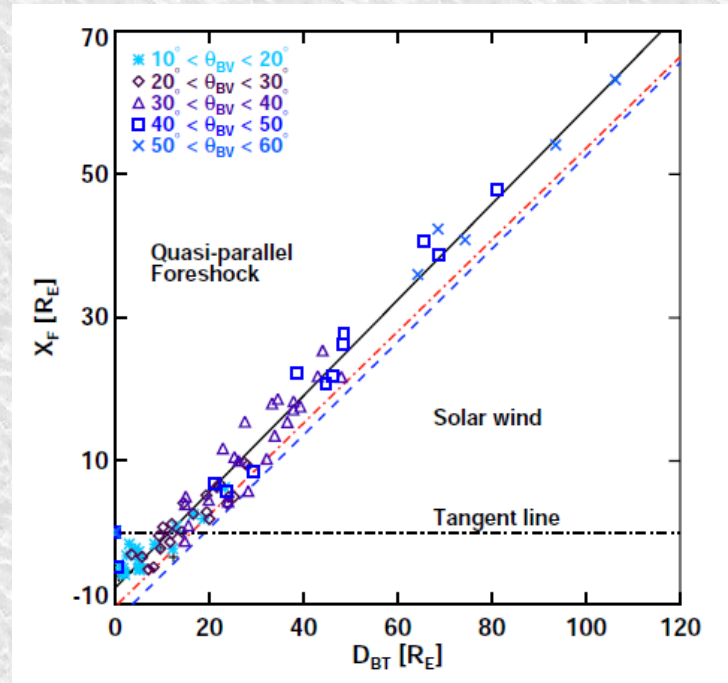
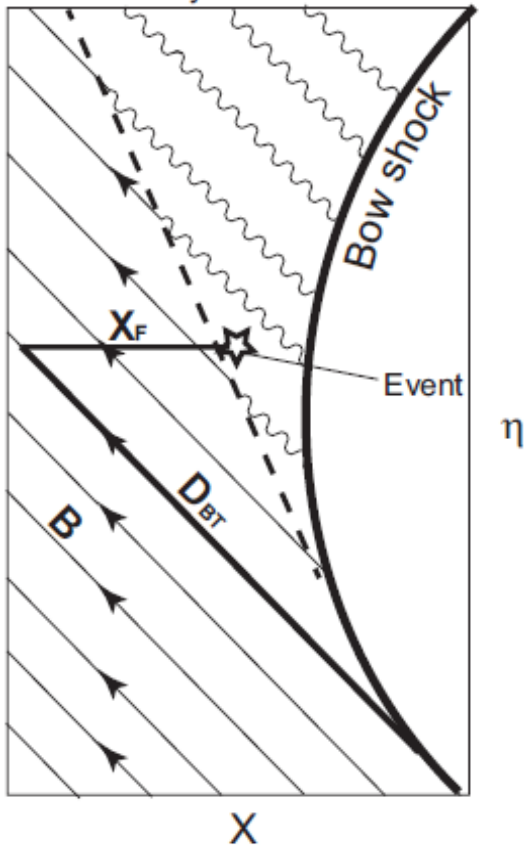




# Cavitons in SFR

## Solar foreshock coordinates

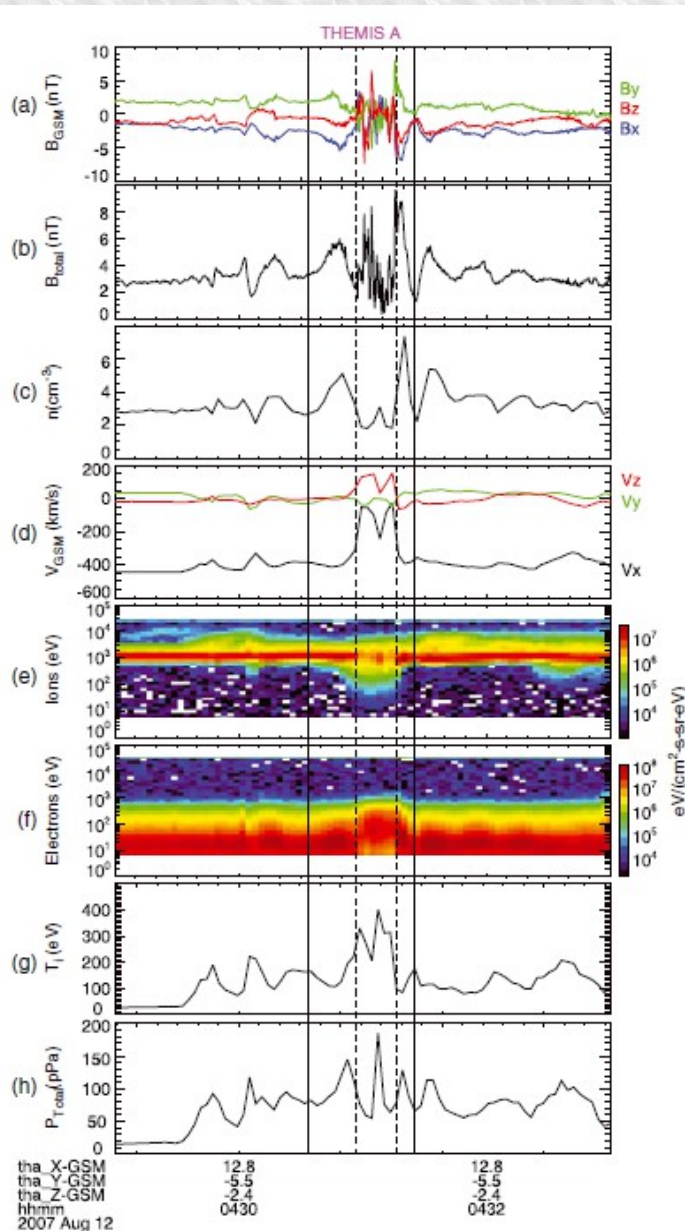
Foreshock boundary





# Interaction with bow-shock: spontaneous hot flow anomalies

Zhang et al., 2013



Omidi et al., 2013

