Basic Principles of Solar Acoustic Holography
ASTR 500

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Outline

"Seismic holography" was applied to helioseismic data from SOHO. New solar acoustic phenomena:

- ‘acoustic moats’ surrounding sunspots
- ‘acoustic condensations’ 10-20 Mm beneath active regions
- ‘acoustic glories’ surrounding complex active regions
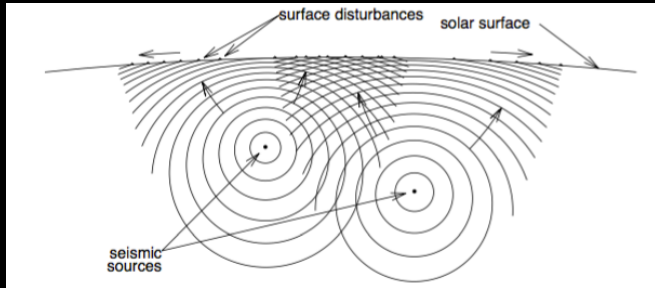- first helioseismic images of a flare
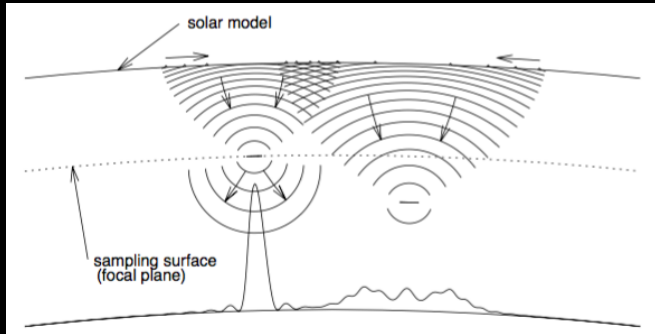
Figure 1

Figure: captiontext
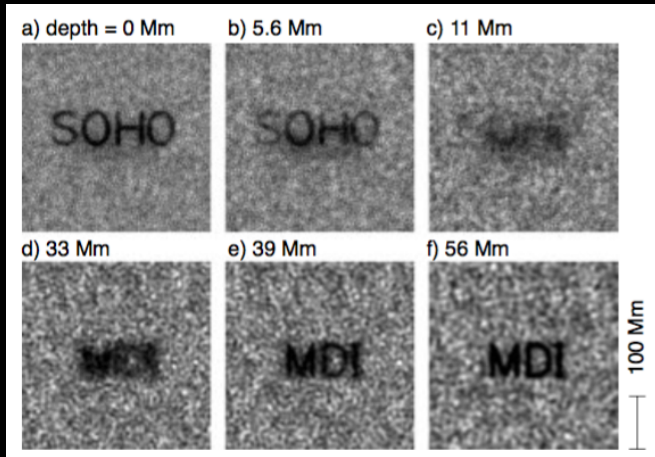
Figure 2

Figure: captiontext

Figure 3

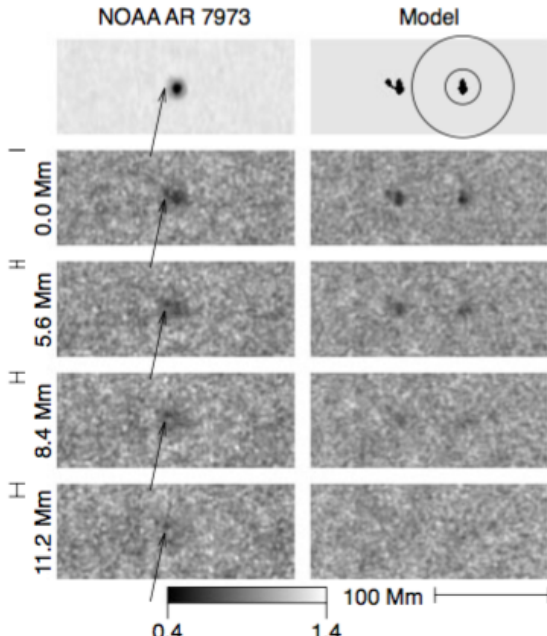Figure: captiontext

3. The Computational Task

Figure 4
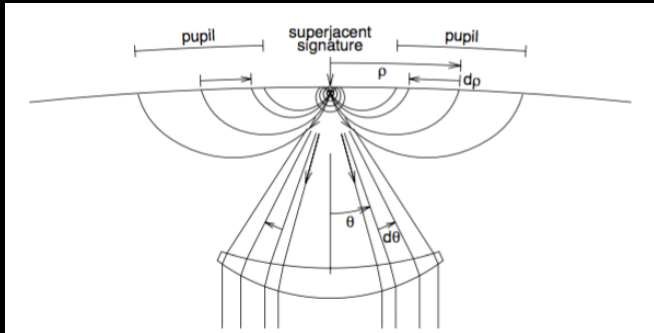
Figure: This is figure 4

Figure 5

NOAA AR 7973   Model
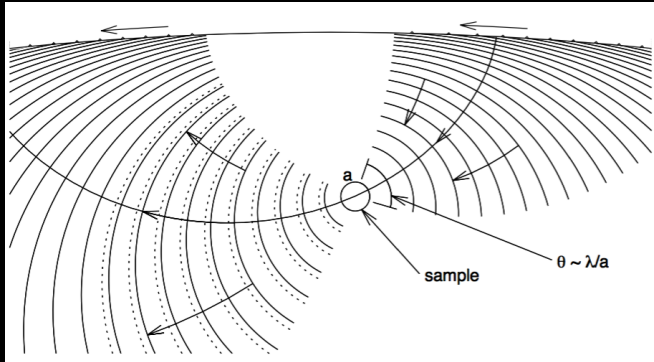
I

0.0 Mm

5.6 Mm

8.4 Mm

11.2 Mm
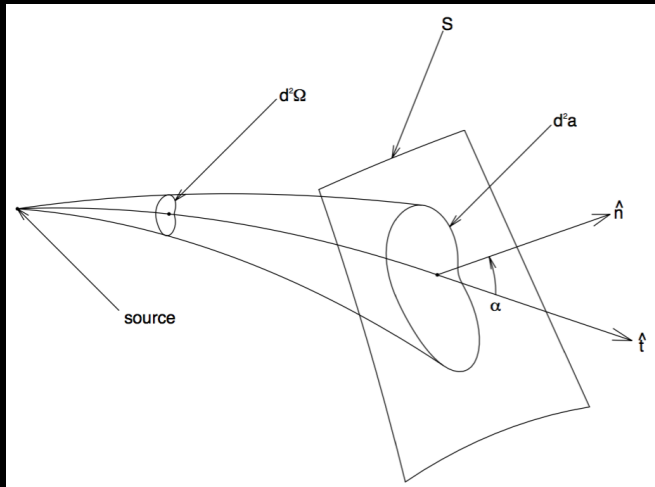
100 Mm
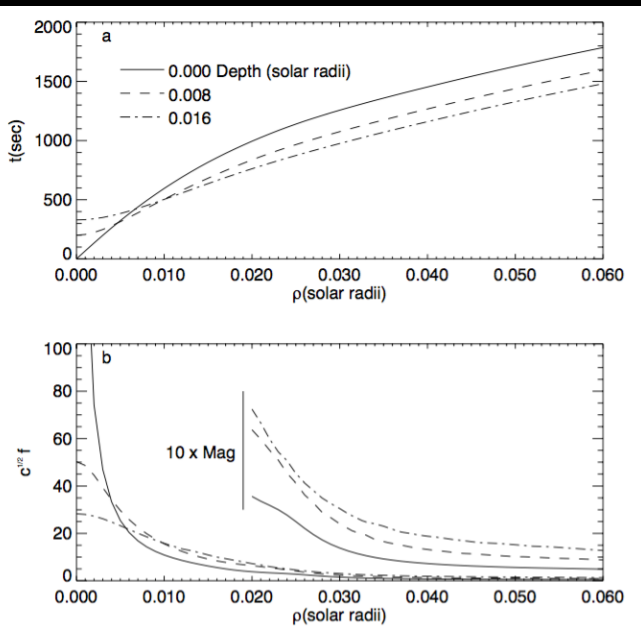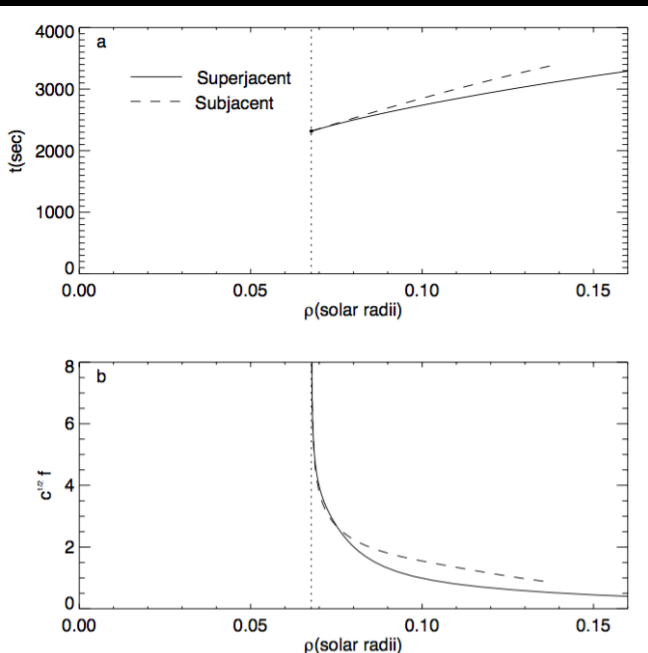
0.4   1.4

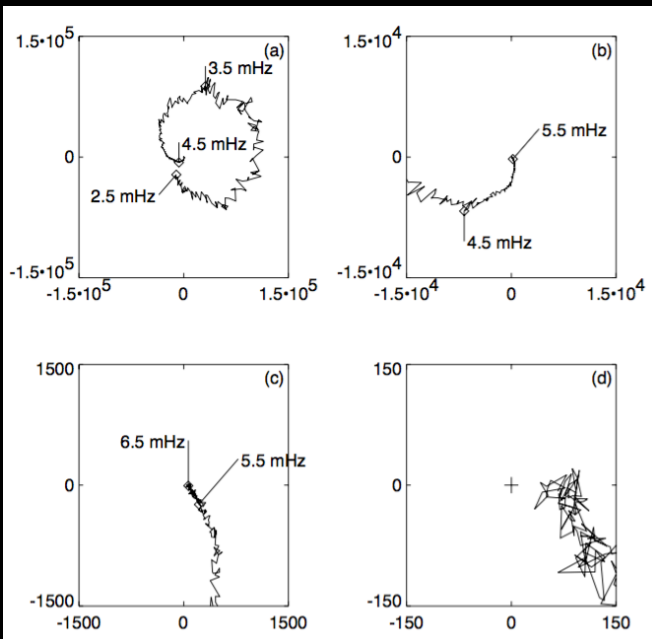# Figure 6

Figure 7
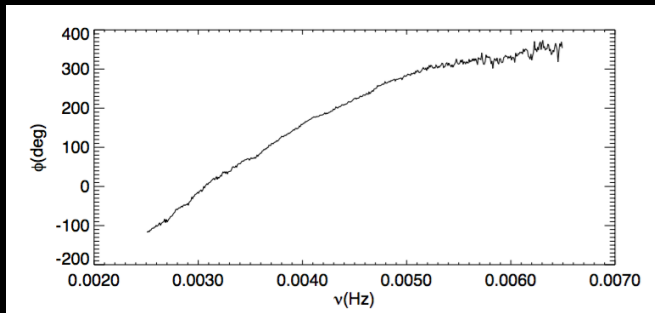

Figure: captiontext

Figure 8

Figure 9

Figure 10

Figure 11

Figure: captiontext