

Koordinované trojmiestne pozorovanie pokojných protuberancií

trvanie kampane:

28. júl – 7. august 2014

účastníci kampane:

J. Koza, M. Kozák

zapojené prístroje:

THEMIS

CoMP-S

HSFA 2 (Ondřejov)

SUMER/SoHO (P. Schwartz)

podporené projektom:

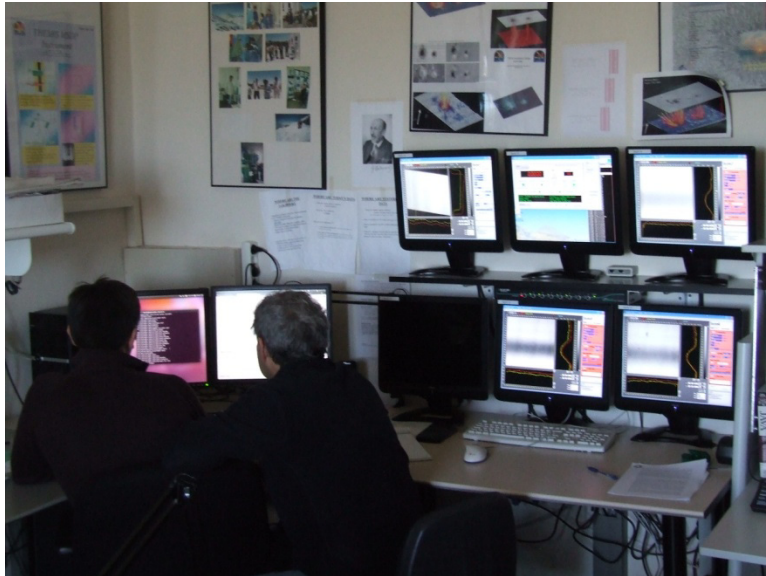
[SOLARNET](#)



THEMIS, ciele kampane, stratégia

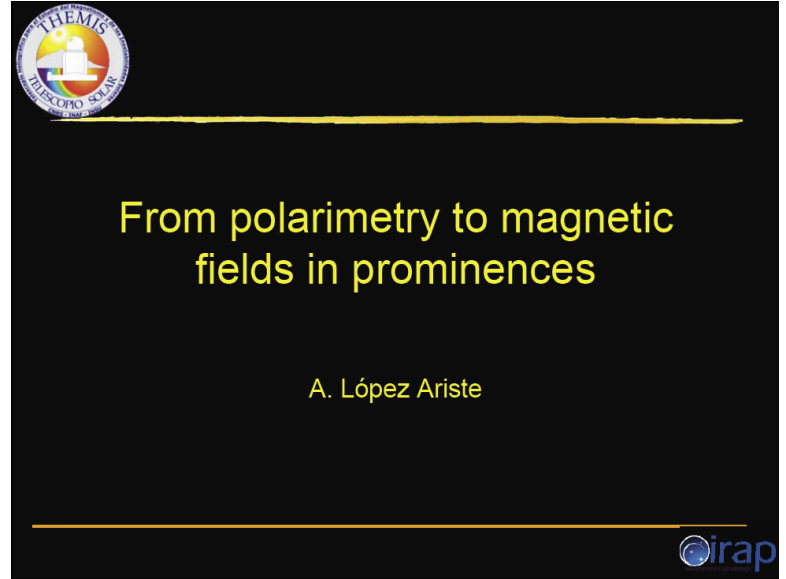
THEMIS 90-cm reflektor
MTR – mnohokanálový štrbinový spektrograf (max. 6 spektrálnych oblastí súčasne)
primárne určenie – spektropolarimetria škvŕn, filamentov a protuberancií

- odvodenie spektrálnych a spektropolarimetrických charakteristík a magnetickej štruktúry pokojných protuberancií
- získanie referenčných dát pre kalibráciu CoMP-S
- simultánna spektropolarimetria protuberancií v čiarach $H\alpha$ a He I 587,6 nm (D3)

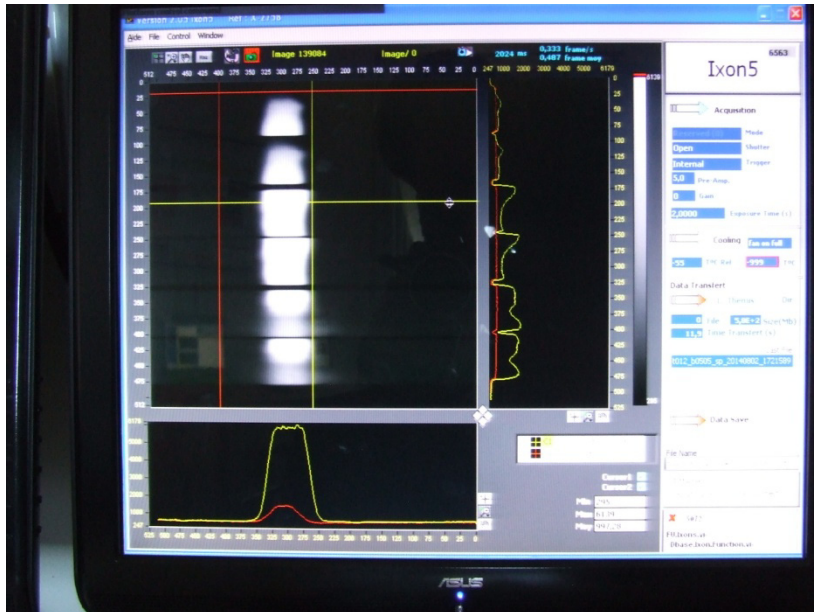




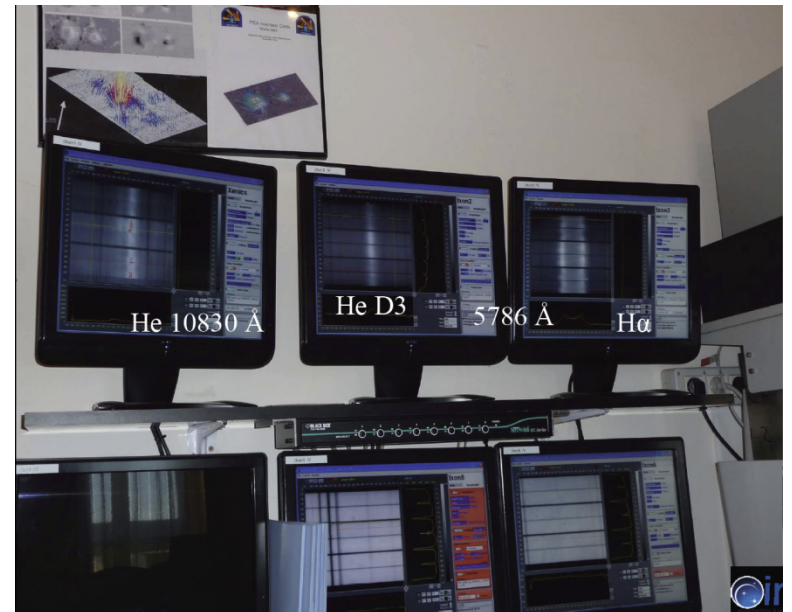
Claude Le Men, Arturo López Ariste, 9.7. 2013



Toulouse, november 2014



naša realita: He D3 a H α SEKVENČNE
nepripravená maska pre predisperzer

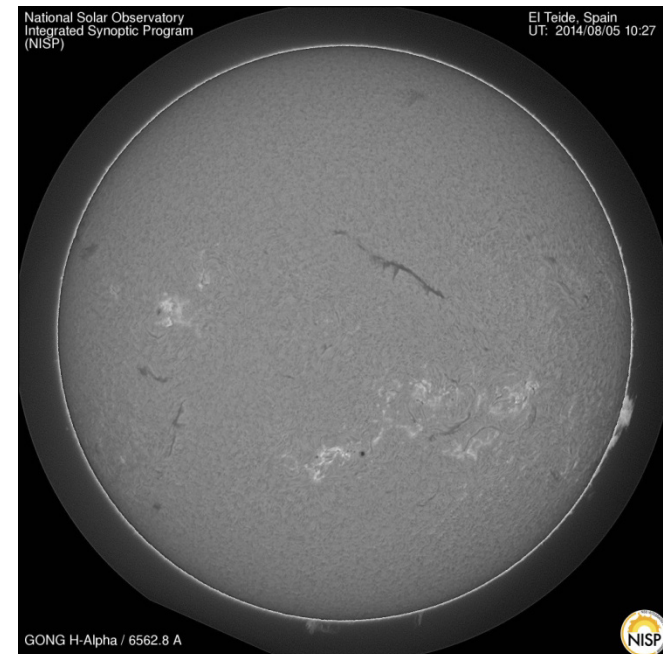
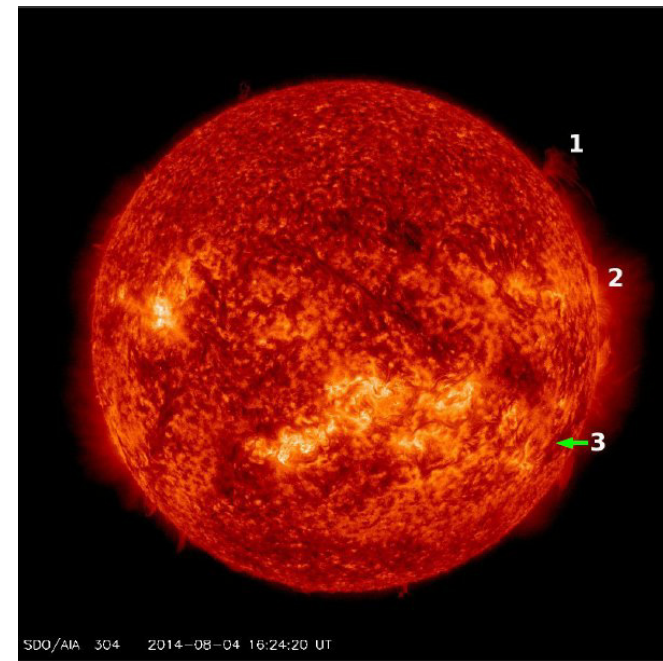
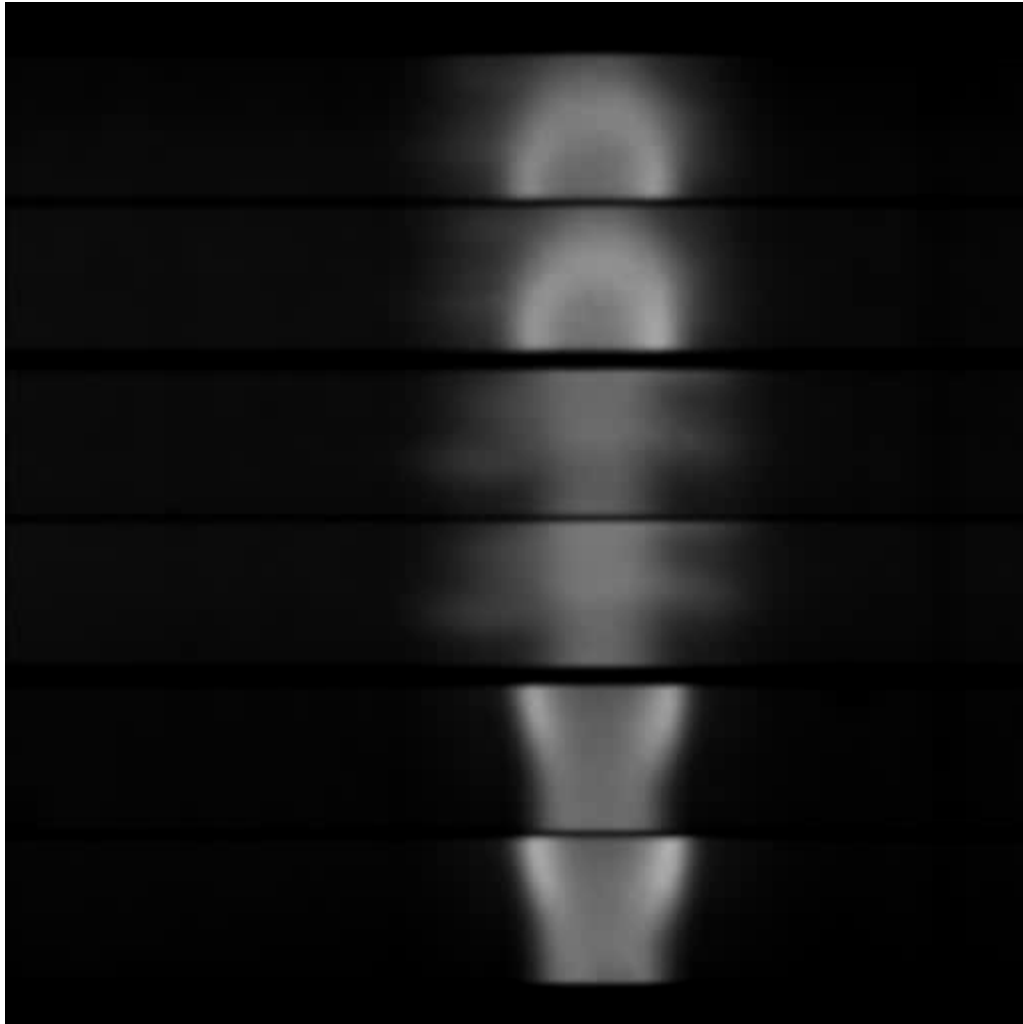


He IR, He D3, H α SIMULTÁNNE

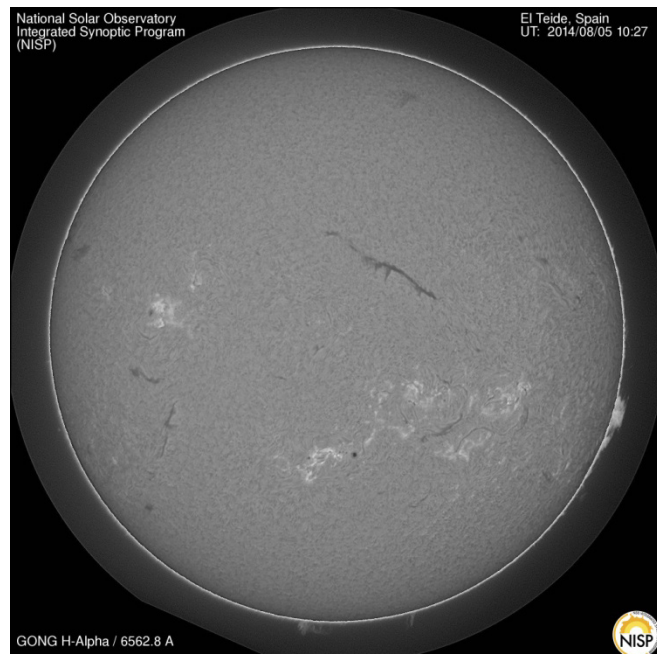
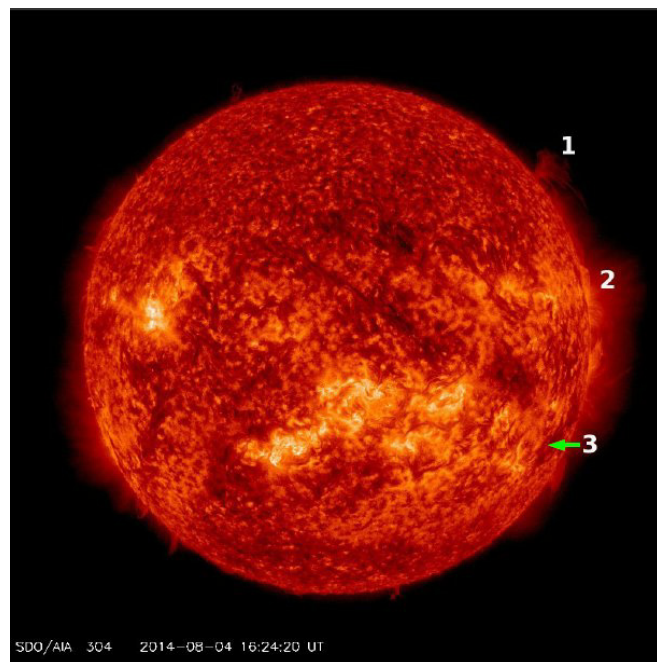
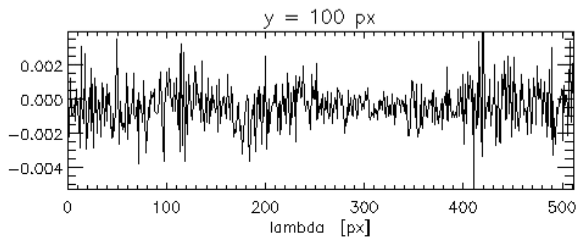
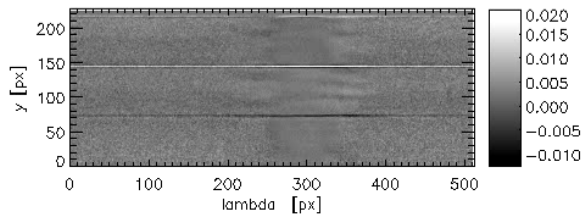
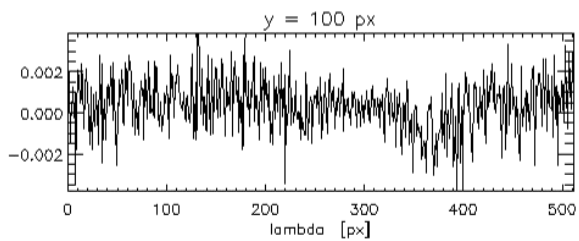
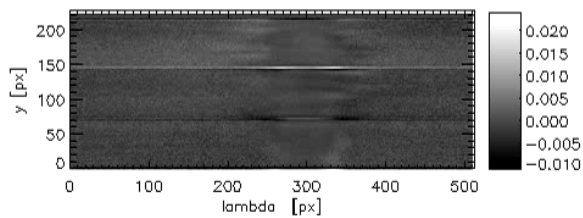
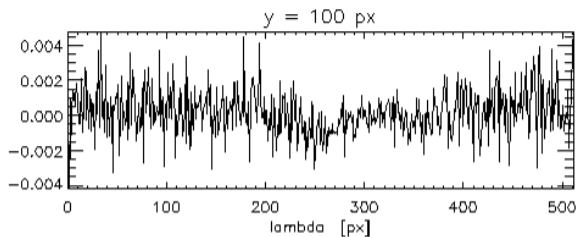
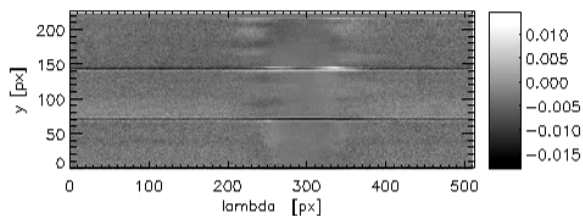
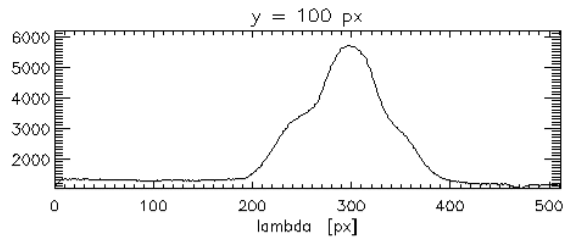
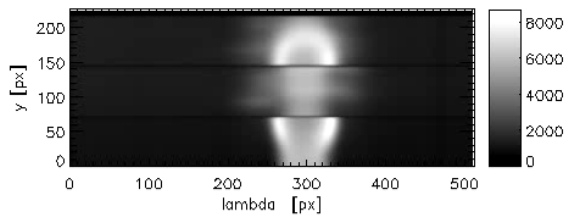
Získané pozorovania pokojných protuberancií

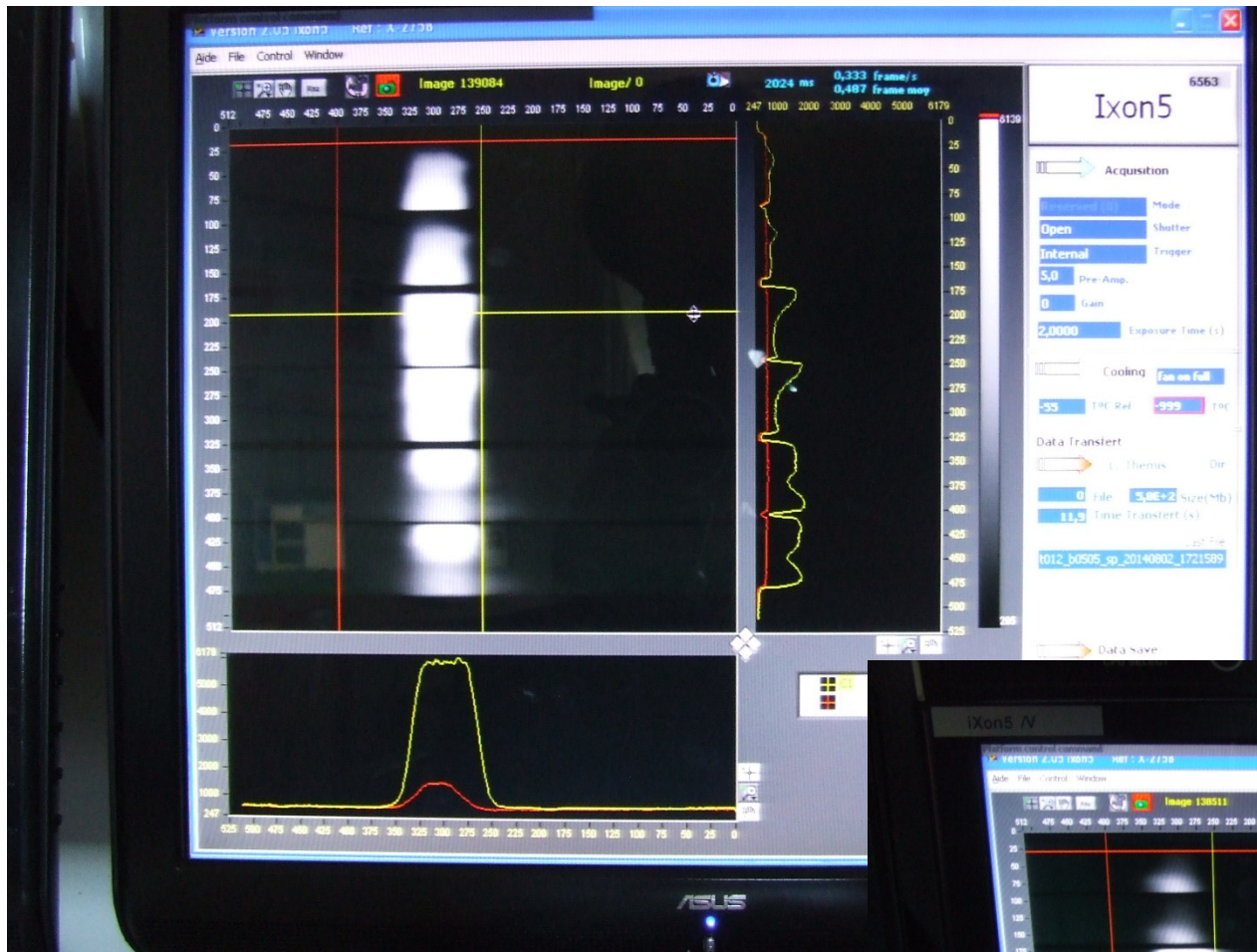
14-07-28	Sequence 1: Ha	15:00 - 16:30 UT PA = 246 deg	No. 2 in target definition
14-07-29	Sequence 1: D3	08:42 - 09:36 UT PA = 292 deg	No. 1 in target definition
	Sequence 2: Ha	09:51 - 11:30 UT PA = 292 deg	No. 1 in target definition
14-07-30	Sequence 1: D3	08:14 - 09:23 UT PA = 72 deg	not included in target definition
	Sequence 2: Ha	10:08 - 10:48 UT PA = 72 deg	not included in target definition
14-08-01	Sequence 1: D3	09:18 - 12:46 UT PA = 297.8 deg	No. 1 in target definition
	Sequence 2: D3	15:09 - 17:33 UT PA = 116 deg	not included in target definition
14-08-02	Sequence 1: Ha	09:20 - 10:20 UT PA = 300 deg	No. 1 in target definition
	Sequence 2: Ha	11:02 - 12:04 UT PA = 309.5 deg	not included in target definition
	Sequence 3: D3	15:00 - 17:00 UT PA = 117.2 deg	not included in target definition
14-08-04	Sequence 1: D3	08:21 - 09:25 UT PA = 283.2 deg	not included in target definition
	Sequence 2: Ha	09:42 - 11:01 UT PA = 283.2 deg	not included in target definition
	Sequence 3: D3	11:16 - 12:27 UT PA = 282.4 deg	not included in target definition
14-08-05	Sequence 1: D3	08:40 - 10:07 UT PA = 255 deg	No. 3 in target definition
	Sequence 2: Ha	10:27 - 11:51 UT PA = 255 deg	No. 3 in target definition
14-08-07	Sequence 1: D3	09:12 - 11:15 UT PA = 281.5 deg	No. 1 in target definition

Ukážka pozorování H α



Zredukované H α data - Deep Stokes

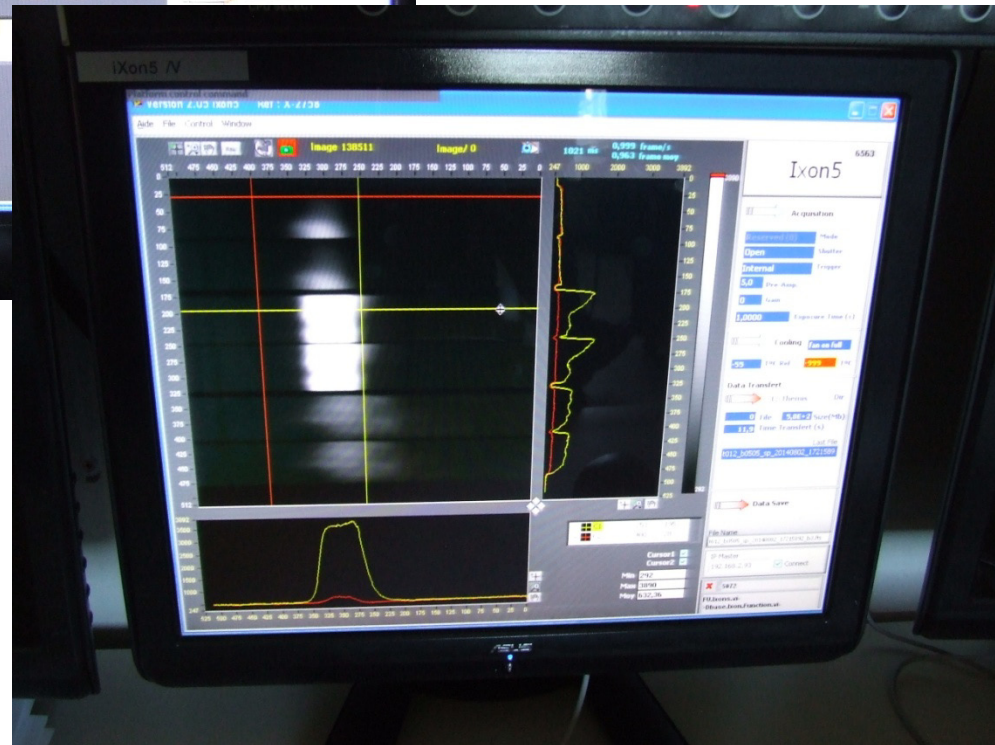




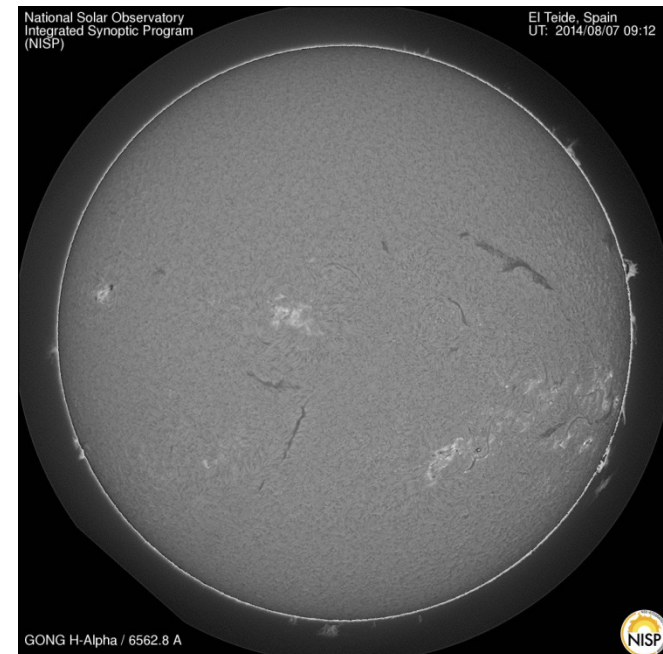
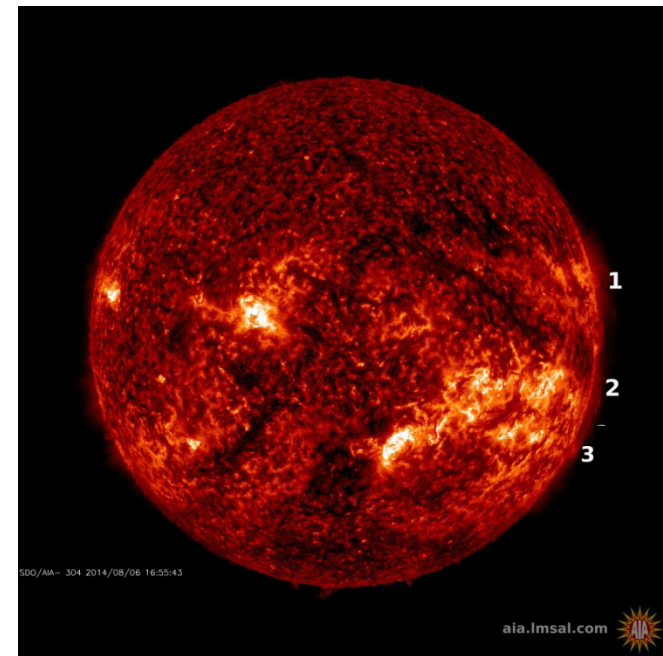
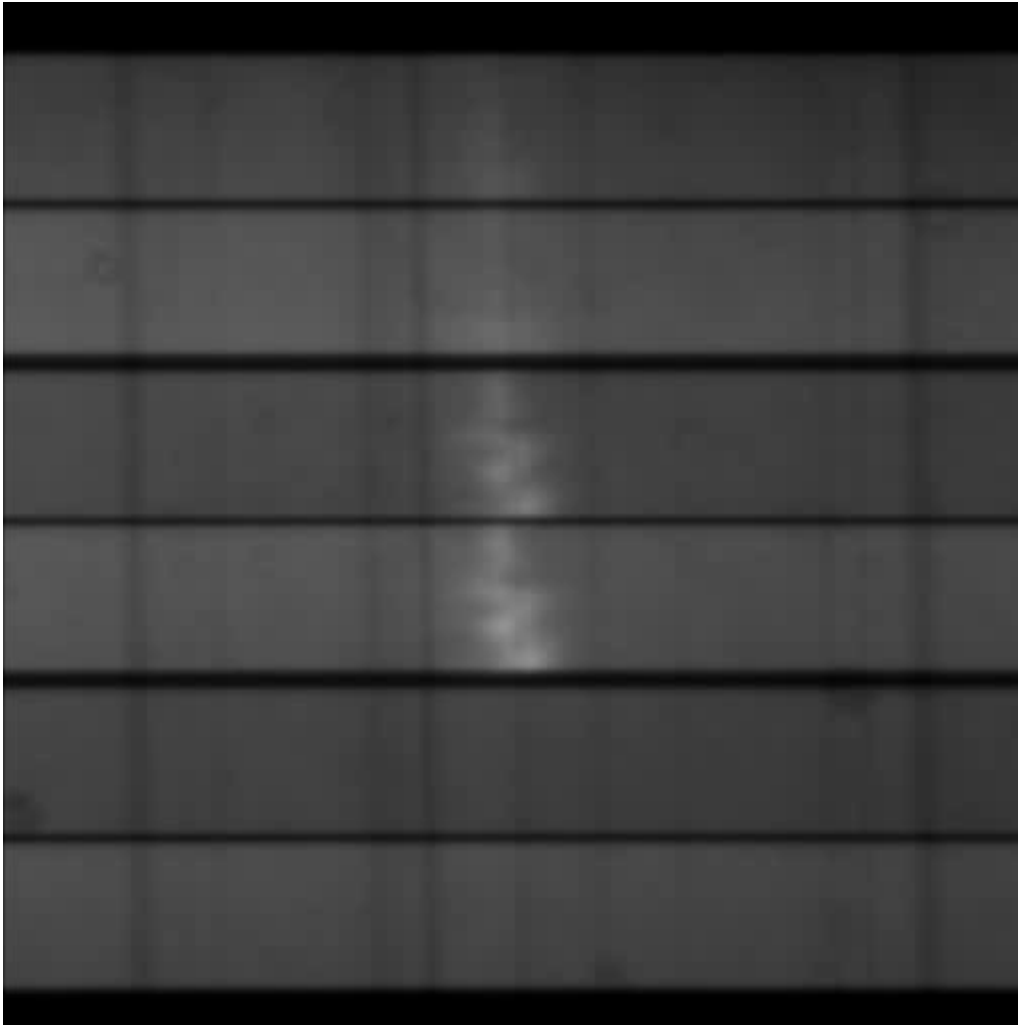
Saturácia H α v jasnej protuberancii ???

Dôsledky pre CoMP-S

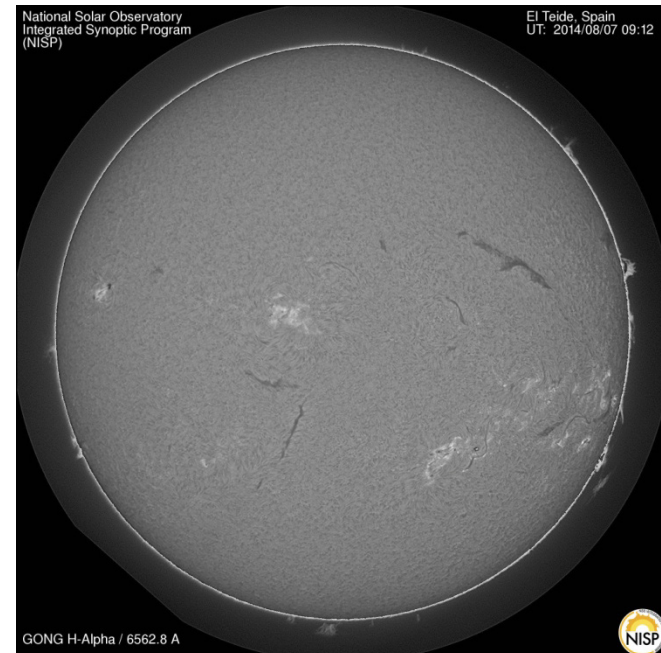
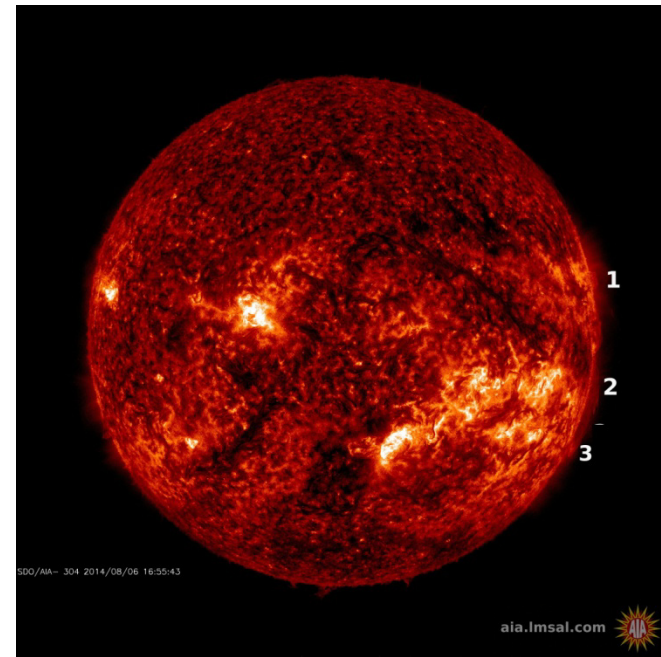
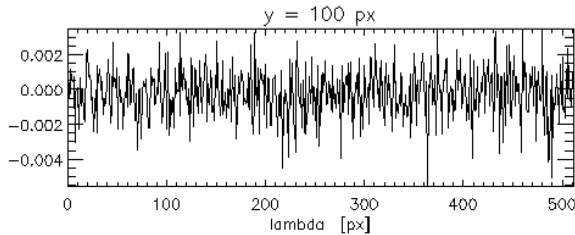
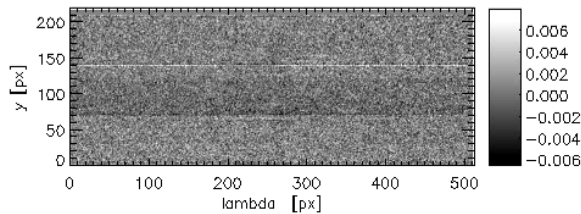
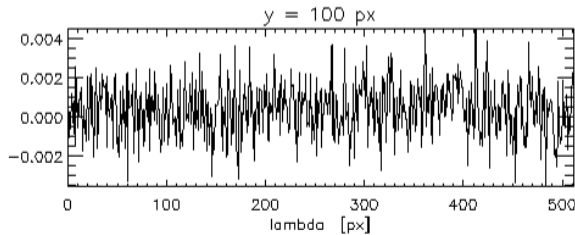
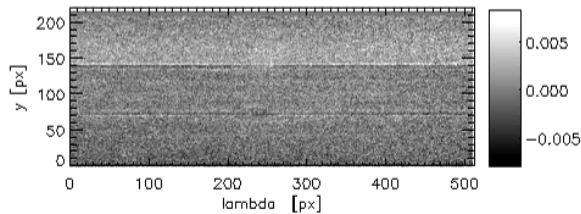
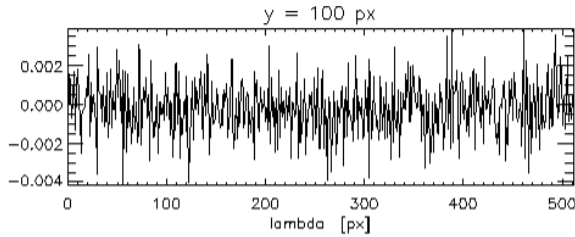
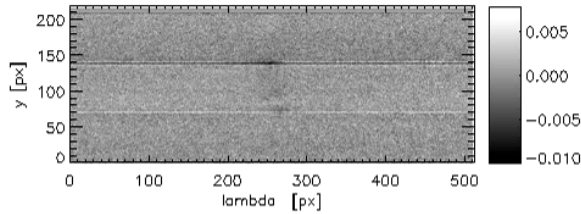
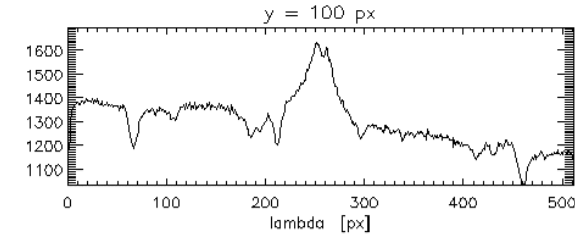
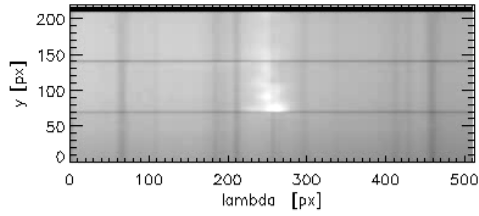
ploché jadro
 centrálna absorpcia
 polarizácia



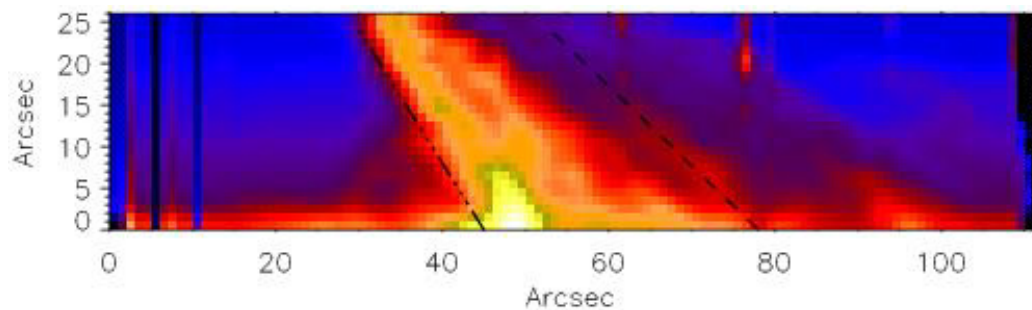
Ukážka pozorování D3



Zredukované data D3 - Deep Stokes



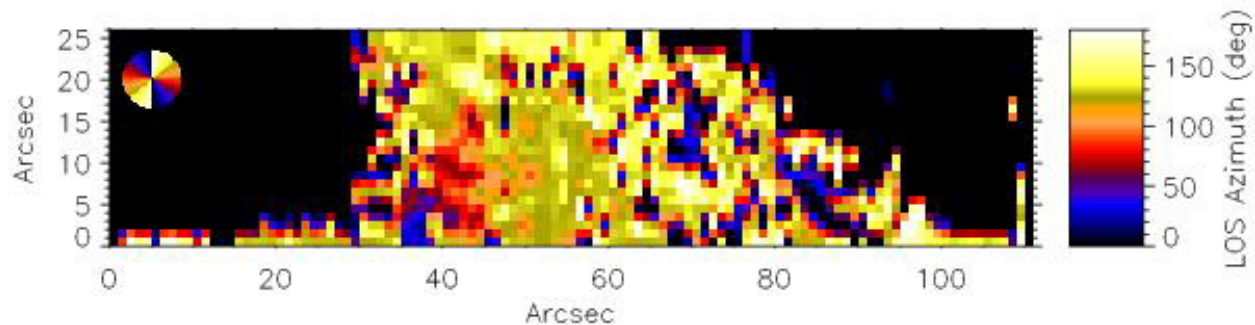
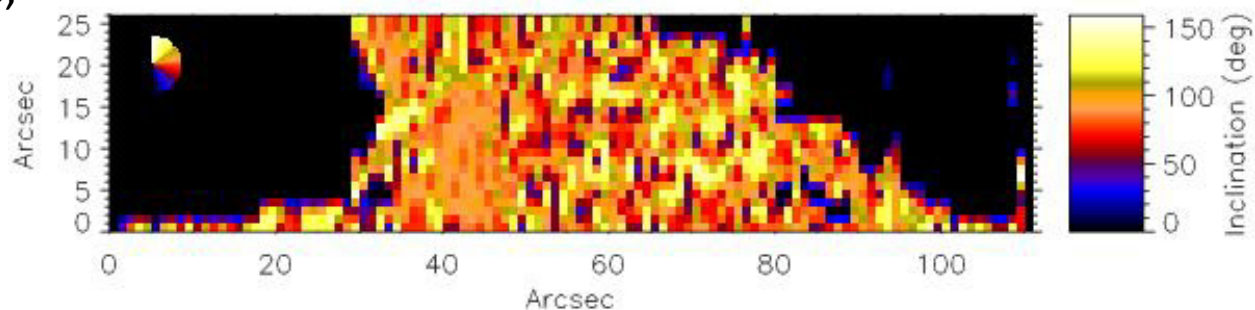
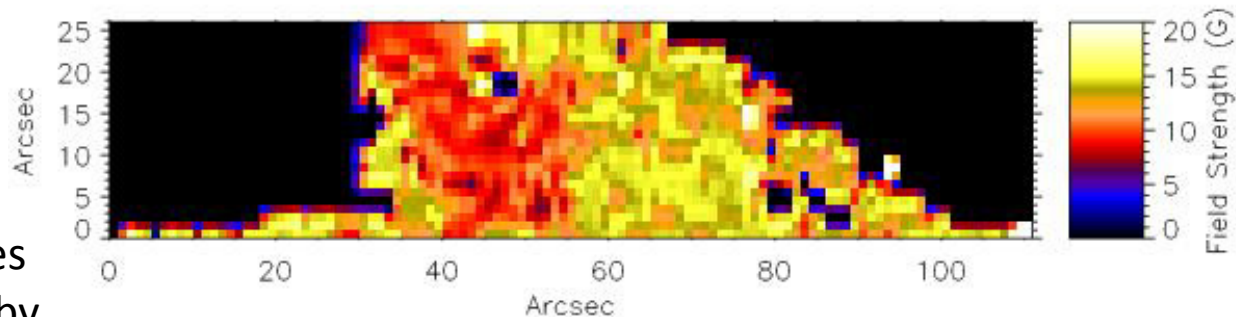
Dôsledky pre CoMP-S, He I D3 je dublet



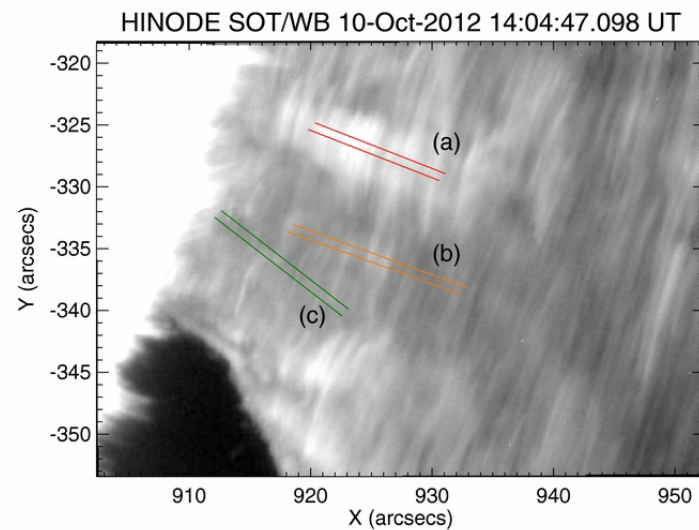
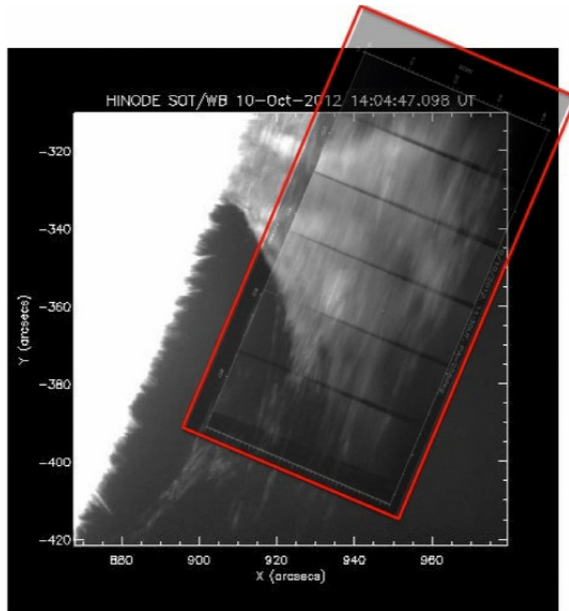
Schmieder et al. (2014)
Astronomy & Astrophysics

Open questions on prominences
from coordinated observations by
IRIS, Hinode, SDO/AIA, THEMIS,
and the Meudon/MSDP

Figure by A. López Ariste



Schmieder et al. (2013)
The Astrophysical Journal



PROPAGATING WAVES TRANSVERSE
TO THE MAGNETIC FIELD
IN A SOLAR PROMINENCE

Figures by A. López Ariste

