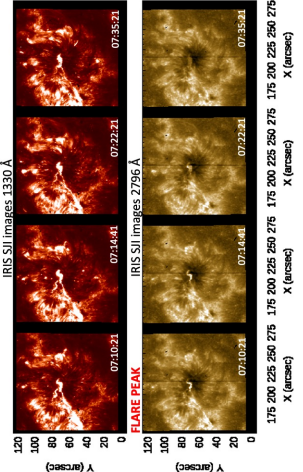
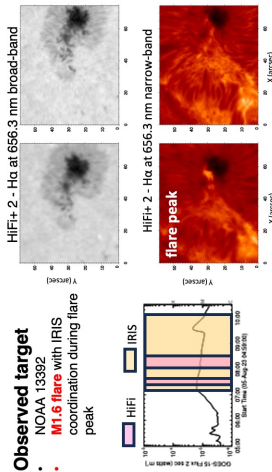
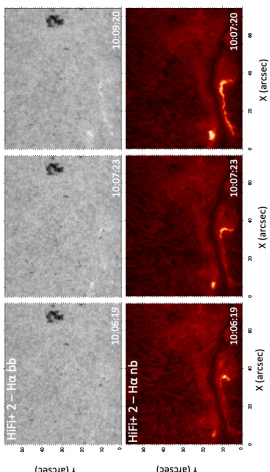


05/08/2023

Observed target
NOAA 13392
M1.6 flare with IRIS coordination during flare peak



Observed target: Burning filament



Observing campaign dates

Date	GREGOR Targets (NOAA)	Seeing	Coordination IRIS - Hinode (NOAA)
31/07/2023	13380	Good	13388; 13380
01/08/2023	/	/	13386; 13380
02/08/2023	13386	Sufficient	13386; 13380
03/08/2023	/	/	13382; 13380
04/08/2023	13382	Very bad	13382; 13380
05/08/2023	13382	Variable	13382; 13380
06/08/2023	13382	Excellent	13382; 13380
07/08/2023	13381; 13385	Good	13384; 13380
08/08/2023	13384	Good	13384; 13380
09/08/2023	13384; 13385	Excellent	13384; 13384

Our instrument setup at GREGOR

- HIFI+: fast imaging in G-band and blue continuum (HIFI+ No. 1), H-alpha (broad & narrow band) (HIFI+ No. 2), Ca II H (396.8 nm) and TiO (705.8 nm) (HIFI+ No. 3) for context images.
- GRIS: full spectropolarimetry in the He I 1083 nm spectral range, including the photospheric Si I 1082.7 nm and Ca I 1083.9 nm lines.

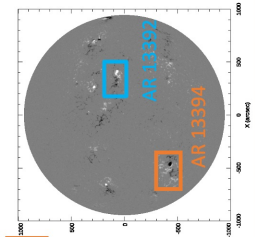
Coordination with LOCNES@TNG, IRIS and Hinode satellites.

Abstract

We have been awarded with 10 days of observing time (31 July - 9 August 2023) at the GREGOR solar telescope in order to investigate emerging ARs and their multifaceted interactions with the magnetic environment using high-resolution spectroscopic and spectropolarimetric observations. Here we show the highlights of the recent observing campaign. These data will be used for future in-depth analyses.

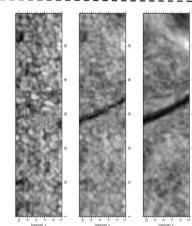
Science topics

- Small-scale energy release phenomena
- Flares
- Penumbral formation
- Penumbral jets
- Filaments

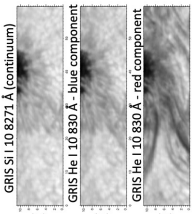


09/08/2023

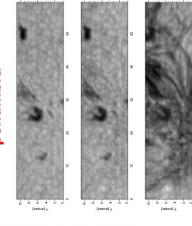
Quiescent filament



Penumbra and filaments

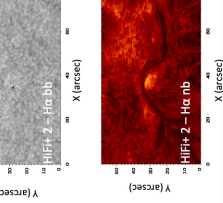


Pores with orphan penumbra

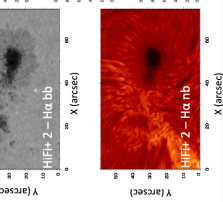


06/08/2023

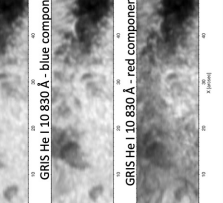
Quiescent filament



Spot's penumbra with HIFI & GRIS



GRIS Quiet Sun granulation



Observed targets

- NOAA 13392 follow up:
 - Same filament observed on 05 August 2023
 - Spot penumbra observed with excellent seeing
- Quiet Sun granulation