THEMIS team opportunity observations
JET2SB project observations: solar jets in coronal holes

Observations log: May 22nd 2026 ; July 1st-2nd 2026

Saida DIAZ CASTILLO (FSLAC), Etienne PARIAT (FLSAC & LPP), & Jorge ROMERO CASTAÑEDA (LPP)

Observations summary - 2026-05-22

DAY SYNTHESIS

Seeing ok to good
Test of campaign and of inversion.
Coronal hole observation at beginning: not sure target was on
Observation of AR14441 to test inversion code

WEATHER CONDITIONS & SEEING

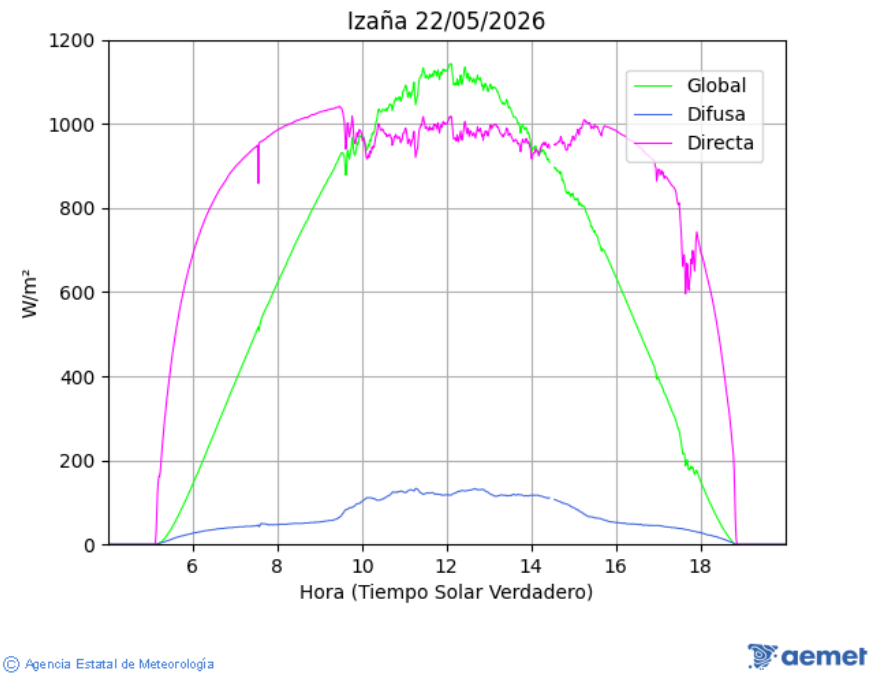


Figure 1: Daily weather conditions
irradiance:https://www.aemet.es/es/eltiempo/observacion/radiacion/radiacion?l=izana

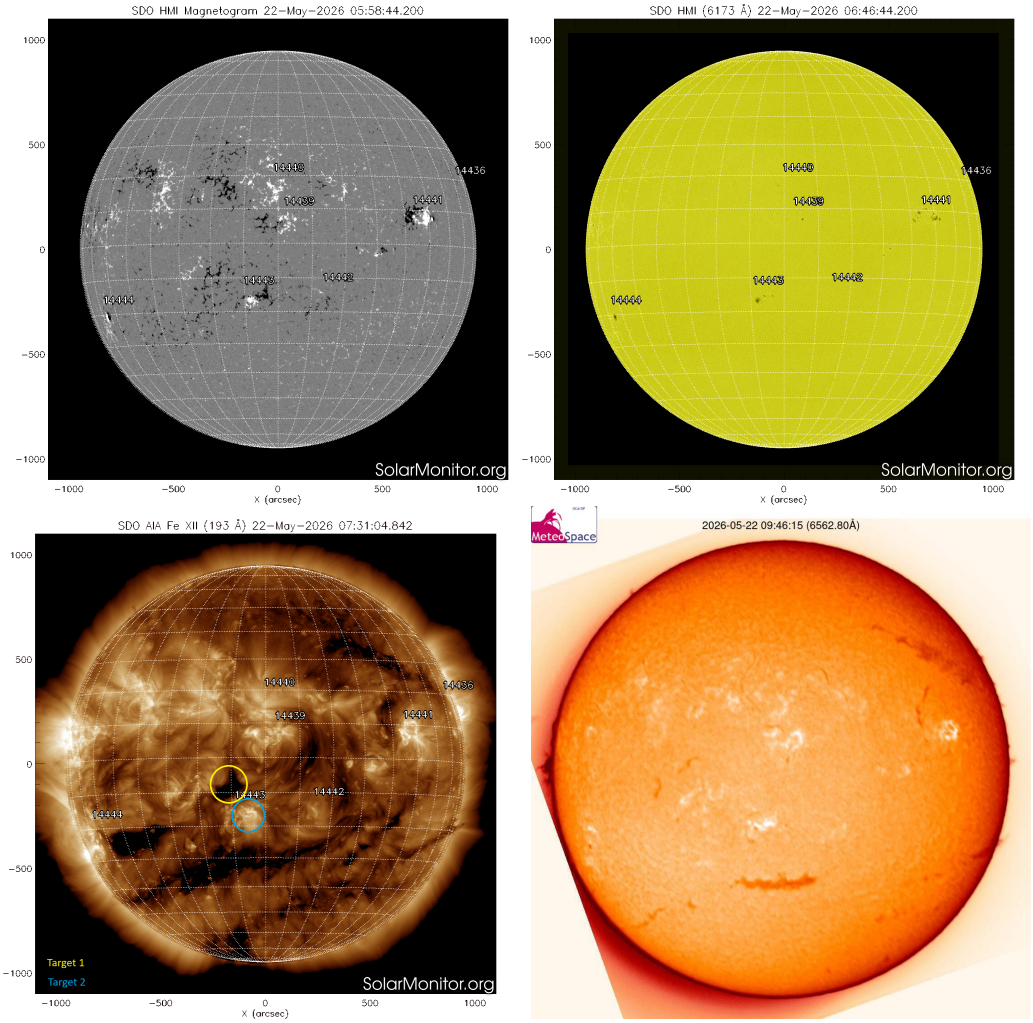


Figure 2: Context solar observations

SOLAR CONTEXT - SOLAR ACTIVITY

OBSERVATIONS

Observers: Etienne Pariat & Jorge Romero Castañeda
Technical assistance: Bernard Gelly, Sofiane Mami & Saida Diaz

Opening telescope: 07:45 UT
Observations breaks: 12:38 UT - 13:55 UT
Closing telescope: 14:05 UT
Coordination with other instruments: No

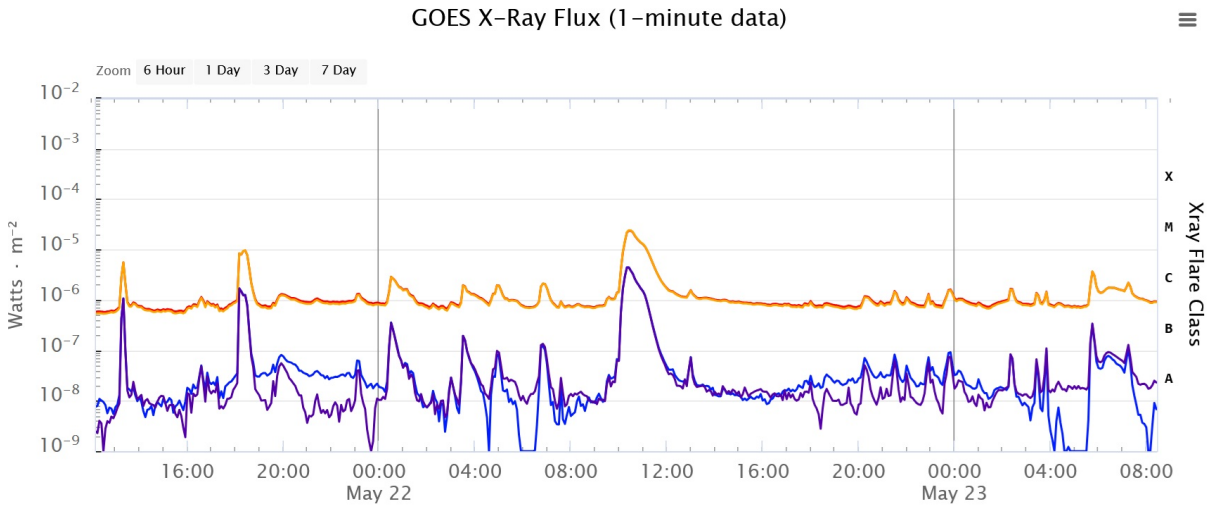


Figure 3: Daily Goes Flux

Targets of the day

Target	Type	Label	Coordinates	Obs period
1	Coronal Hole	Anemone	10E-10S	07:19-00:00 UT
2	Active Region	NOAA 14443	06E-16S	00:00-00:00 UT

Guider/Context Images

Snapshot time: 00:00 UT

Slitjaw Images

Snapshot Times 00:00 UT : Target n°X

Figure 4: Guider and BBI image (00:00 UT)

Broadband Imaging

Snapshot Time 00:00-00:00 UT: Target n°X ; Multiple snapshots to map AR 00000.
Snapshot Time 00:00 UT: Target n°X

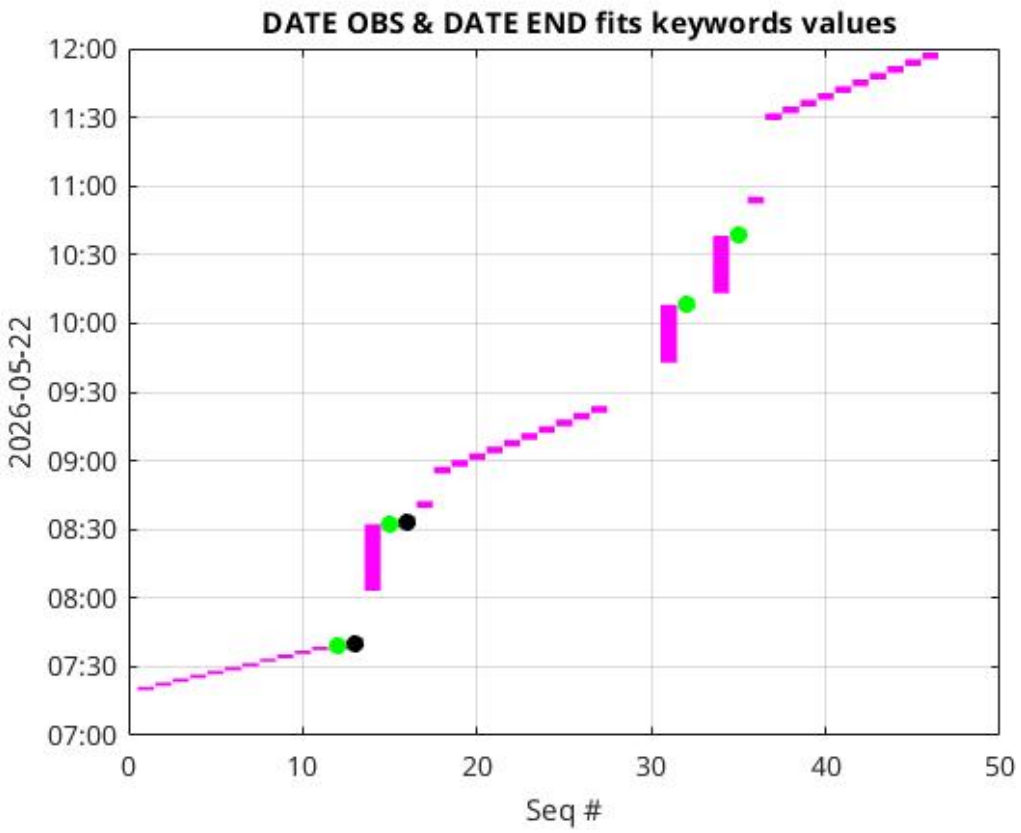


Figure 5: Time line of sequences acquisition

MTR2

Sequences 01-11: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [X]
Observation period: 07:20-07:39 UT
Seeing/data quality: Correct (early morning)
Slit direction: Equatorial ; Scan direction: ~ North to South
Scan step: 0.6" ; Scan length: 90"
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Search for target in coronal hole

Sequence 12: Flat Sun center
Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 07:39-07:39 UT
Seeing/data quality: Correct
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s

* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s

Sequence 13: Dark
Scan [ ] **Sit & Stare** [ ] **Flat** [ ] **Dark** [X] **Polar** [ ] **AO on** [ ]
Observation period: 07:40-07:40 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s

Sequence 14: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [X] **AO on** [X]
Observation period: 08:03-08:32 UT
Seeing/data quality: correct
Slit direction: Equatorial ; Scan direction: ~ North to South
Scan step: 0.3 " ; Scan length: 90 "
Wavelengths: Ca II @ 854.2 nm [X] Fe I @ 630.2 nm [X] H_α @ 652.8 nm [X]
Camera exposure time: 0.1 s
Comment: With Polar. AO working in and out.

Sequence 15: Flat Sun center
Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 08:32-08:32 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s

Sequence 16: Dark
Scan [ ] **Sit & Stare** [ ] **Flat** [ ] **Dark** [X] **Polar** [ ] **AO on** [ ]
Observation period: 08:33-08:33 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s

Sequence 17: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [X]
Observation period: 08:39-08:42 UT
Seeing/data quality: Good
Slit direction: North ; Scan direction: ~ equatorial toward solar West

Scan step: 0.3" ; Scan length: 90"
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment:

Sequence 18-27: Flat Sun center
Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 08:54-09:24 UT
Seeing/data quality: Good
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: scan 23, 24

Sequence 31: Target n°2
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [?] **AO on** [X]
Observation period: 09:43-10:08 UT
Seeing/data quality: Good
Slit direction: North ; Scan direction: ~ East to West
Scan step: 0.3 " ; Scan length: 90 "
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment:

Sequence 32: Flat Sun Center
Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 10:08-10:08 UT
Seeing/data quality: Good
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment:

Sequence 34: Target n°2
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [X] **AO on** [X]
Observation period: 10:13-10:38 UT
Seeing/data quality: Correct
Slit direction: North ; Scan direction: ~ East to West
Scan step: 0.3 " ; Scan length: 90 "
Wavelengths:

* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment:

Sequence 35: Flat Sun Center
Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 10:38-10:38 UT
Seeing/data quality: Correct
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment:

Sequence 37-46: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [X]
Observation period: 11:28-11:58 UT
Seeing/data quality: Correct
Slit direction: North ; Scan direction: ~ West to East
Scan step: 0.3 " ; Scan length: 90 "
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.28s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Sequence 43 clouds come in

QUICKLOOKS

Observations summary - 2026-07-01

DAY SYNTHESIS

Seeing ok (slight calima)
Test of campaign and of inversion.
Observation of AR14478

WEATHER CONDITIONS & SEEING

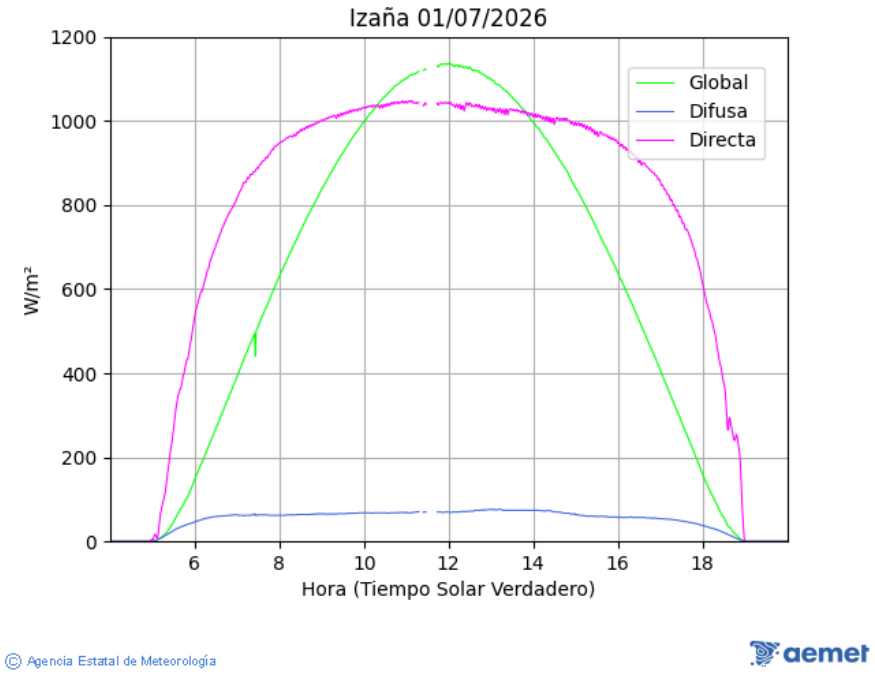


Figure 6: Daily weather conditions

SOLAR CONTEXT - SOLAR ACTIVITY

OBSERVATIONS

Observers: Etienne Pariat & Jorge Romero Castañeda
Technical assistance: Sofiane Mami

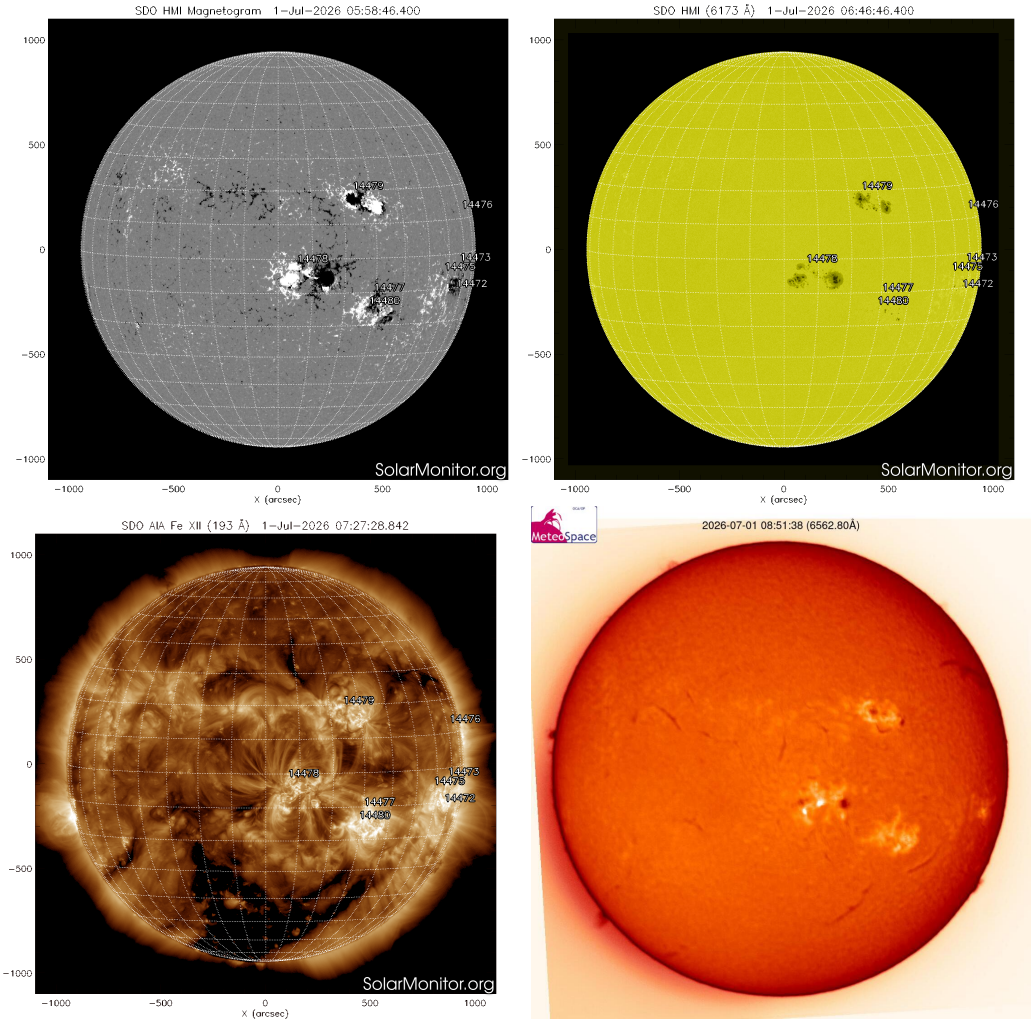


Figure 7: Context solar observations

Opening telescope: 08:45 UT
Observations breaks: 10:38 UT - 13:30 UT
Closing telescope: 14:55 UT
Coordination with other instruments: No

Targets of the day

Target	Type	Label	Coordinates	Obs period
1	Active Region	NOAA 14478	15W-05S	09:30-14:45 UT
2	Active Region	NOAA 14478	05W-05S	10:03-10:35 UT

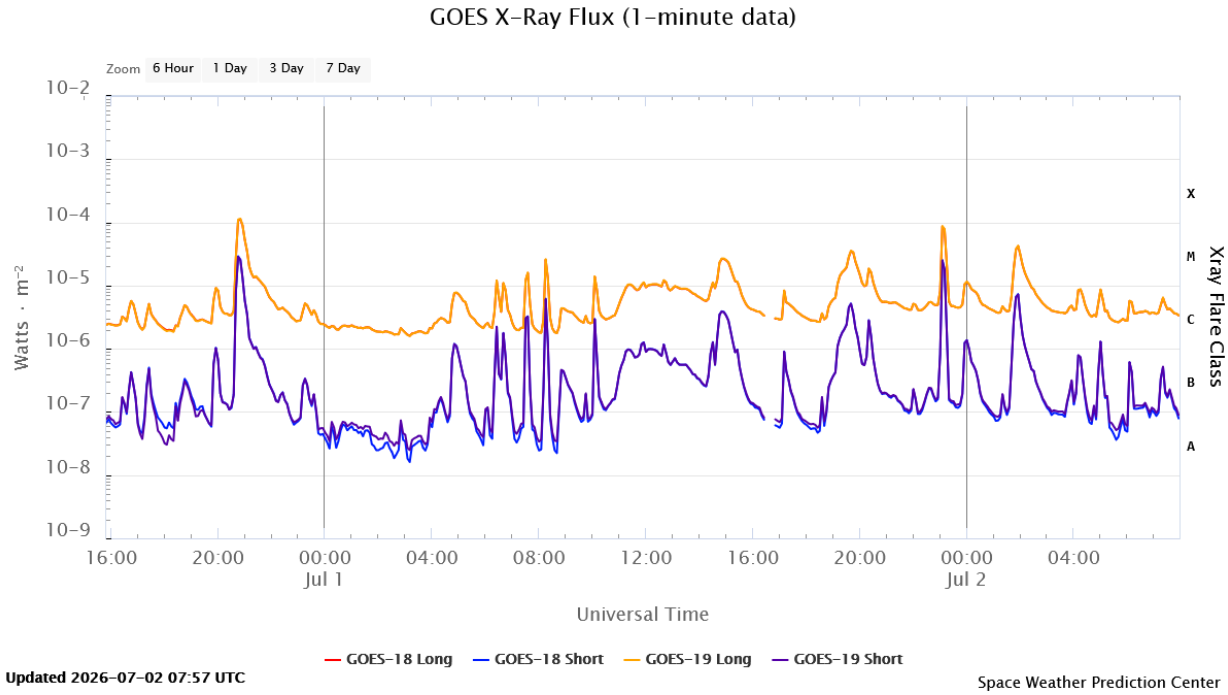


Figure 8: Daily Goes Flux

Guider/Context Images

Snapshot time: 00:00 UT

Slitjaw Images

Snapshot Times 00:00 UT : Target n°X

Figure 9: Guider and BBI image (00:00 UT)

Broadband Imaging

Snapshot Time 00:00-00:00 UT: Target n°X ; Multiple snapshots to map AR 00000.
Snapshot Time 00:00 UT: Target n°X

MTR2

Sequences 01: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [X]

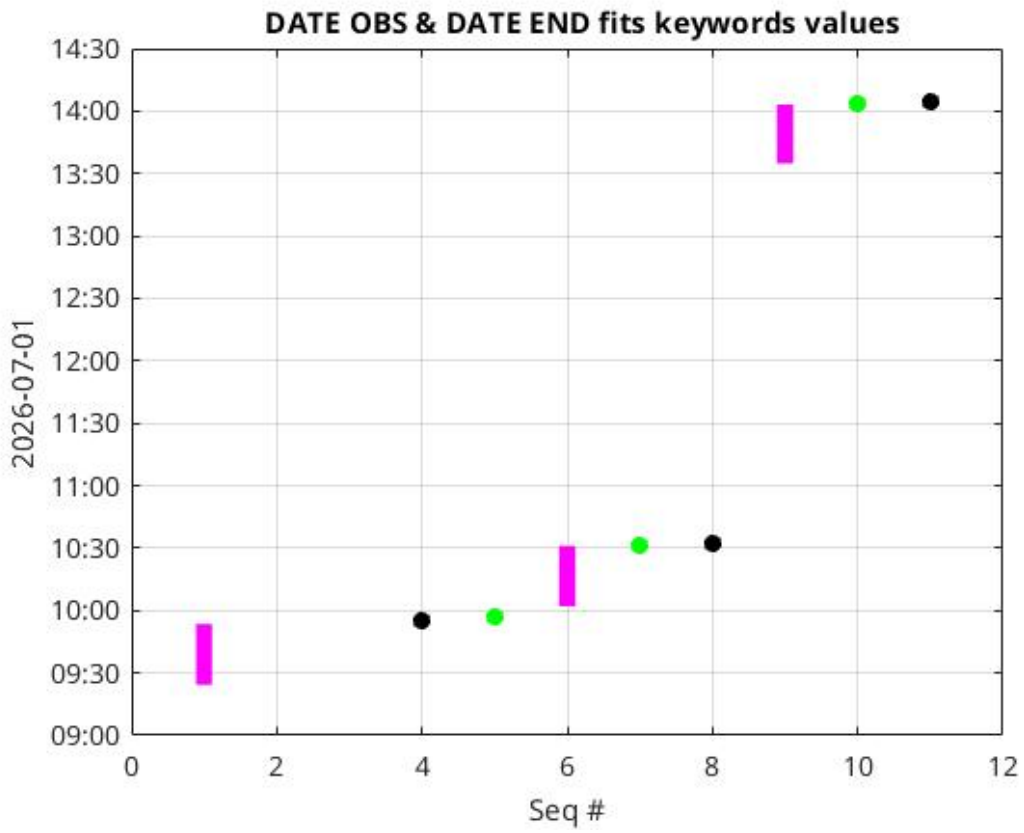


Figure 10: Time line of sequences acquisition

Observation period: 09:30-09:58 UT
Seeing/data quality: Medium (Calima)
Slit direction: North ; Scan direction: ~ East to West
Scan step: 0.3" ; Scan length: 90"
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Camera Zyla 6 not well centered.

Sequences 04: Dark
Scan [ ] **Sit & Stare** [ ] **Flat** [ ] **Dark** [X] **Polar** [ ] **AO on** [ ]
Observation period: 10:00-10:01 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Camera Zyla 6 not well centered.

Sequence 05: Flat Sun center

Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 10:01-10:02 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Camera Zyla 6 not well centered.

Sequences 06: Target n°2
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [X]
Observation period: 10:03-10:35 UT
Seeing/data quality: Medium (Calima)
Slit direction: North ; Scan direction: ~ East to West
Scan step: 0.3" ; Scan length: 90"
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Same active region as Target n°1 but focusing on small spot. Camera Zyla 6 not well centered.

Sequence 07: Flat Sun center
Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 10:35-10:36 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Camera Zyla 6 not well centered.

Sequence 08: Dark
Scan [ ] **Sit & Stare** [ ] **Flat** [ ] **Dark** [X] **Polar** [ ] **AO on** [ ]
Observation period: 10:36-10:37 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Camera Zyla 6 not well centered.

Sequence 09: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 13:38-14:08 UT
Seeing/data quality: Medium (Calima)
Slit direction: North ; Scan direction: ~ East to West
Scan step: 0.3" ; Scan length: 90"
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s

* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Camera Zyla 6 is from now on centered.

Sequence 10: Flat Sun center
Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 14:08-14:09 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s

Sequence 11: Dark
Scan [ ] **Sit & Stare** [ ] **Flat** [ ] **Dark** [X] **Polar** [ ] **AO on** [ ]
Observation period: 14:10-14:11 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s

Sequence 12: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 14:15-14:45 UT
Seeing/data quality: Medium (Calima)
Slit direction: North ; Scan direction: ~ East to West
Scan step: 0.3" ; Scan length: 90"
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment:

QUICKLOOKS

Observations summary - 2026-07-02

DAY SYNTHESIS

Seeing ok (slight calima)
Test of campaign and of inversion.
Observation of AR14478

WEATHER CONDITIONS & SEEING

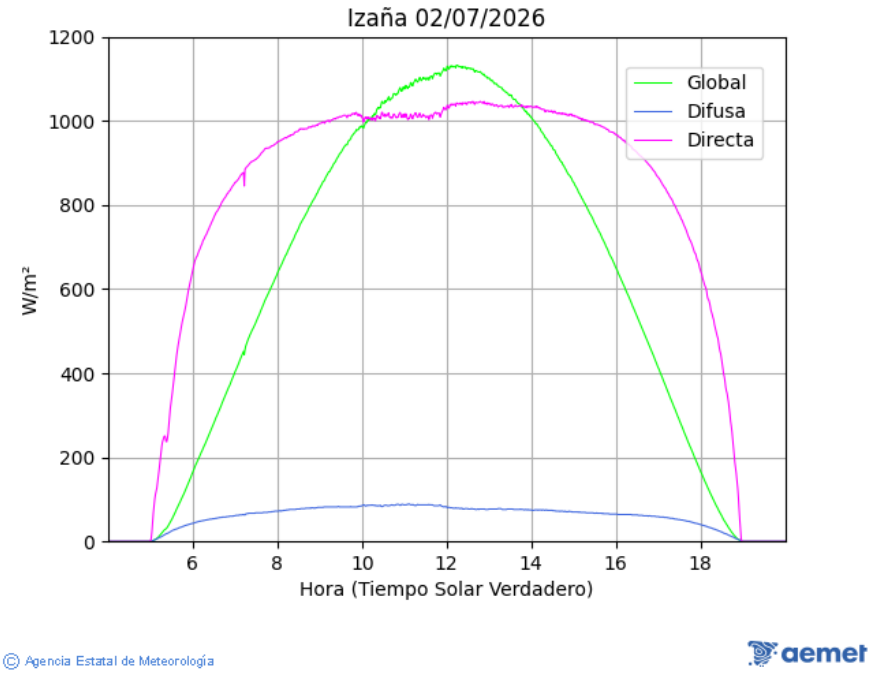


Figure 11: Daily weather conditions

SOLAR CONTEXT - SOLAR ACTIVITY

OBSERVATIONS

Observers: Etienne Pariat & Jorge Romero Castañeda
Technical assistance: Bernard Gelly

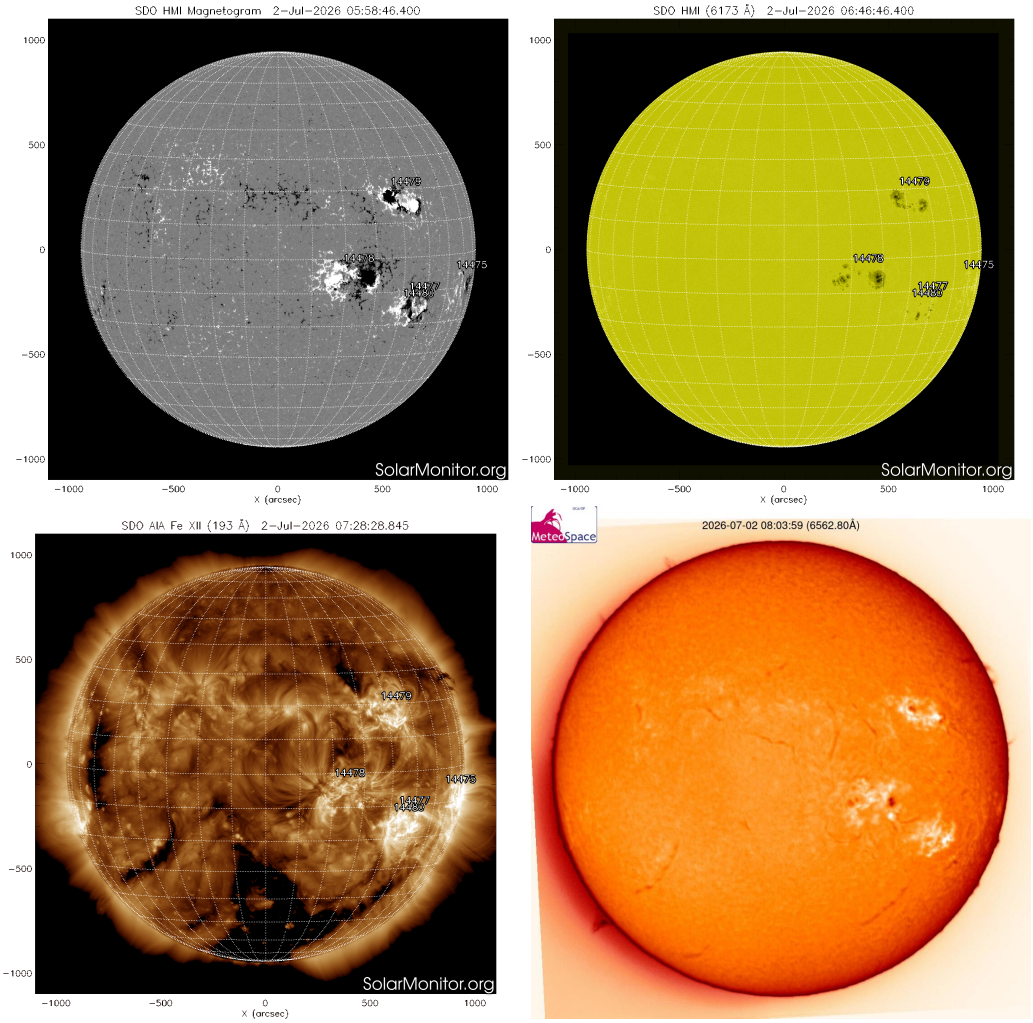


Figure 12: Context solar observations

Opening telescope: 07:40 UT
Observations breaks: 12:31 UT - 13:45 UT
Closing telescope: 16:10 UT
Coordination with other instruments: No

Targets of the day

Target	Type	Label	Coordinates	Obs period
1	Active Region	NOAA 14478	25W-05S	07:59-11:48 UT

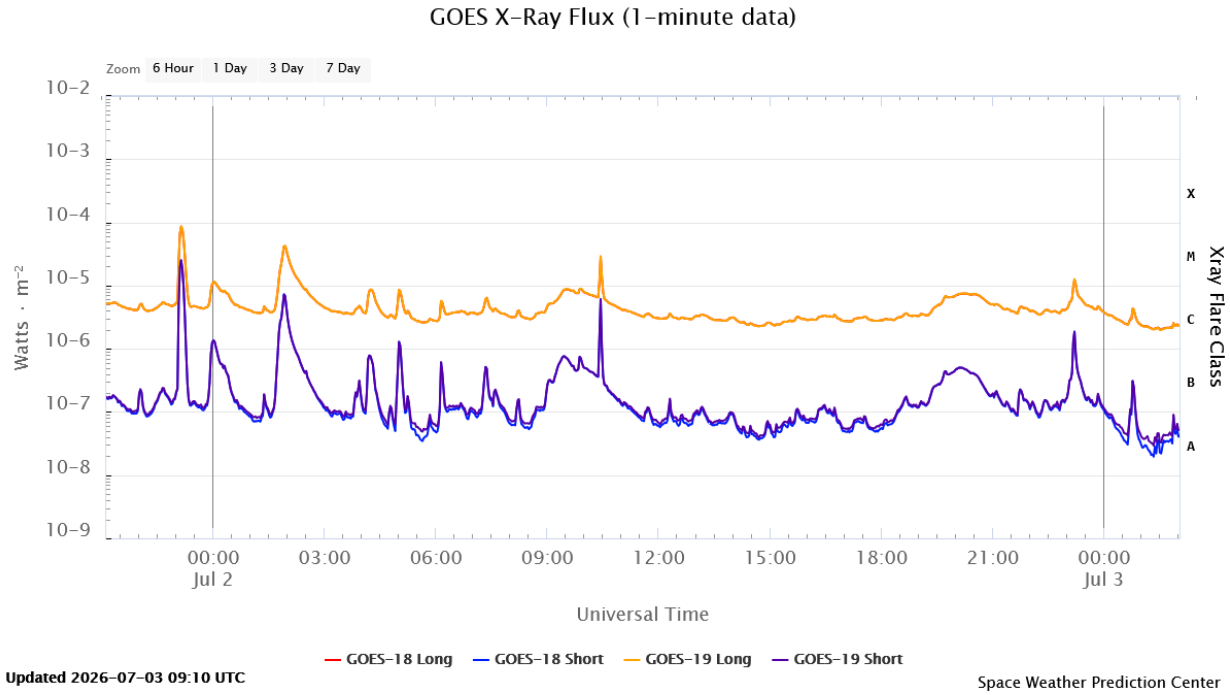


Figure 13: Daily Goes Flux

Guider/Context Images

Snapshot time: 00:00 UT

Slitjaw Images

Snapshot Times 00:00 UT : Target n°X

Figure 14: Guider and BBI image (00:00 UT)

Broadband Imaging

Snapshot Time 00:00-00:00 UT: Target n°X ; Multiple snapshots to map AR 00000.
Snapshot Time 00:00 UT: Target n°X

MTR2

Sequence 02: Dark
Scan [ ] **Sit & Stare** [ ] **Flat** [ ] **Dark** [X] **Polar** [ ] **AO on** [ ]

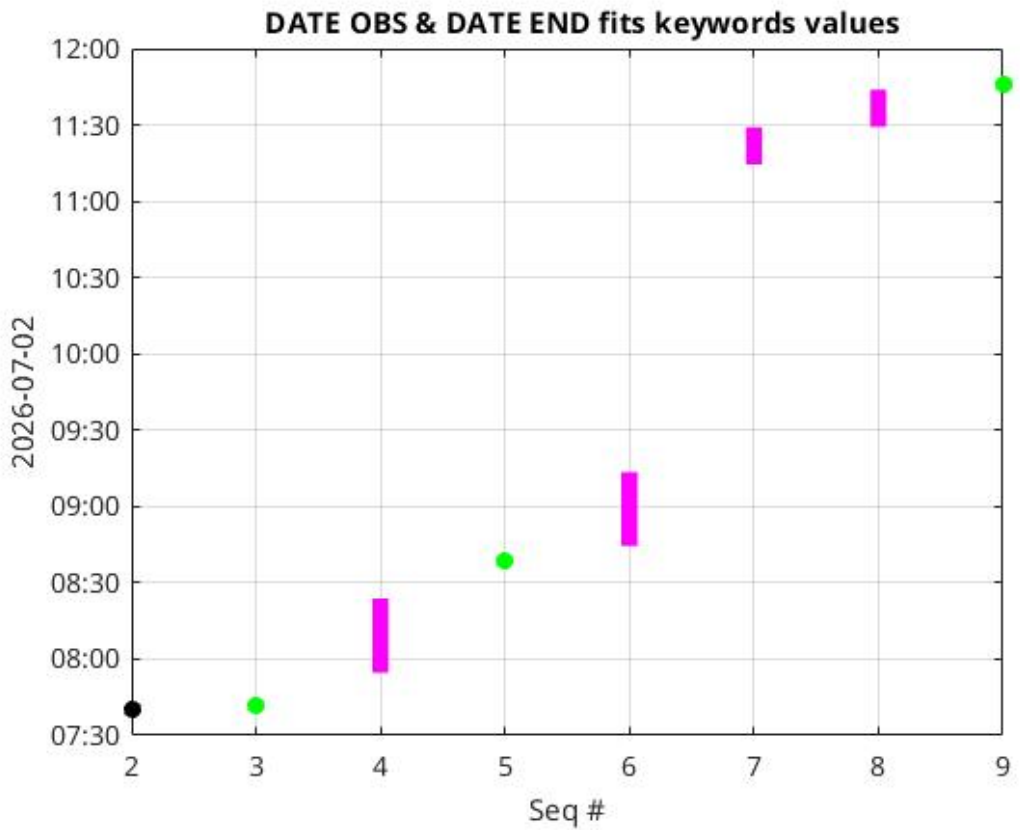


Figure 15: Time line of sequences acquisition

Observation period: 07:45-07:46 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s

Sequence 03: Flat Sun center
Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 07:47-07:48 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s

Sequence 04: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [X]
Observation period: 07:59-08:28 UT
Seeing/data quality: Ok (Slight calima)

Slit direction: North ; Scan direction: ~ East to West
Scan step: 0.3" ; Scan length: 90"
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: AO did not work correctly during scan so we get a cut.

Sequence 05: Flat Sun center
Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 08:43-08:44 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s

Sequence 06: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [X]
Observation period: 08:49-09:18 UT
Seeing/data quality: Ok (Slight calima)
Slit direction: North ; Scan direction: ~ East to West
Scan step: 0.3" ; Scan length: 90"
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment:

Sequence 07: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [X]
Observation period: 11:19-11:34 UT
Seeing/data quality: Ok (Slight calima)
Slit direction: North ; Scan direction: ~ East to West
Scan step: 0.3" ; Scan length: 45"
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Scan of the head of the target so using 45" scan lenght instead of 90".

Sequence 08: Target n°1
Scan [X] **Sit & Stare** [ ] **Flat** [ ] **Dark** [ ] **Polar** [ ] **AO on** [X]
Observation period: 11:35-11:48 UT
Seeing/data quality: Ok (Slight calima)
Slit direction: North ; Scan direction: ~ East to West

Scan step: 0.3" ; Scan length: 45"
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s
Comment: Scan of the head of the target so using 45" scan lenght instead of 90".

Sequence 09: Flat Sun center
Scan [ ] **Sit & Stare** [ ] **Flat** [X] **Dark** [ ] **Polar** [ ] **AO on** [ ]
Observation period: 11:50-11:51 UT
Wavelengths:
* Fe I @ 524.9 nm ; camera: Zyla 5 ; exposure time: 0.3s
* Fe I @ 630.2 nm ; camera: Zyla 6 ; exposure time: 0.3s
* H_α @ 652.8 nm ; camera Ixon 2 ; exposure time: 0.22s

QUICKLOOKS