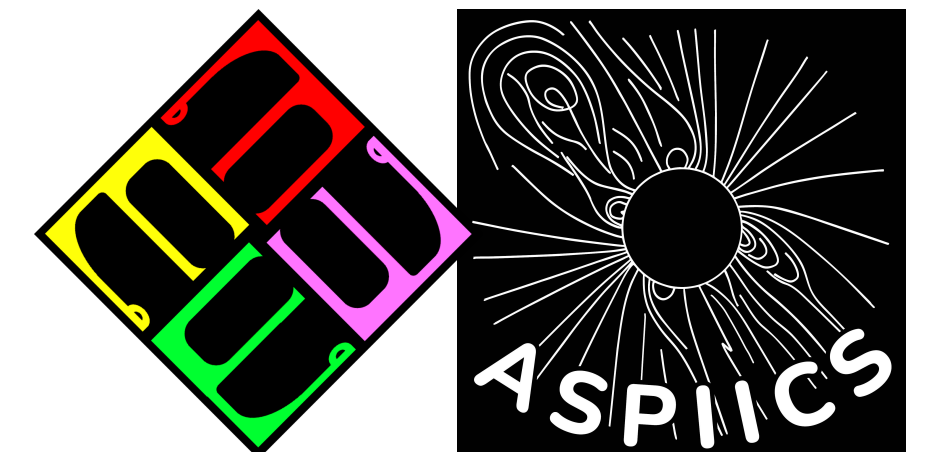


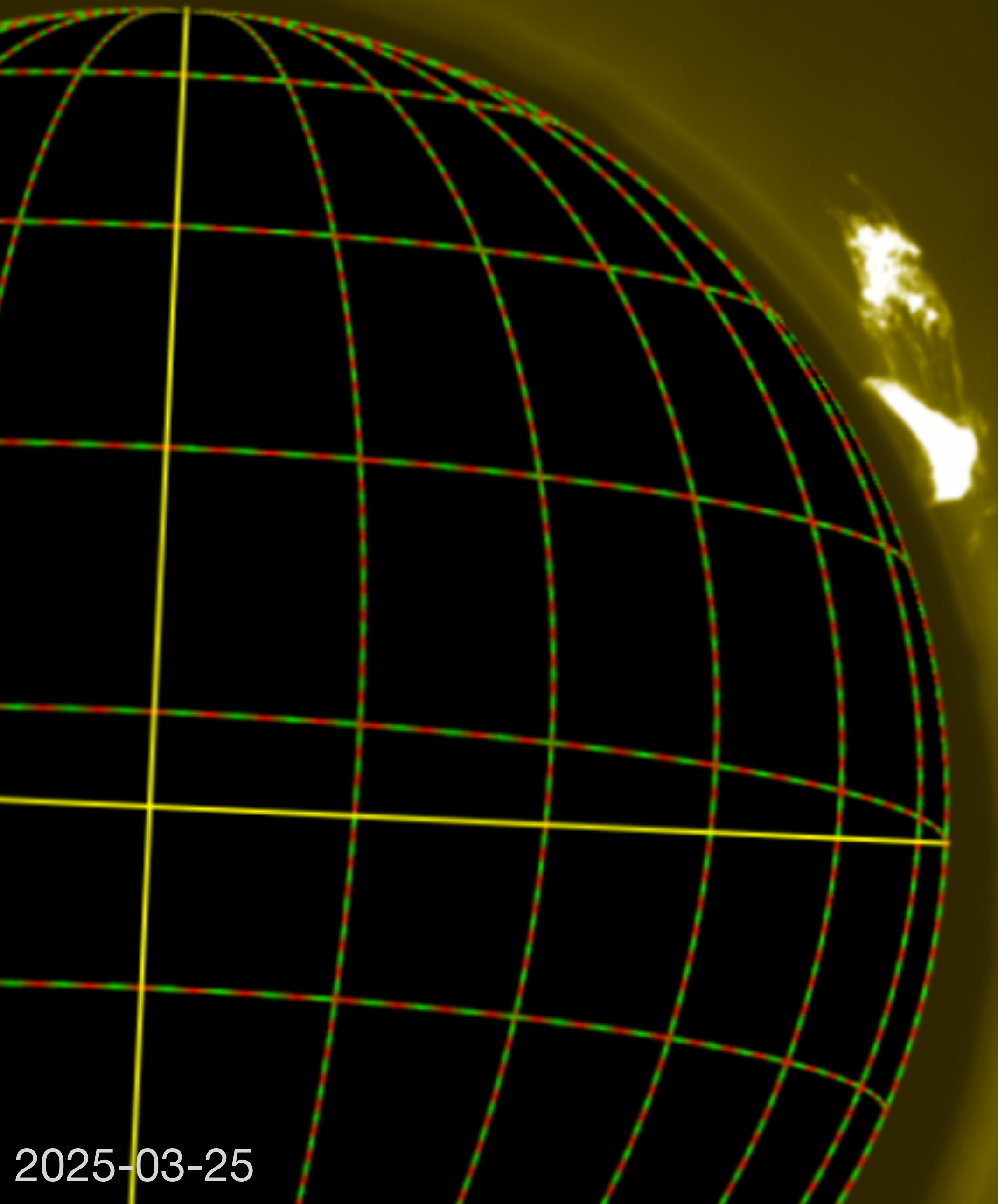
EUI & ASPIICS alignments

Opportunities for joint observations

David Berghmans - Proba-3 ASPIICS SWT 2025 June ROB

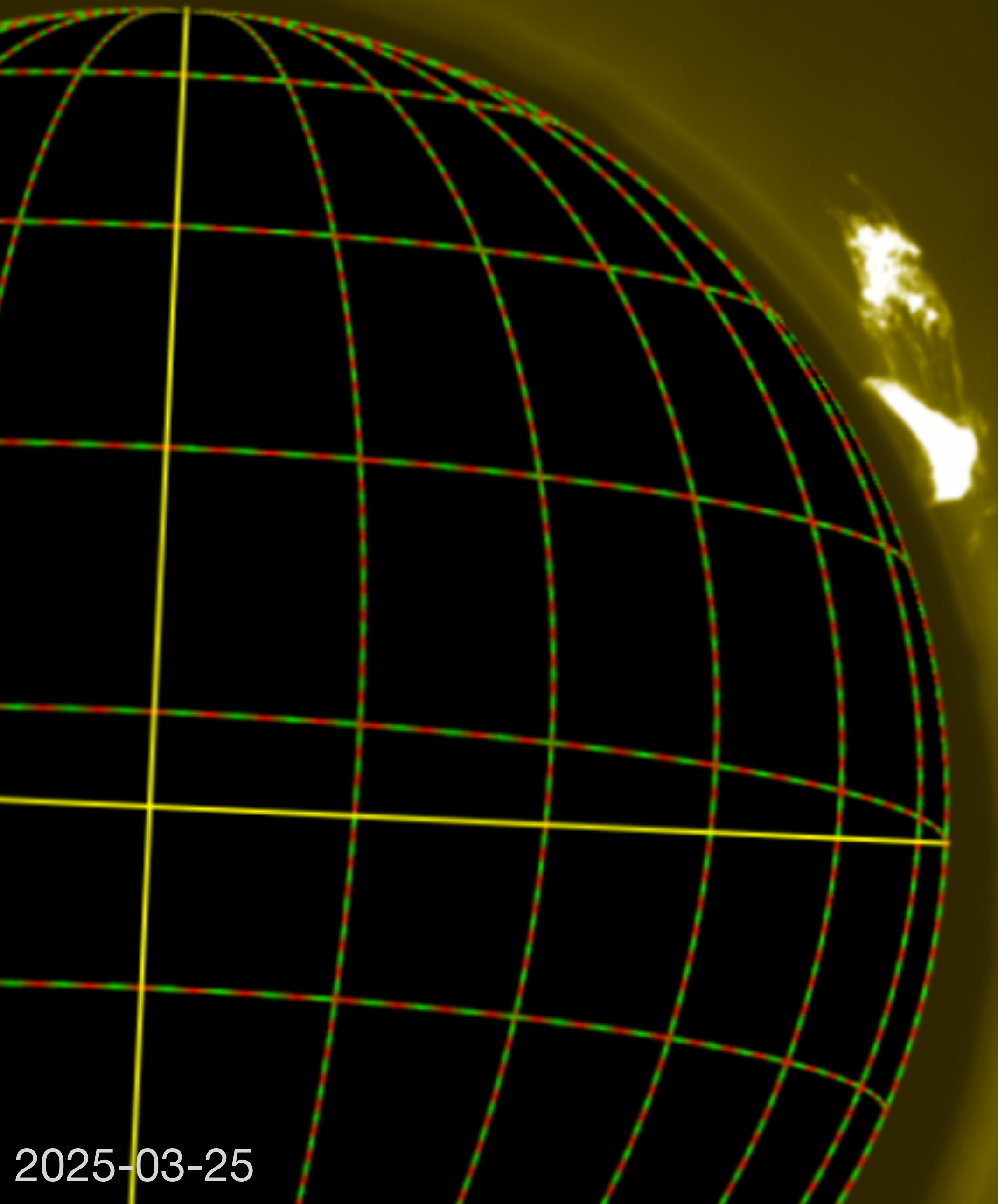


Orbit 135



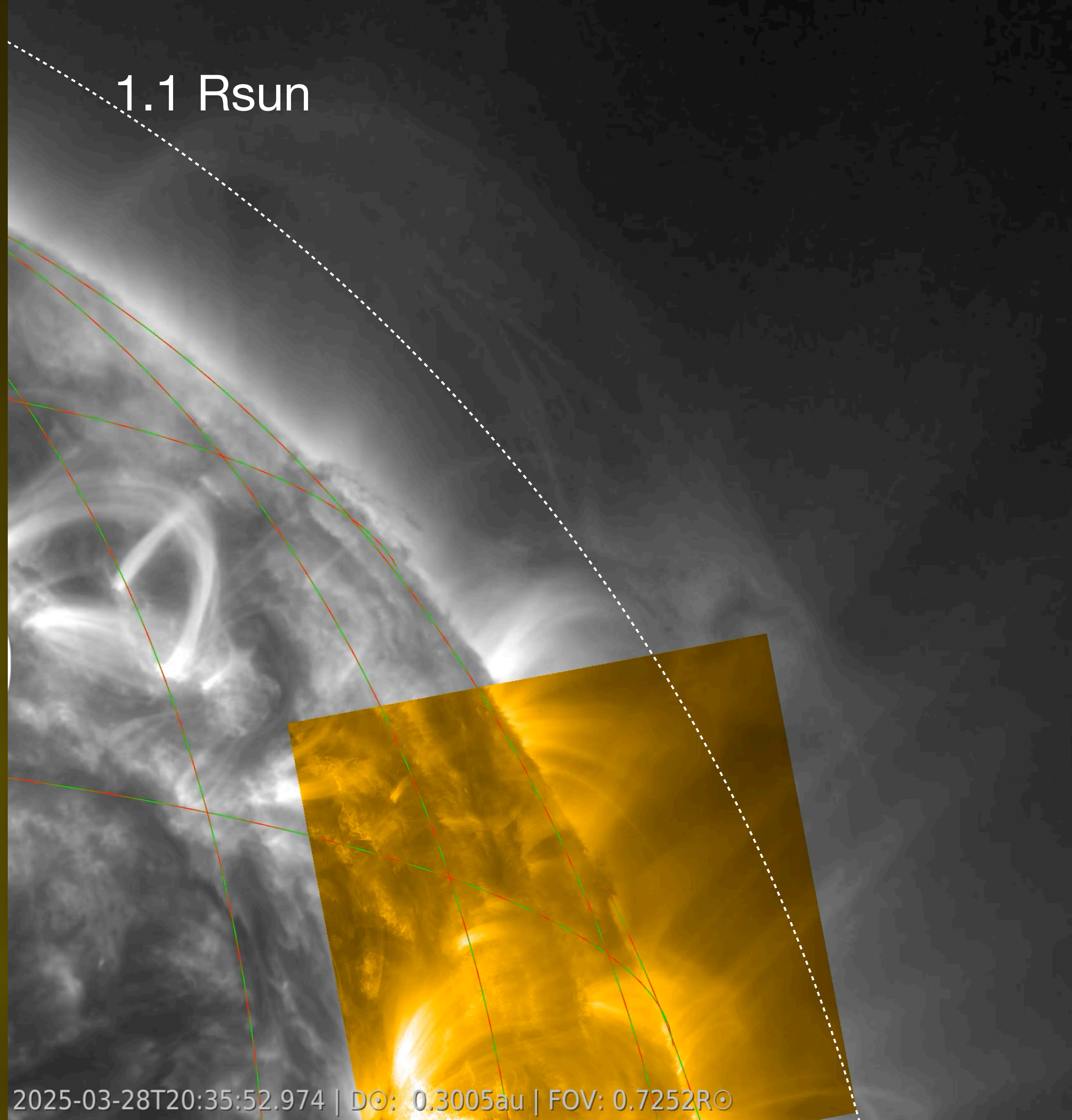
2025-03-25

Orbit 135

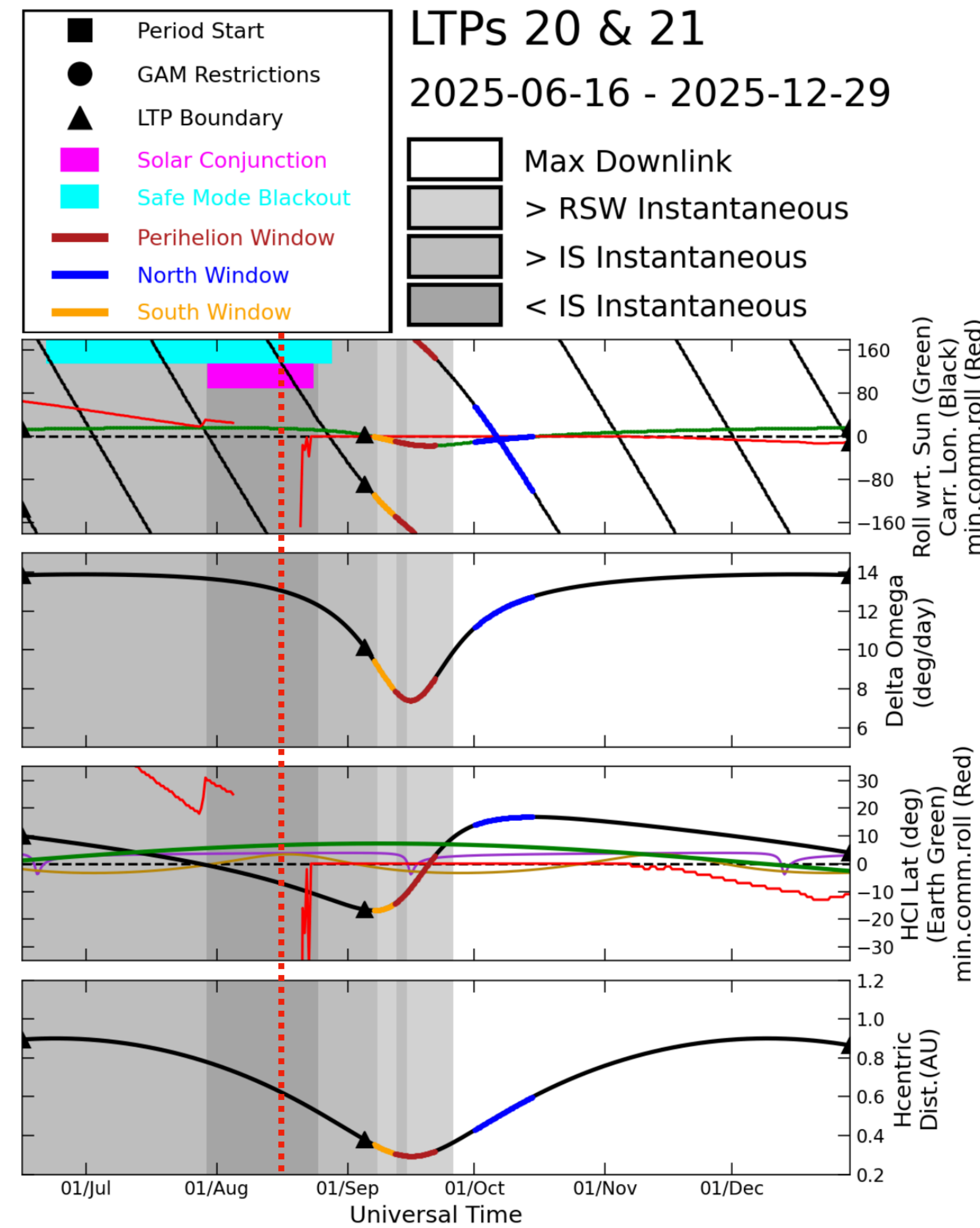
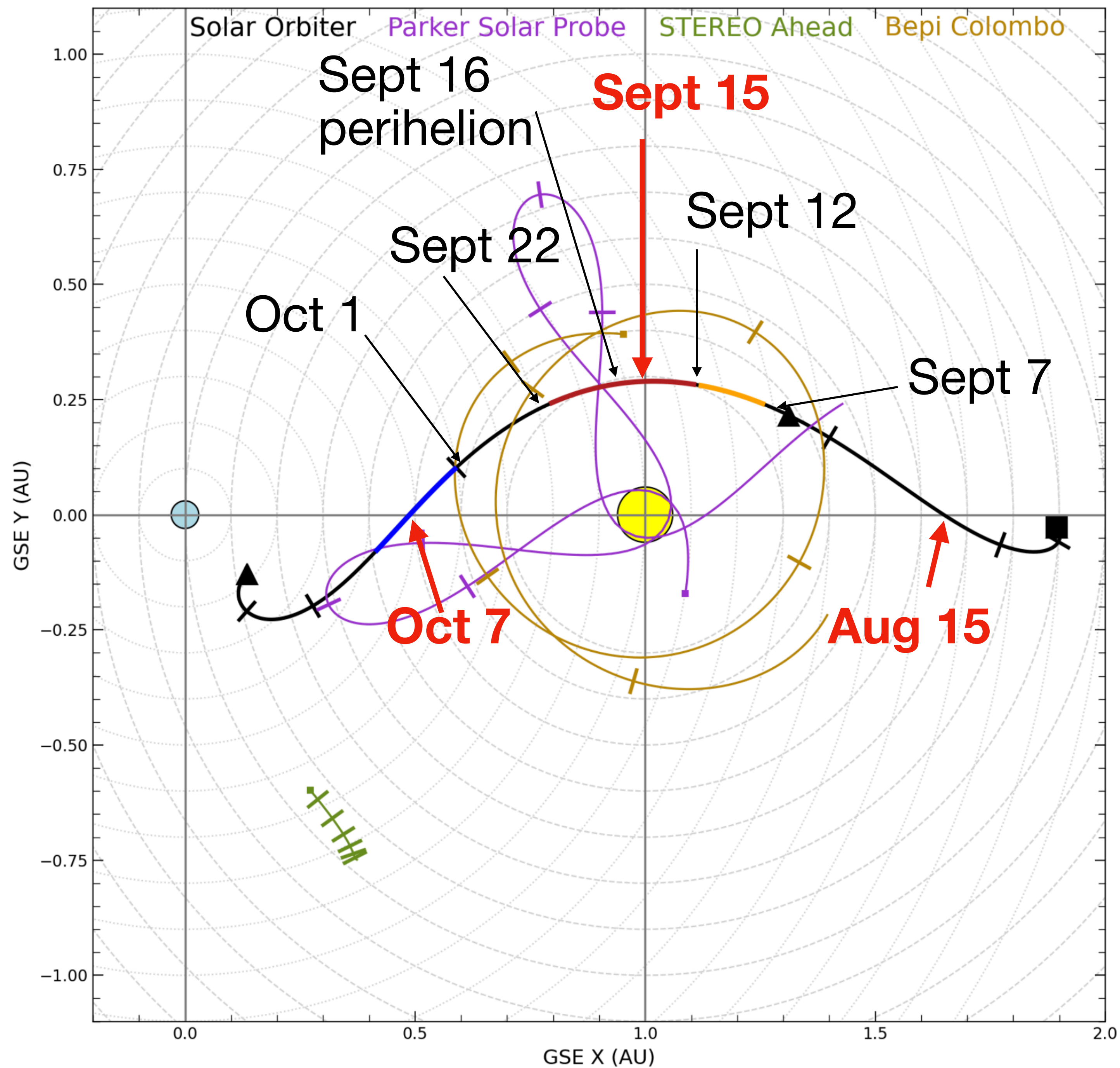


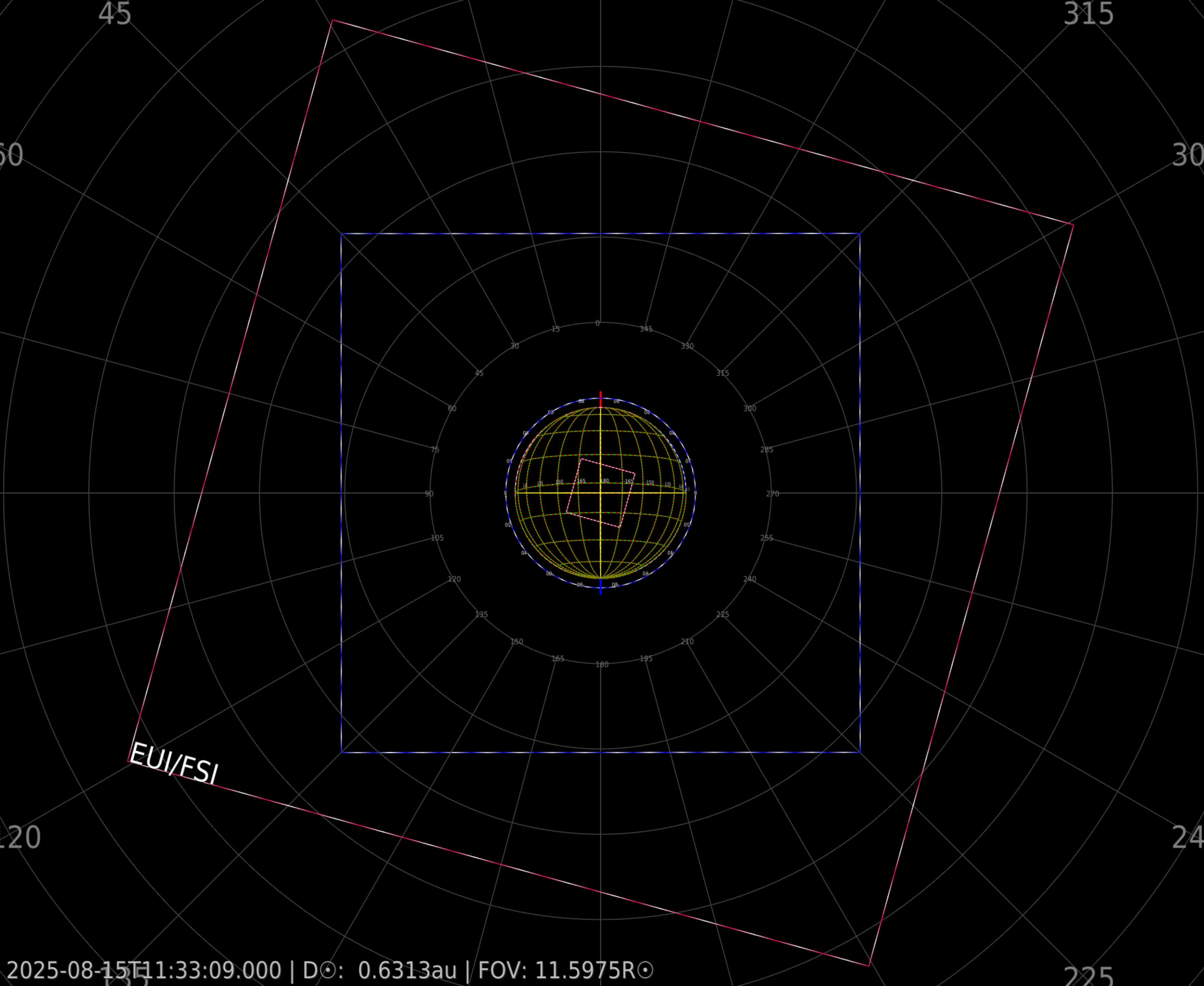
2025-03-25

1.1 R_{sun}



2025-03-28T20:35:52.974 | DO: 0.3005au | FOV: 0.7252R_☉





2025-08-15

Solar Orbiter aligned in
opposition with Earth,
same lat, long+180

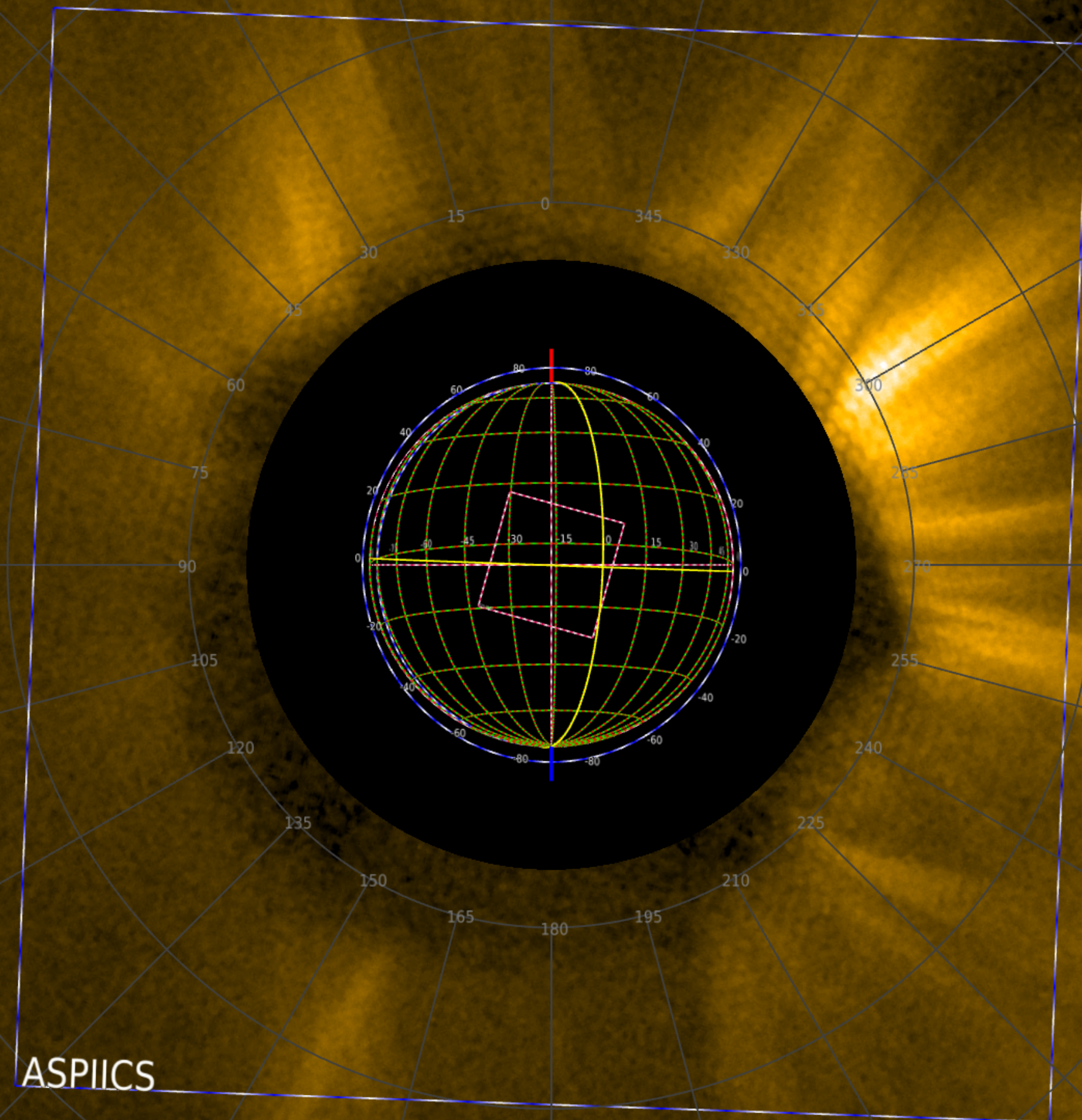
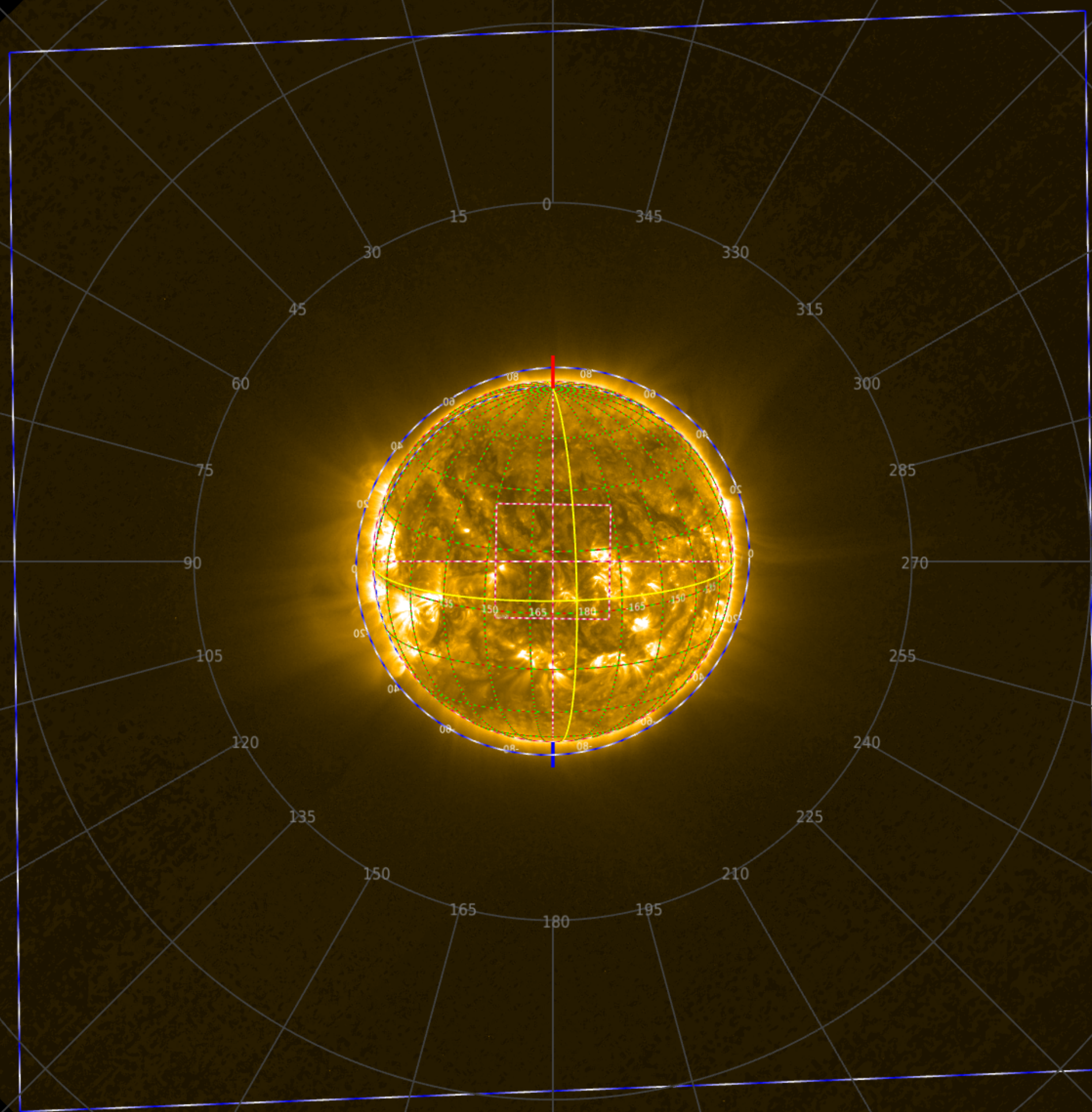
775 MiB to spend, more
than what we can produce
in 6h!

No off-pointing
FSI only

Command upload: July 8

2025-08-15T11:33:09.000 | D☉: 0.6313au | FOV: 11.5975R☉

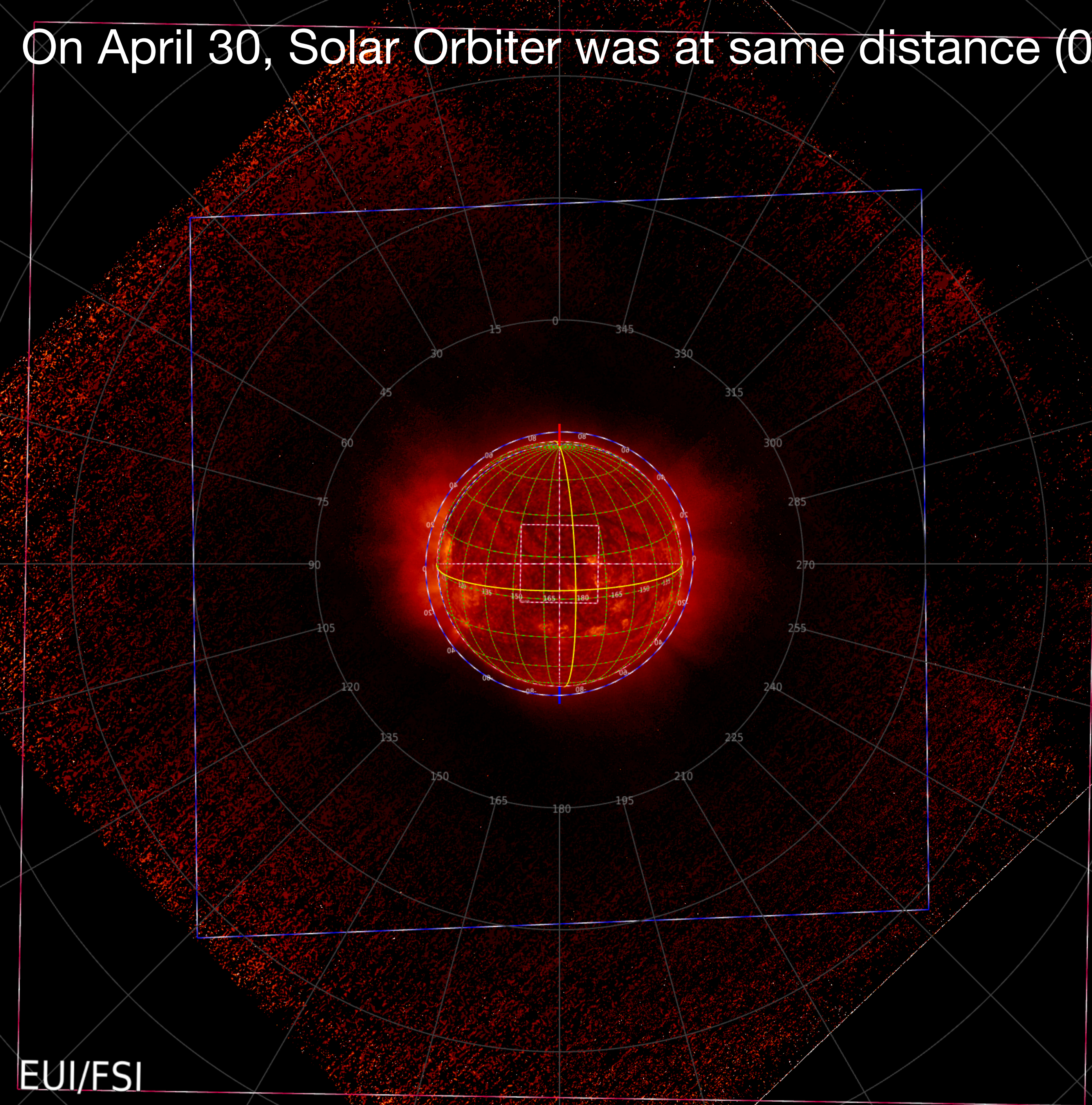
On April 30, Solar Orbiter was at same distance (0.631 au) to the sun as it will be on Aug 15



ASPIICS

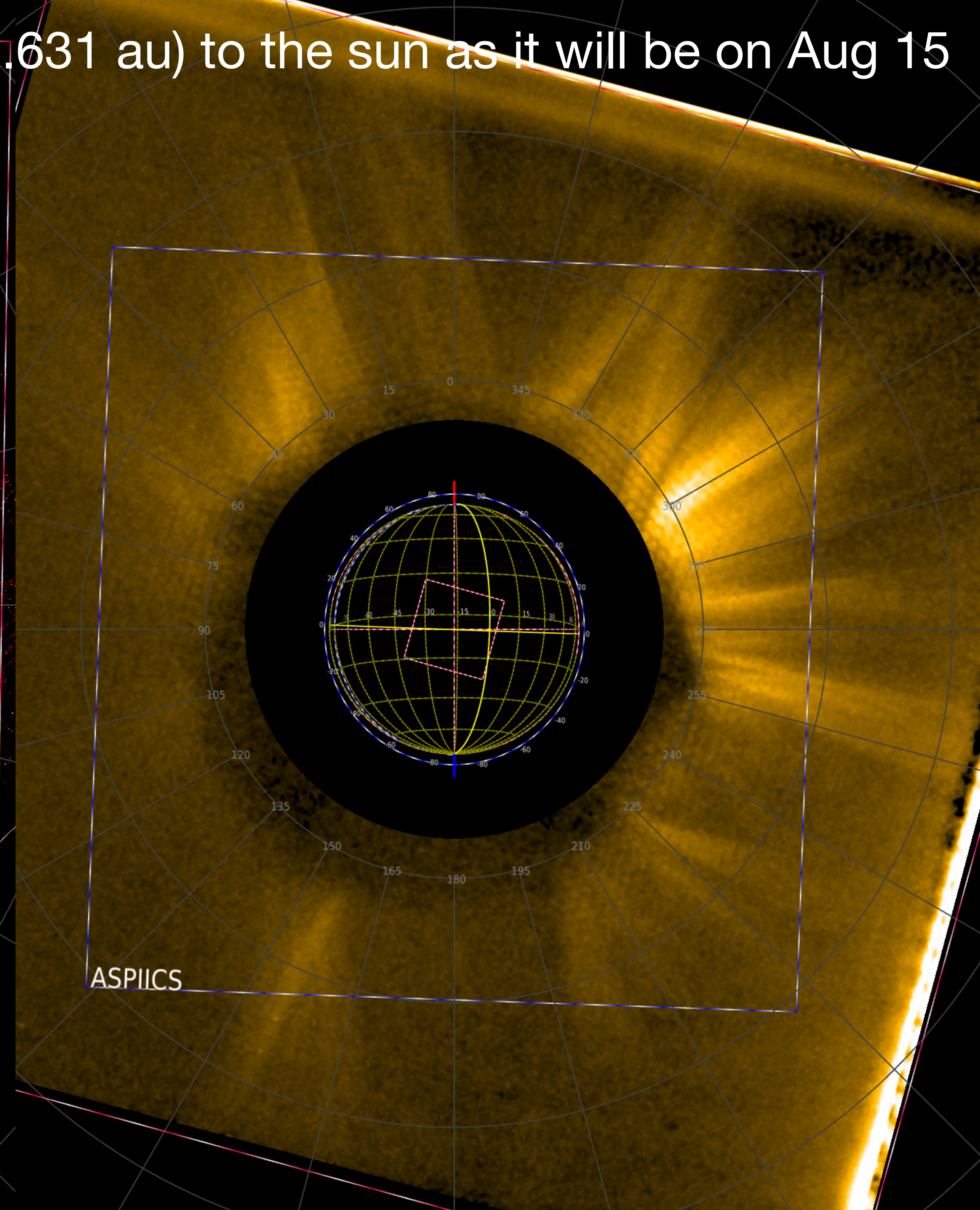
EUI/FSI

On April 30, Solar Orbiter was at same distance (0.631 au) to the sun as it will be on Aug 15



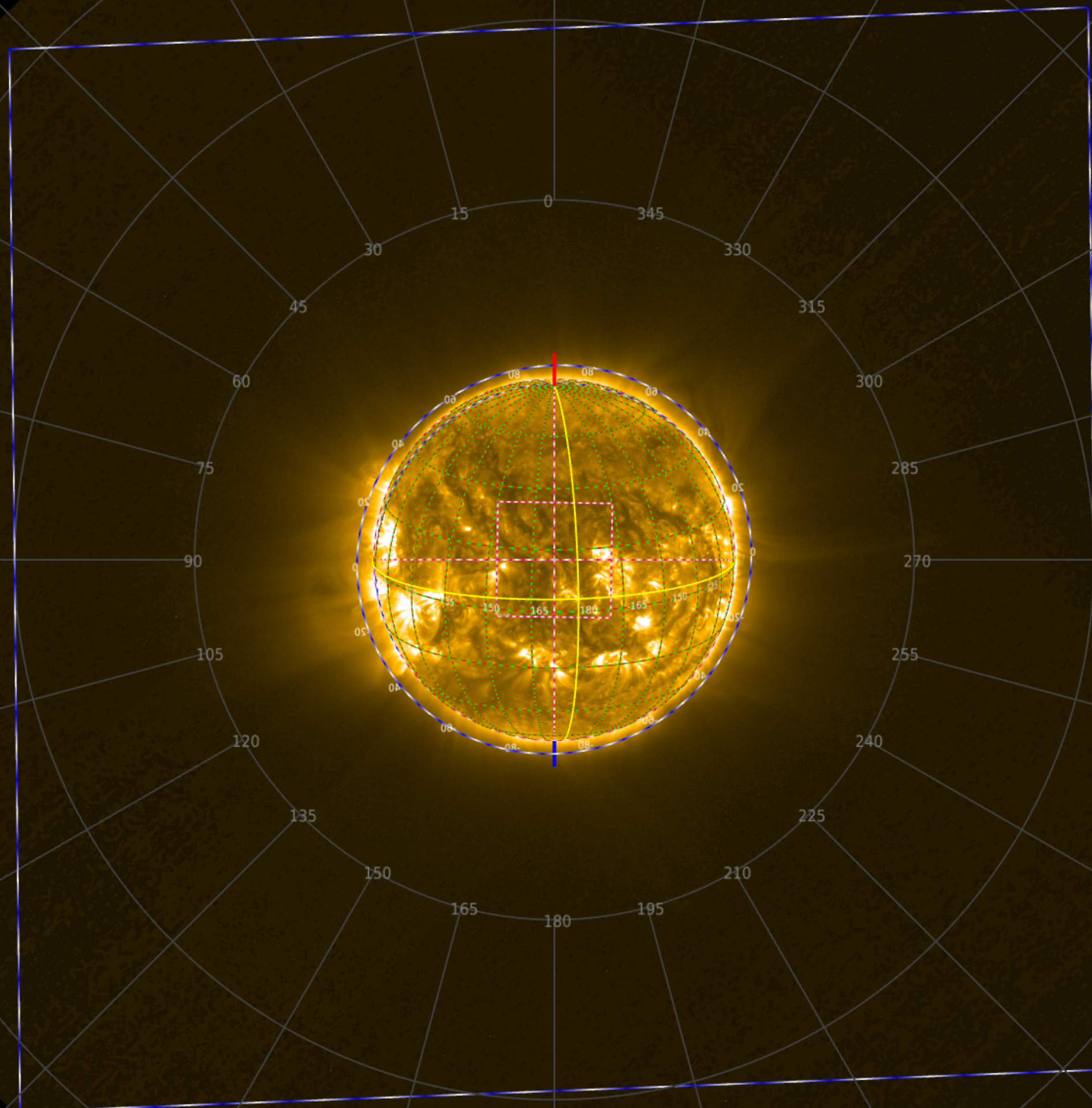
EUI/FSI

113.02.27.171.LDQ 0.6127 1.50V 0.6070BQ



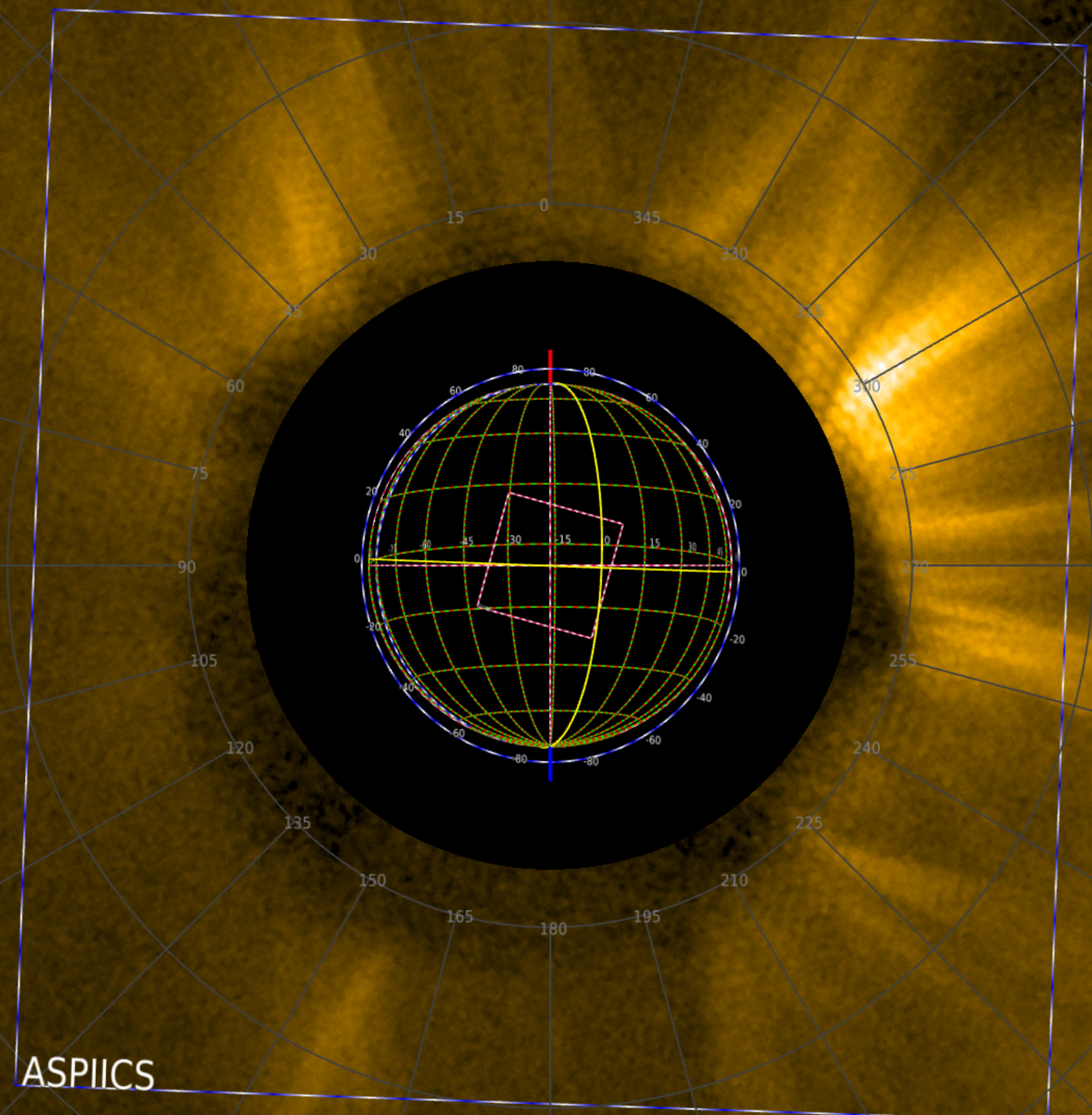
ASPIICS

On April 30, Solar Orbiter was at same distance (0.631 au) to the sun as it will be on Aug 15



1 regular FSI= 0.63 MiB
max 30s cadence
2h => 151 MiB

EUI/FSI

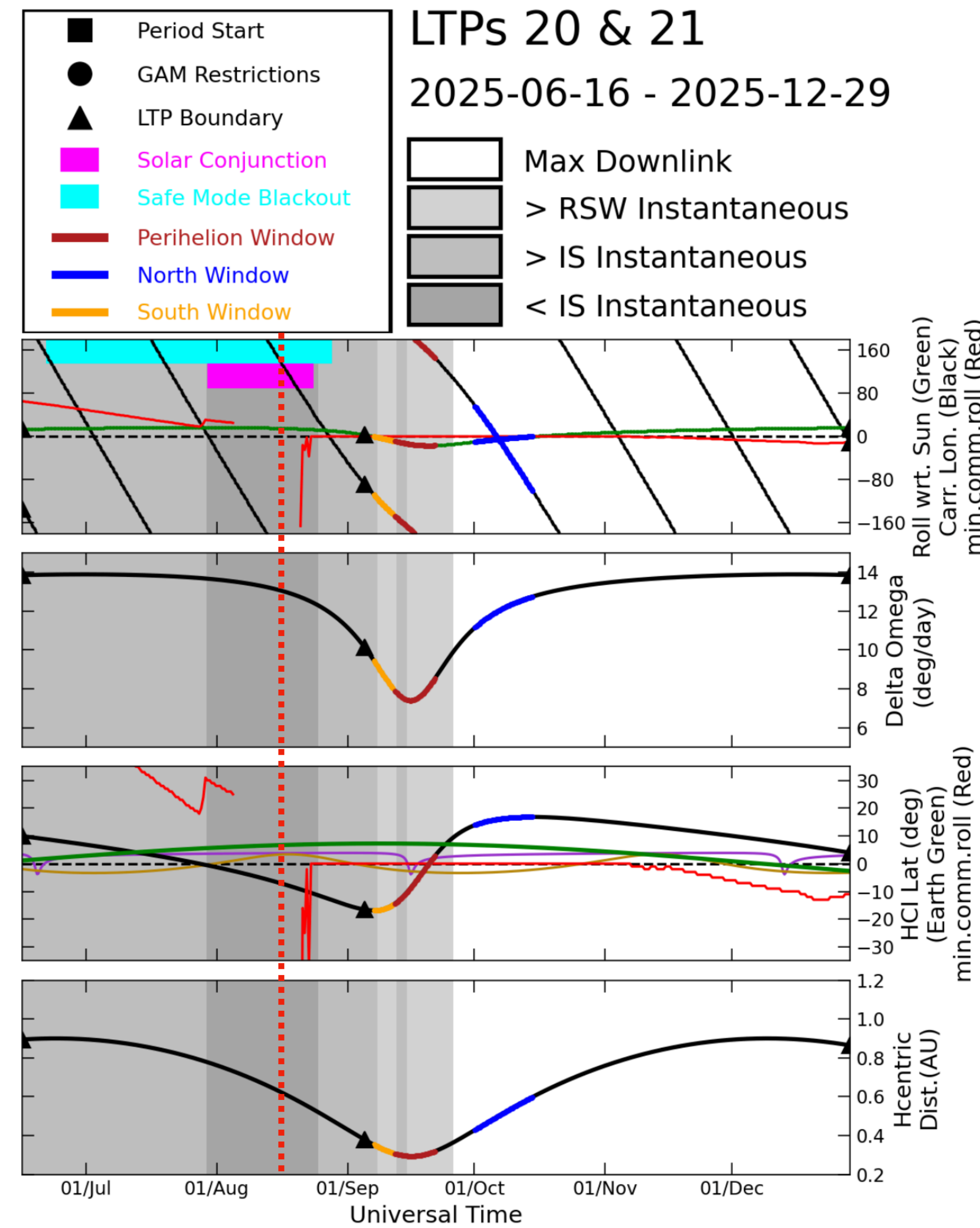
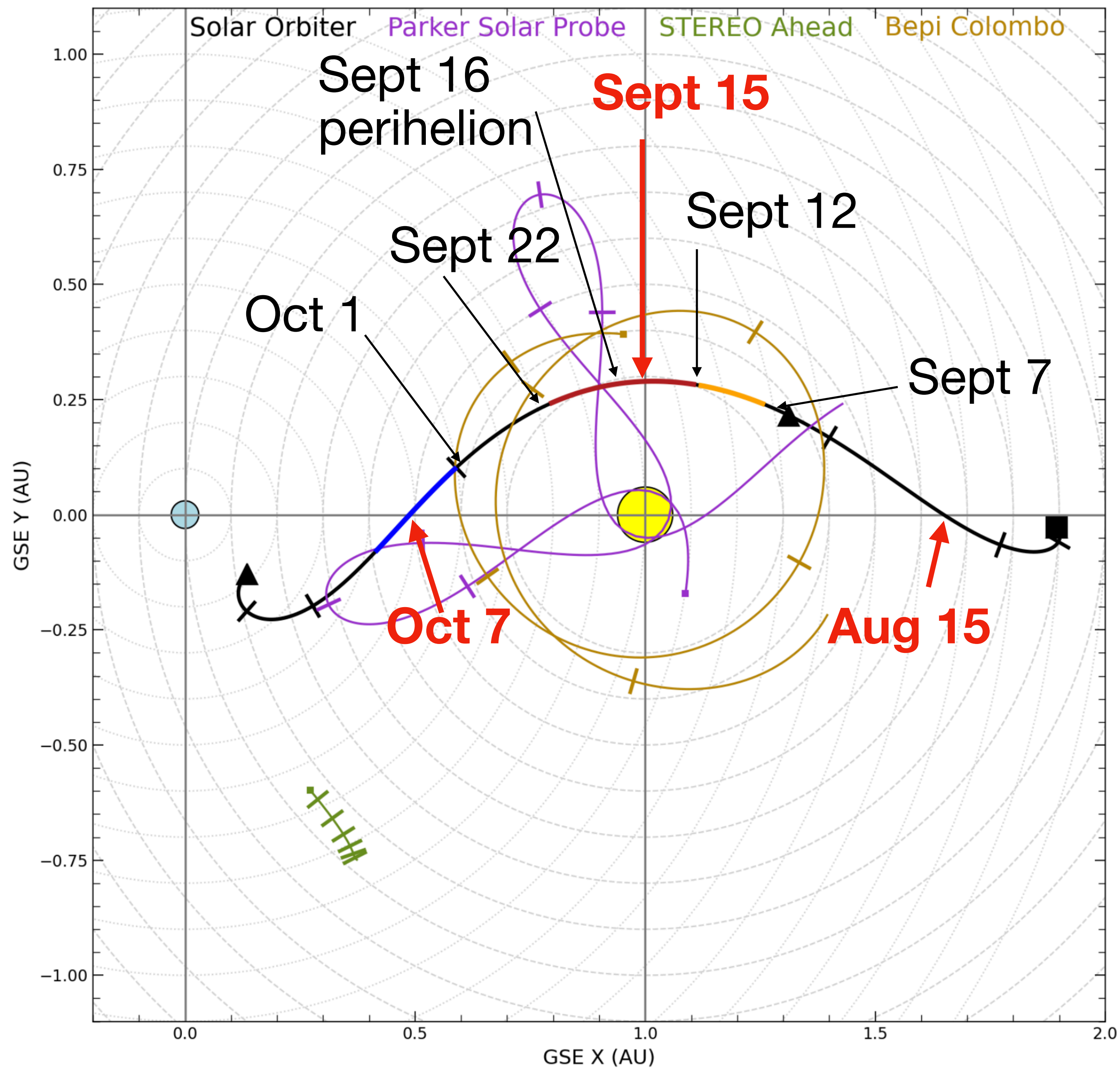


ASPIICS

1 occulted FSI= 7 MiB,
max 20 min cadence
4h => 84 MiB

FSI

| | | | | | |
|------|----------------------|----------------------|----------------------|--|---------|
| 0308 | 2025 Aug 14 05:39:45 | 2025 Aug 14 08:39:45 | 2025 Aug 14 11:39:45 | | 3:39:45 |
| 0309 | 2025 Aug 15 01:19:29 | 2025 Aug 15 04:19:29 | 2025 Aug 15 07:19:29 | SolO-P3 alignment 15/08 02:10, uGMRT + MWA 02:30-05:30 | |
| 0310 | 2025 Aug 15 20:59:11 | 2025 Aug 15 23:59:11 | 2025 Aug 16 02:59:11 | | |
| 0311 | 2025 Aug 16 16:38:50 | 2025 Aug 16 19:38:50 | 2025 Aug 16 22:38:50 | | |



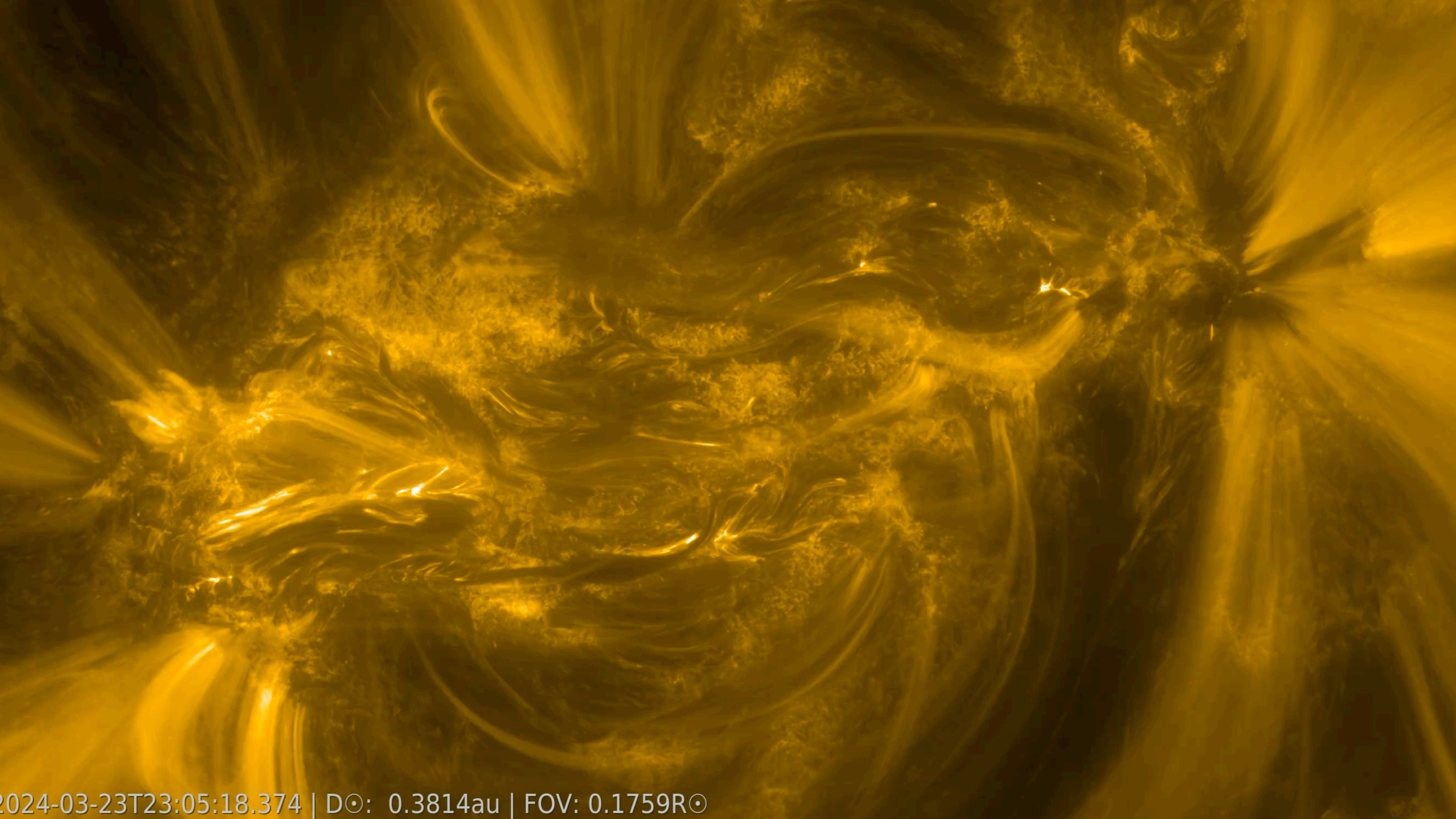
| | | | | | |
|------|----------------------|----------------------|----------------------|---|---------|
| 0345 | 2025 Sep 13 13:09:21 | 2025 Sep 13 16:09:21 | 2025 Sep 13 19:09:21 | Coronal sources SolO before super-quadrature | 2:20:39 |
| 0346 | 2025 Sep 14 08:48:58 | 2025 Sep 14 11:48:58 | 2025 Sep 14 14:48:58 | Coronal sources PSP before super-quadrature | 6:00:00 |
| 0347 | 2025 Sep 15 04:28:36 | 2025 Sep 15 07:28:36 | 2025 Sep 15 10:28:36 | Super-quadrature with PSP and SolO 15/09 07:00, uGMRT + MWA 04:30-07:30 | 2:28:36 |
| 0348 | 2025 Sep 16 00:08:13 | 2025 Sep 16 03:08:13 | 2025 Sep 16 06:08:13 | uGMRT + MWA 02:30-05:30 | |
| 0349 | 2025 Sep 16 19:47:52 | 2025 Sep 16 22:47:52 | 2025 Sep 17 01:47:52 | Coronal sources PSP before quadrature | |
| 0350 | 2025 Sep 17 15:27:33 | 2025 Sep 17 18:27:33 | 2025 Sep 17 21:27:33 | | 0:02:27 |
| 0351 | 2025 Sep 18 11:07:16 | 2025 Sep 18 14:07:16 | 2025 Sep 18 17:07:16 | PSP-P3 quadrature 18/09 07:48 | 4:22:44 |

| | | |
|---------------------------------------|----------------|----------------|
| Nanoflares quiet Sun | 13th September | 13th September |
| Major Flare (instance 1/3) | 13th September | 13th September |
| Density fluctuations with HRI support | 14th September | 15th September |
| RS Burst, target active region | 15th September | 15th September |
| Major Flare (instance 2/3) | 16th September | 16th September |
| Major Flare (instance 3/3) | 17th September | 17th September |
| Coronal Dynamics | 18th September | 22nd September |
| Pole to Pole | 18th September | 22nd September |

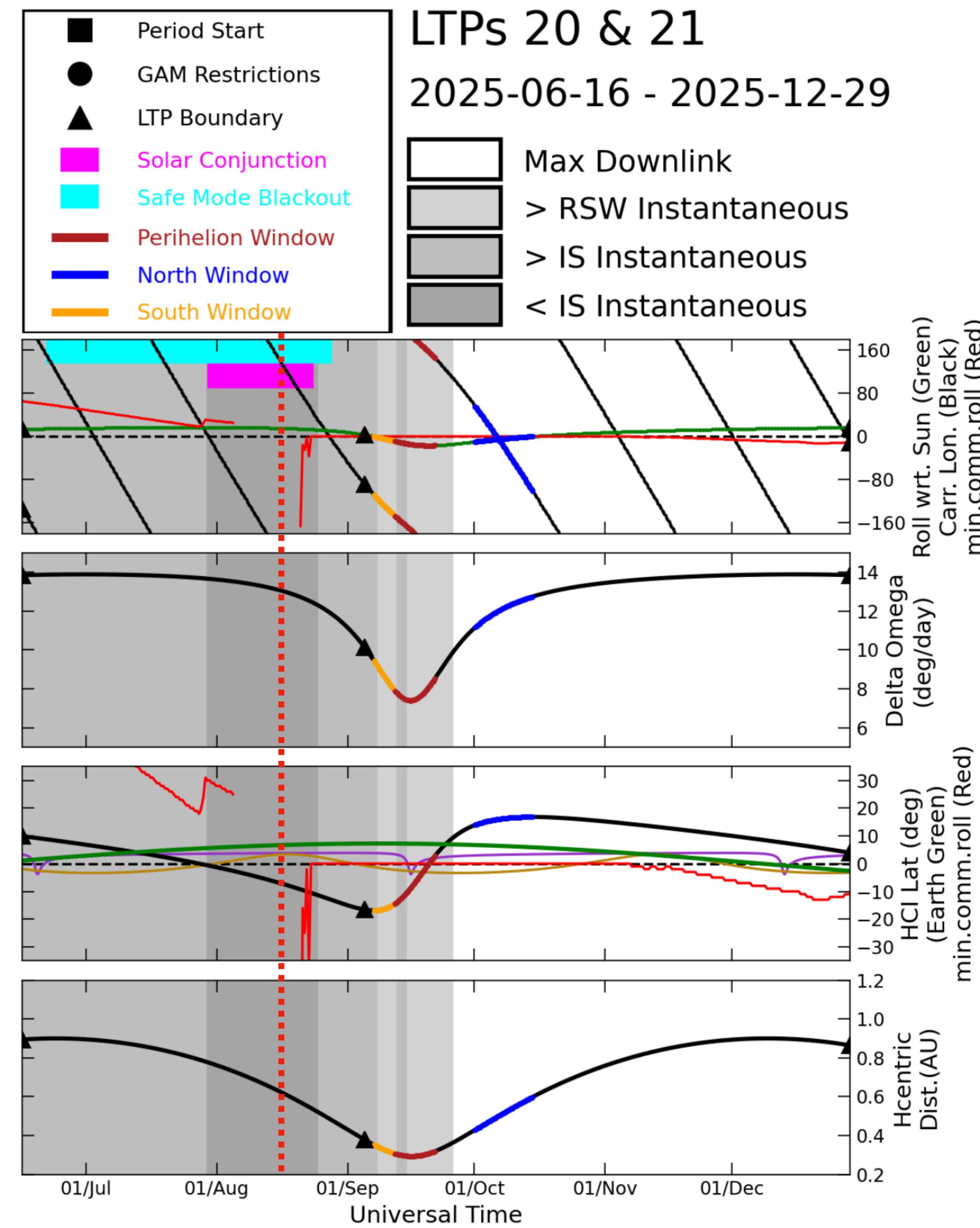
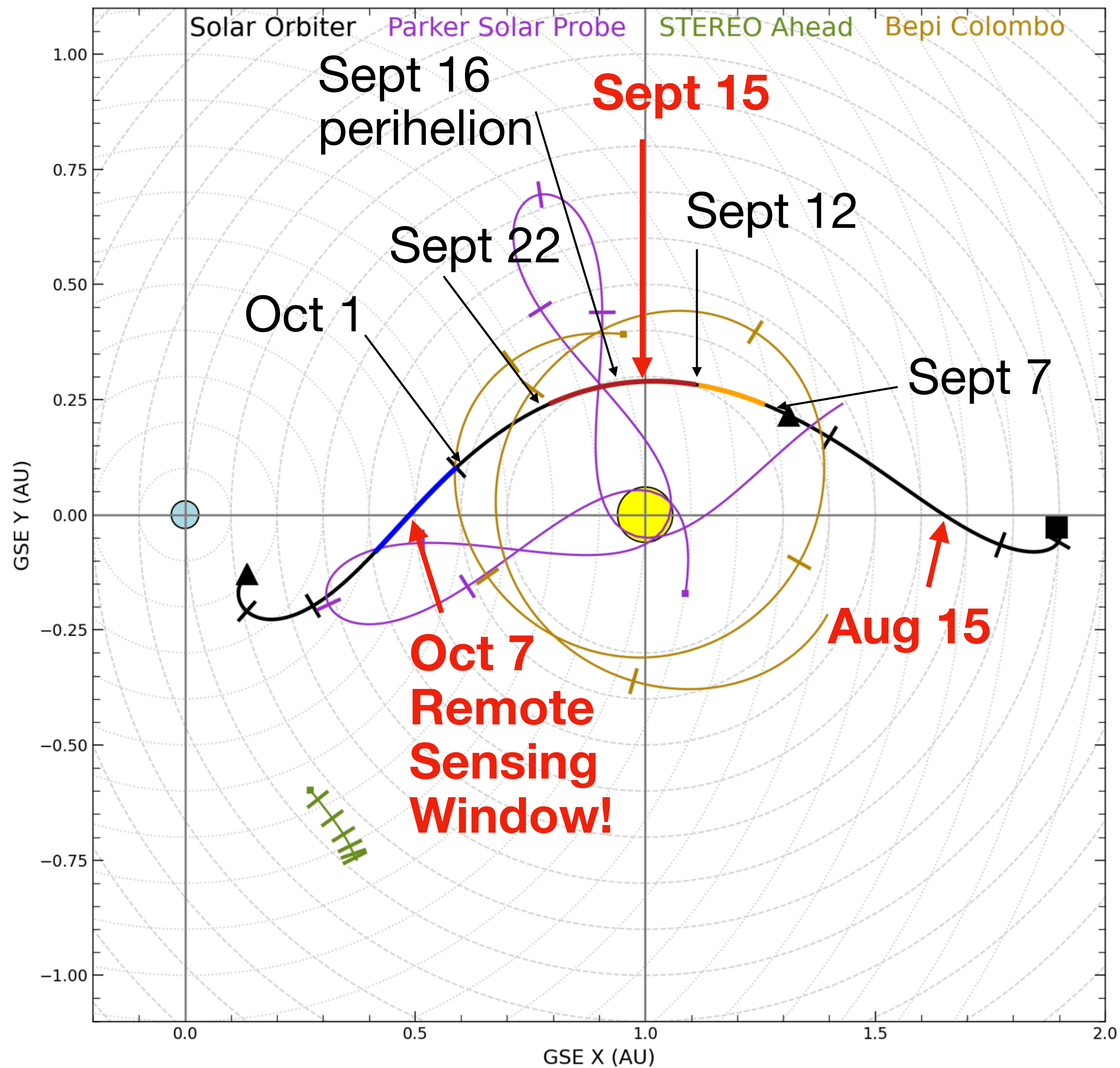
Solar Orbiter coordination deadline: SOWG July 8 -10

Command upload: end August

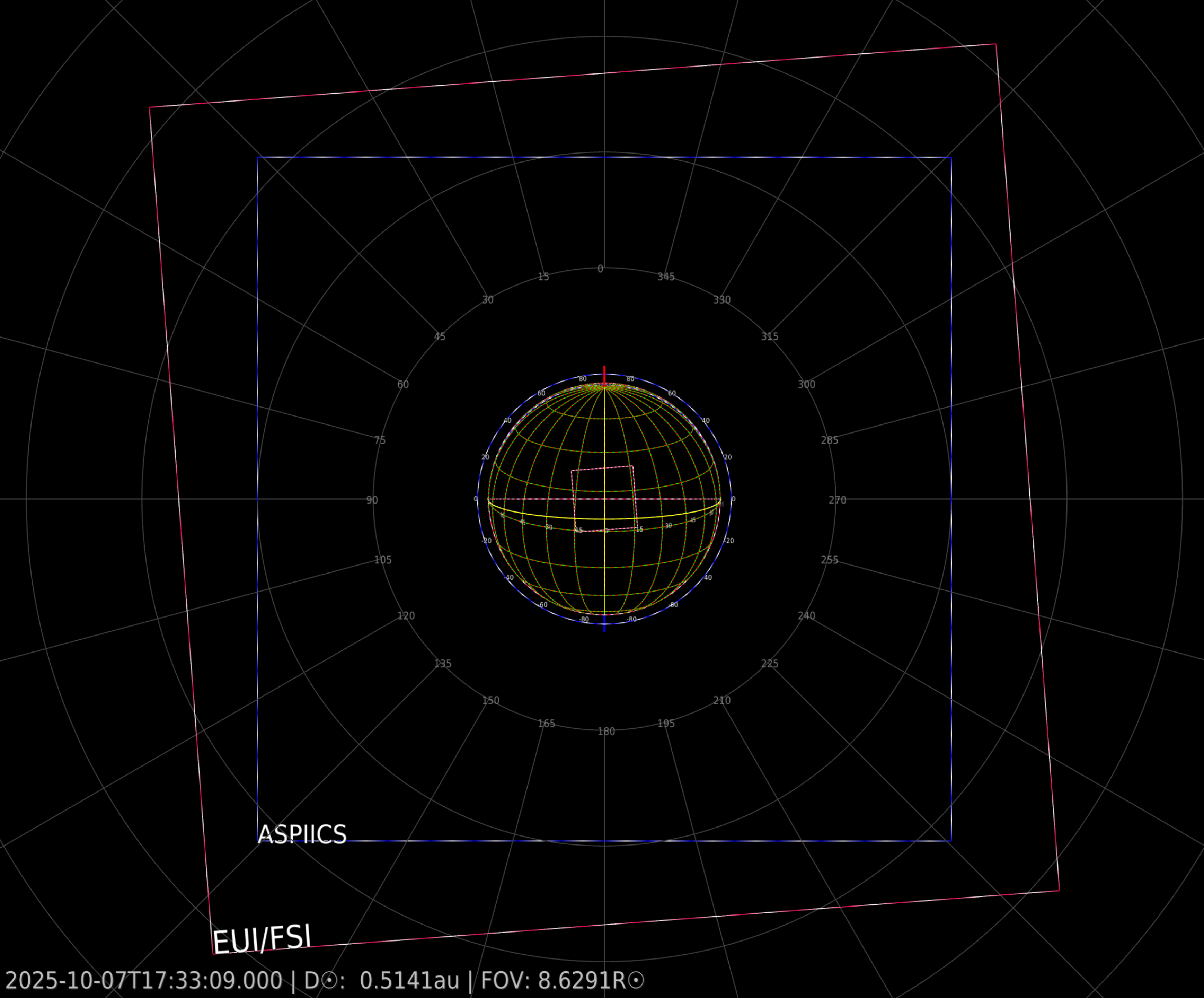
2024-09-30T23:39:00.925



2024-03-23T23:05:18.374 | D☉: 0.3814au | FOV: 0.1759R☉



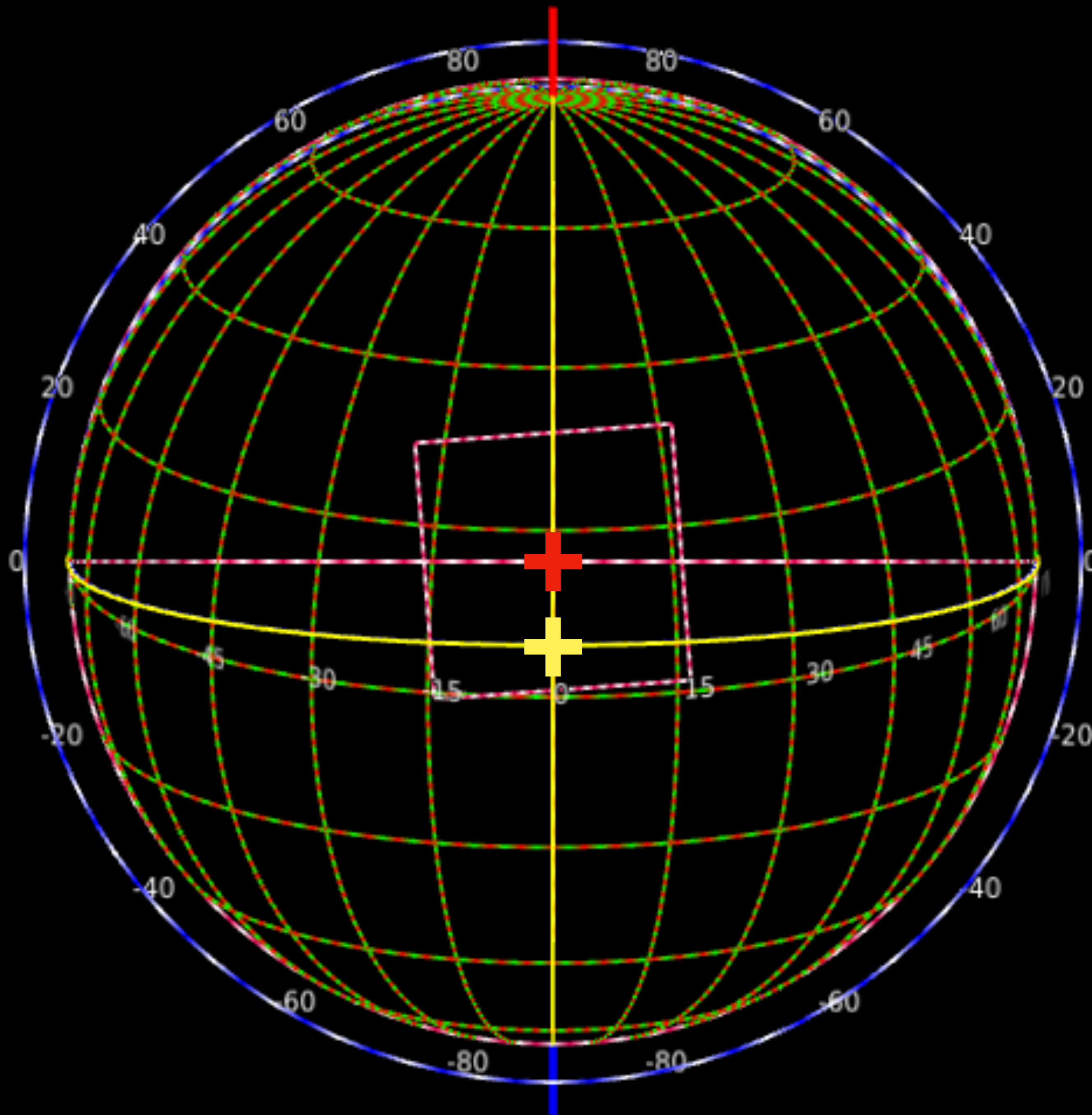
2025-10-07
Solar Orbiter aligned with
Earth in longitude,
not latitude



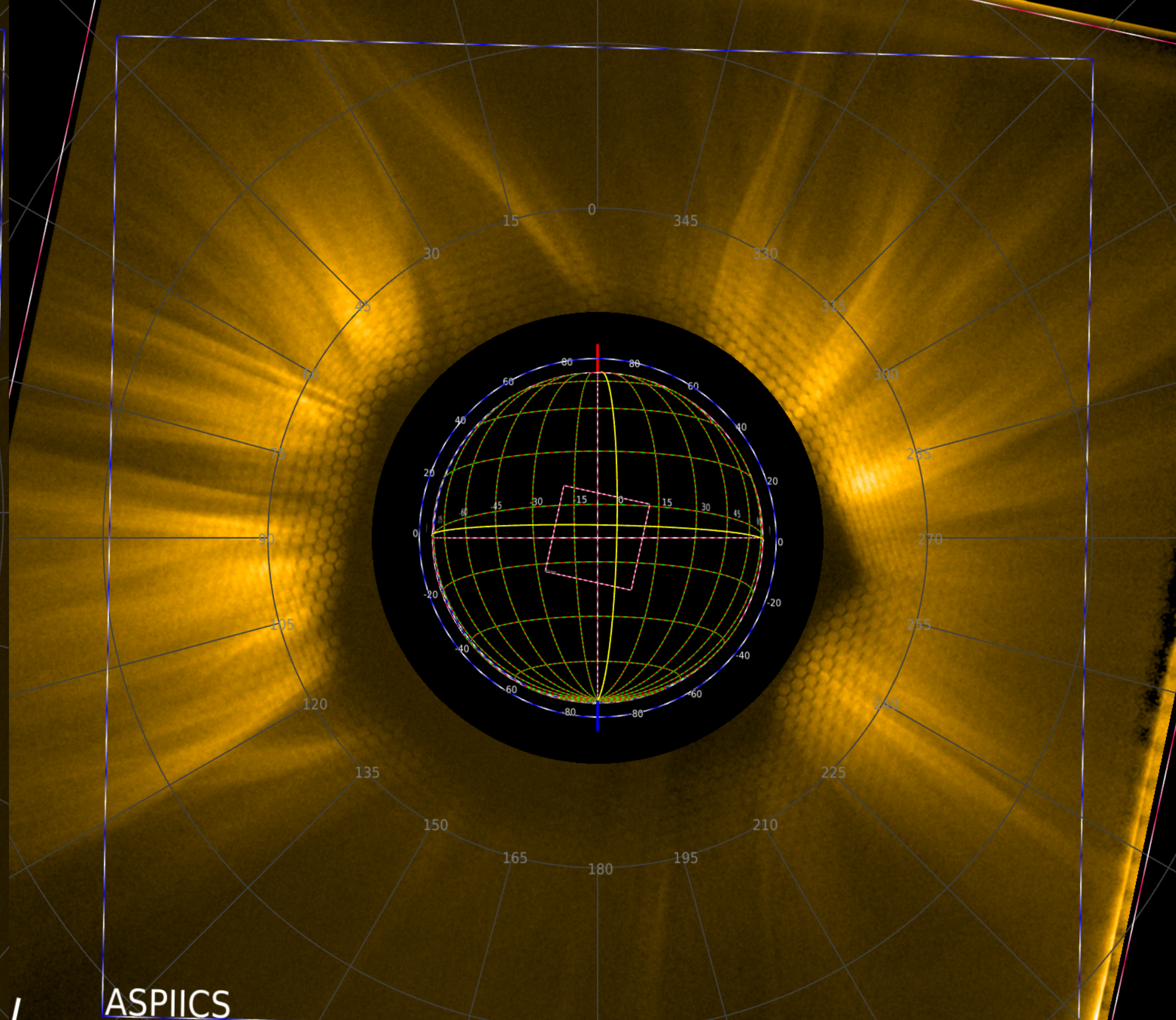
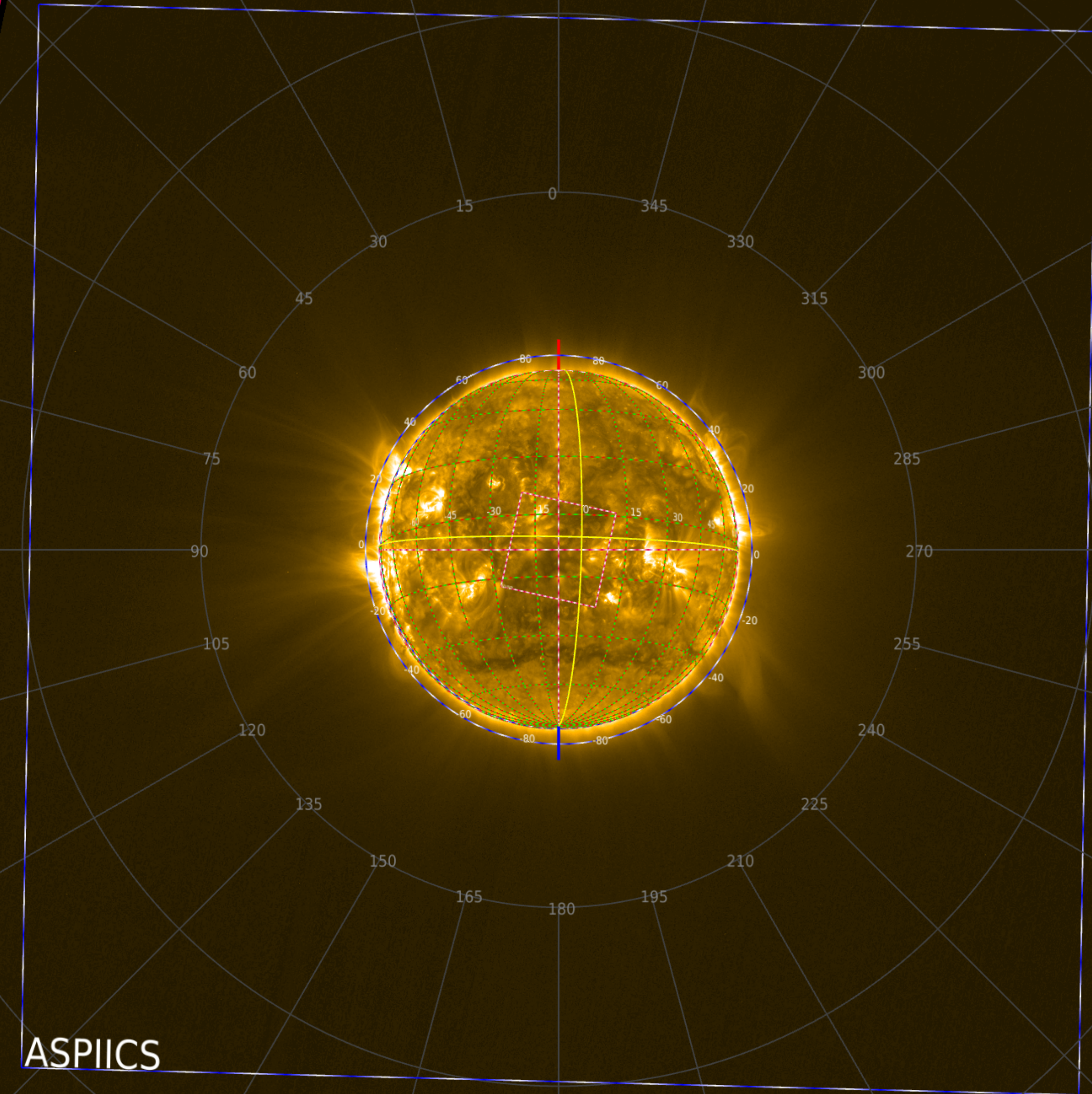
2025-10-07
Solar Orbiter aligned with
Earth in longitude,
not latitude

Solar Orbiter at +16 deg lat

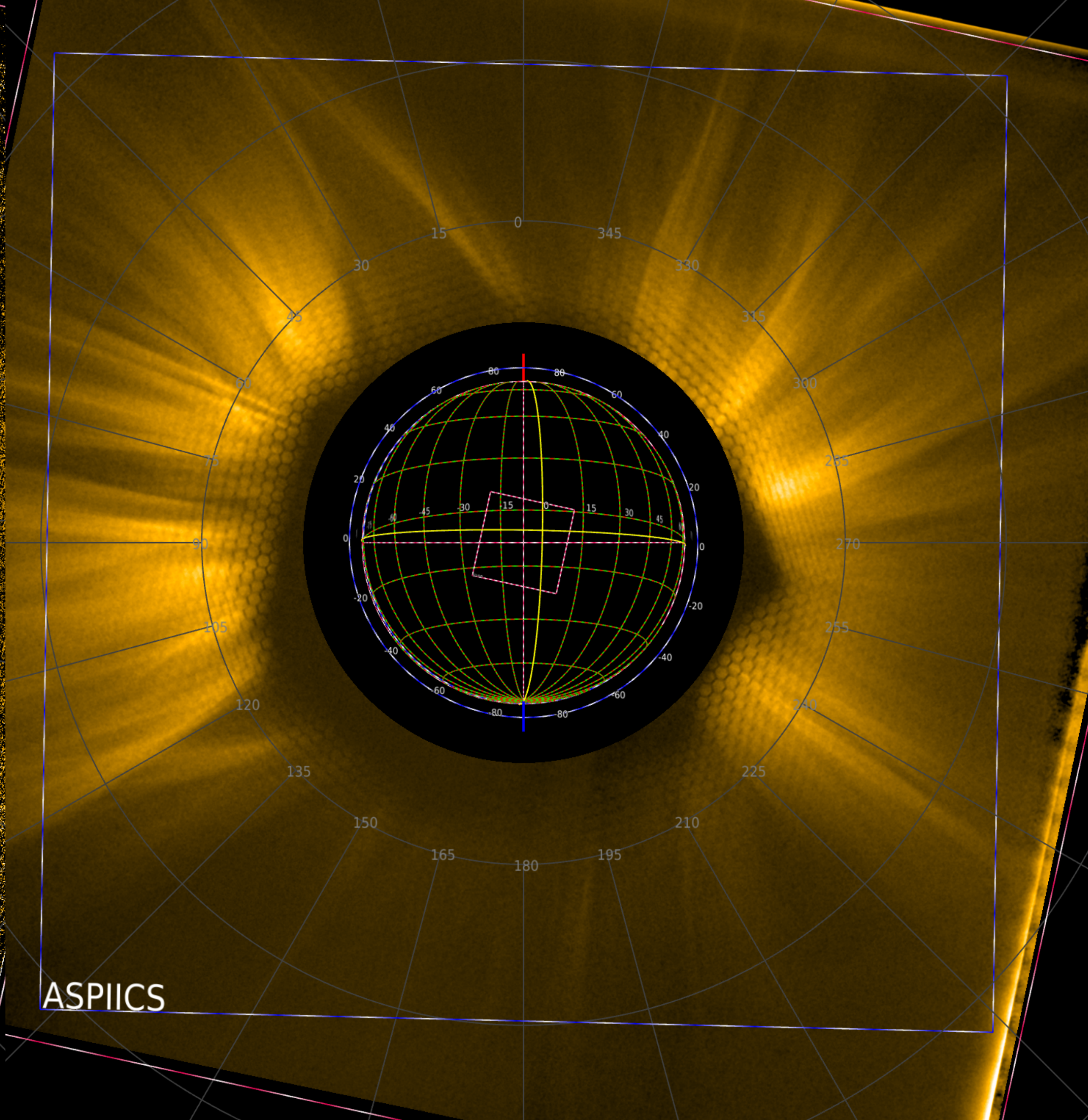
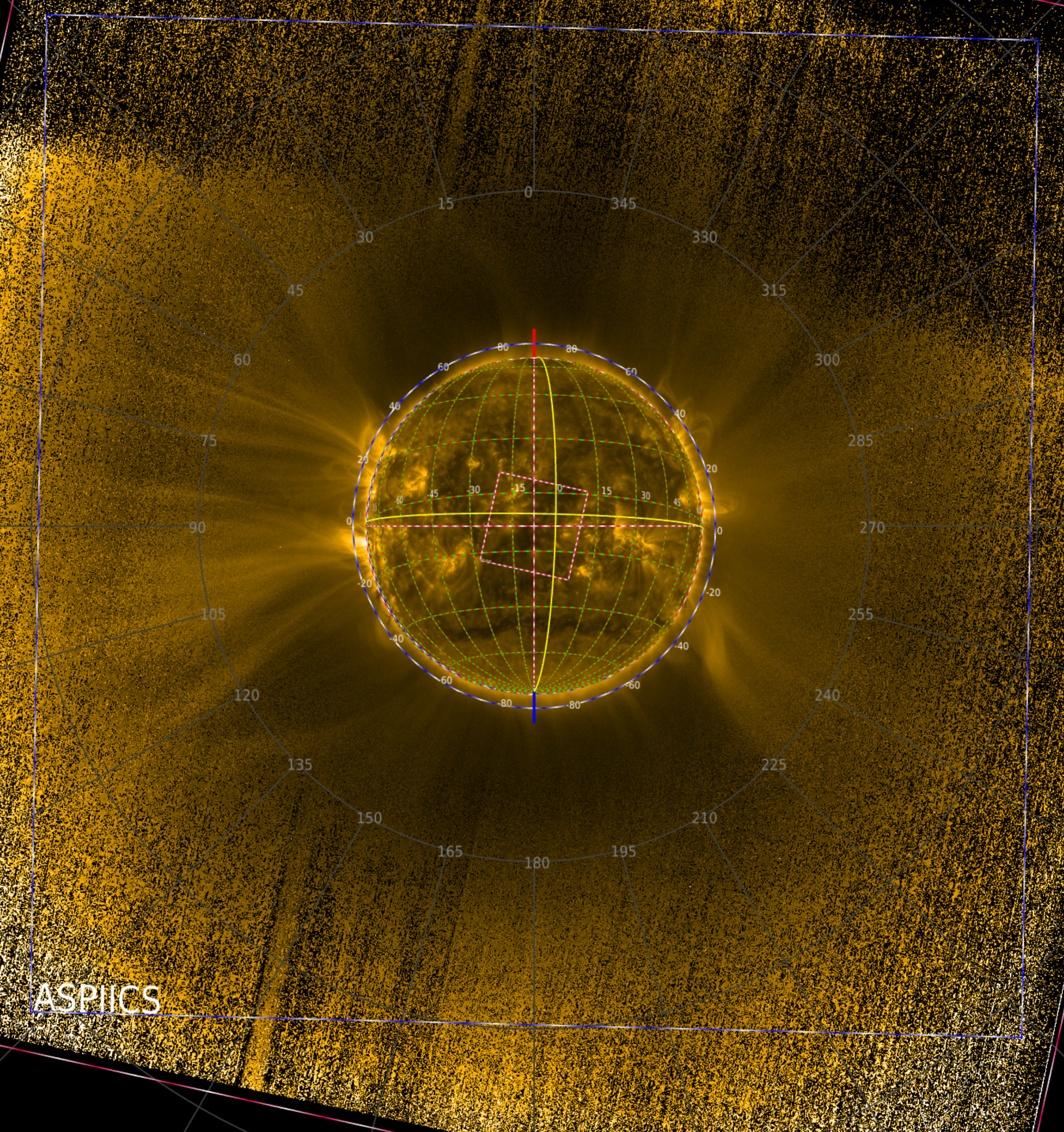
Earth at +6deg lat



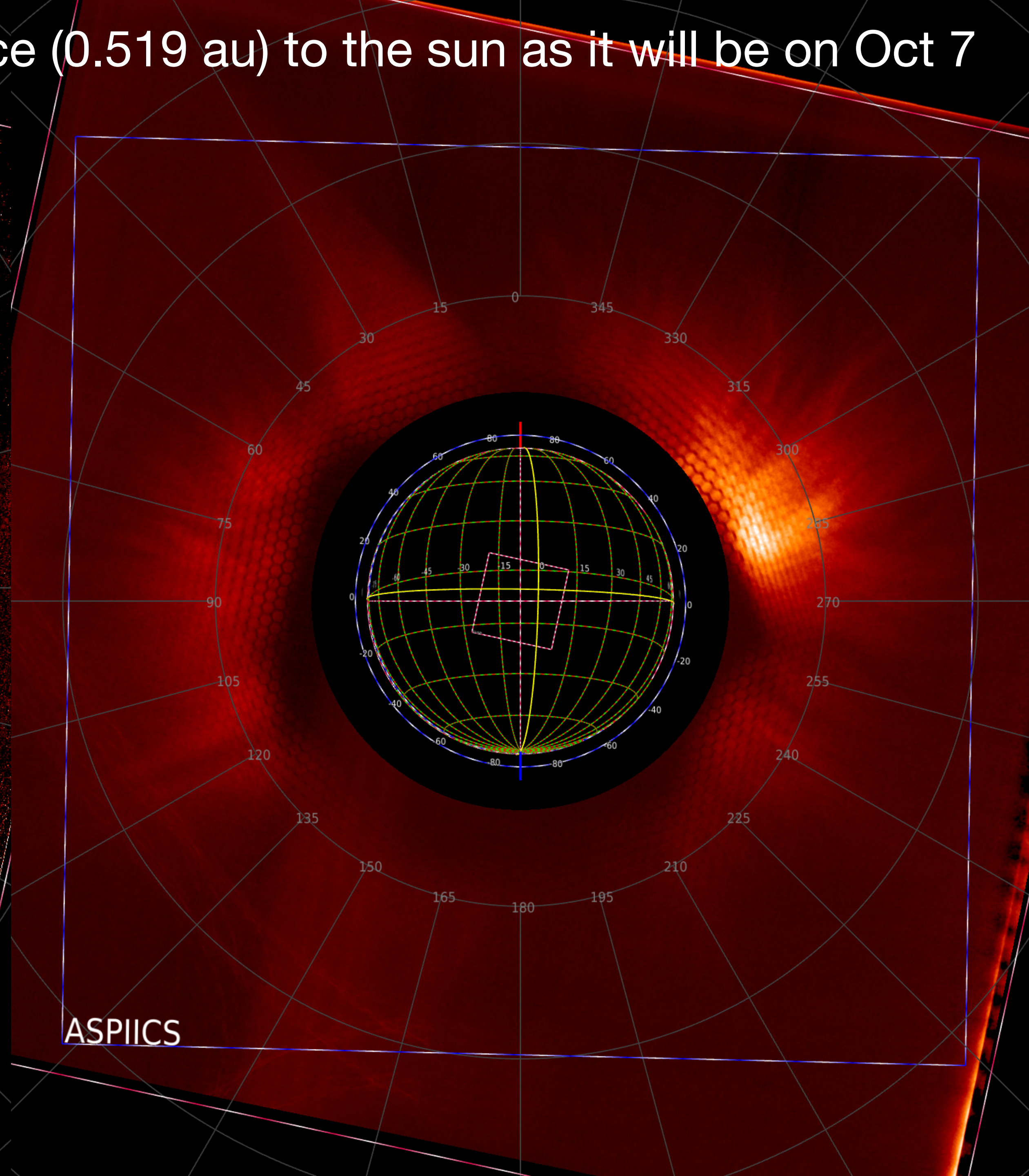
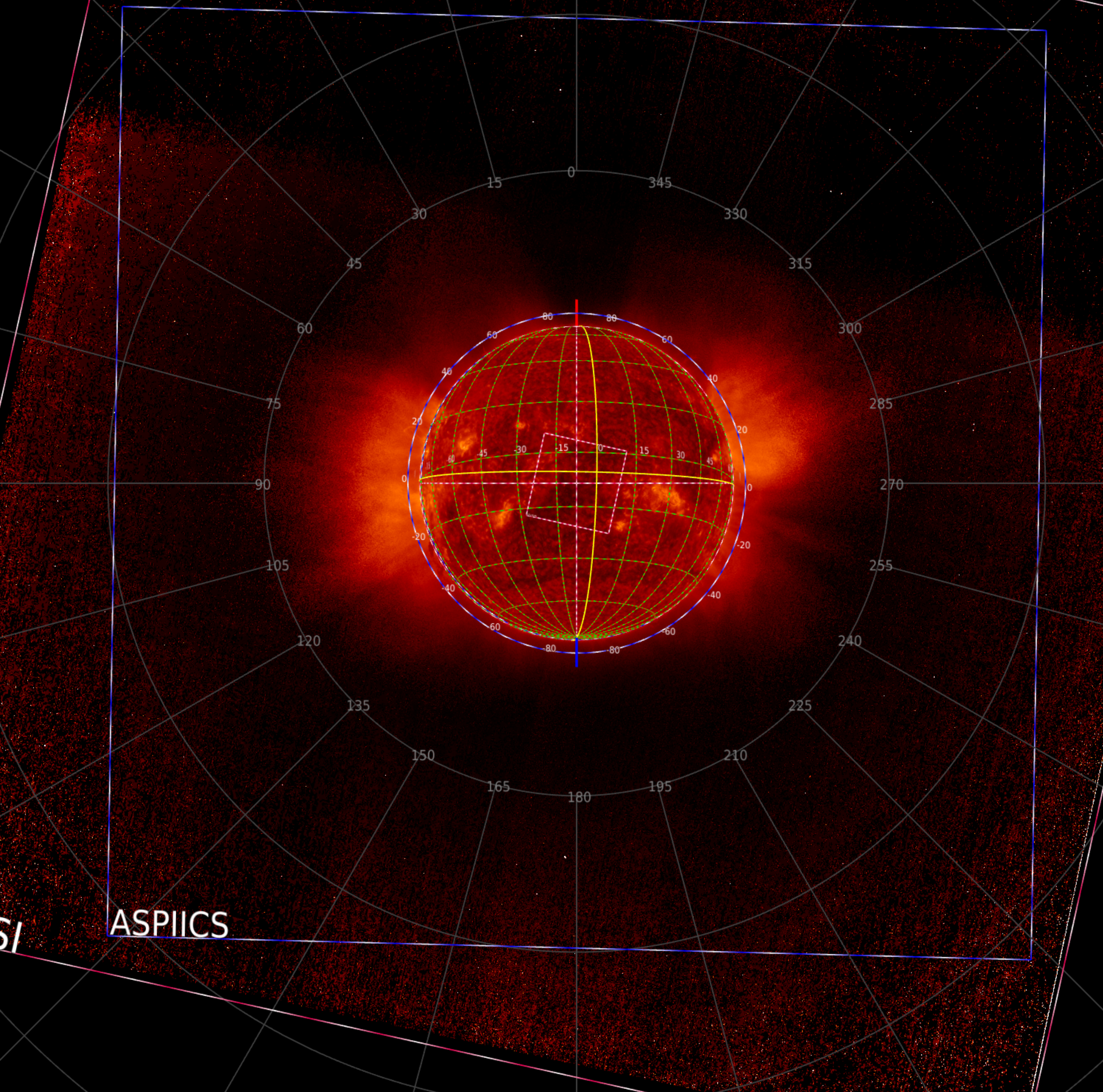
On March 9, Solar Orbiter was at same distance (0.519 au) to the sun as it will be on Oct 7



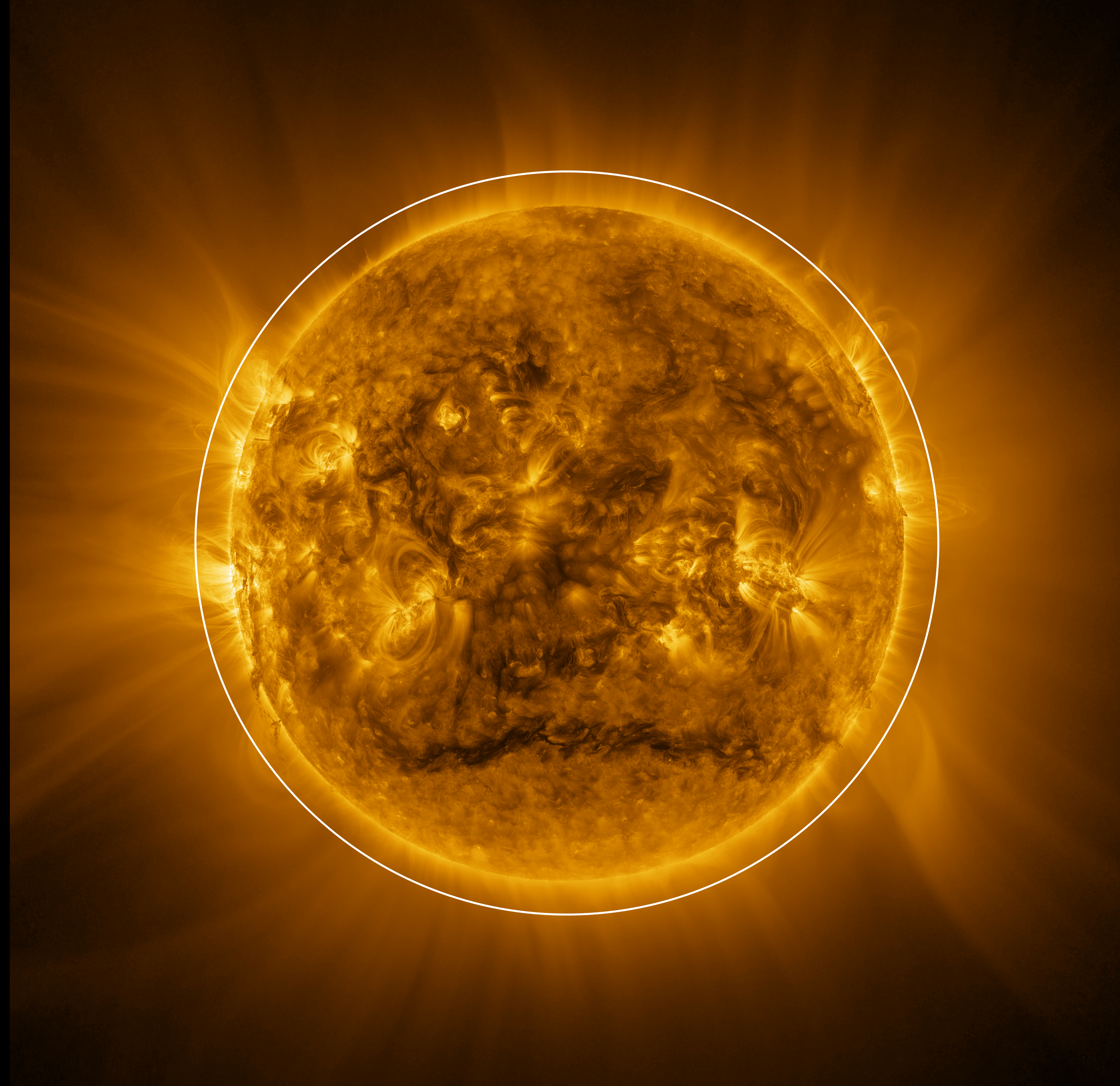
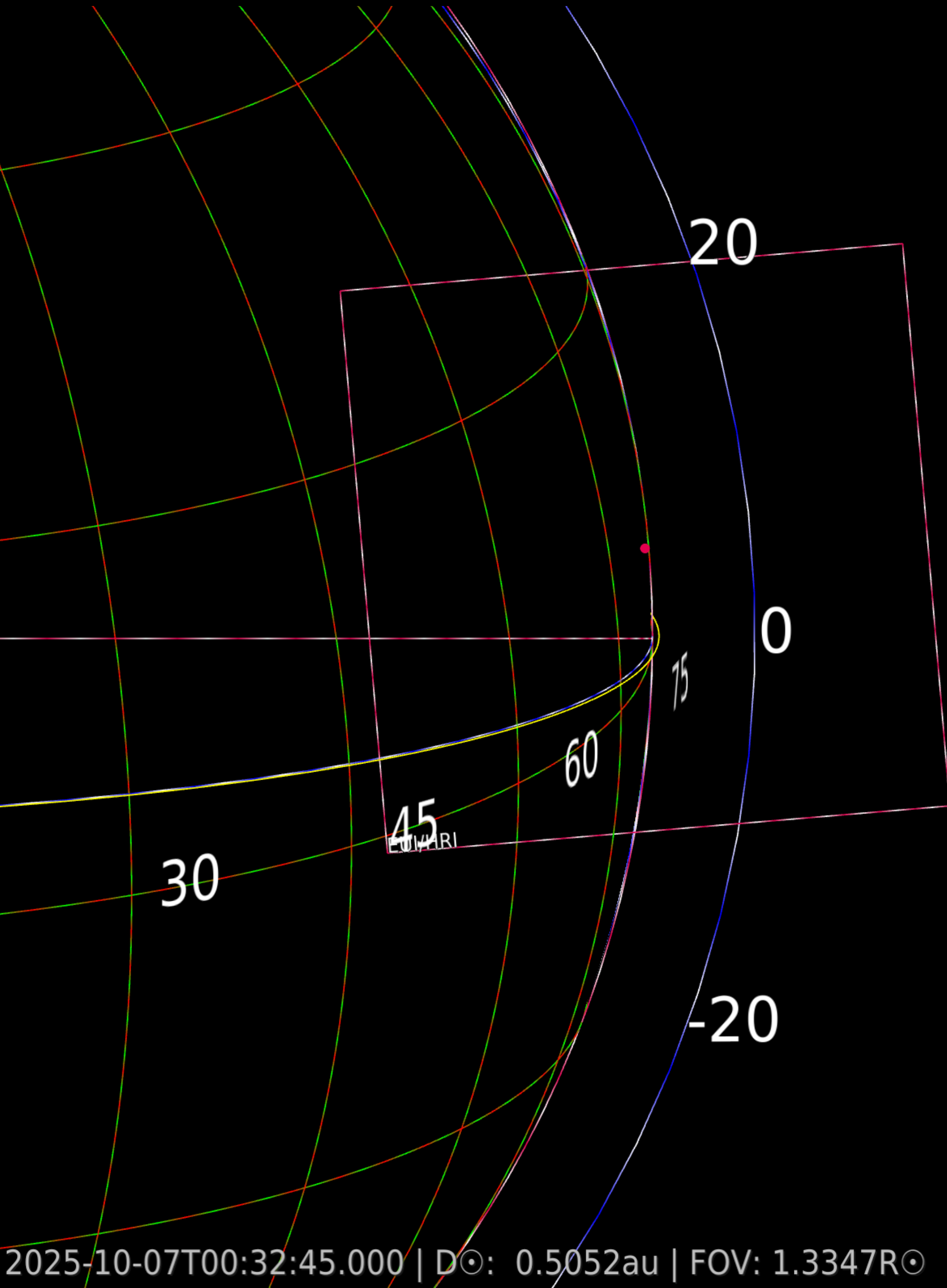
On March 9, Solar Orbiter was at same distance (0.519 au) to the sun as it will be on Oct 7

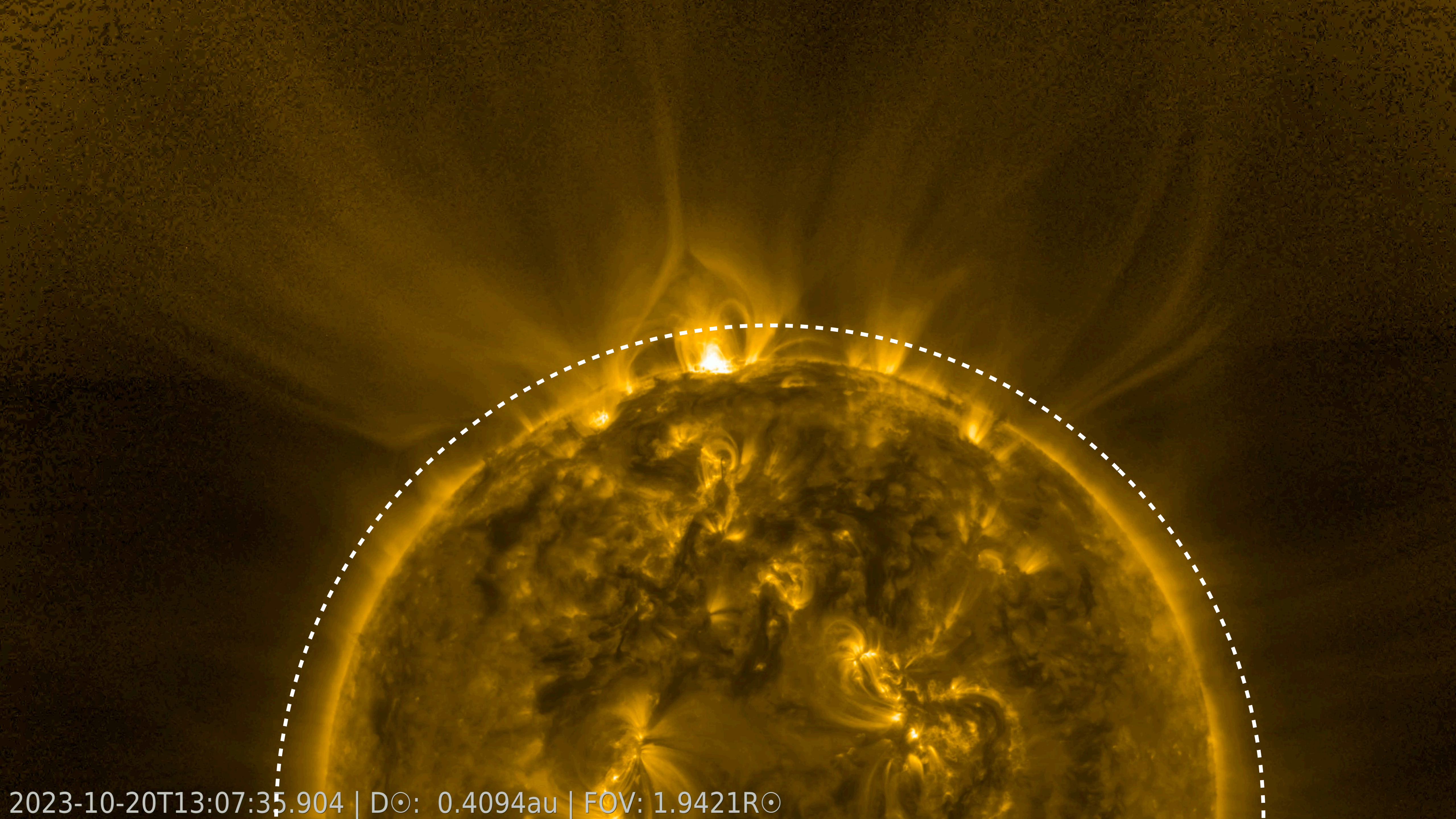


On March 9, Solar Orbiter was at same distance (0.519 au) to the sun as it will be on Oct 7

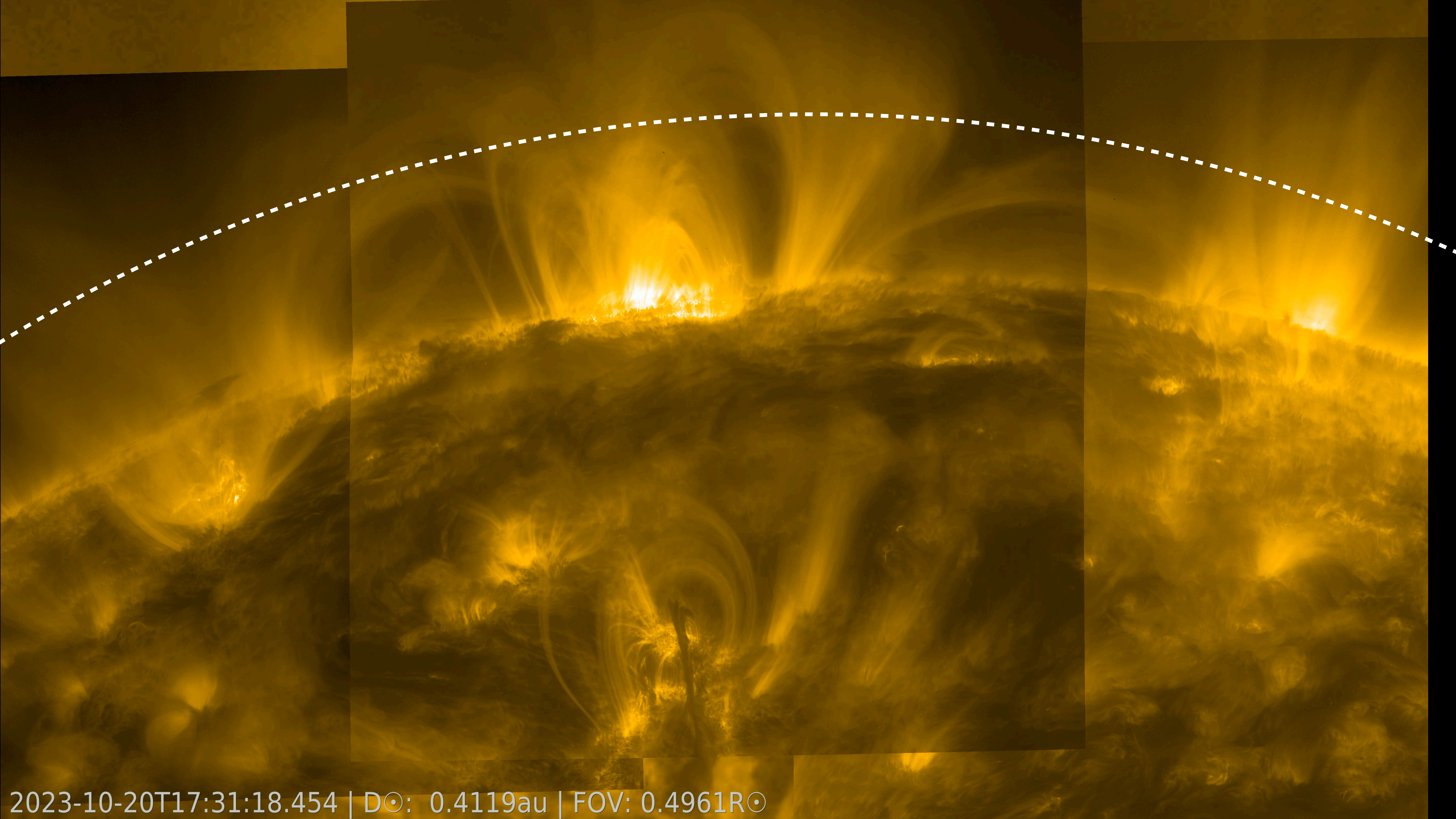


Offpointings possible but they
hamper Metis observations

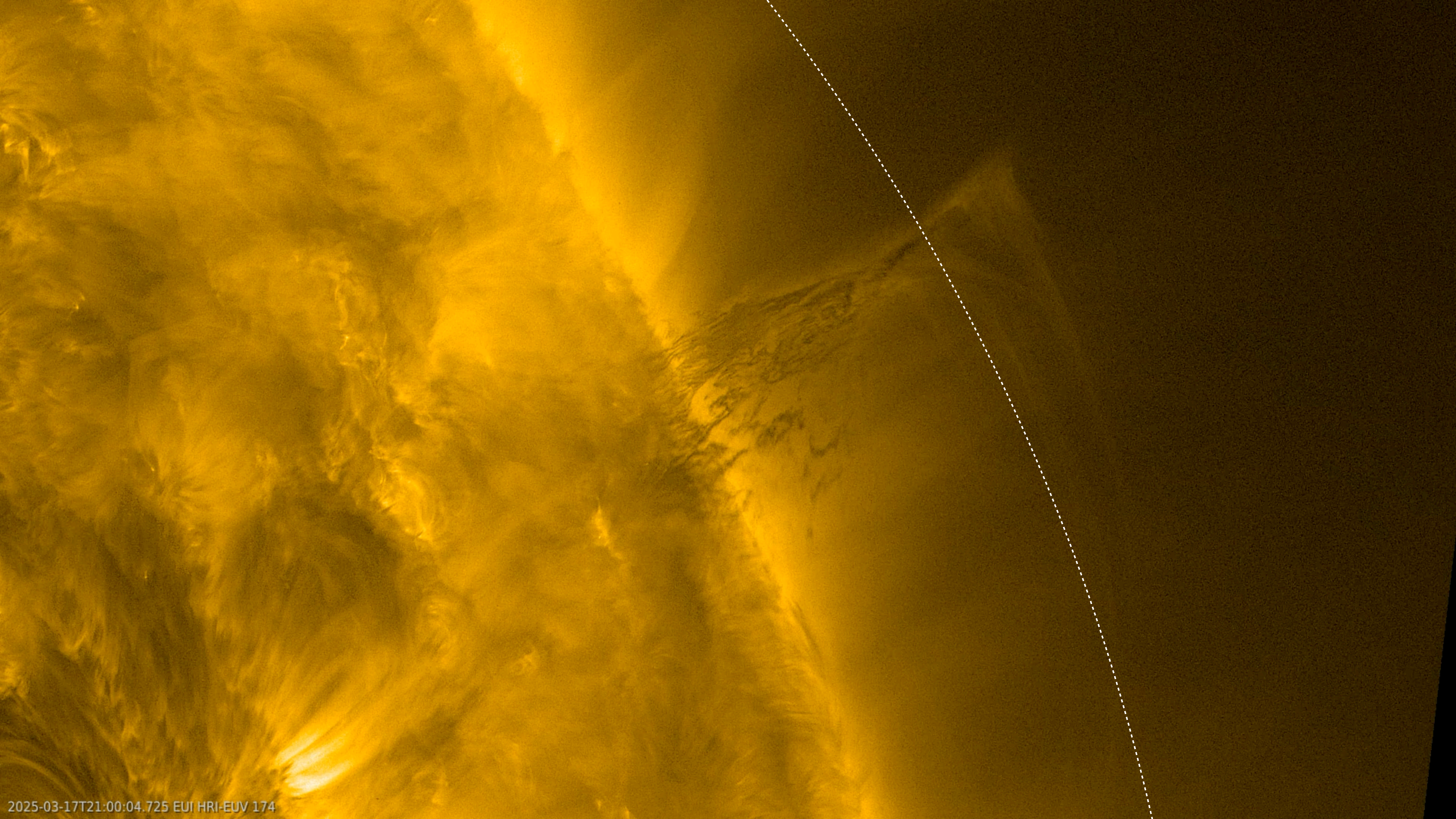




2023-10-20T13:07:35.904 | D☉: 0.4094au | FOV: 1.9421R☉



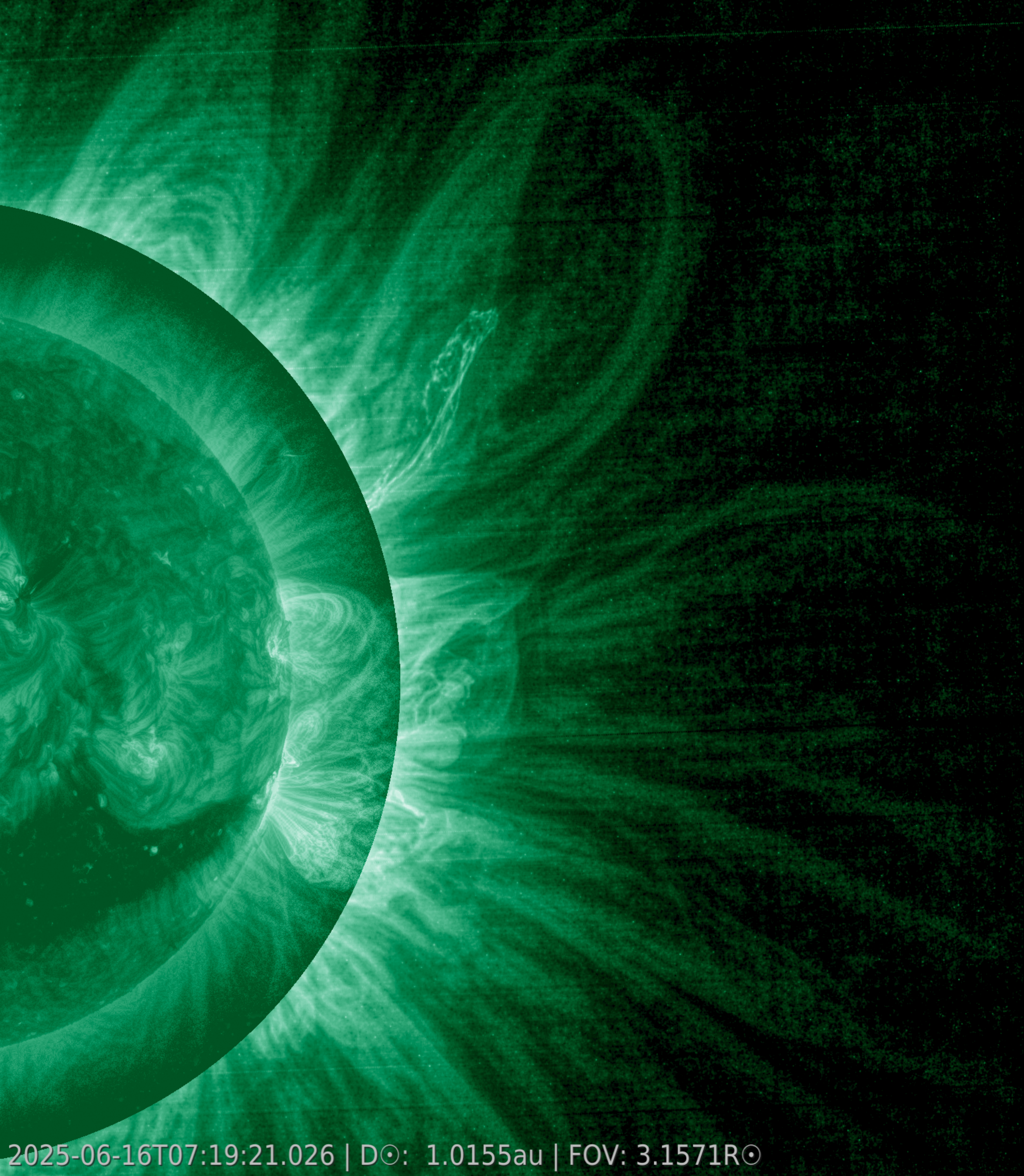
2023-10-20T17:31:18.454 | D☉: 0.4119au | FOV: 0.4961R☉



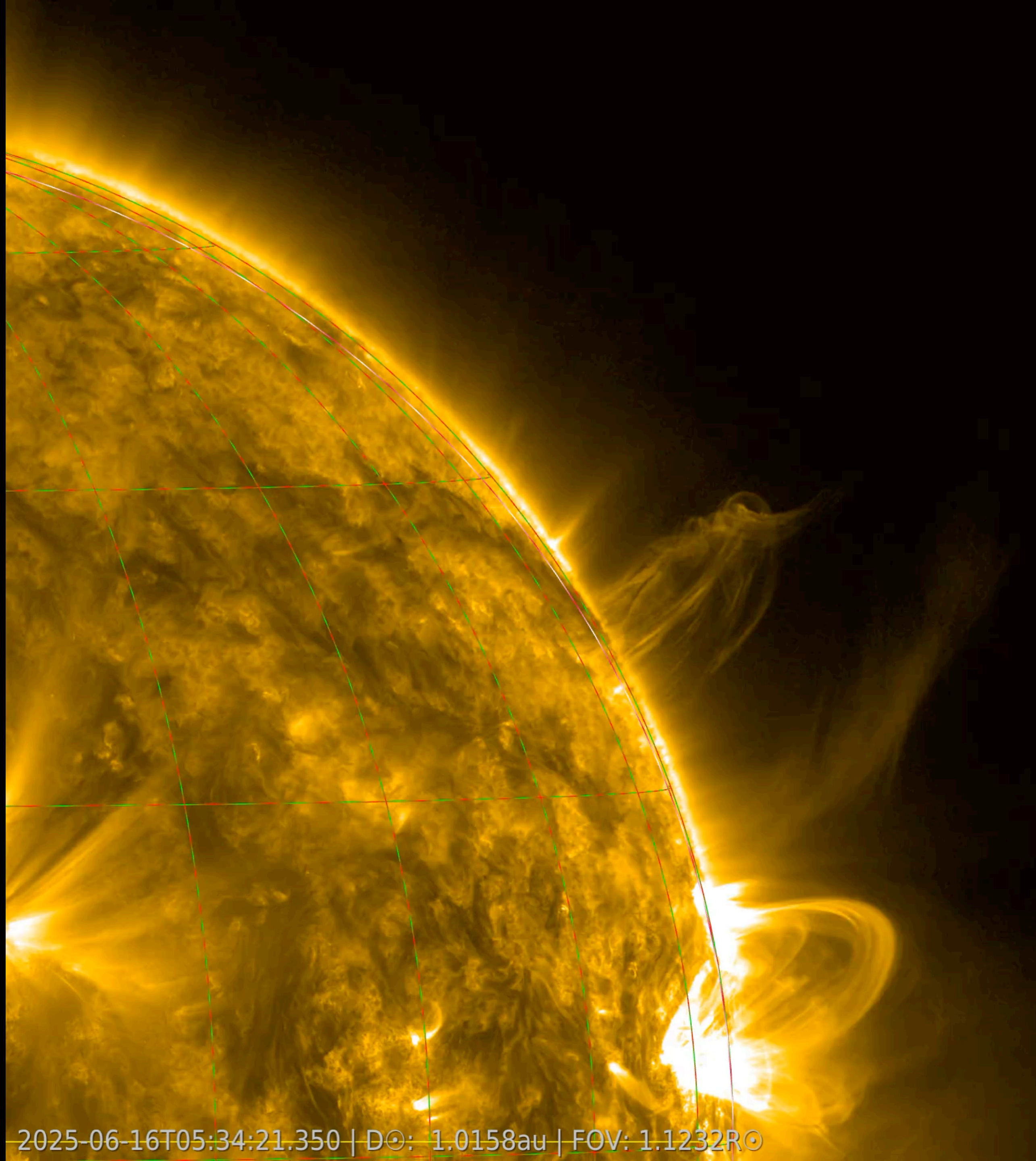
| | | | | |
|----------------------|----------------------|----------------------|---|---------|
| 2025 Oct 05 16:01:14 | 2025 Oct 05 19:01:14 | 2025 Oct 05 22:01:14 | | |
| 2025 Oct 06 11:41:00 | 2025 Oct 06 14:41:00 | 2025 Oct 06 17:41:00 | SolO-P3 near-alignment (9.8 deg, mostly in lat) | 3:49:00 |
| 2025 Oct 07 07:20:46 | 2025 Oct 07 10:20:46 | 2025 Oct 07 13:20:46 | | 5:20:46 |
| 2025 Oct 08 03:00:30 | 2025 Oct 08 06:00:30 | 2025 Oct 08 09:00:30 | | 1:00:30 |
| 2025 Oct 08 22:40:12 | 2025 Oct 09 01:40:12 | 2025 Oct 09 04:40:12 | | |
| | | | | |

Coronagraphy orbit suggestions for FFAG

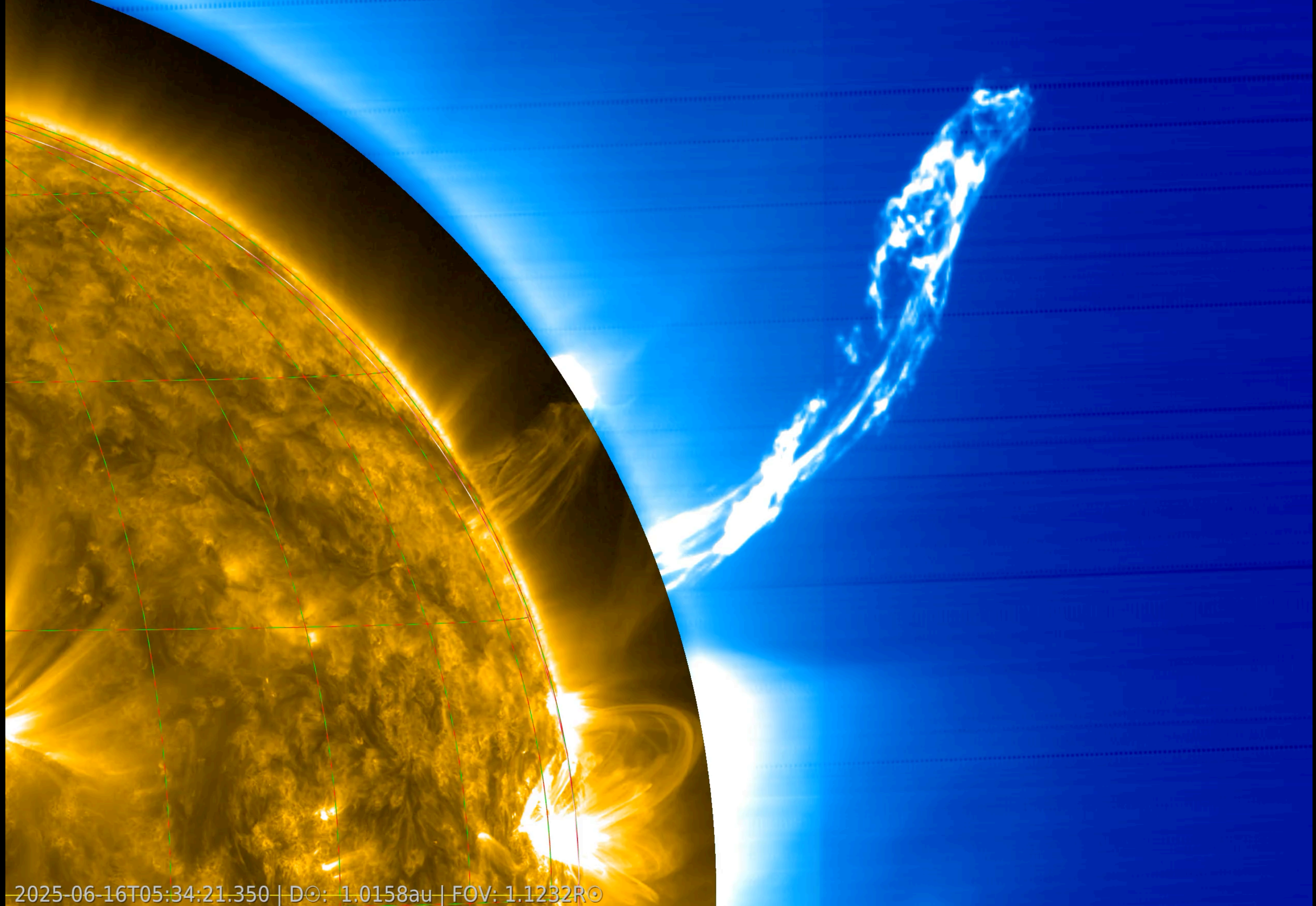
- **Orbit 308 (Aug 14) and orbit 309 (Aug 15)**. EUI will take a mix of regular FSI304/FSI174 for low off-limb corona and FSI174-occulted for high off-limb corona. Commands are uploaded July 8.
- **Orbit 346 (Sep 14) and orbit 347 (Sep 15)**. EUI will most likely participate in flare hunting and high-cadence active region campaigns.
- **Orbit 373 (Oct 6) and Orbit 374 (Oct 7)**. Solar Orbiter aligned with ASPIICS. To be decided what we want to do.



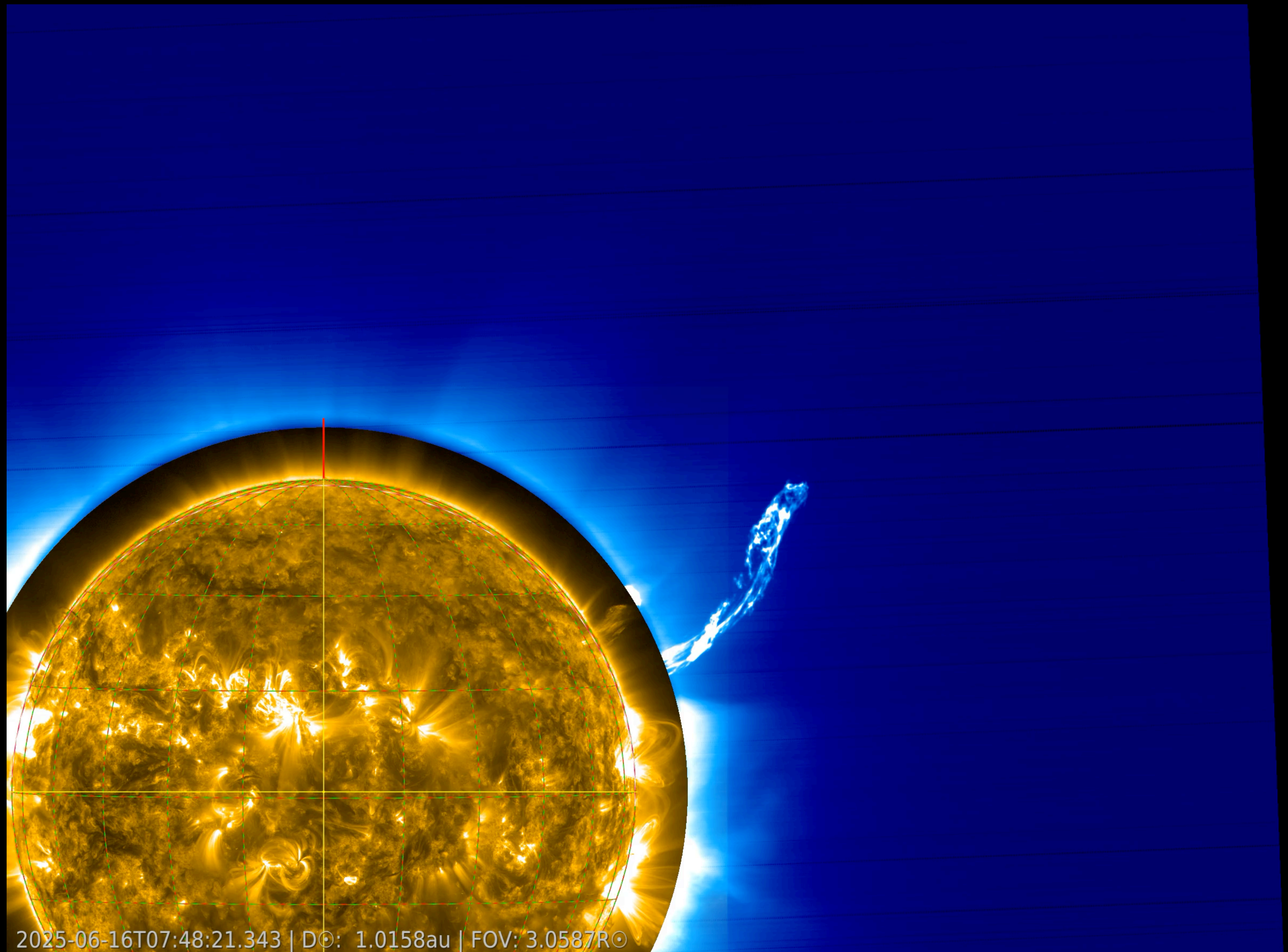
**Erupting Prominence
2025-06-16 Orbit 236**



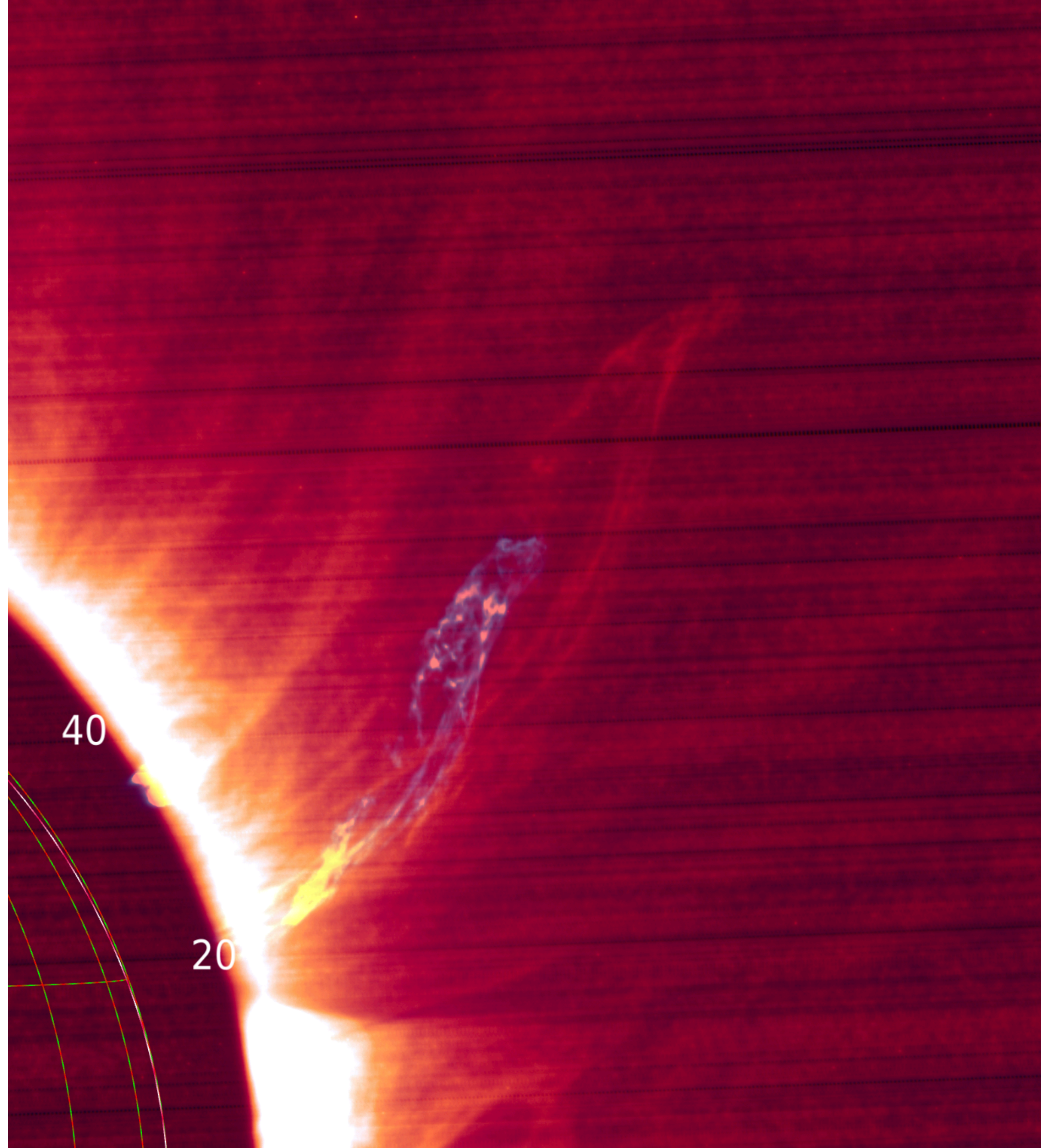
2025-06-16T05:34:21.350 | D☉: 1.0158au | FOV: 1.1232R☉

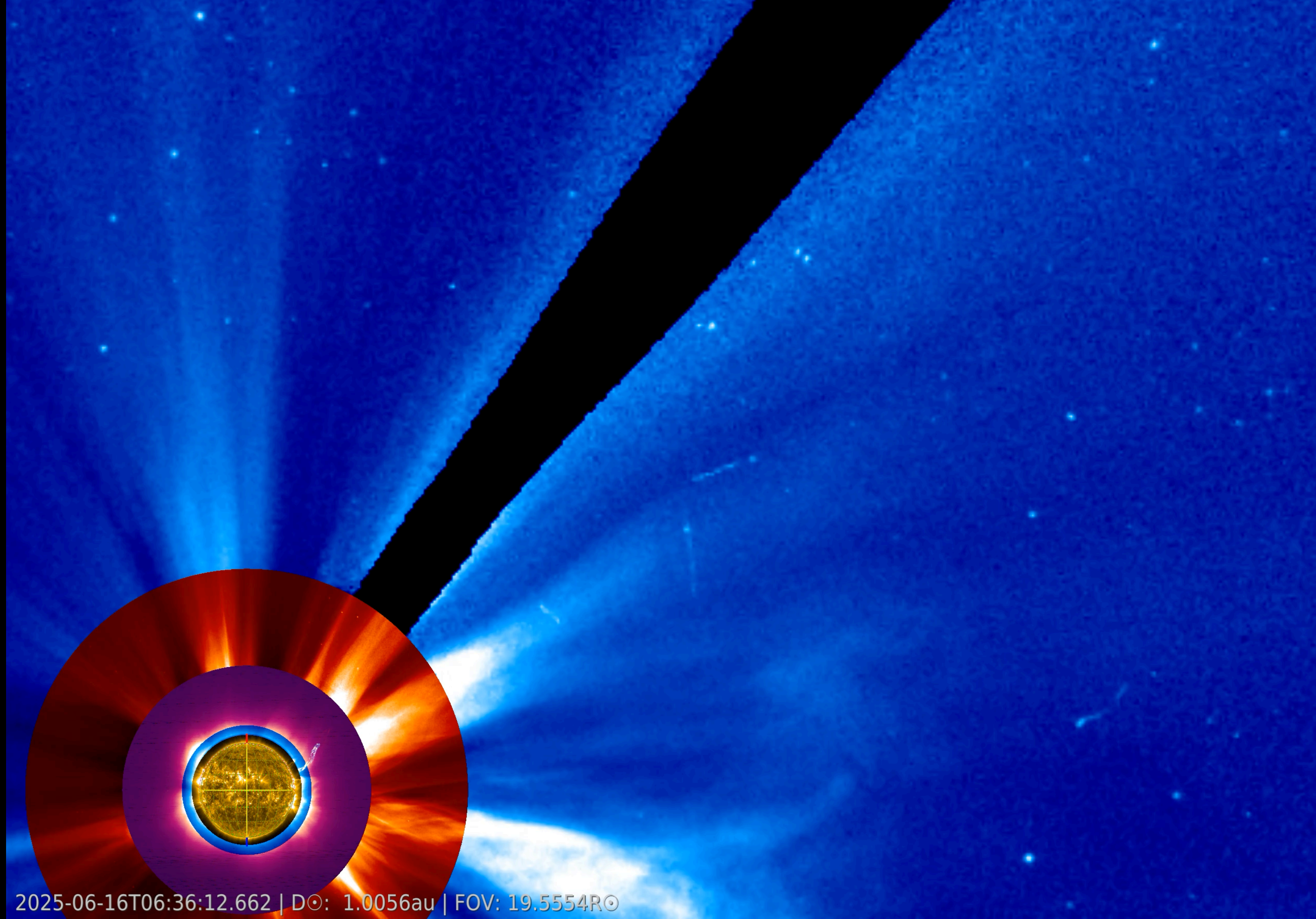


2025-06-16T05:34:21.350 | D☉: 1.0158au | FOV: 1.1232R☉



2025-06-16T07:48:21.343 | D☉: 1.0158au | FOV: 3.0587R☉





2025-06-16T06:36:12.662 | D☉: 1.0056au | FOV: 19.5554R☉

