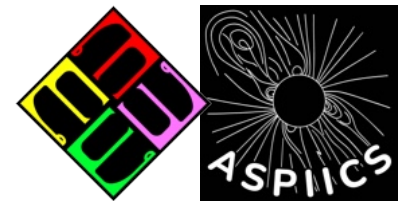


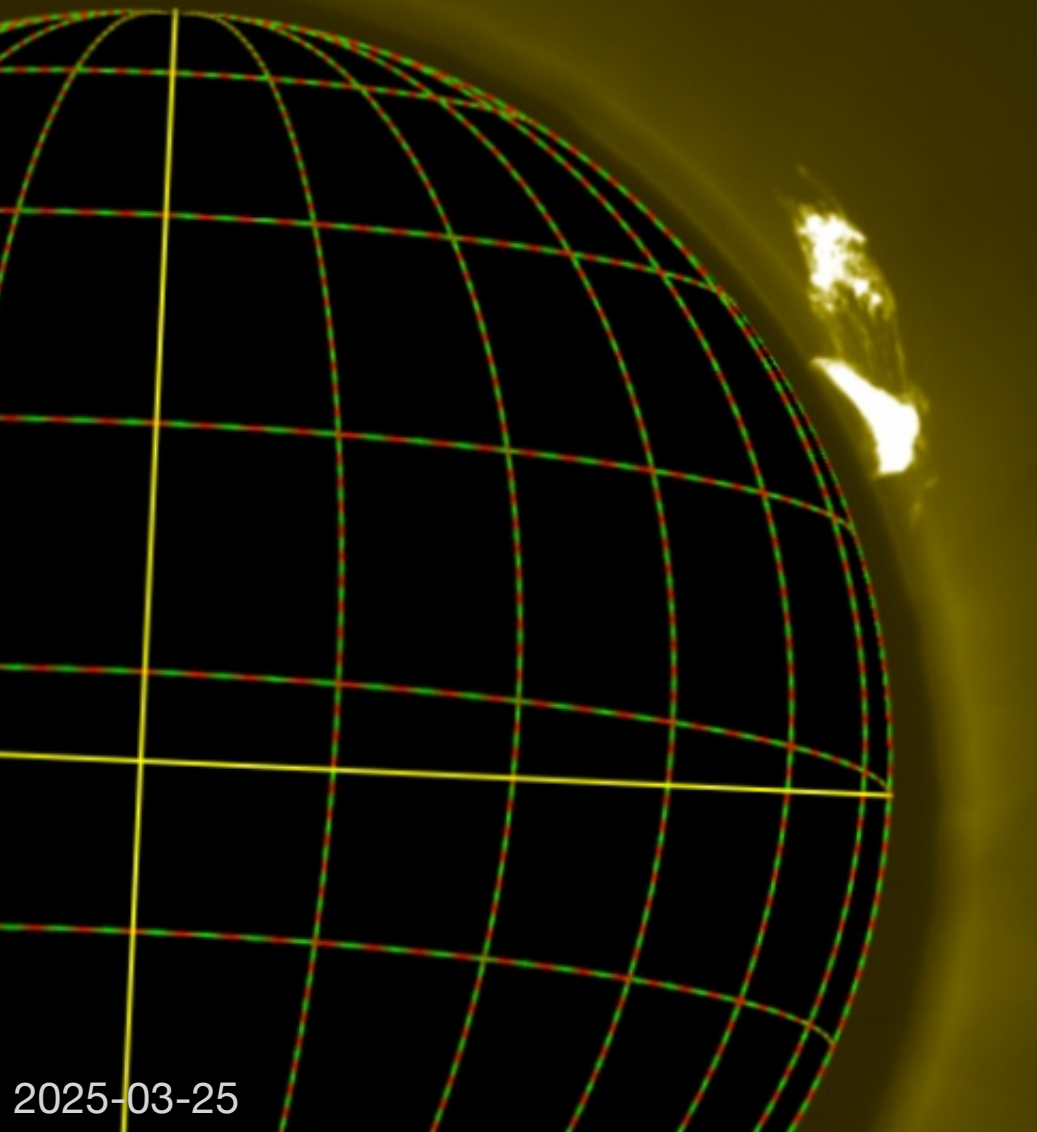
# **EUI & ASPIICS alignments**

**Opportunities for joint observations**

**David Berghmans - Proba-3 ASPIICS SWT 2025 June ROB**

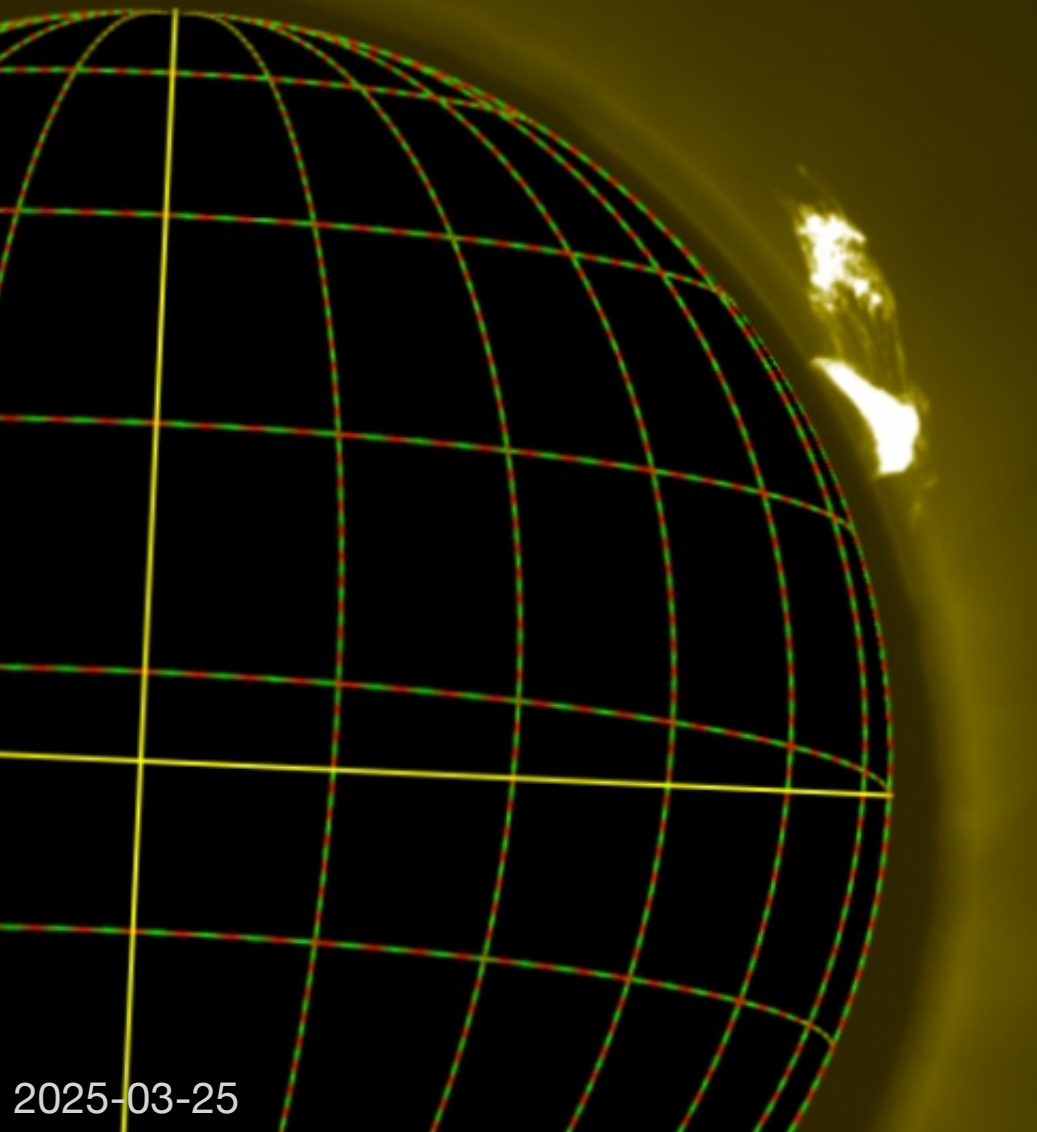


Orbit 135



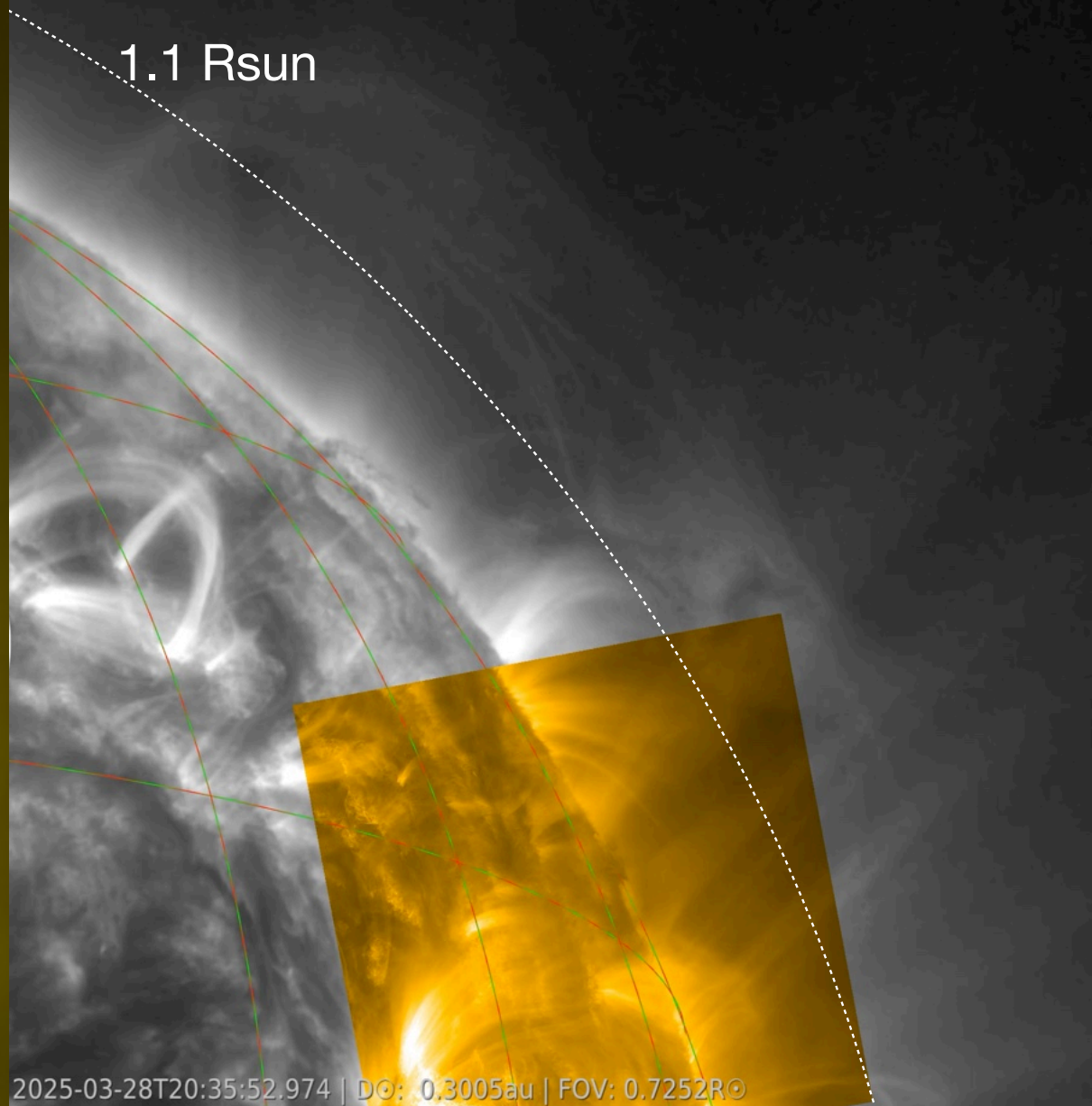
2025-03-25

Orbit 135



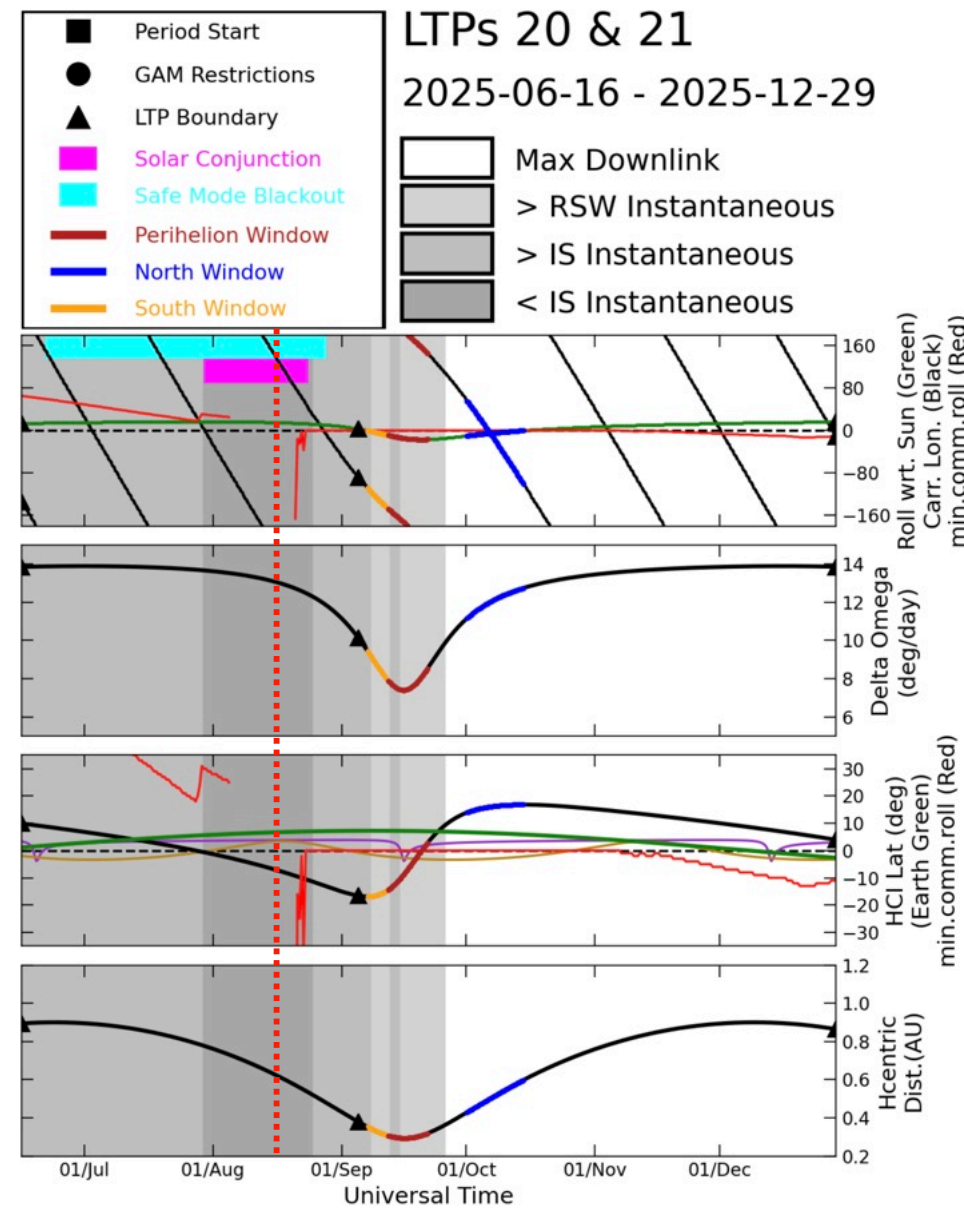
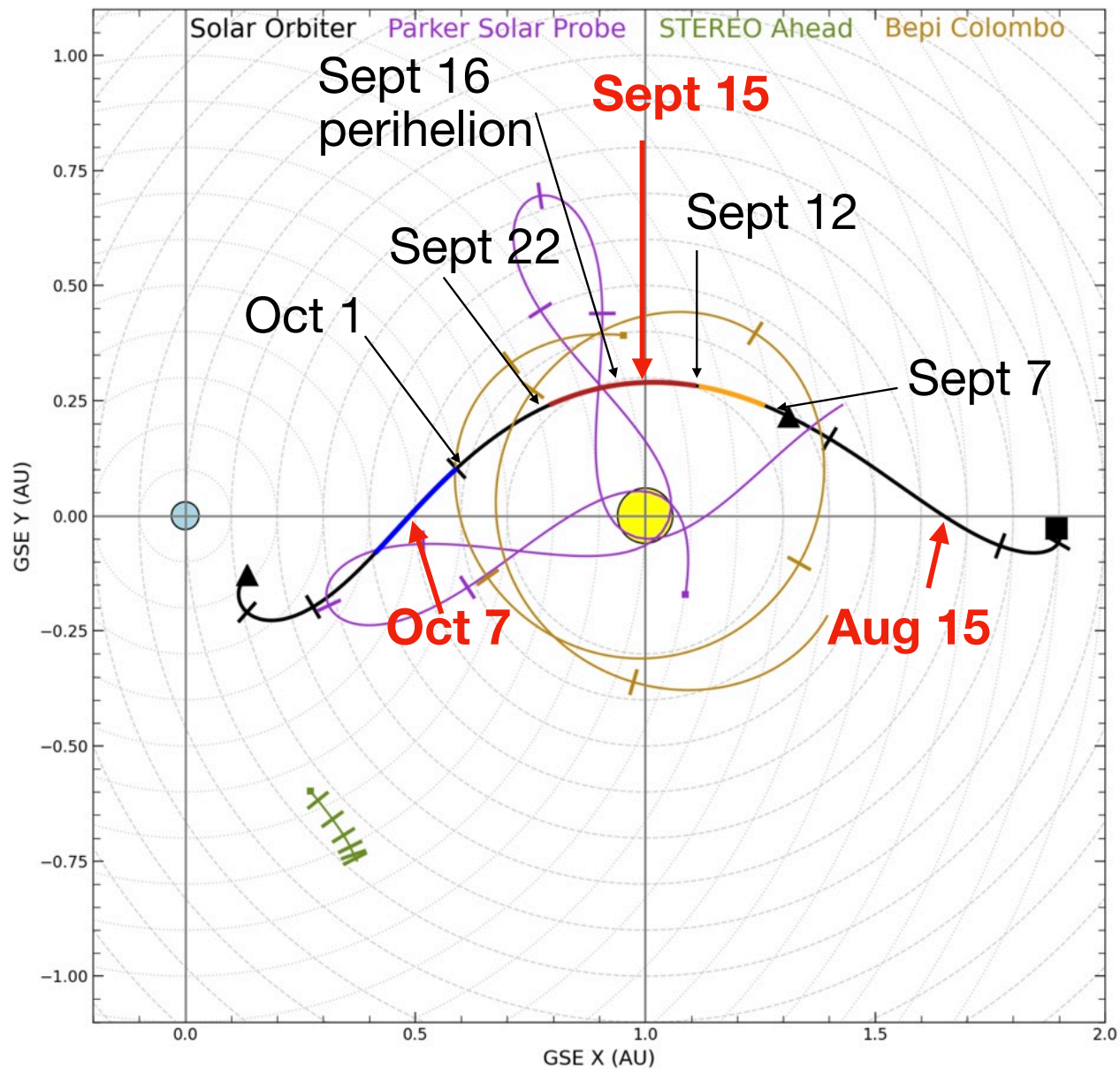
2025-03-25

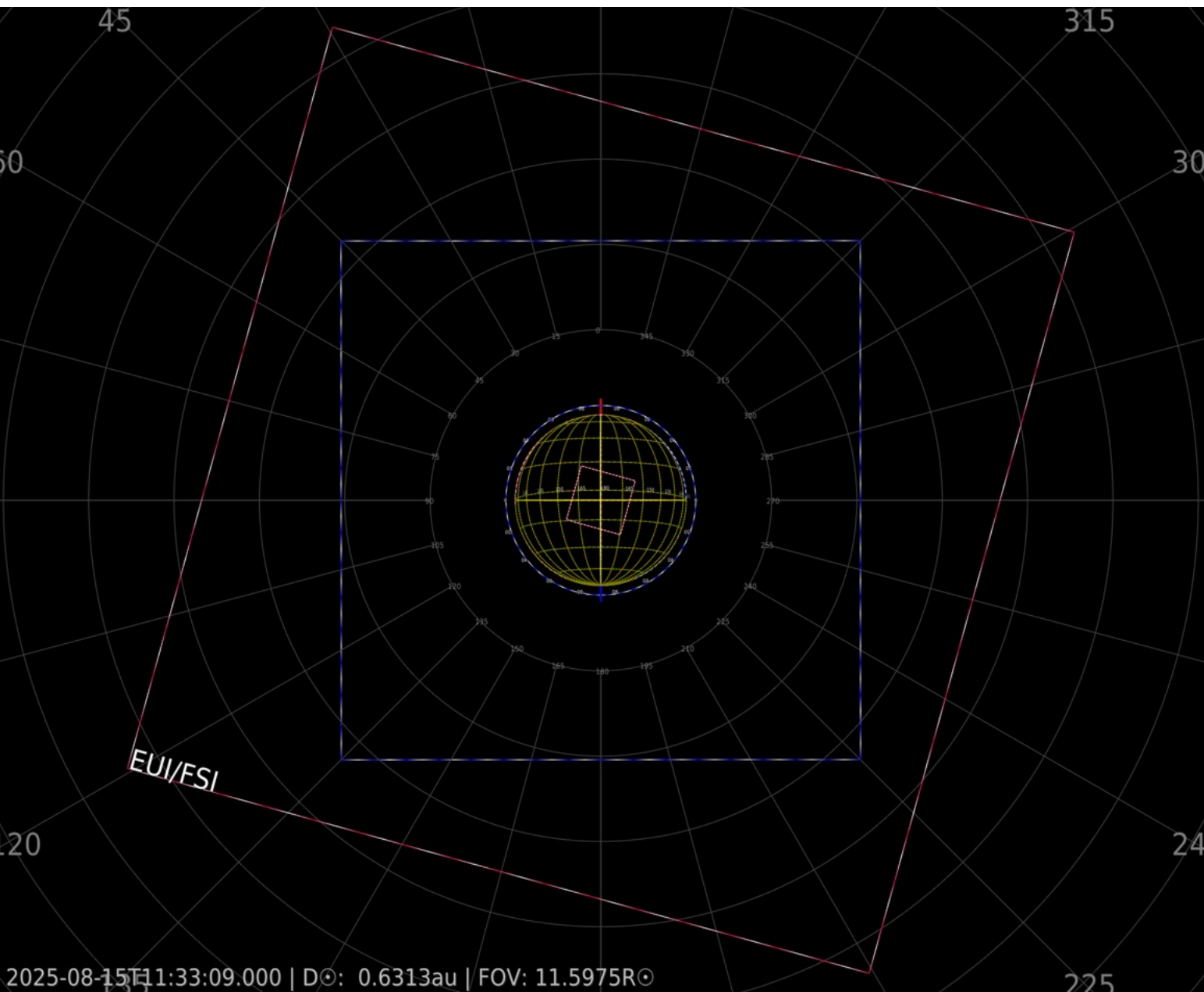
1.1 R<sub>sun</sub>



2025-03-28T20:35:52.974 | DO: 0.3005au | FOV: 0.7252R<sub>☉</sub>







2025-08-15

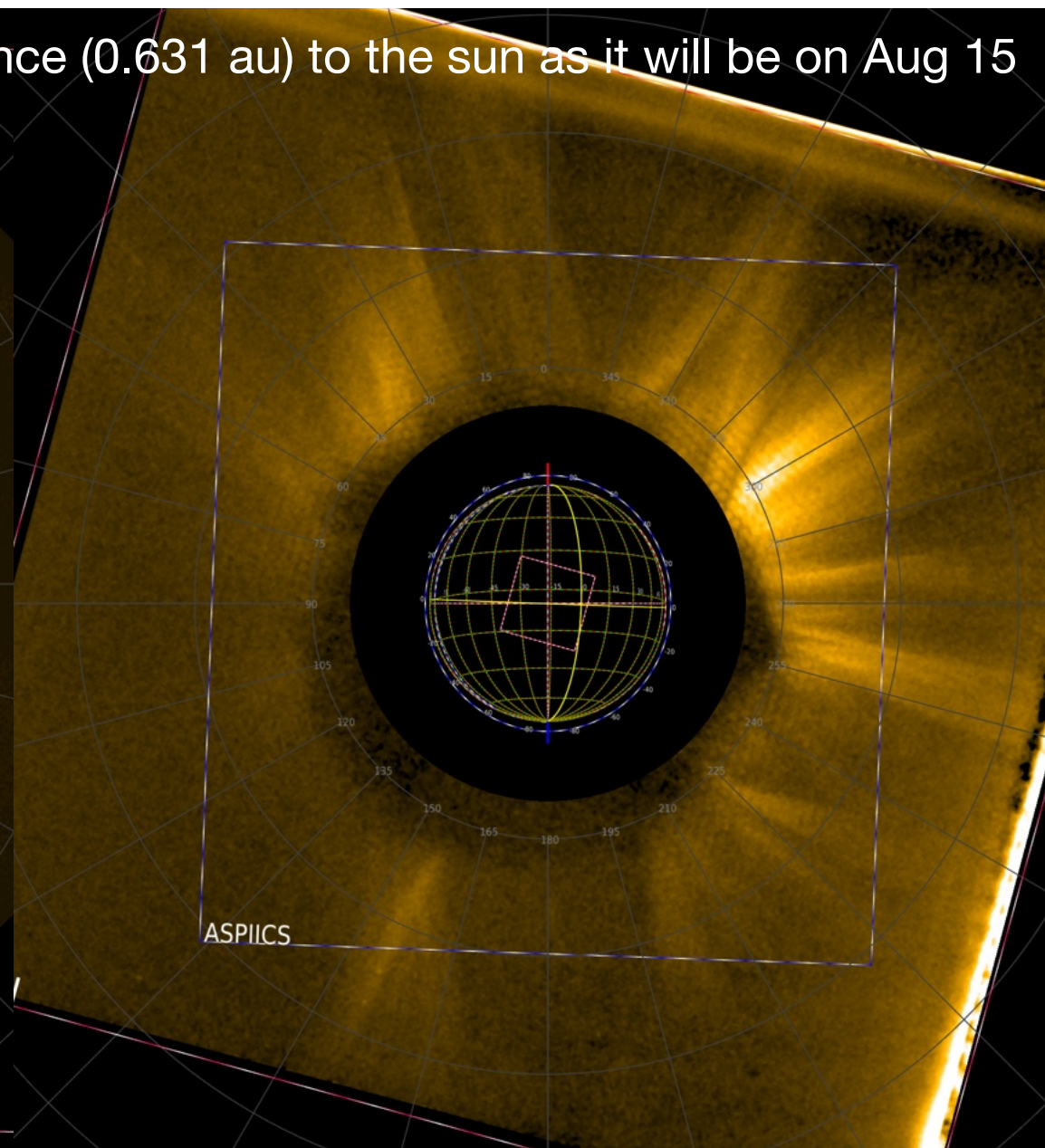
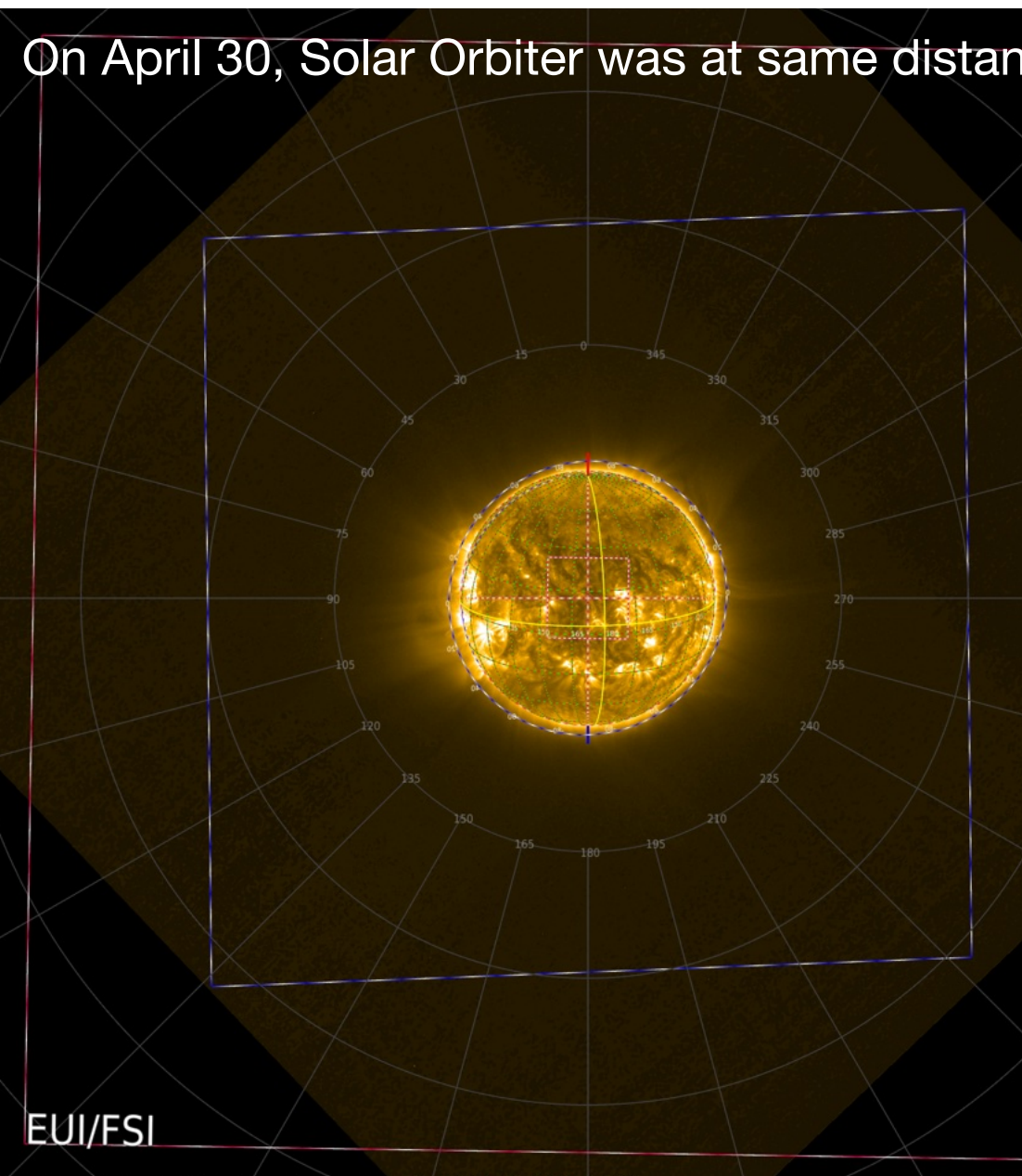
Solar Orbiter aligned in  
opposition with Earth,  
same lat, long+180

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

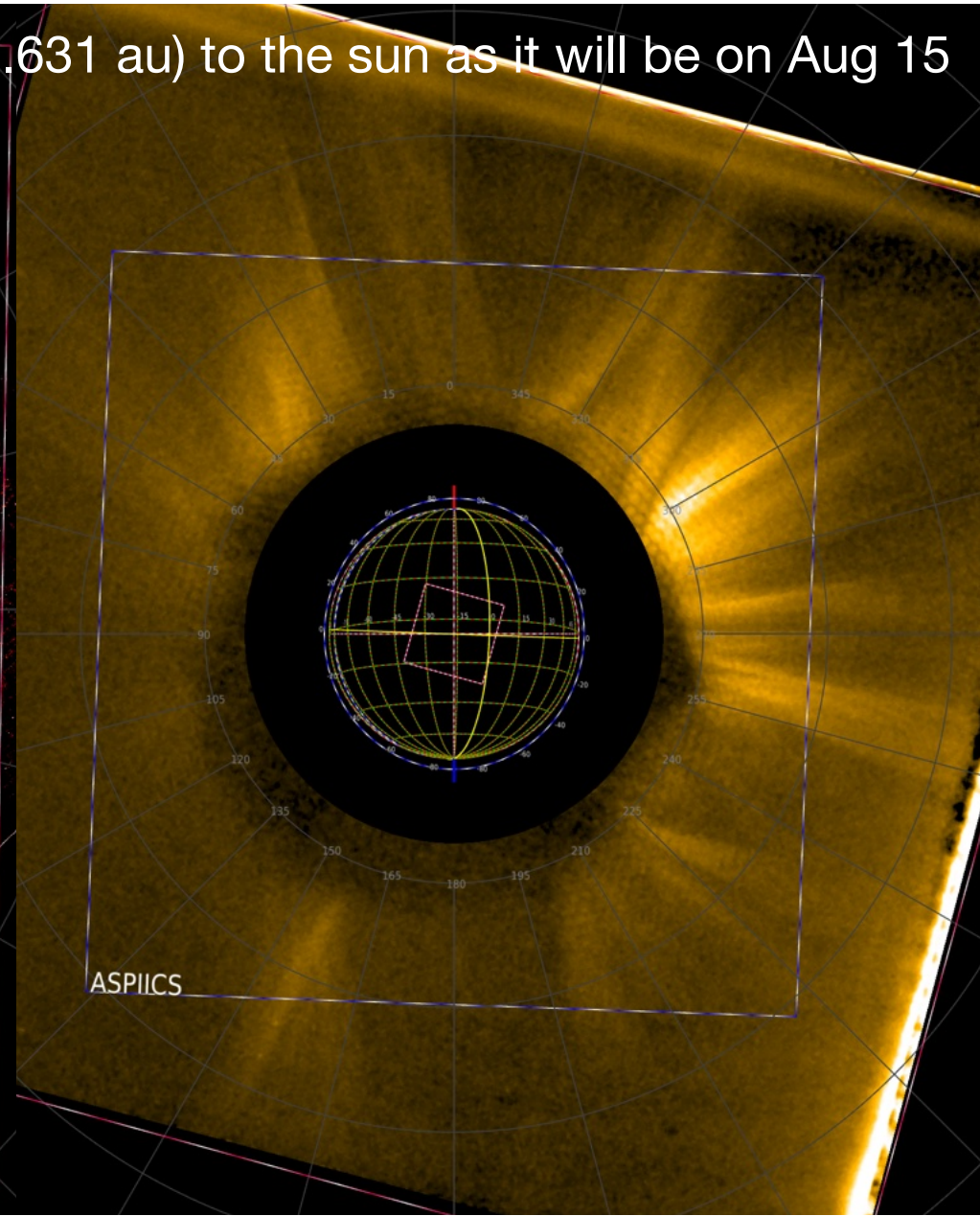
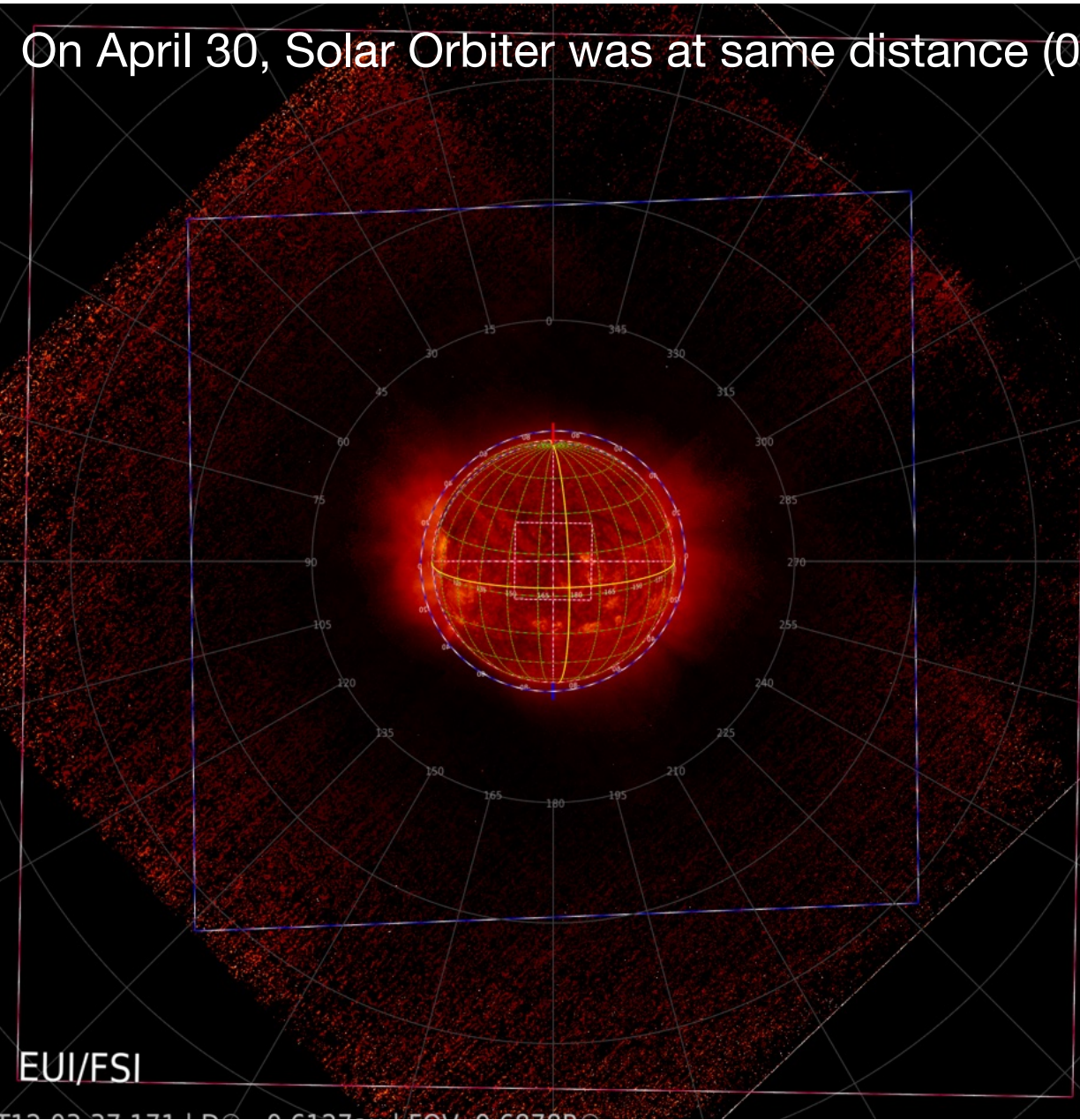
No off-pointing  
FSI only

Command upload: July 8

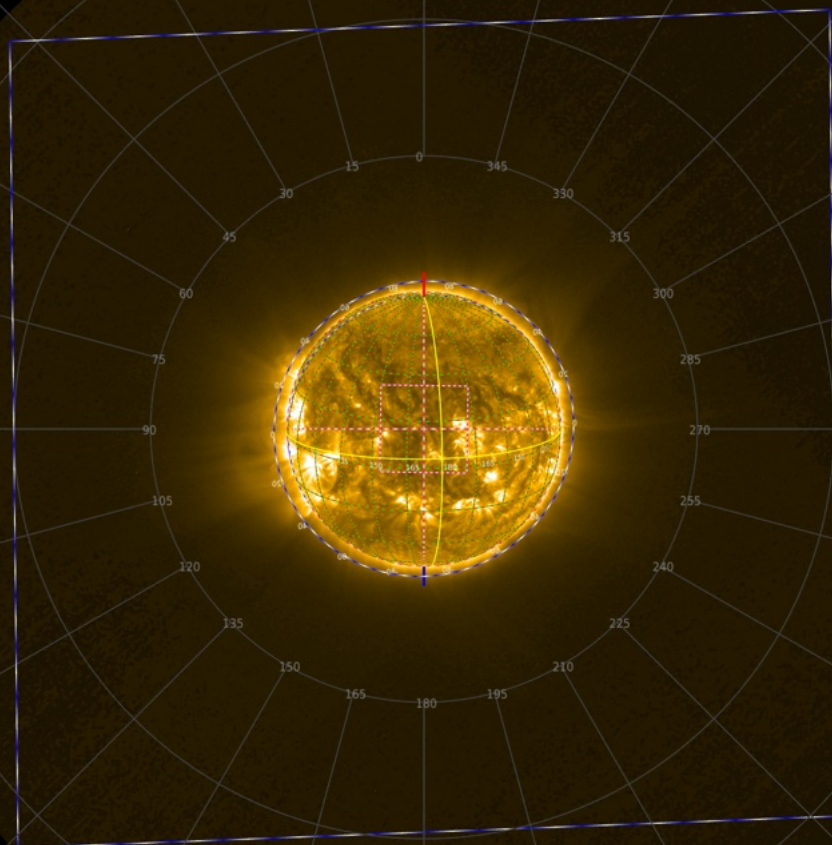
On April 30, Solar Orbiter was at same distance (0.631 au) to the sun as it will be on Aug 15



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

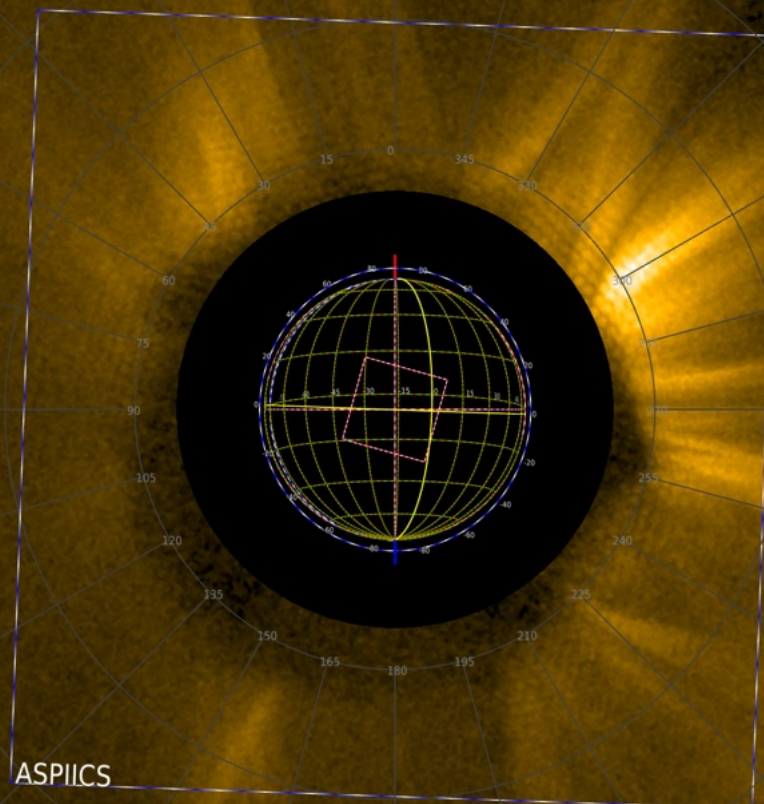


On April 30, Solar Orbiter was at same distance (0.631 au) to the sun as it will be on Aug 15



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

EUVI/FSI



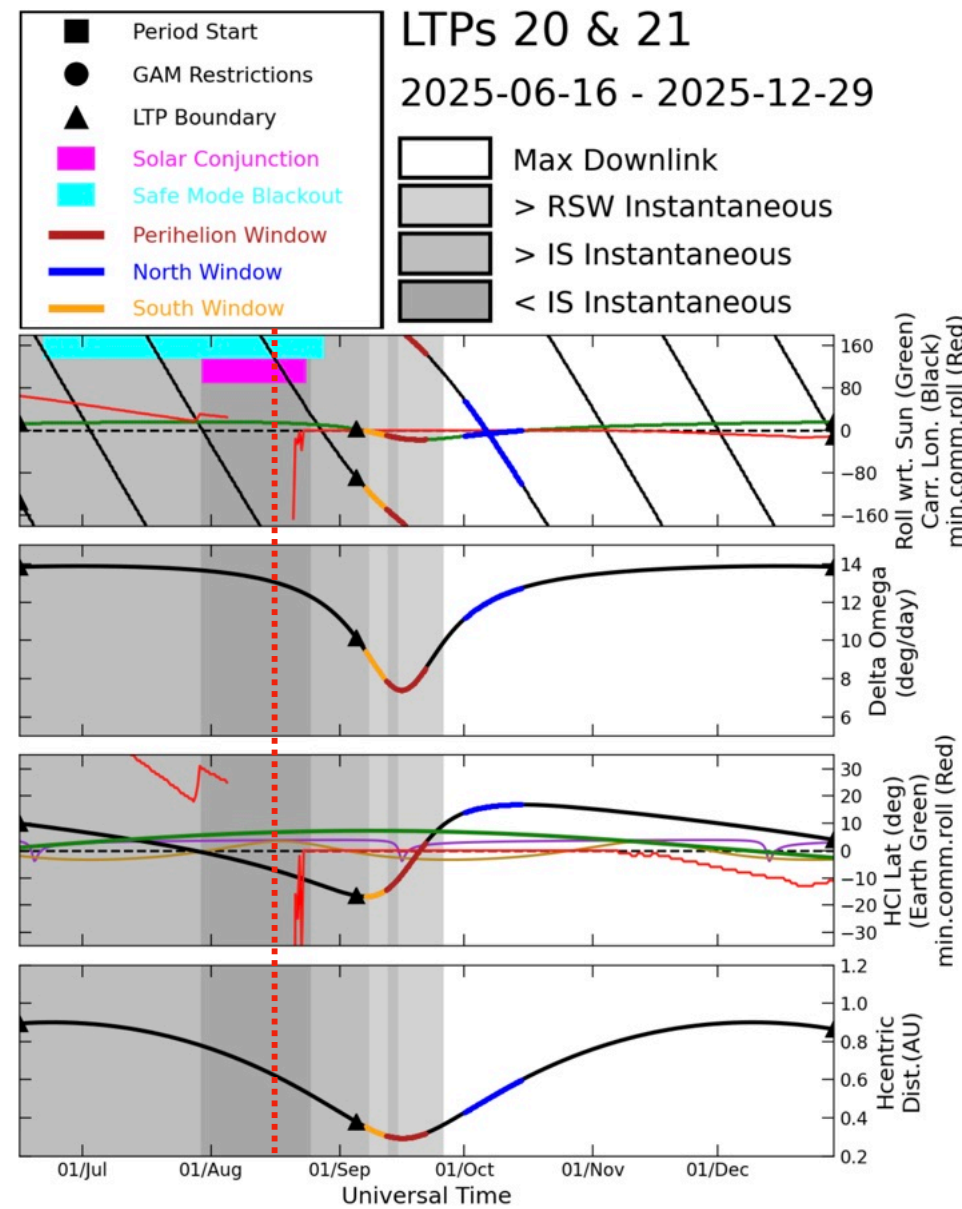
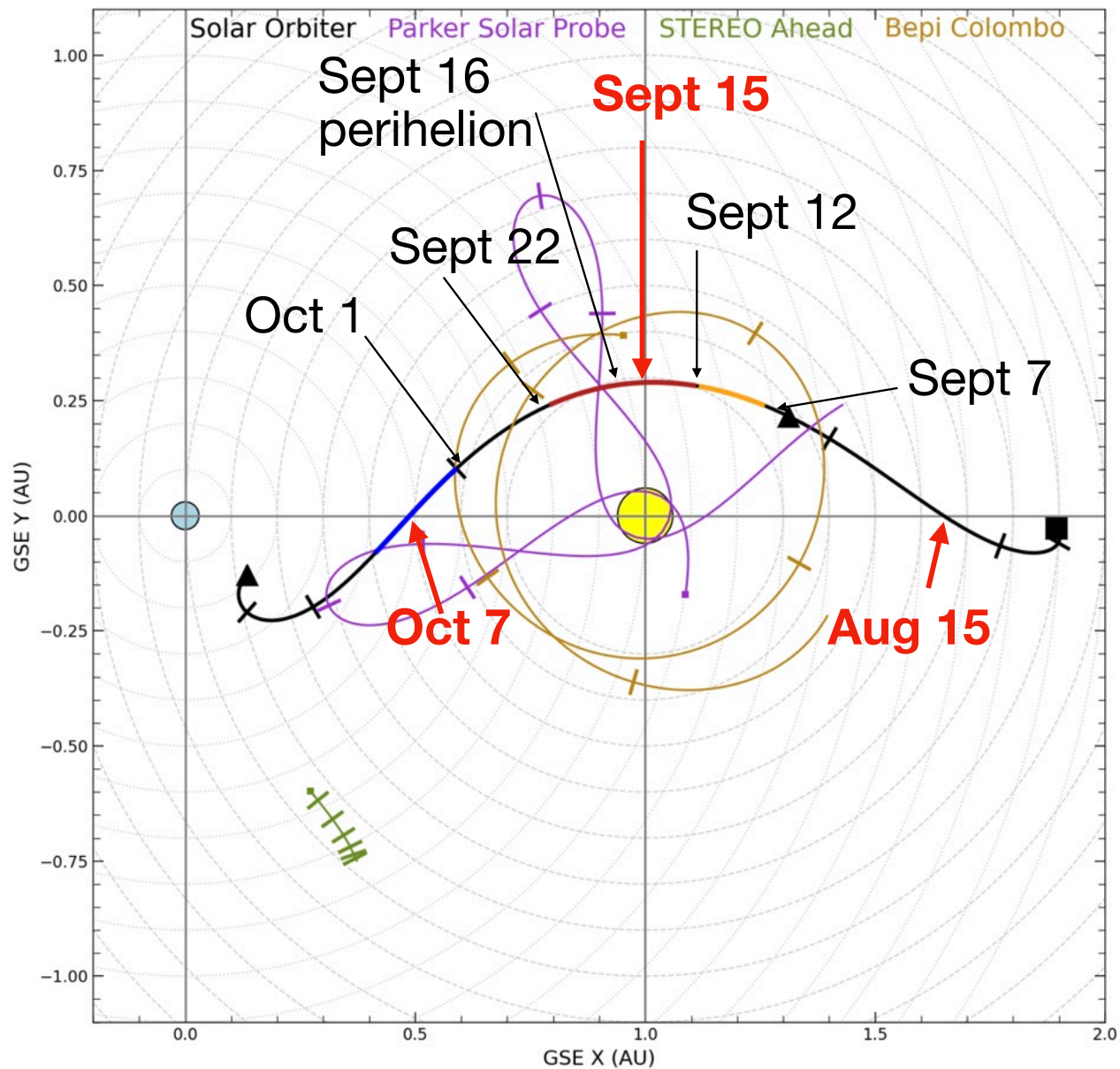
ASPIICS

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		

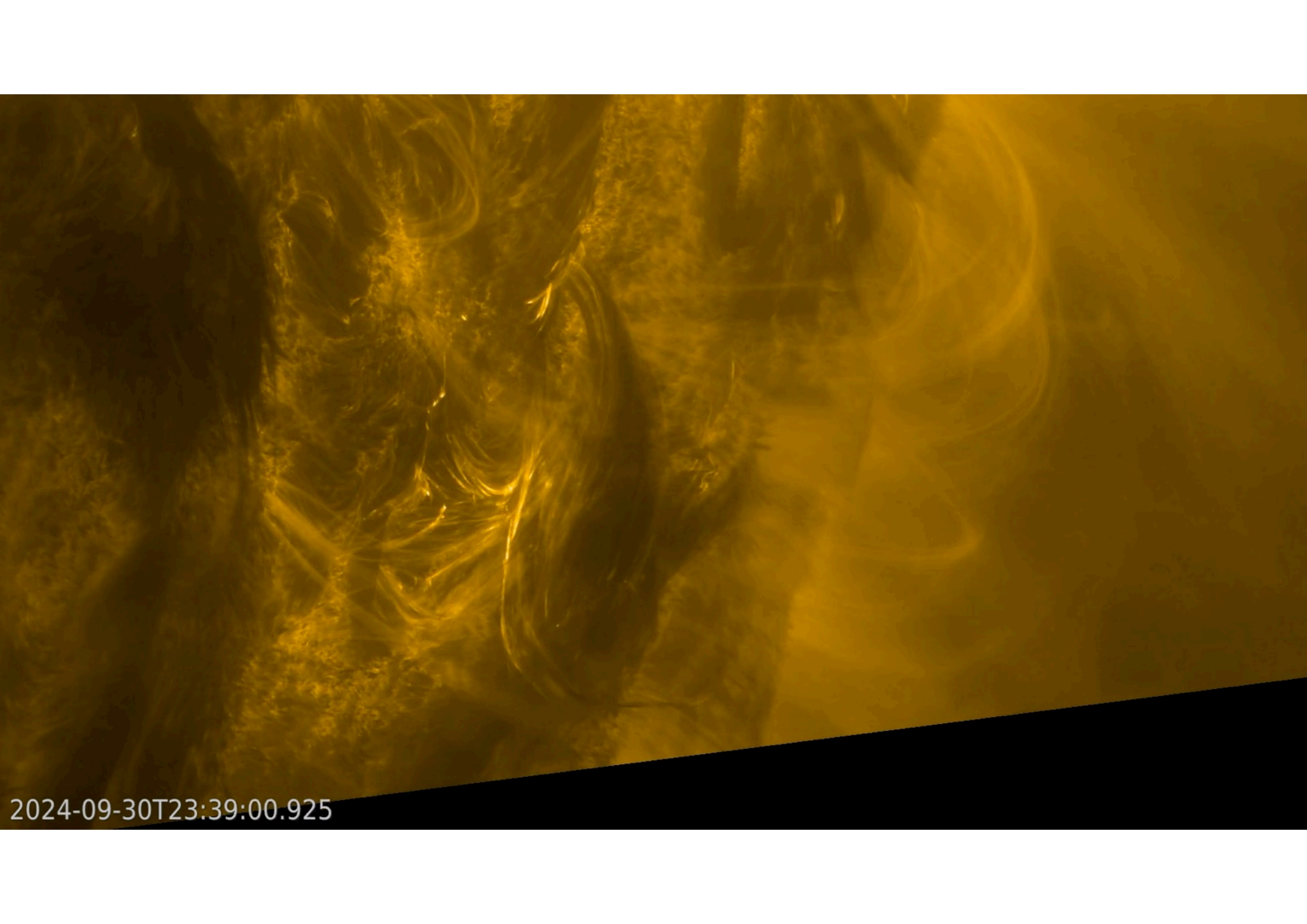




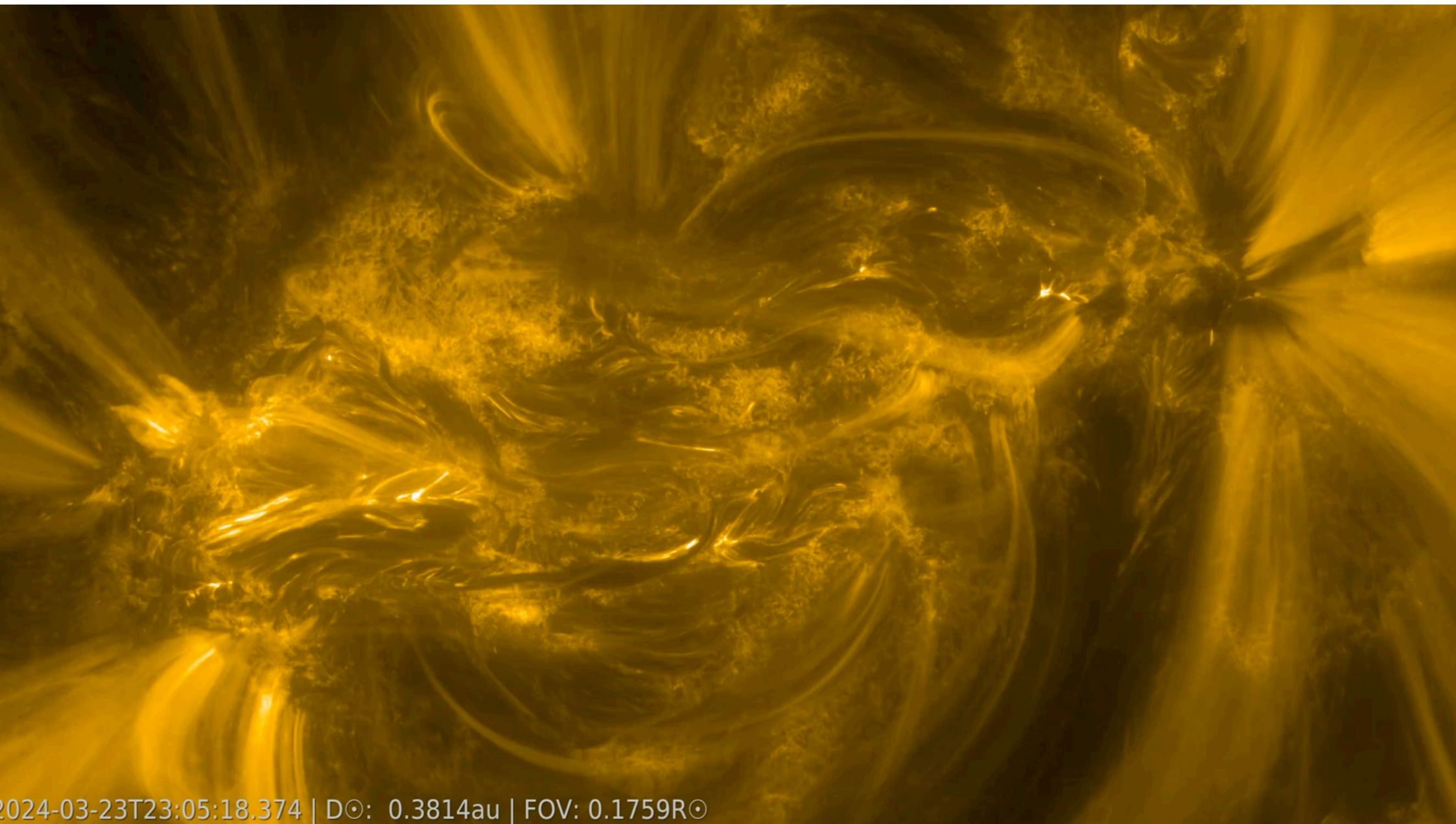
0345	2025 Sep 13 13:09:21	2025 Sep 13 16:09:21	2025 Sep 13 19:09:21	Coronal sources SolO before super-quadrature	2:20:39
0346	2025 Sep 14 08:48:58	2025 Sep 14 11:48:58	2025 Sep 14 14:48:58	Coronal sources PSP before super-quadrature	6:00:00
0347	2025 Sep 15 04:28:36	2025 Sep 15 07:28:36	2025 Sep 15 10:28:36	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

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

Solar Orbiter coordination deadline: SOWG July 8 -10  
Command upload: end August

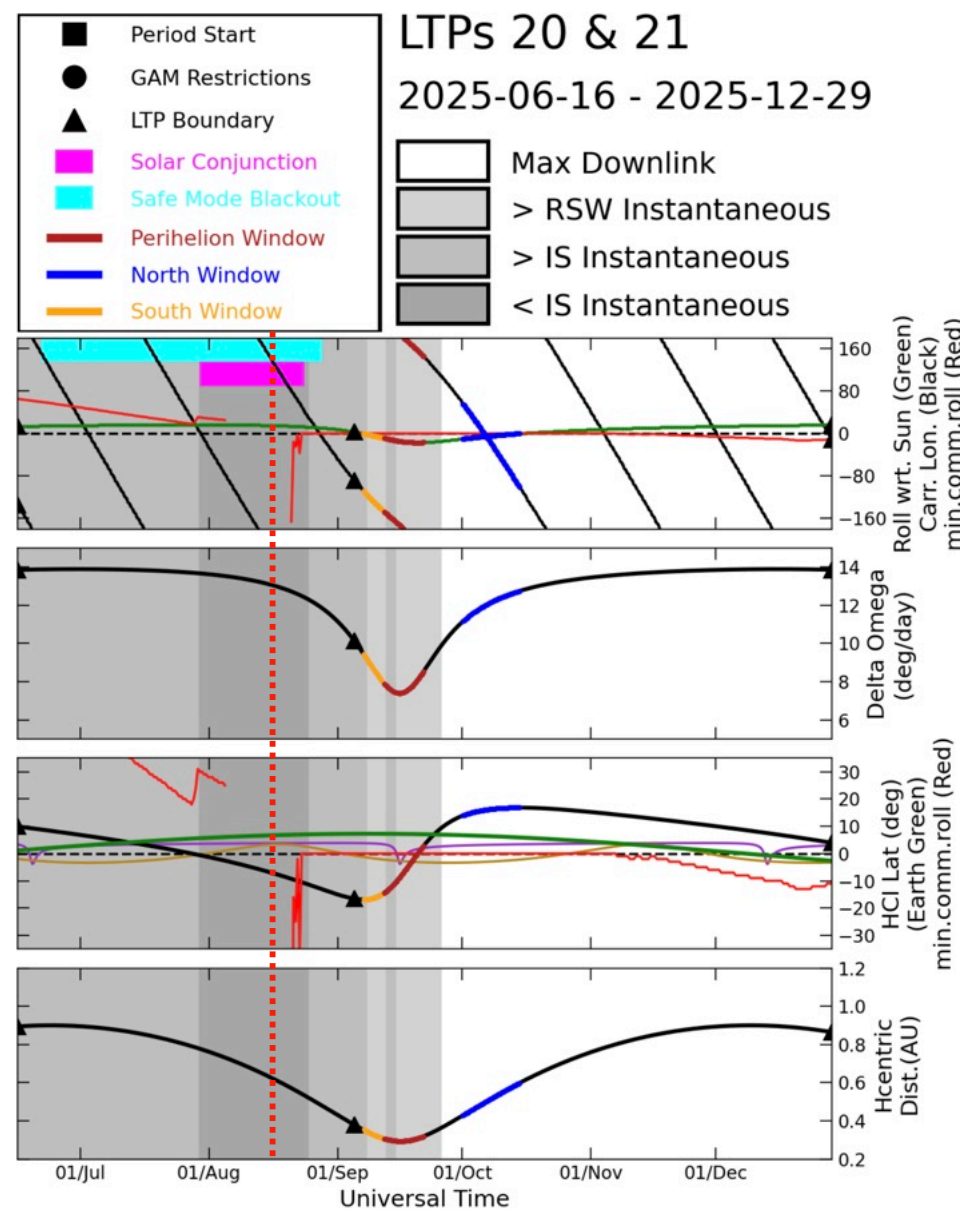
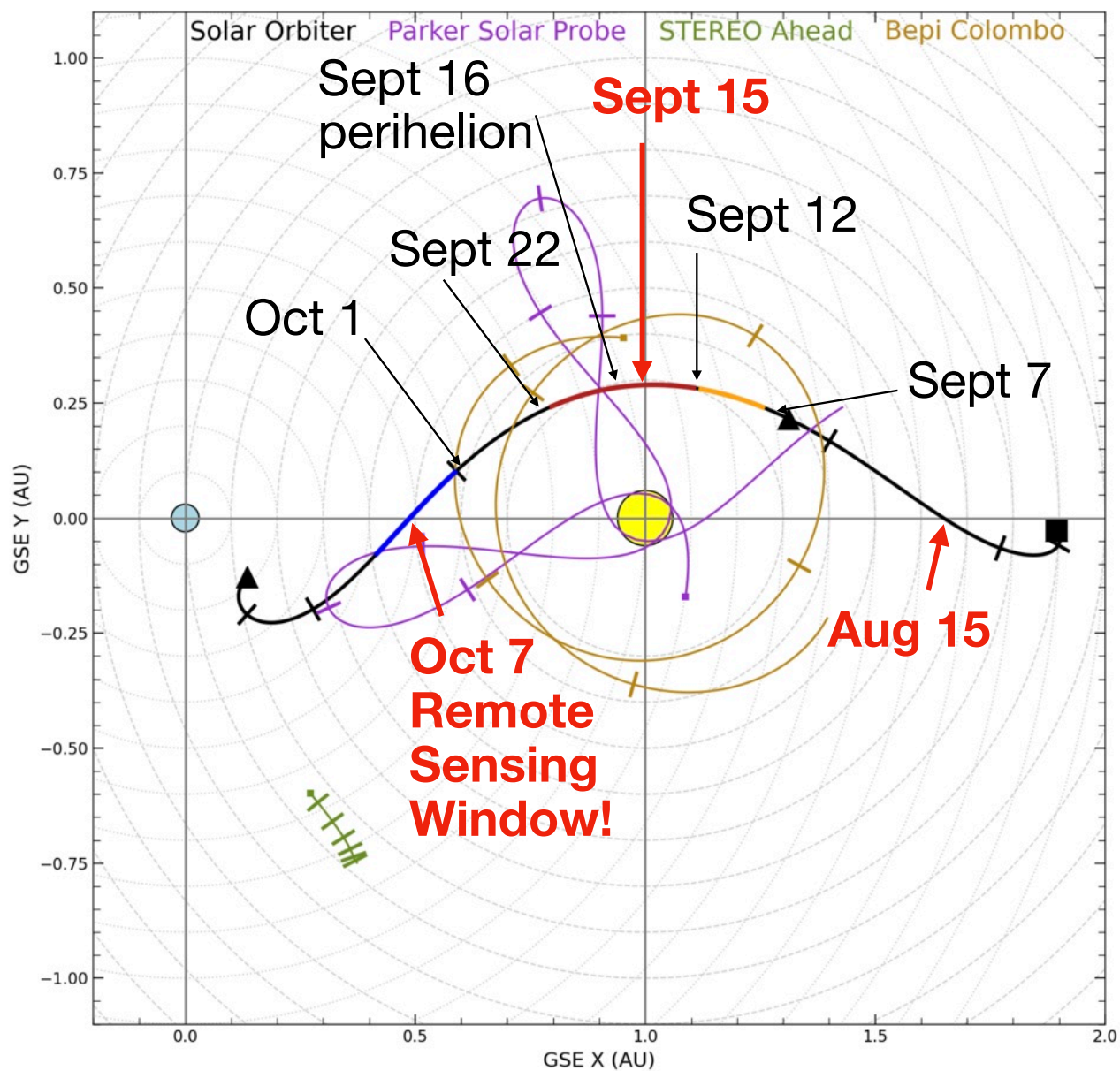


2024-09-30T23:39:00.925

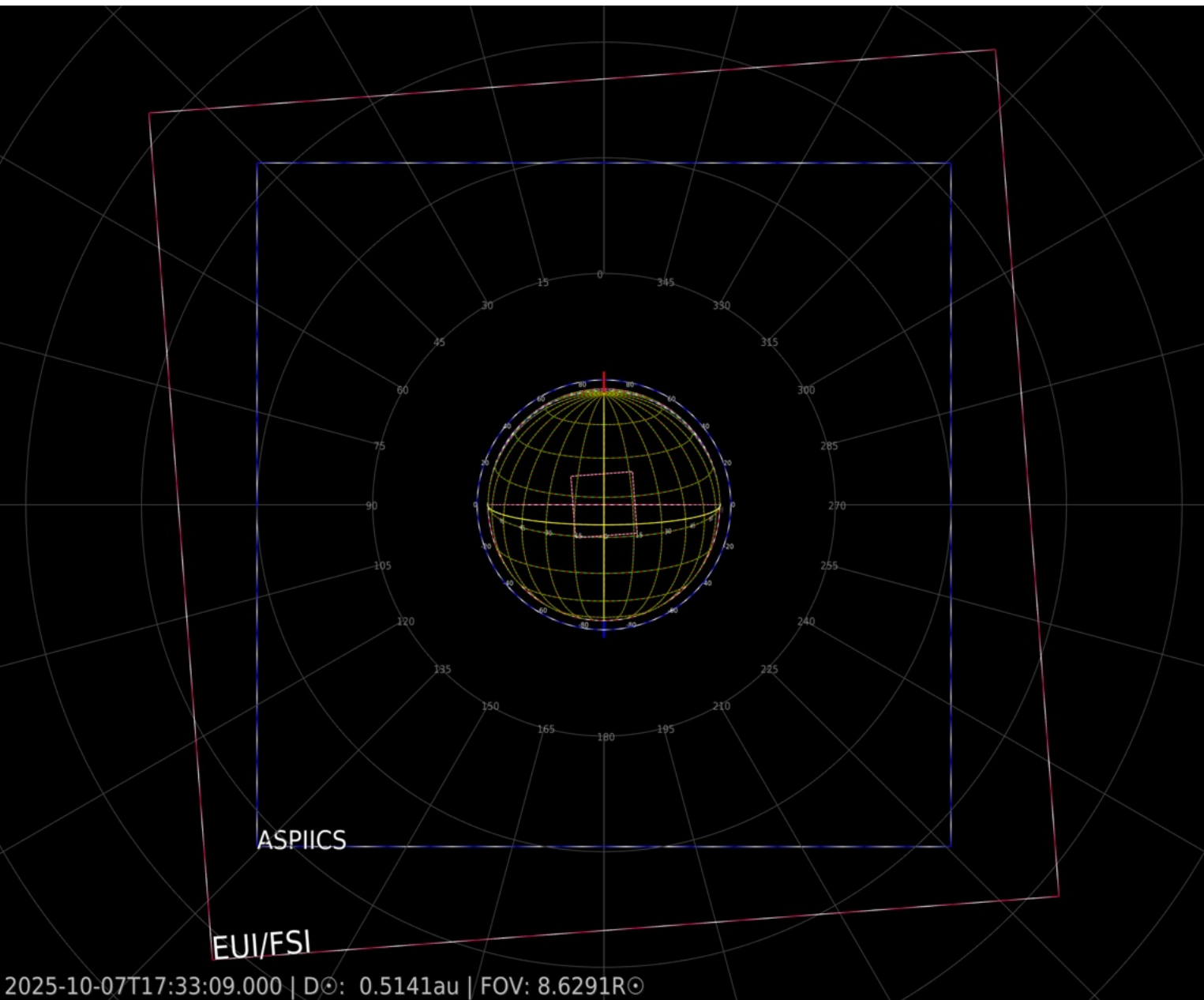


2024-03-23T23:05:18.374 | D☉: 0.3814au | FOV: 0.1759R☉





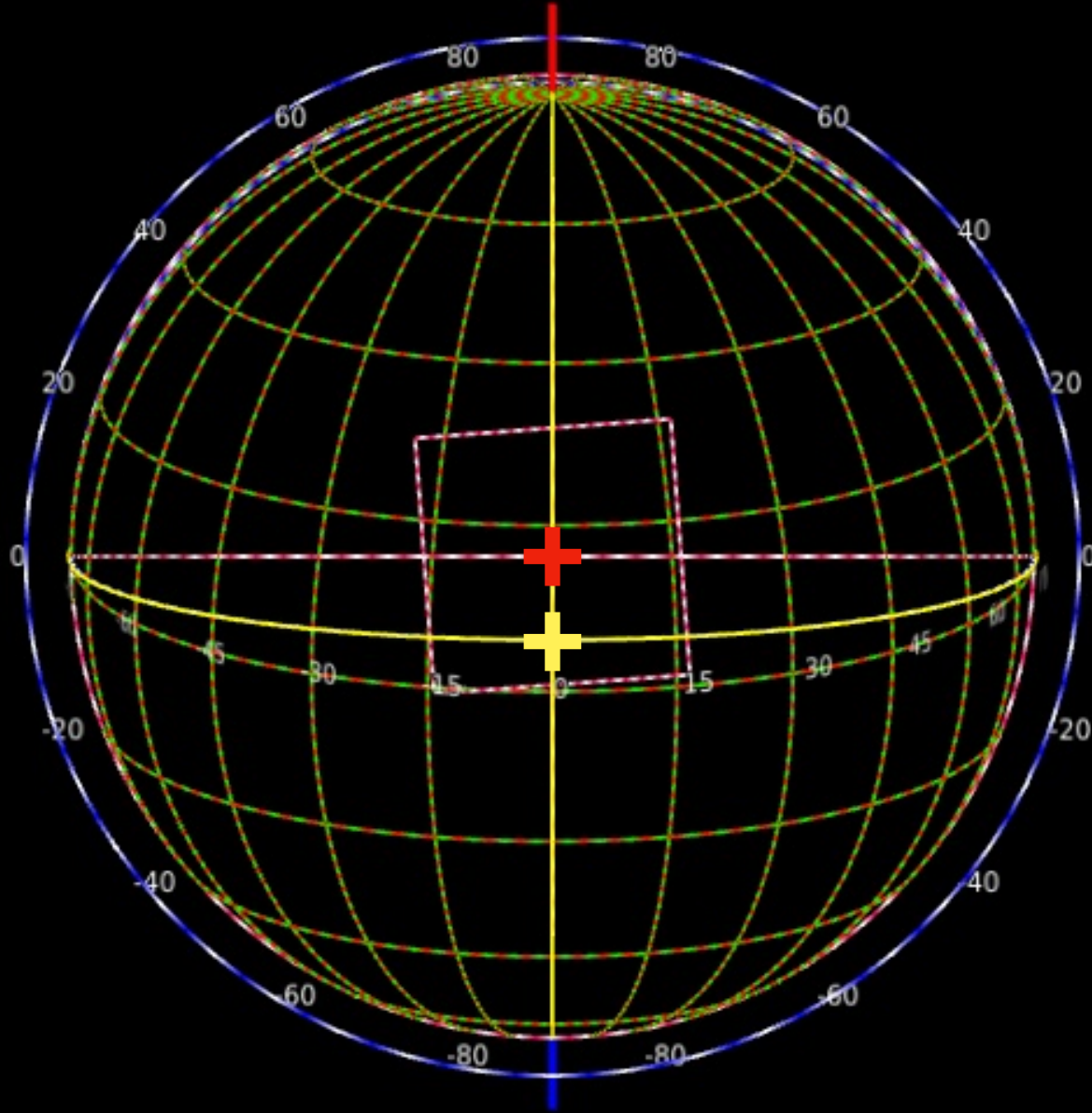
2025-10-07  
Solar Orbiter aligned with  
Earth in longitude,  
not latitude



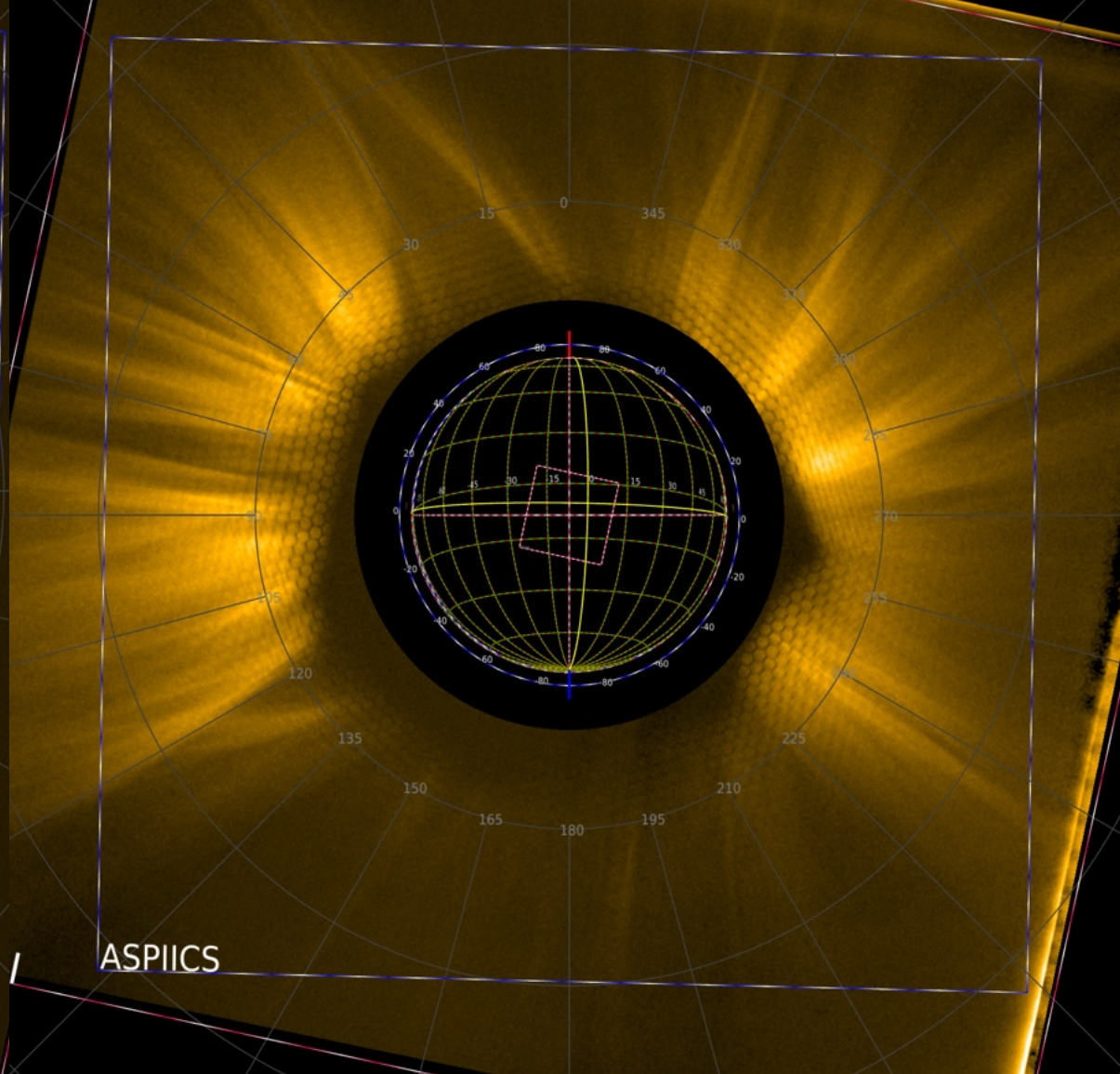
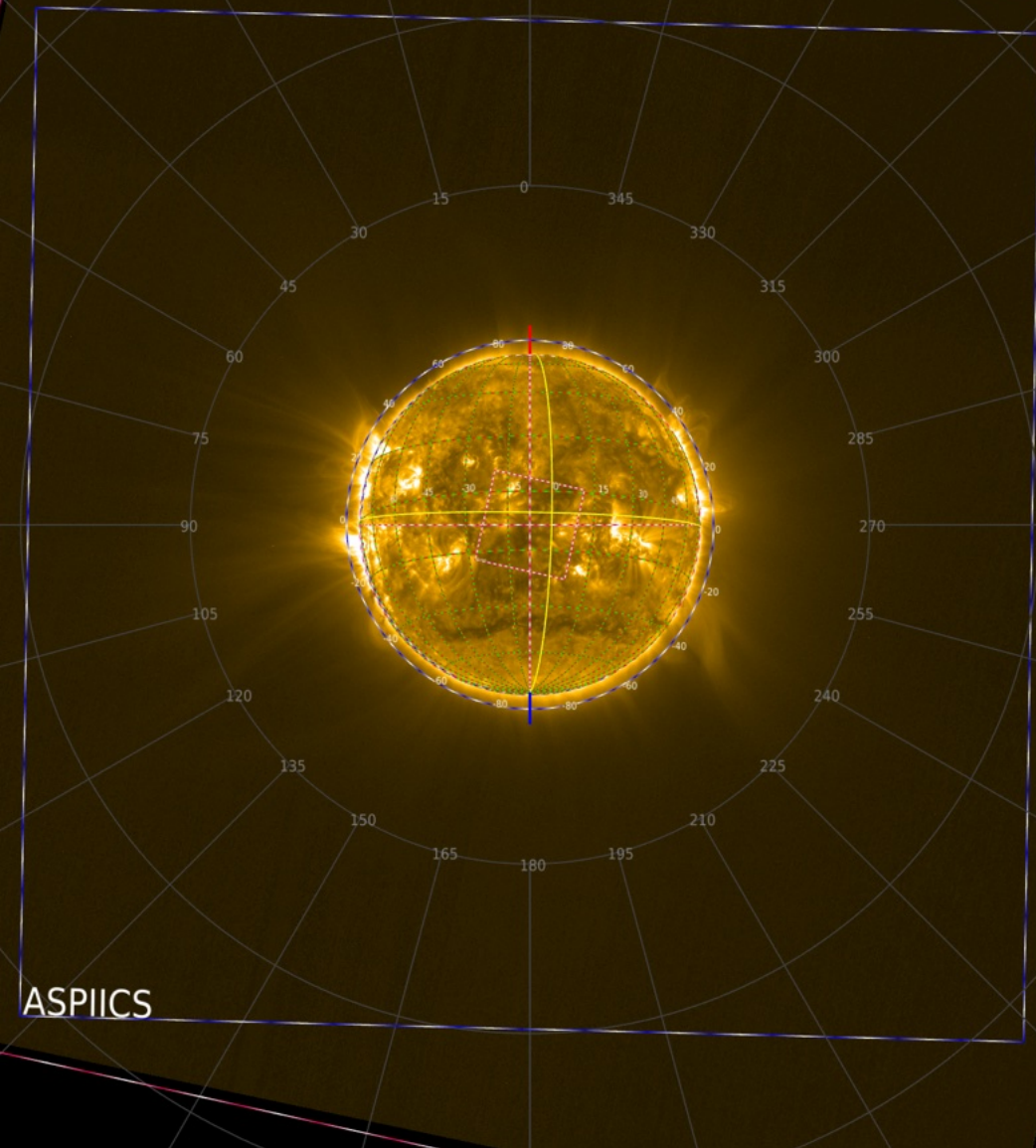
2025-10-07  
Solar Orbiter aligned with  
Earth in longitude,  
not latitude

Solar Orbiter at +16 deg lat

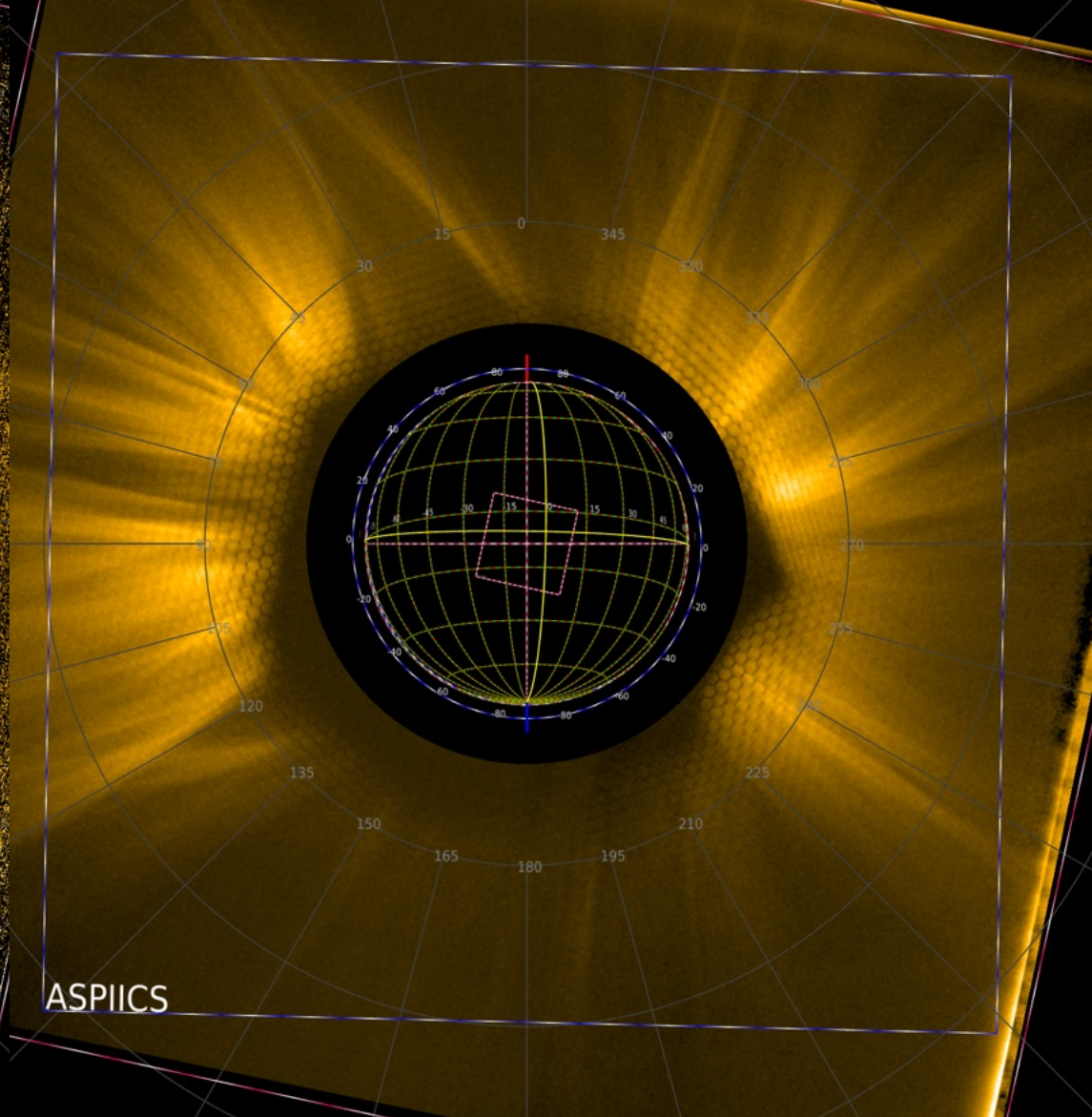
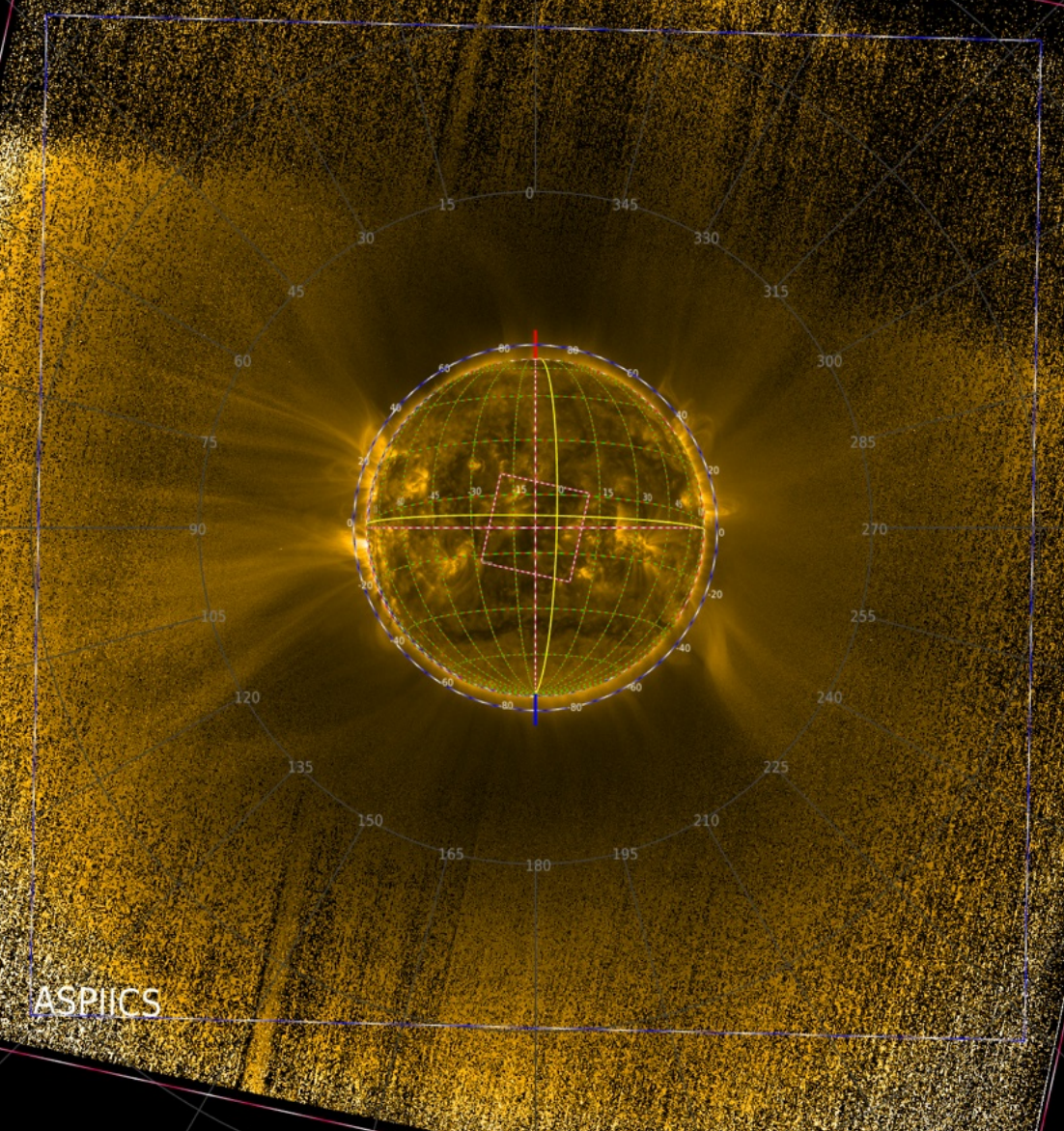
Earth at +6deg lat



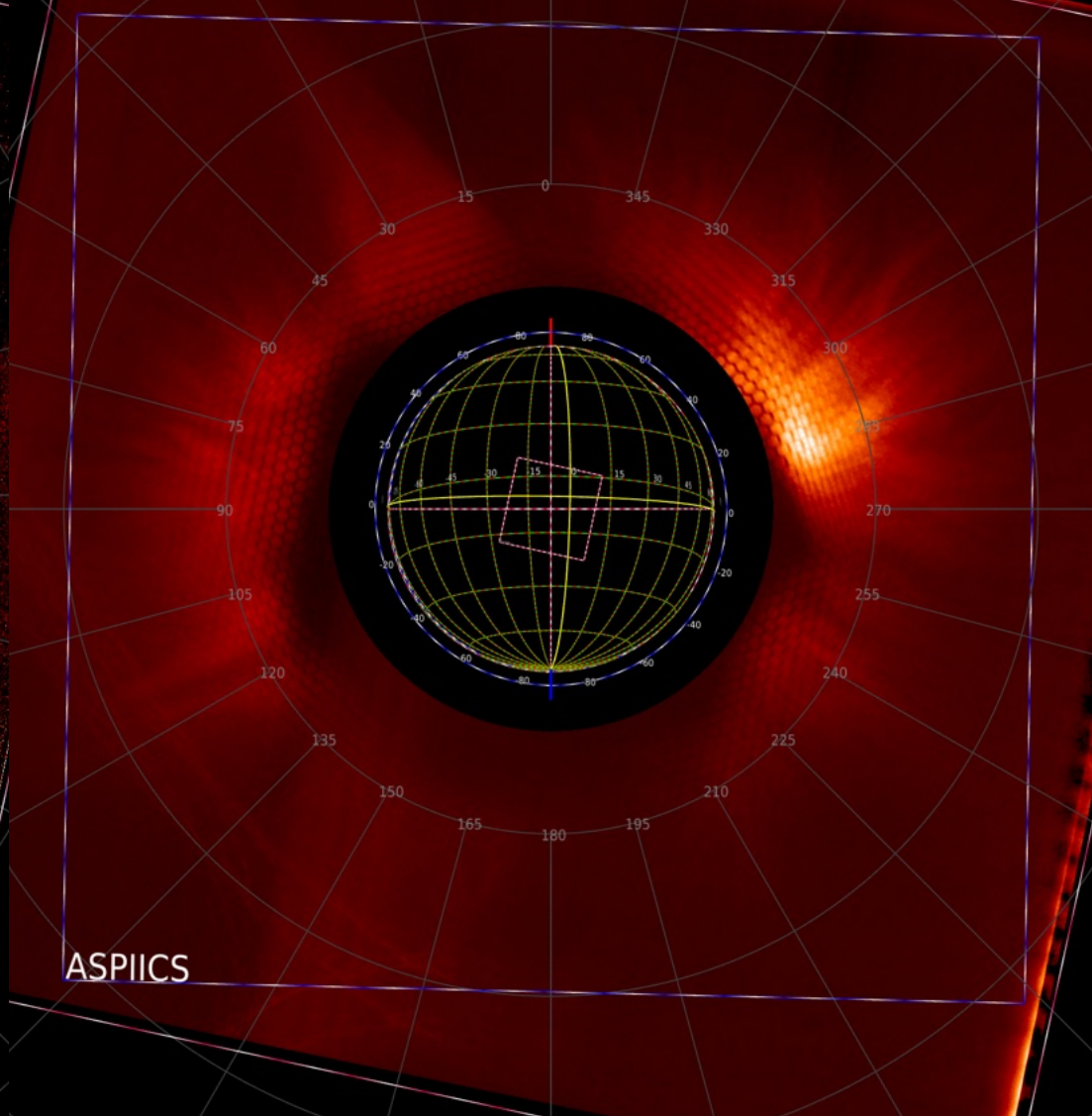
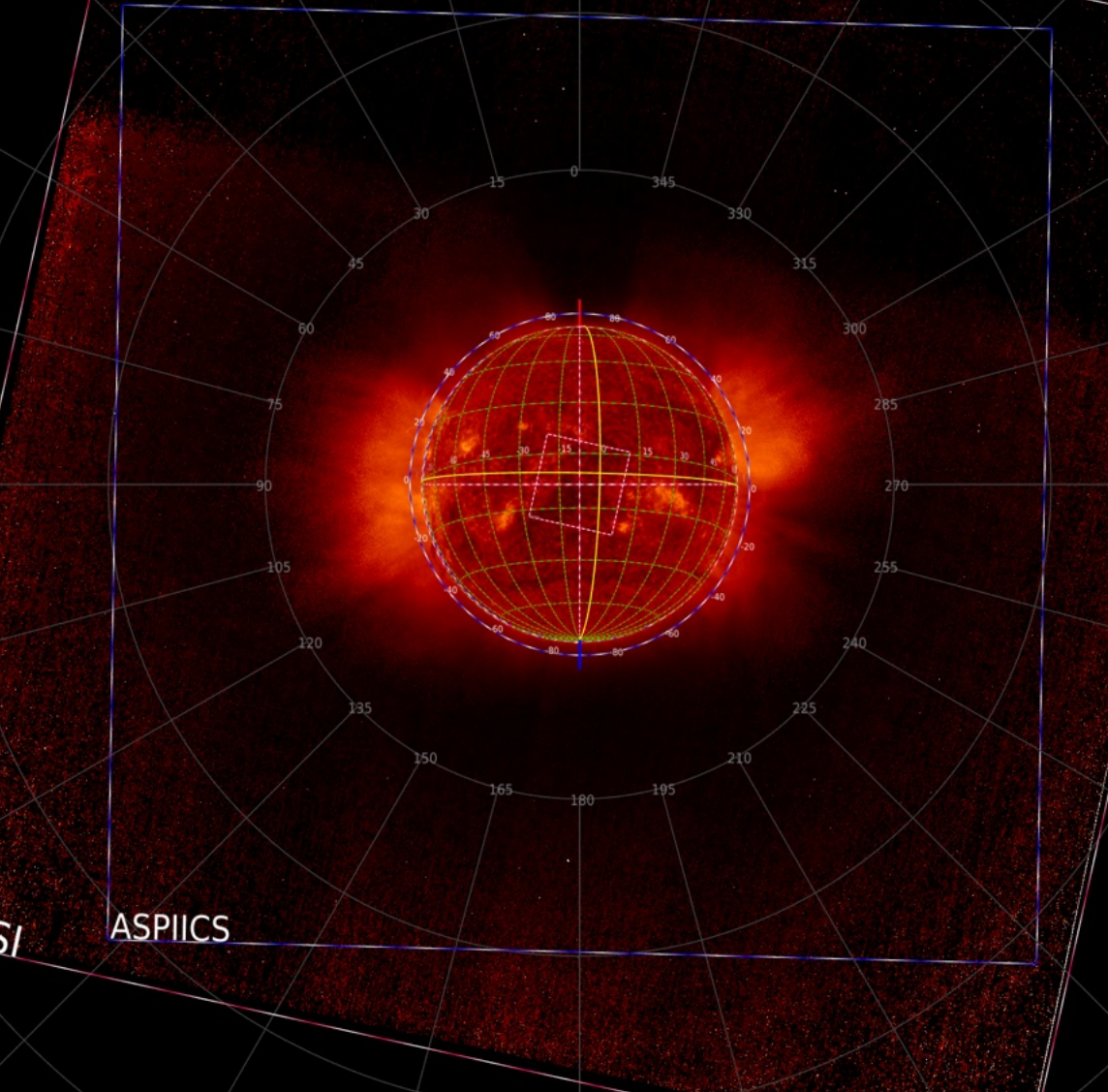
On March 9, Solar Orbiter was at same distance (0.519 au) to the sun as it will be on Oct 7



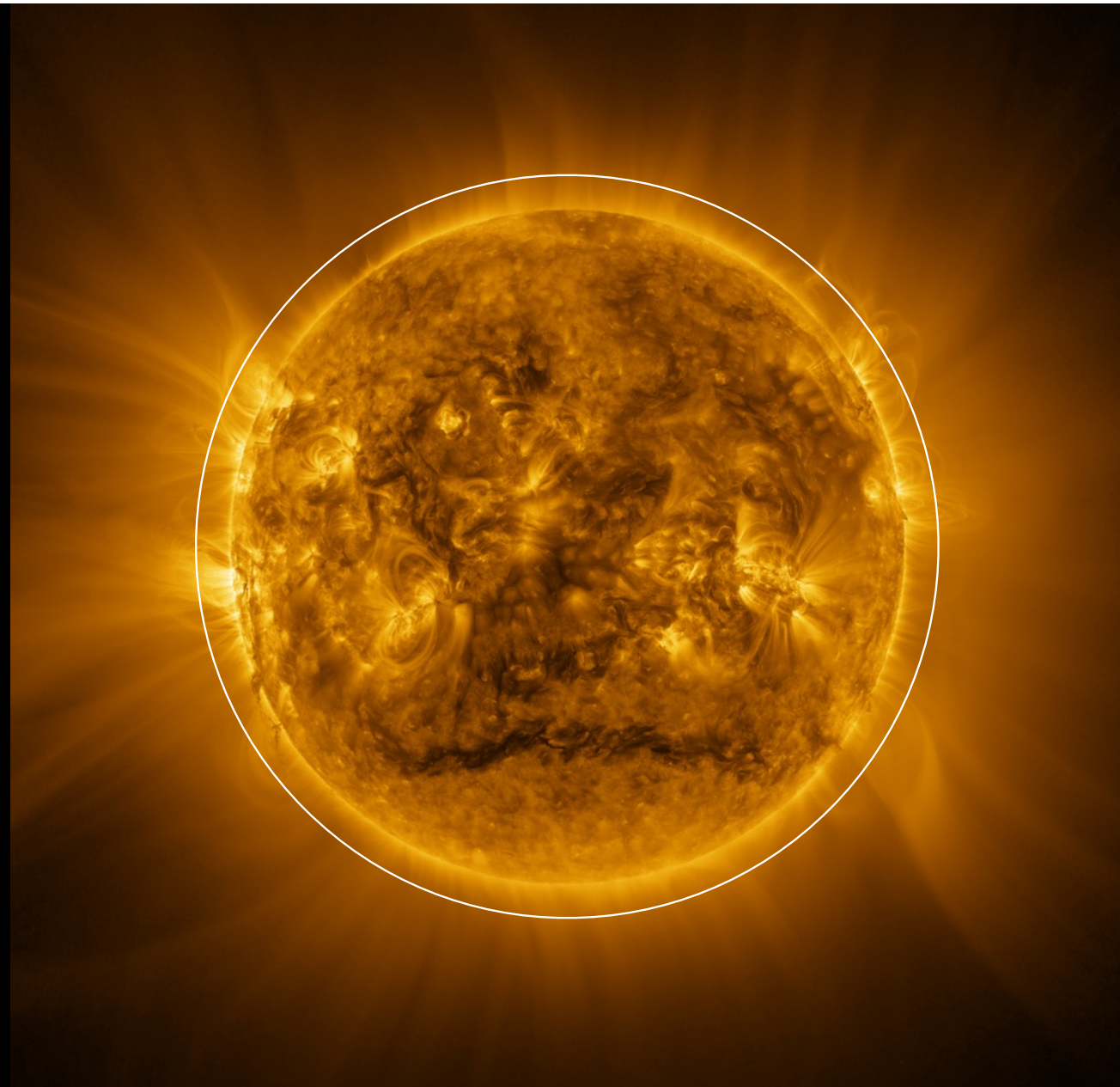
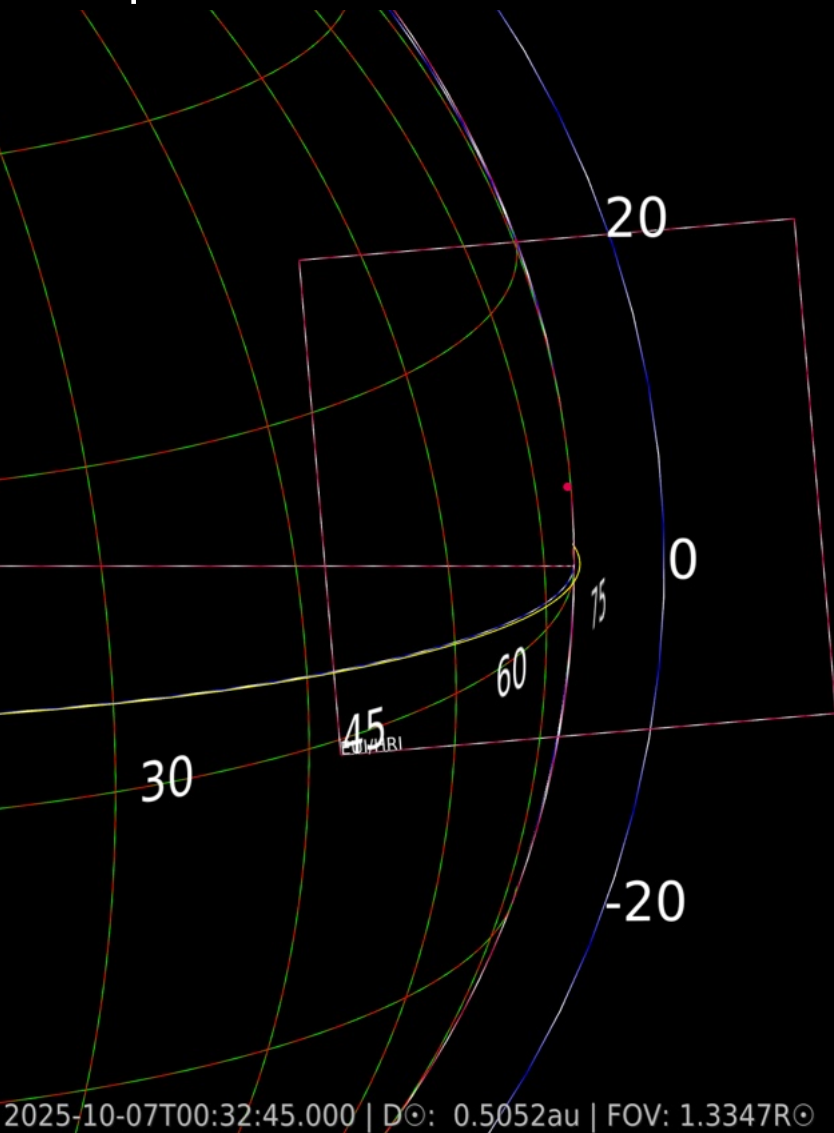
On March 9, Solar Orbiter was at same distance (0.519 au) to the sun as it will be on Oct 7

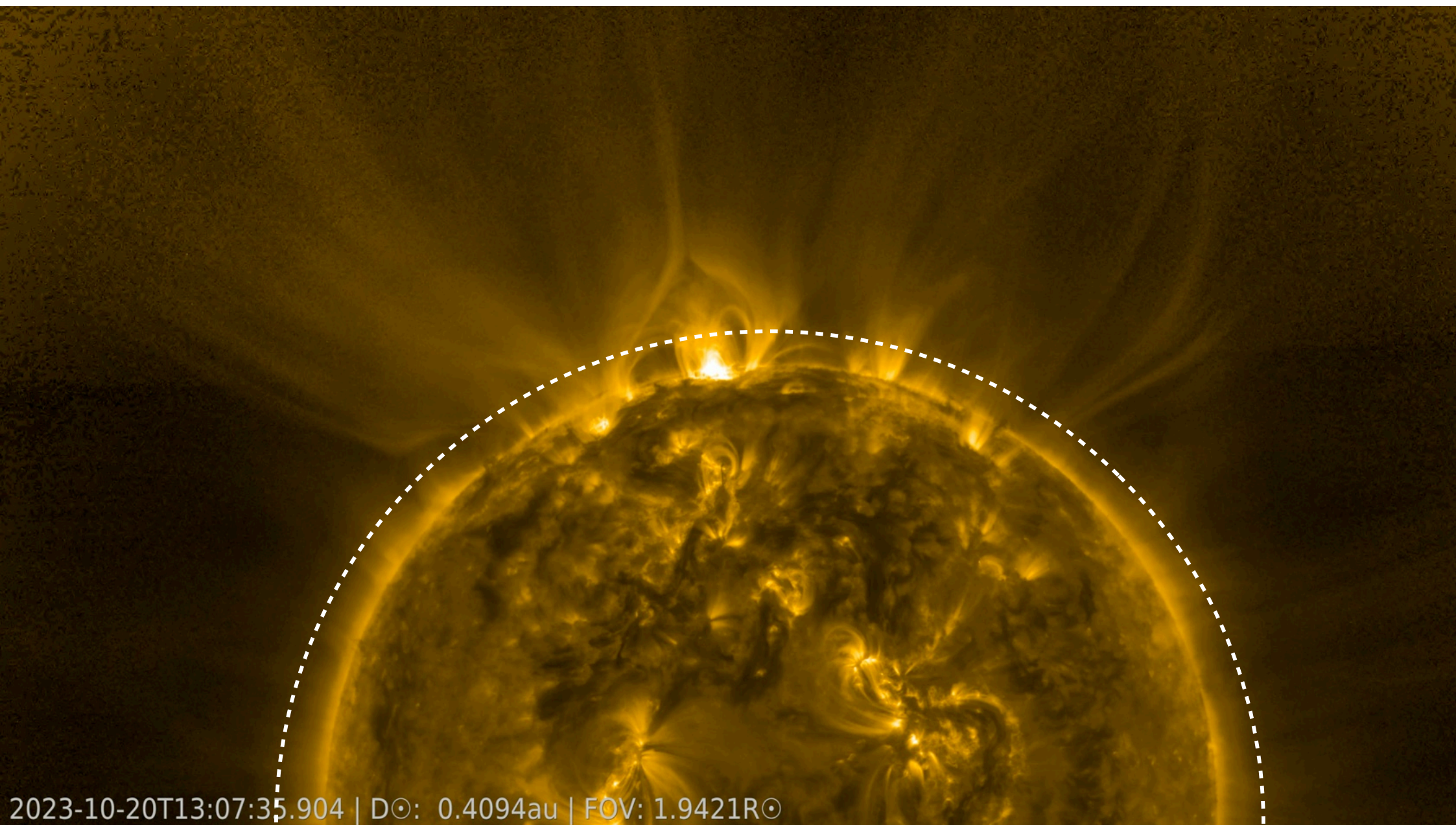


On March 9, Solar Orbiter was at same distance (0.519 au) to the sun as it will be on Oct 7

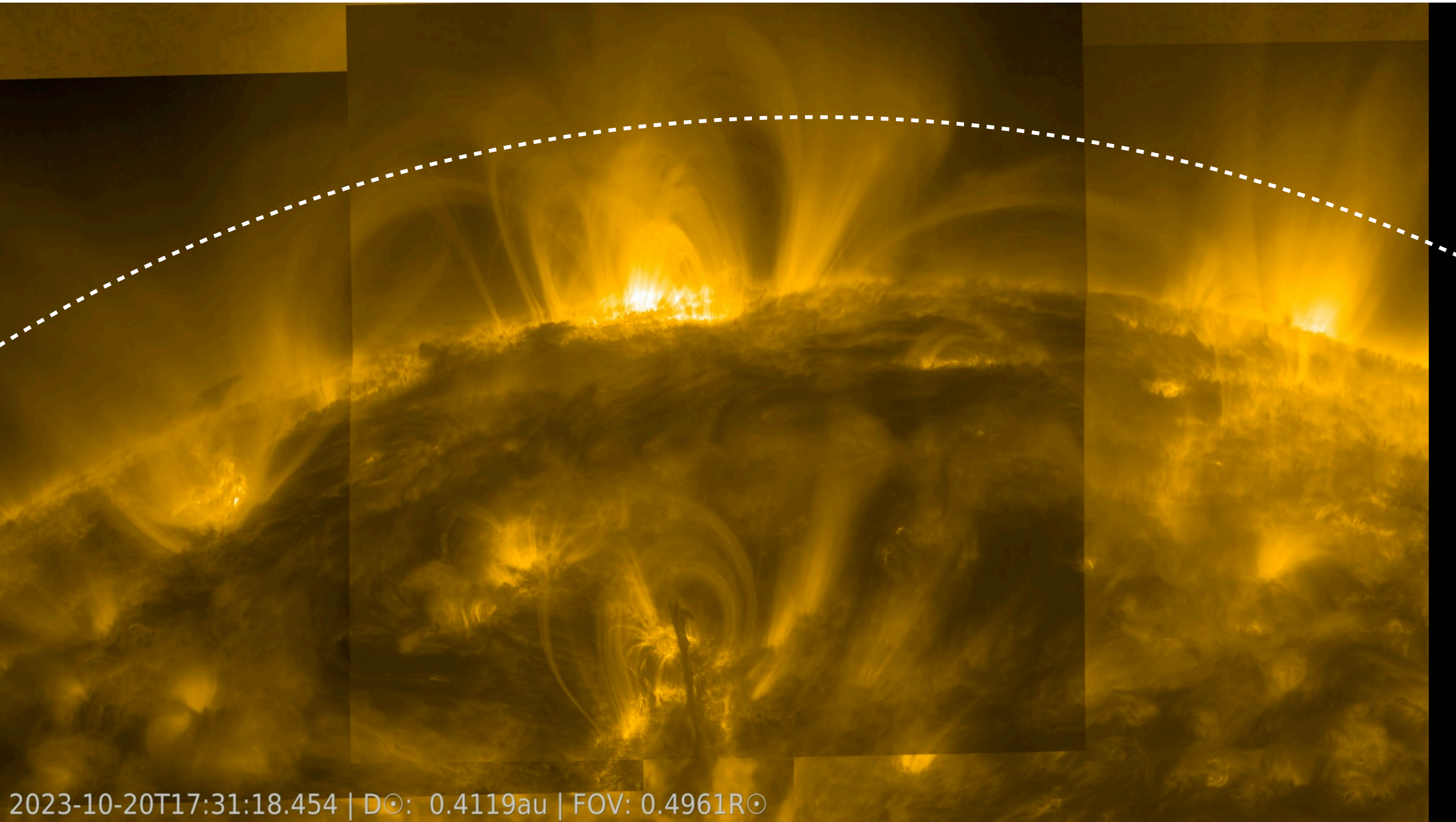


Offpointings possible but they hamper Metis observations

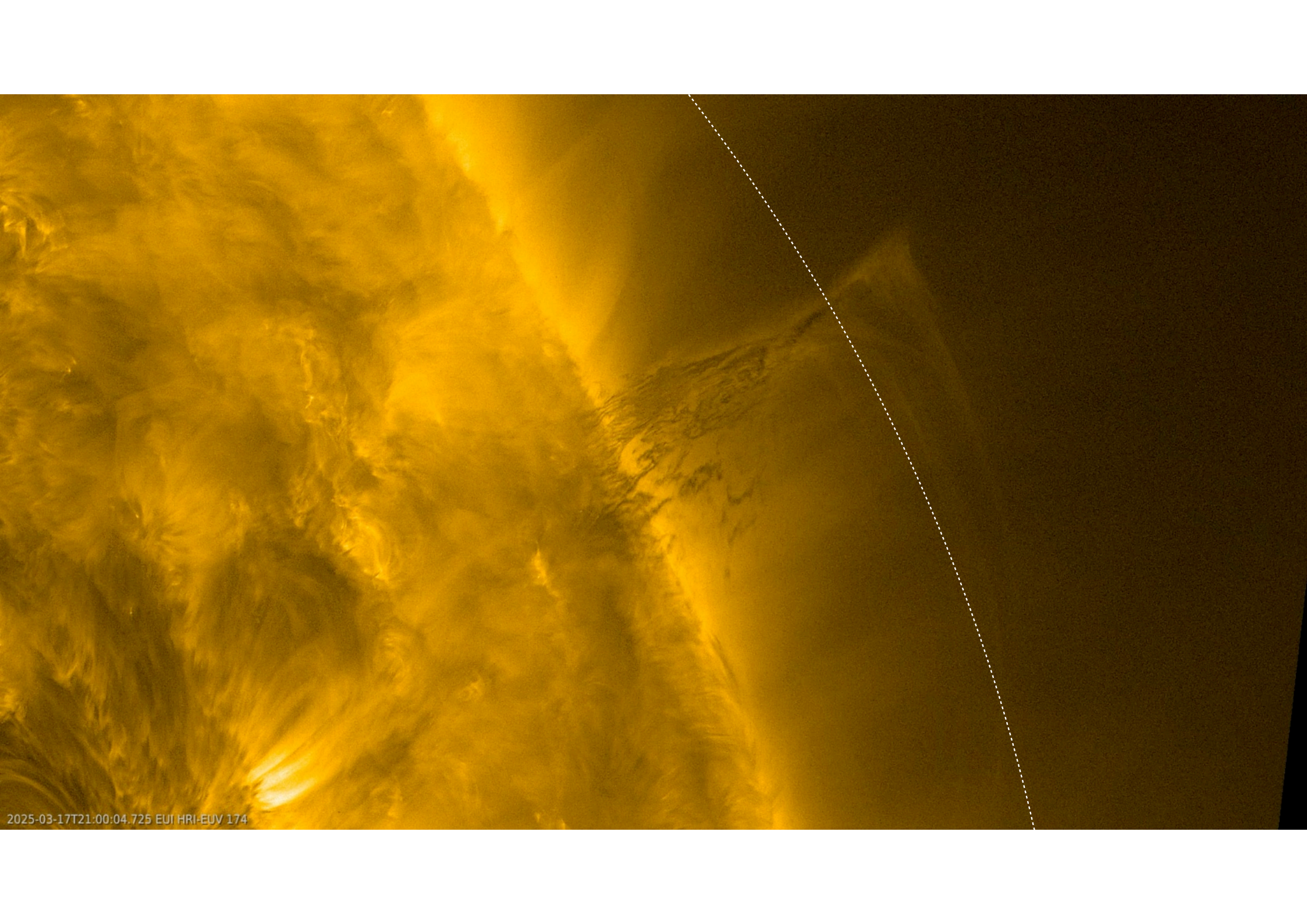




2023-10-20T13:07:35.904 | D $\odot$ : 0.4094au | FOV: 1.9421R $\odot$



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.