



FCI Weather Cases From Middle East and North Africa (MENA)

***EUMETSAT Event Week
23 – 27 June 2025***



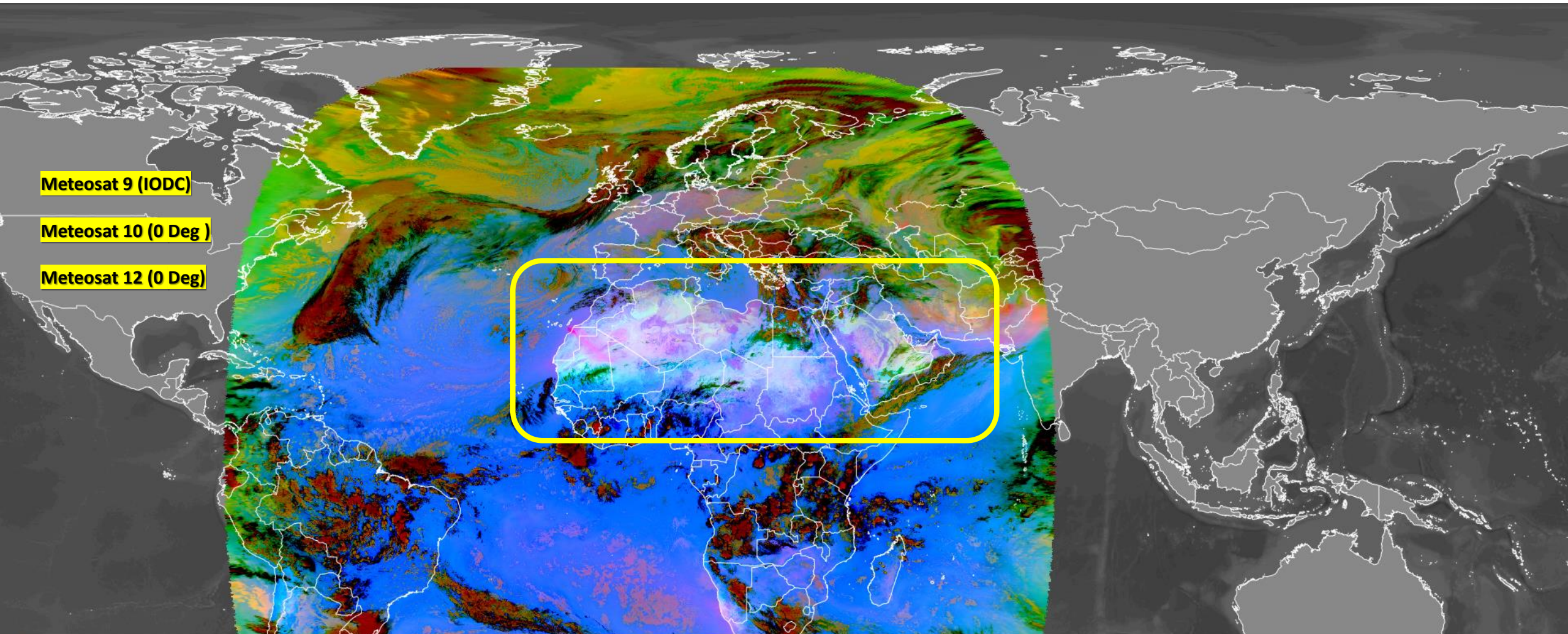
Ibrahim Al Abdulsalam / Meteorologist
Middle East Center of Excellence for Satellite Applications
Muscat\ Sultanate of Oman

Ibrahim.Abdulsalam@caa.gov.om

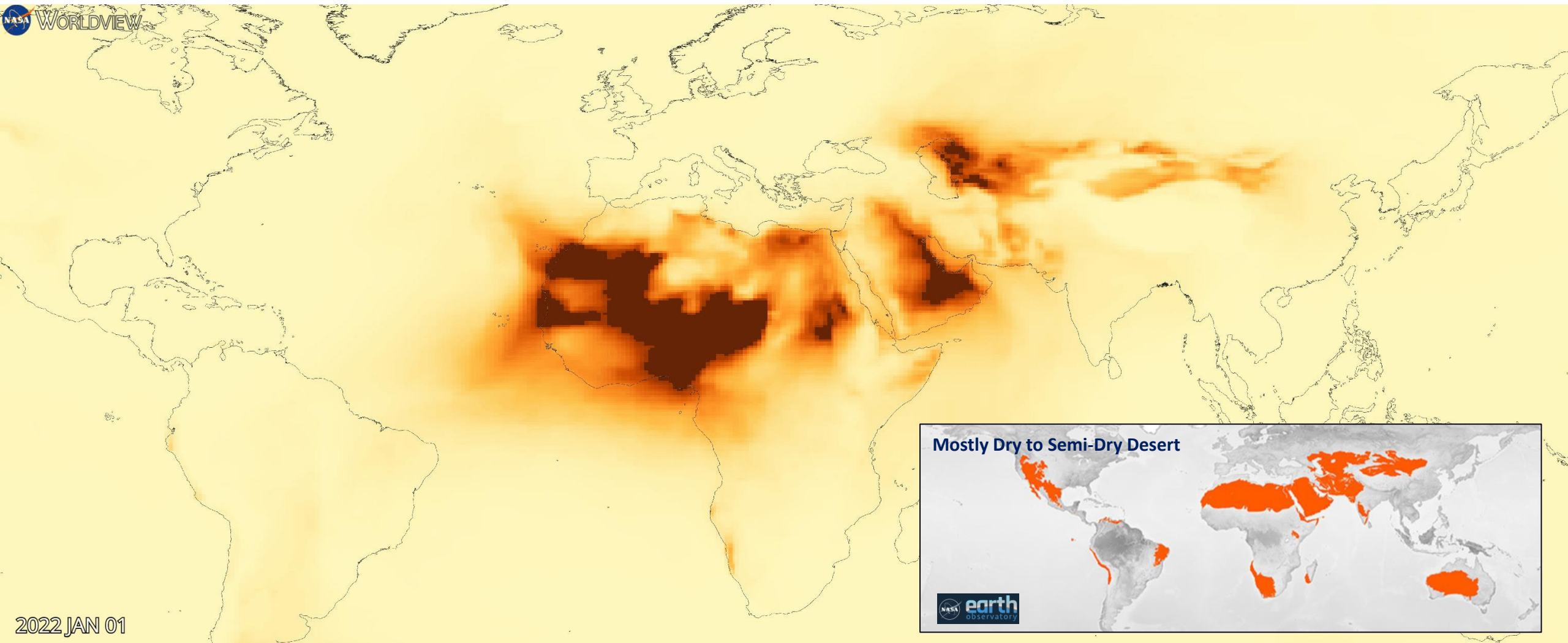
Images by: Johan Strandgren



MENA, Meteosat Coverage



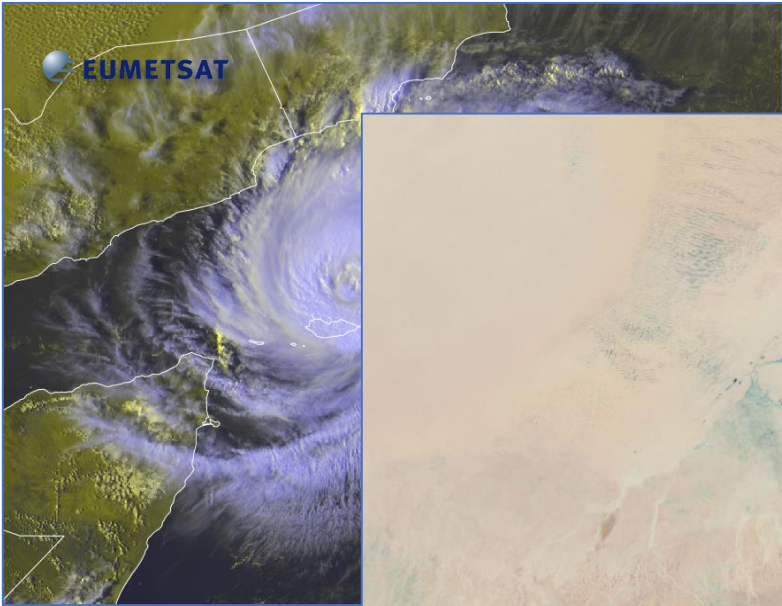
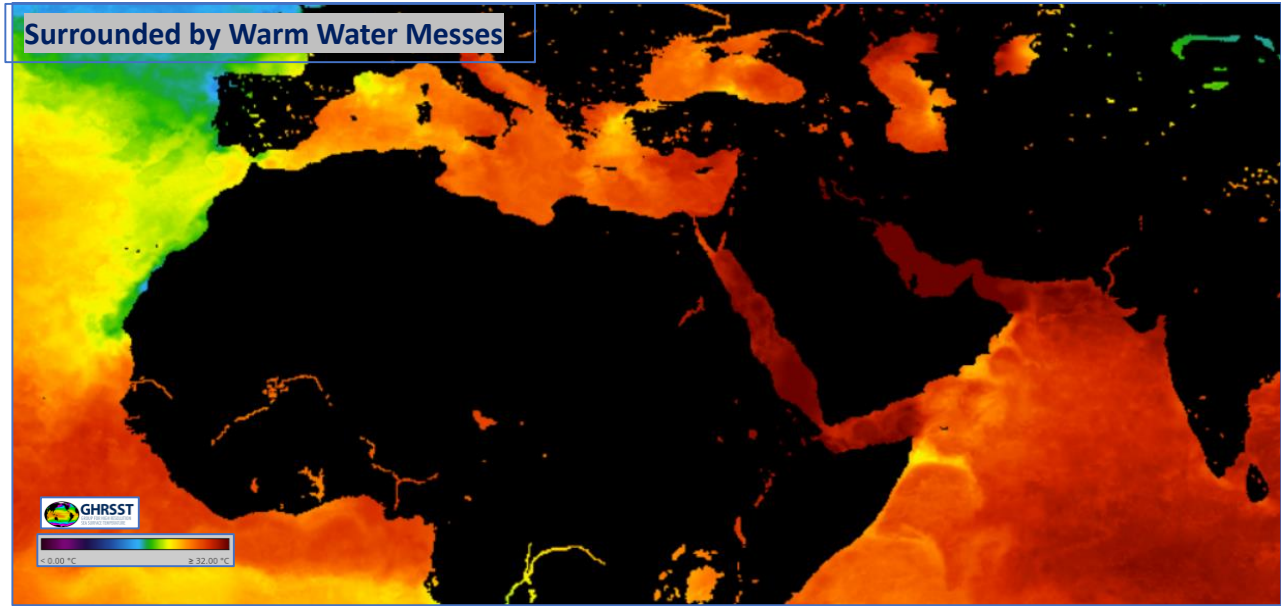
Dust Surface Mass Concentration PM2.5 (Particle Matter 2.5 um or less) (MERRA-2)



0.0 e-8 kg/m³

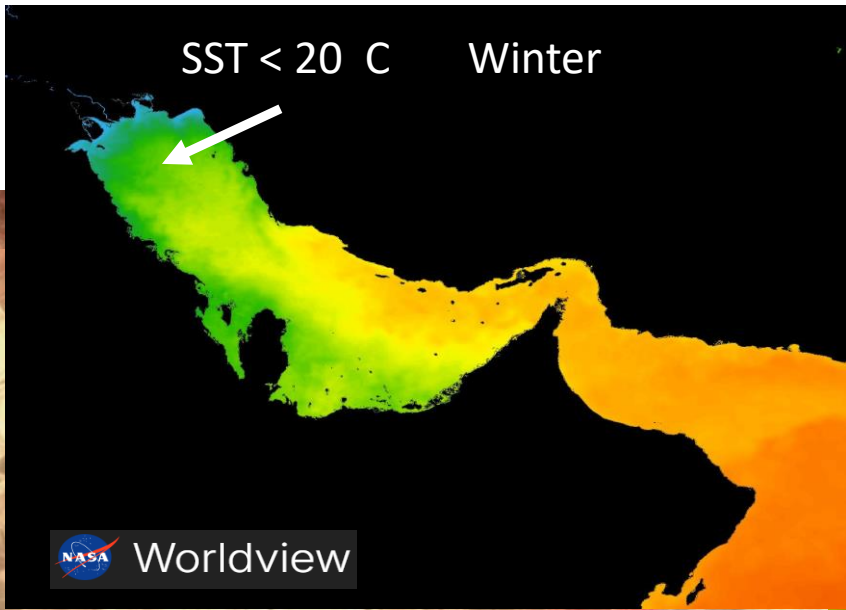
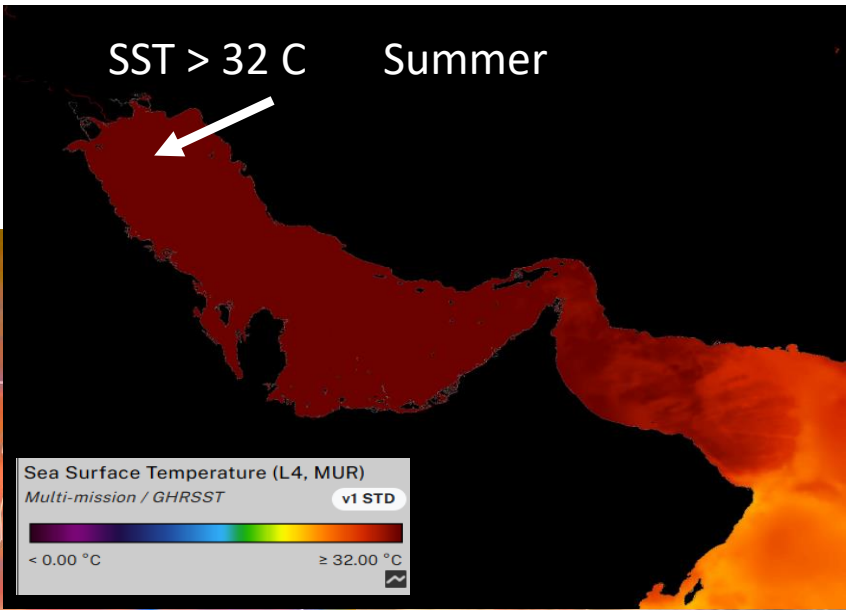
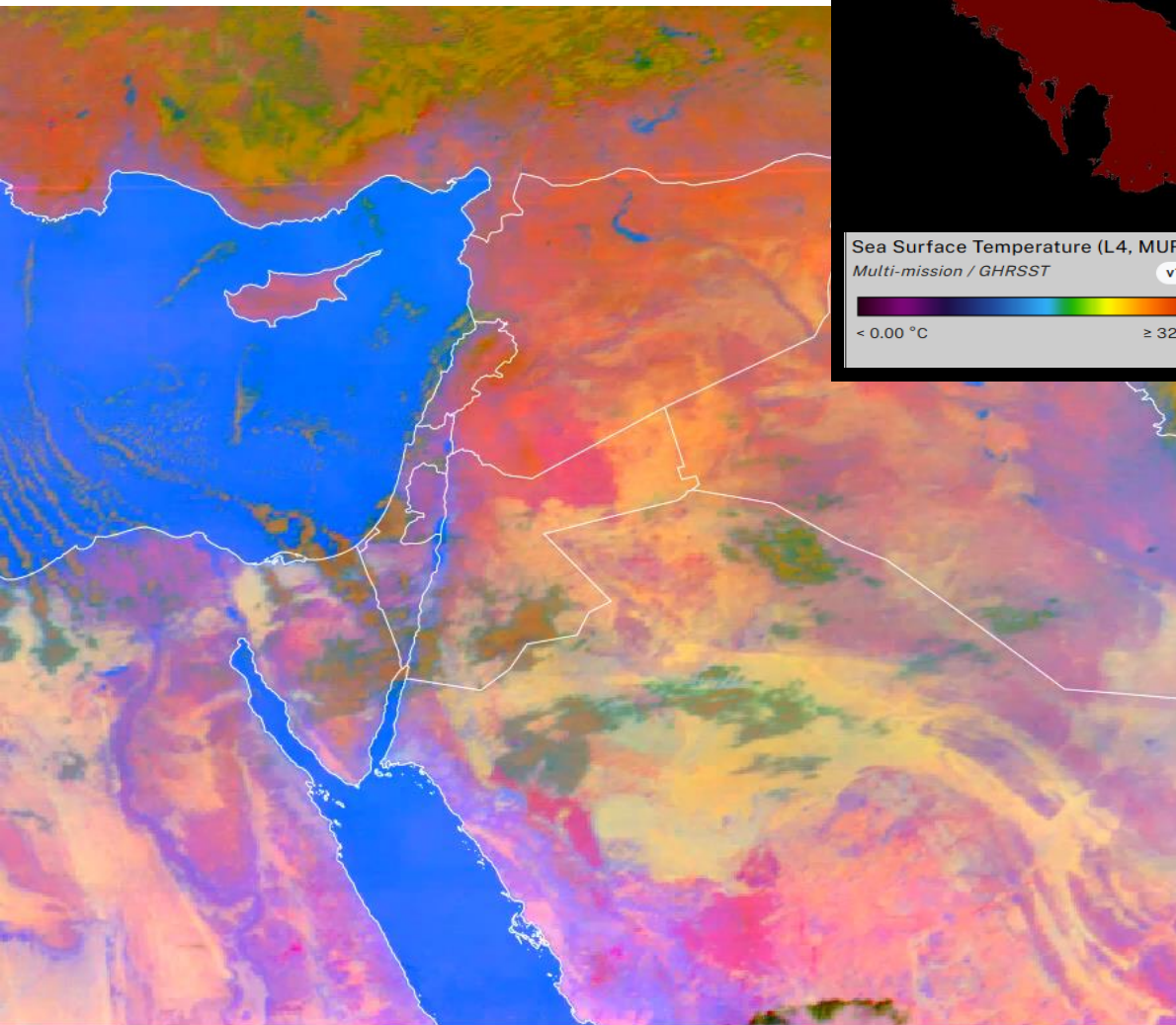
≥ 9.0 e-8 kg/m³

But it's not just about the dust and desert life!



Case Studies by FCI

Dust Emission from Syria and Iraq
14- 15 Dec 2024
FCI Dust RGB

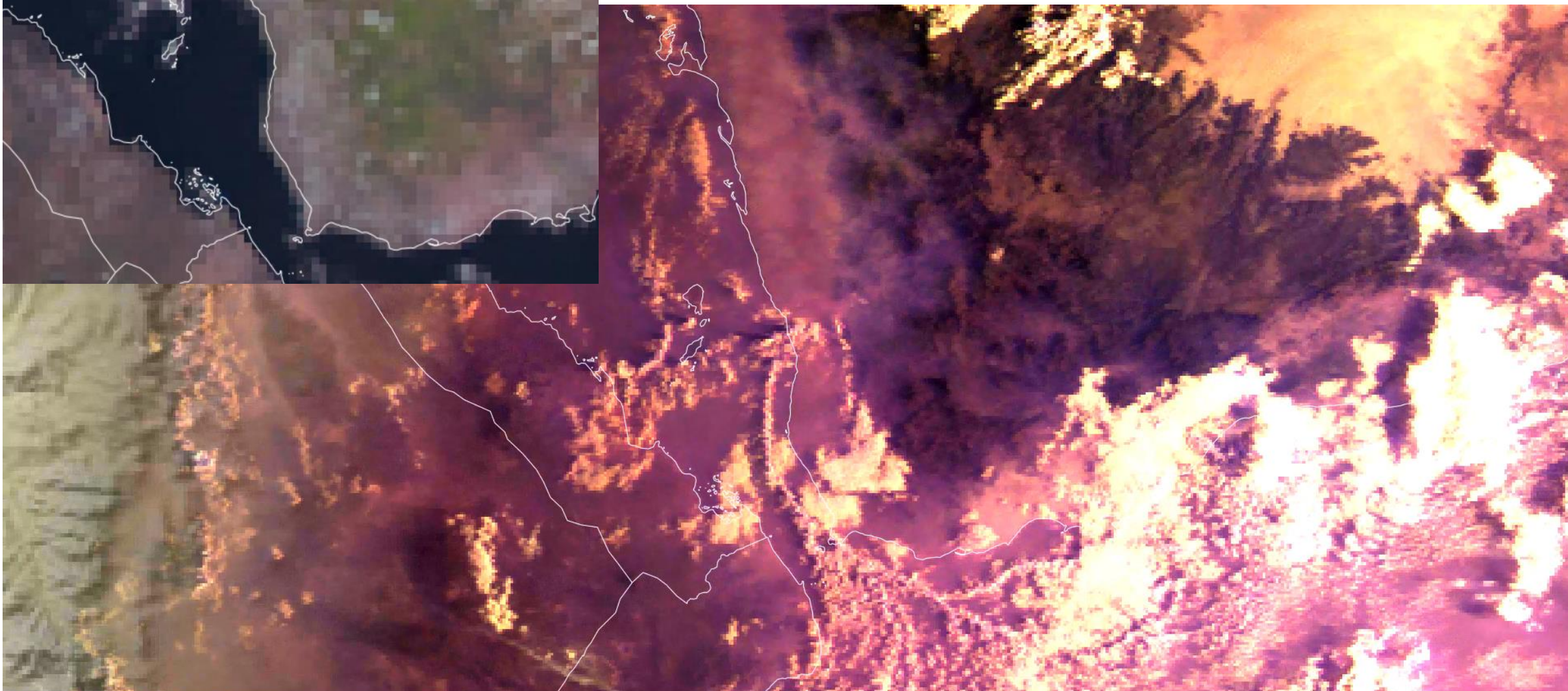


About EO Browser | Contact us | Get data

SEVERI (NC RGB)

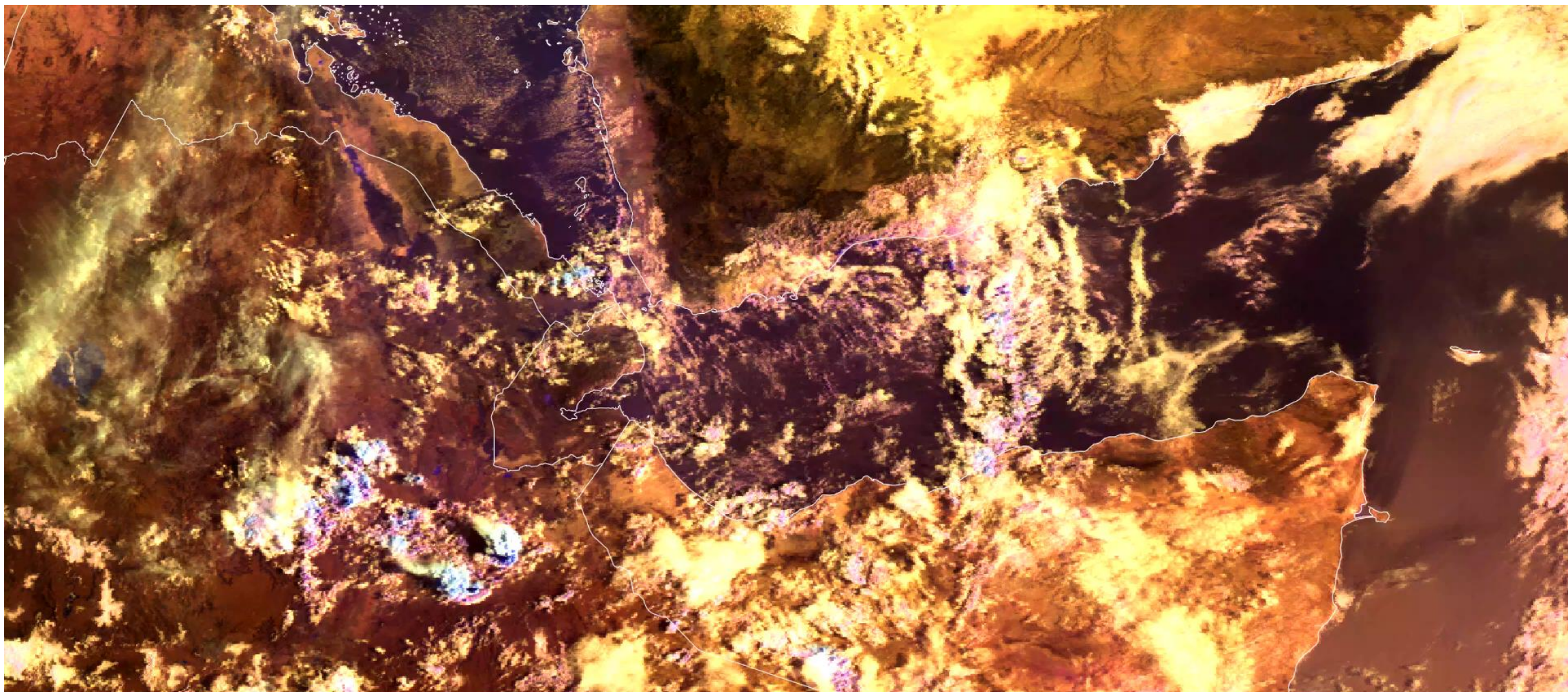
FCI vs SEVERI

Compared to SEVERI, FCI's Cloud Phase RGB, for instance, reveals small-scale cloud features more clearly due to its higher spatial and temporal resolution.



Small features are seen now with high spatial and temporal resolution

NIR1.6 NIR2.3 VIS0.6



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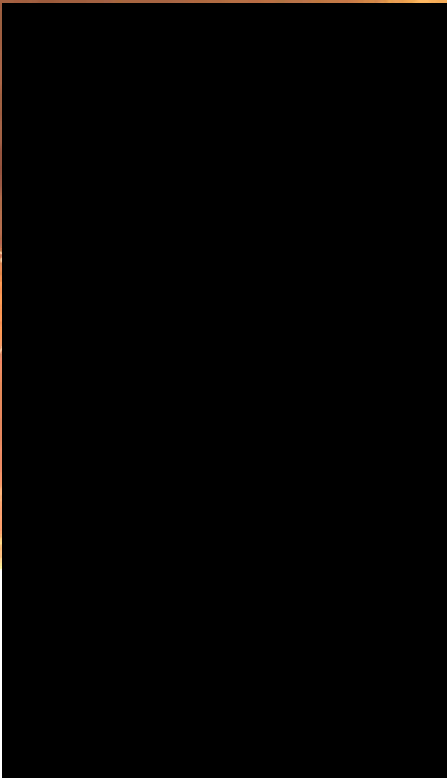
2024-10-05 05:00:00 UTC

Summer Convection and Severe
Downdraft / Oman 26 May 2025

NIR1.6 NIR2.2 VIS0.6



EUMETSAT

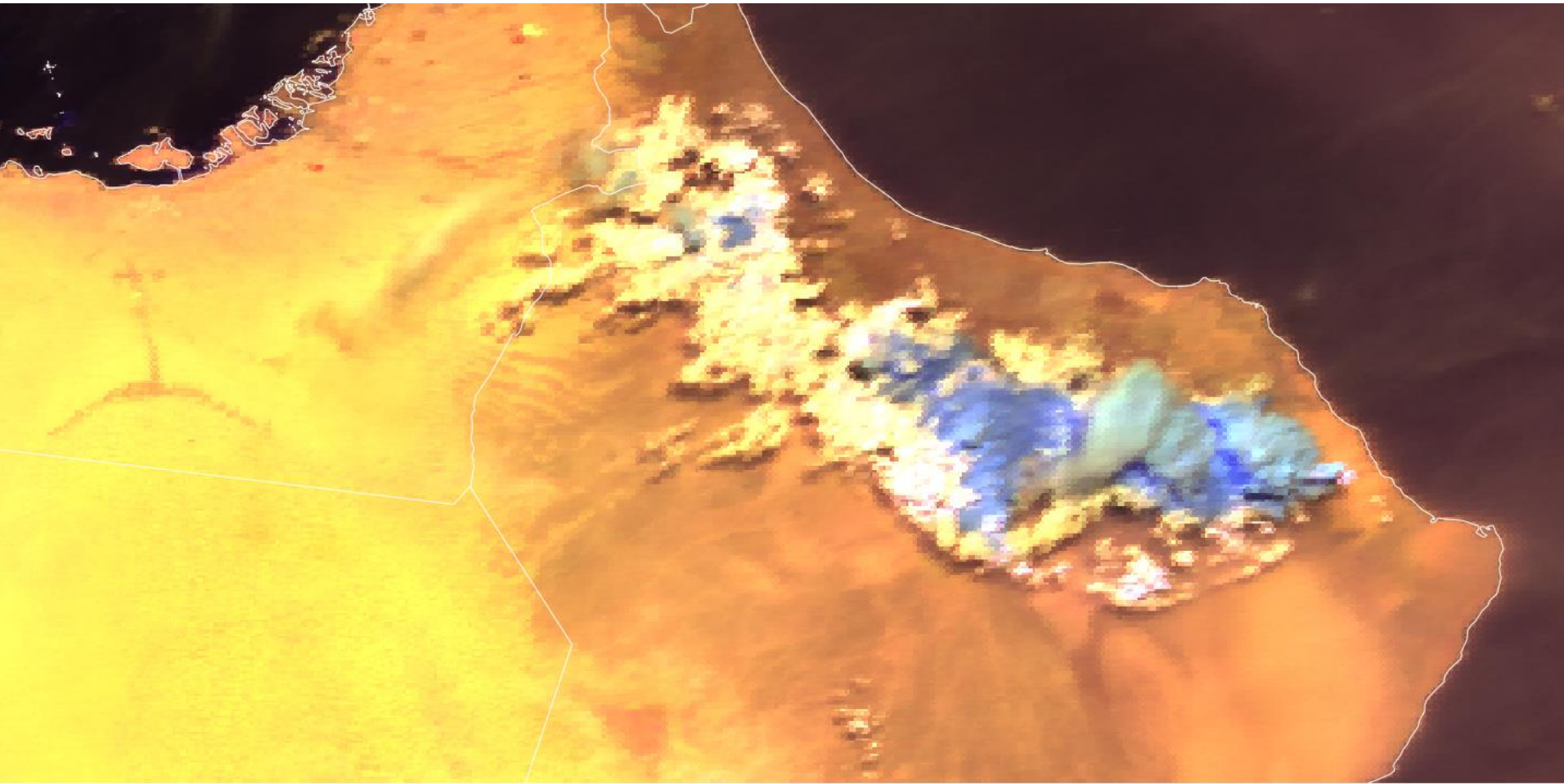


202

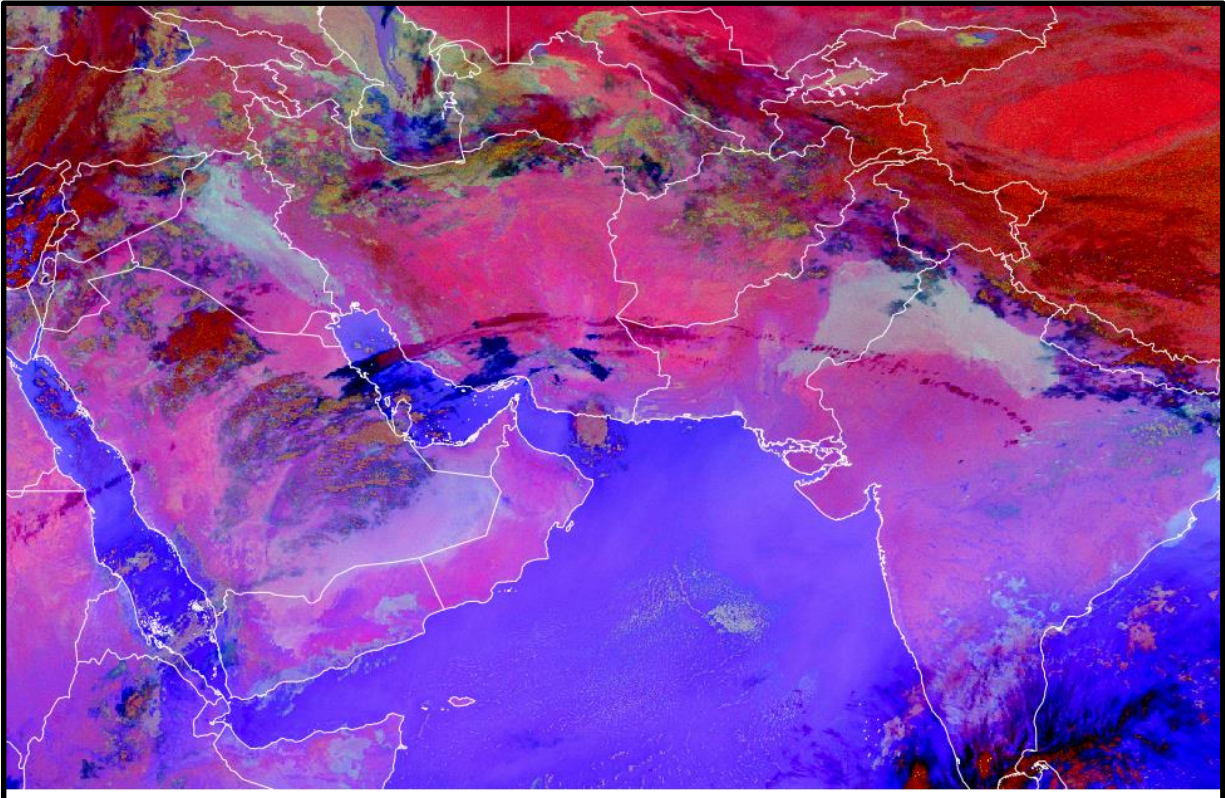
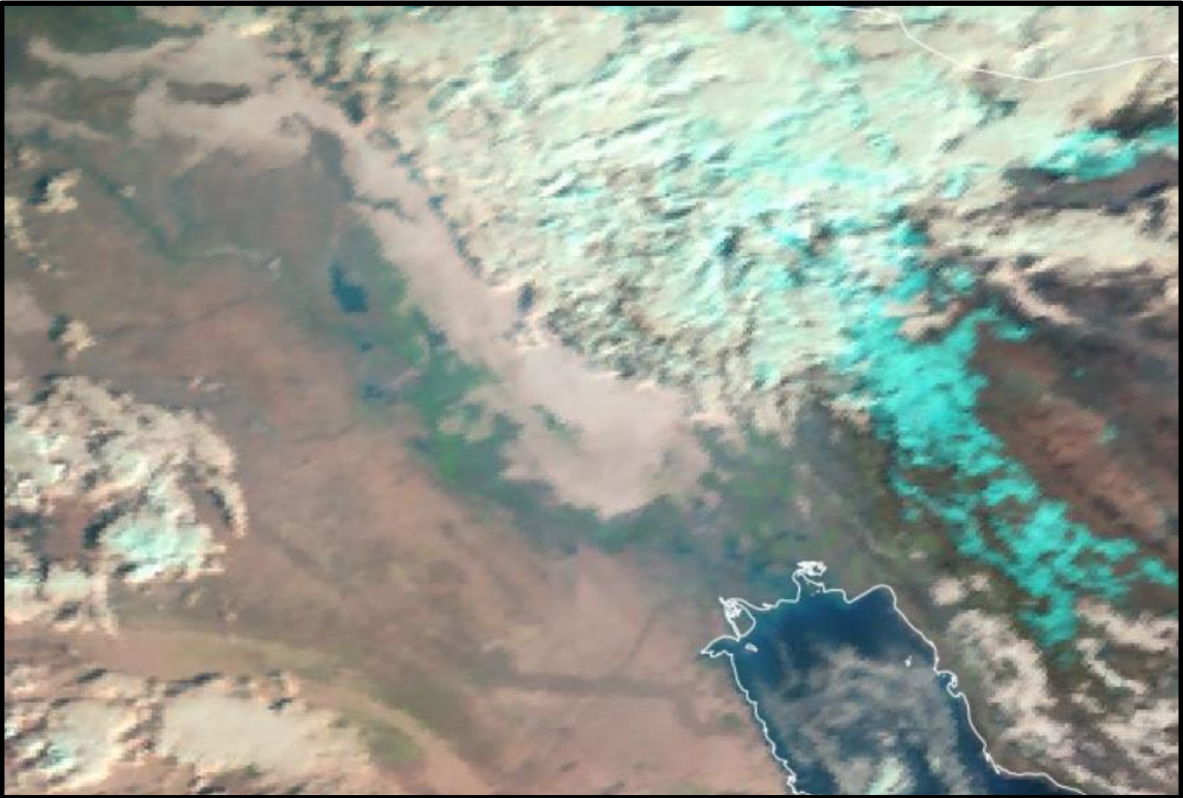
هذا الخط كله من بدايه الى نهايه كذا

Summer Convection and Sever
Downdraft / Oman 21 June 2025

NIR1.6 NIR2.2 VIS0.6

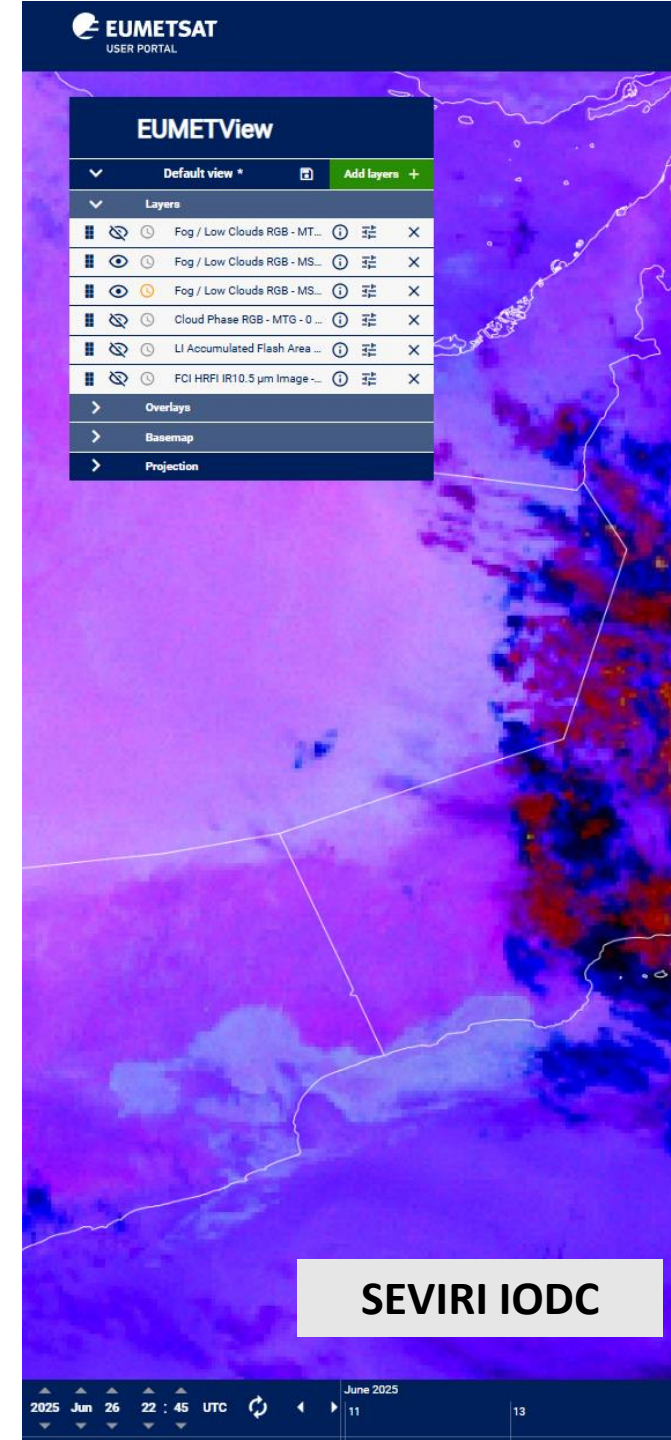
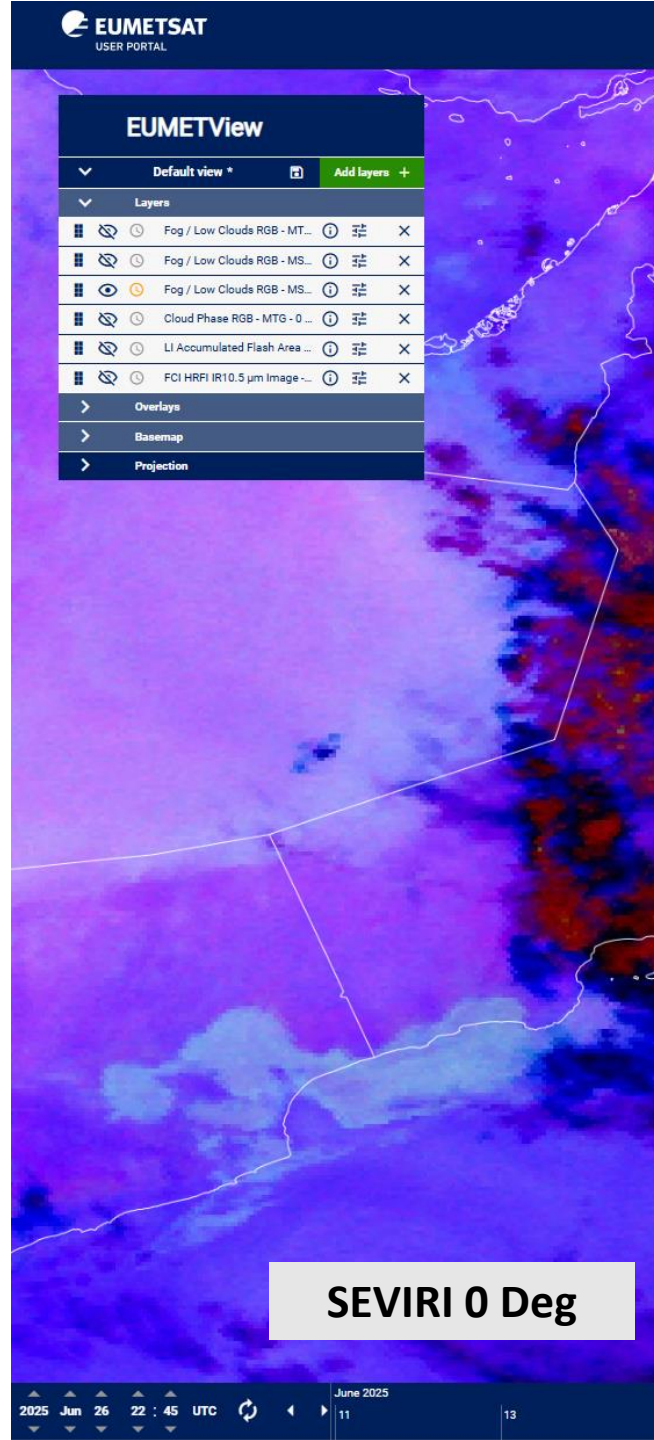
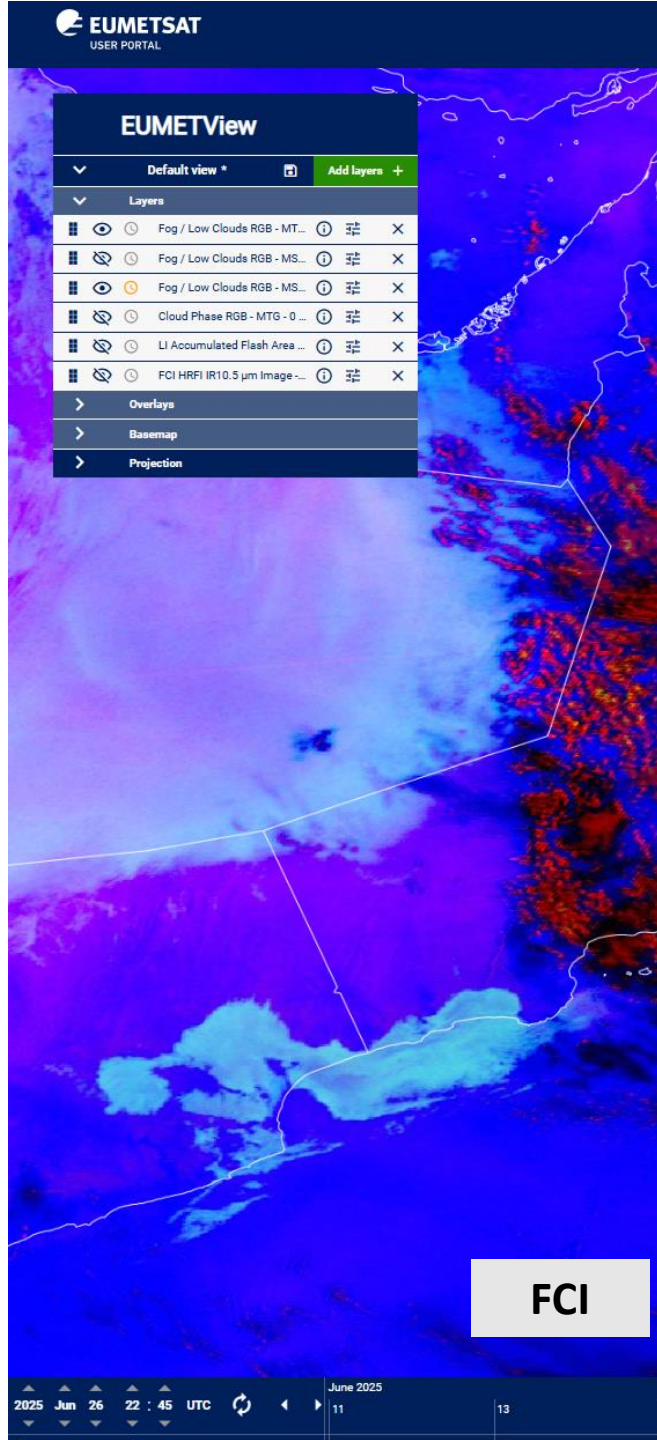


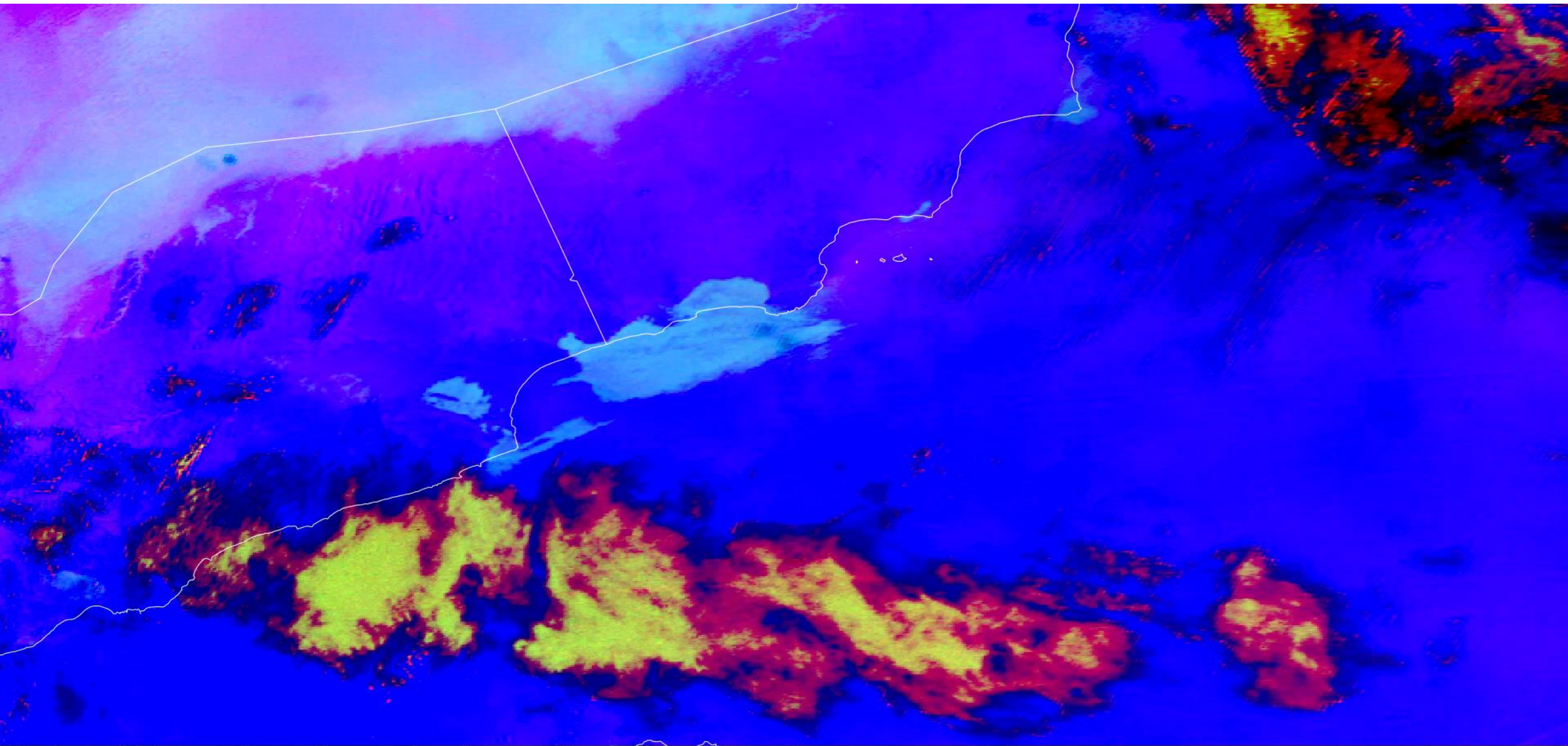
Fog and Low Cloud



2022-12-25 23:15:00 UTC







EUMETView

▼	Default view *	🗺️	Add layers +
Layers			
🔍	High Rate SEVIRI IR3.9 µm I...	🕒	✕
🔍	Cloud Phase RGB - MTG - 0 ...	🕒	✕
🔍	Fog / Low Clouds RGB - MS...	🕒	✕
🔍	Fog / Low Clouds RGB - MS...	🕒	✕
🔍	Fog / Low Clouds RGB - MT...	🕒	✕
🔍	LI Accumulated Flash Area ...	🕒	✕
🔍	FCI HRFI IR10.5 µm Image -...	🕒	✕
Overlays			
Basemap			
Projection			

FCI

EUMETView

▼	Default view *	🗺️	Add layers +
Layers			
🔍	High Rate SEVIRI IR3.9 µm I...	🕒	✕
🔍	Cloud Phase RGB - MTG - 0 ...	🕒	✕
🔍	Fog / Low Clouds RGB - MS...	🕒	✕
🔍	Fog / Low Clouds RGB - MS...	🕒	✕
🔍	Fog / Low Clouds RGB - MT...	🕒	✕
🔍	LI Accumulated Flash Area ...	🕒	✕
🔍	FCI HRFI IR10.5 µm Image -...	🕒	✕
Overlays			
Basemap			
Projection			

SEVIRI 0 Deg

EUMETView

▼	Default view *	🗺️	Add layers +
Layers			
🔍	High Rate SEVIRI IR3.9 µm I...	🕒	✕
🔍	Cloud Phase RGB - MTG - 0 ...	🕒	✕
🔍	Fog / Low Clouds RGB - MS...	🕒	✕
🔍	Fog / Low Clouds RGB - MS...	🕒	✕
🔍	Fog / Low Clouds RGB - MT...	🕒	✕
🔍	LI Accumulated Flash Area ...	🕒	✕
🔍	FCI HRFI IR10.5 µm Image -...	🕒	✕
Overlays			
Basemap			
Projection			

SEVIRI IODC

Factory Fire , UAE , 18 April



Satellite Wildfire/Fire (Super HD)

Fri 04/18/2025, 01:10pm GMT+04

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Sharing: Please get the pic's permalink from share button top right

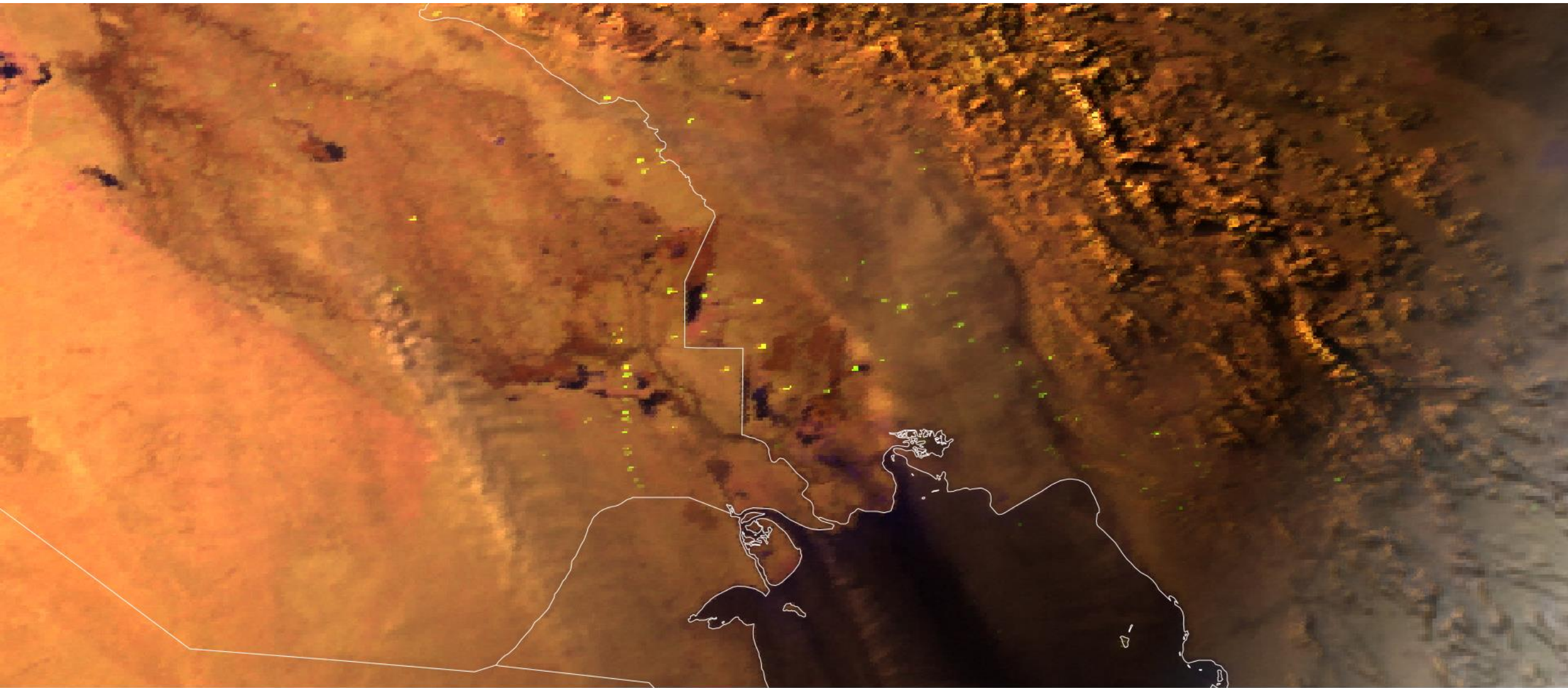
Grid map 55.8 E, 25.8 N (Zoom level 4 / Resolution 400m)

 **meteologix.com**

Satellite data: EUMETSAT

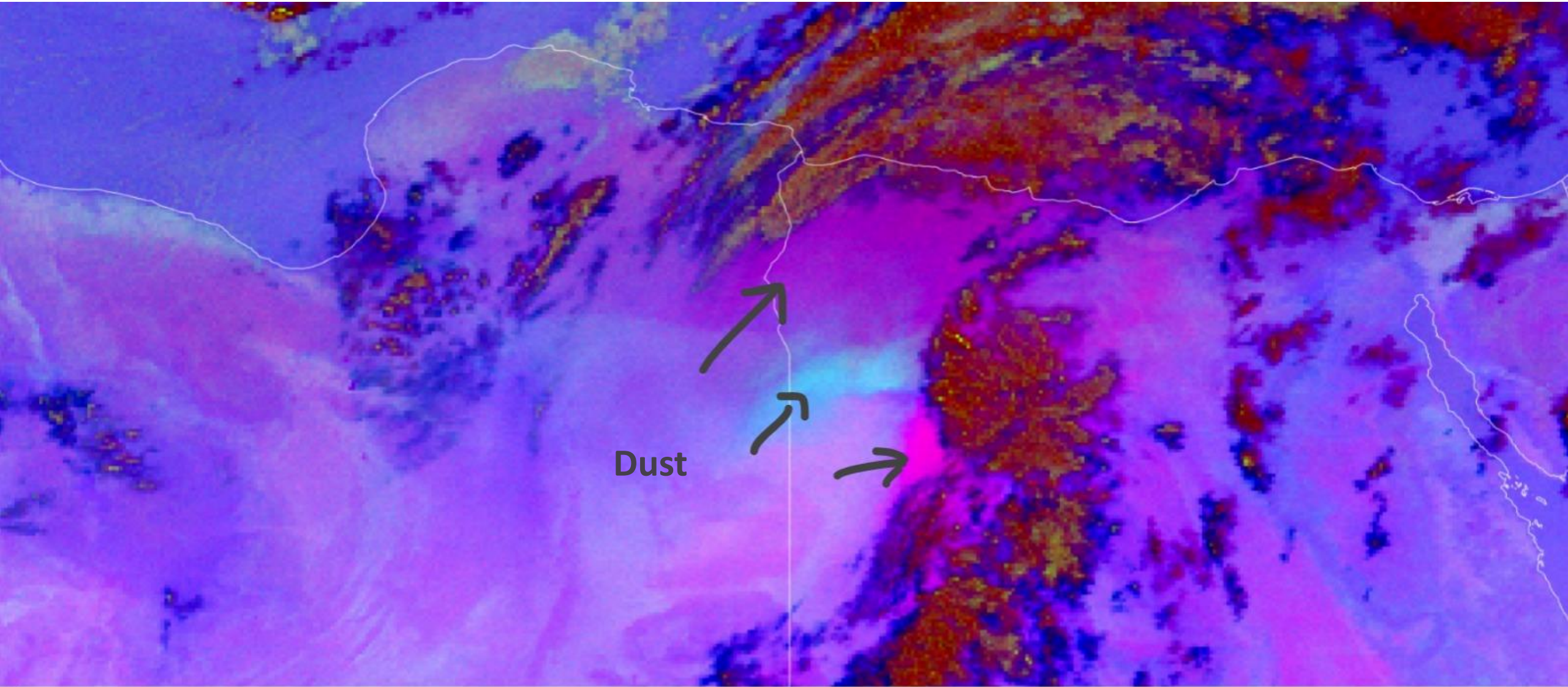


NIR1.6 NIR2.2 VIS0.6

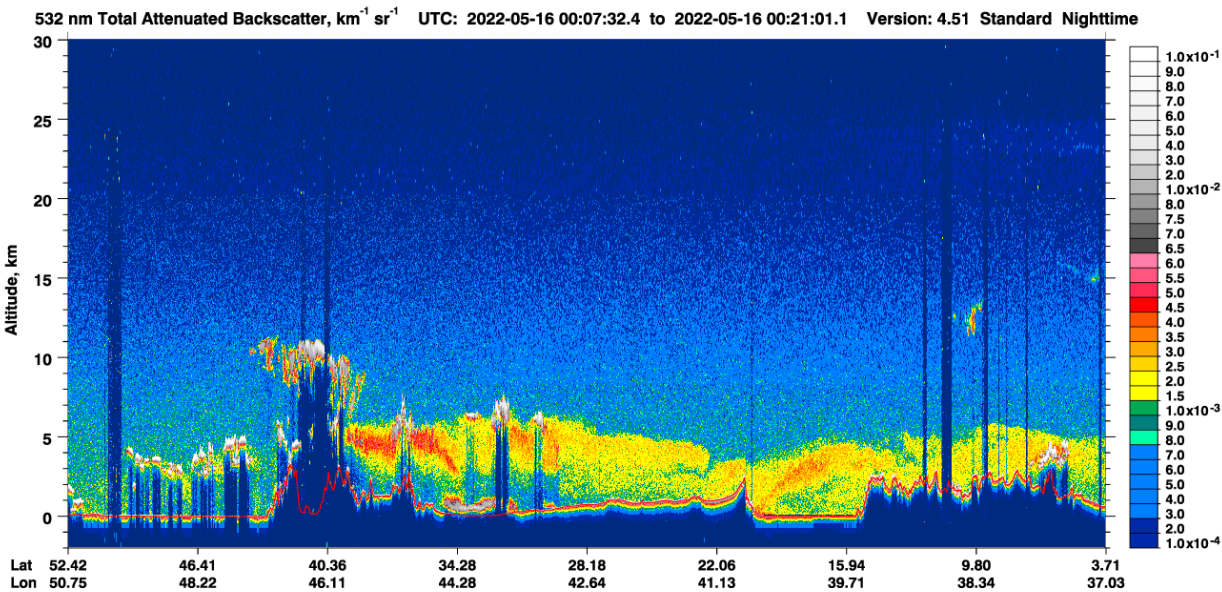
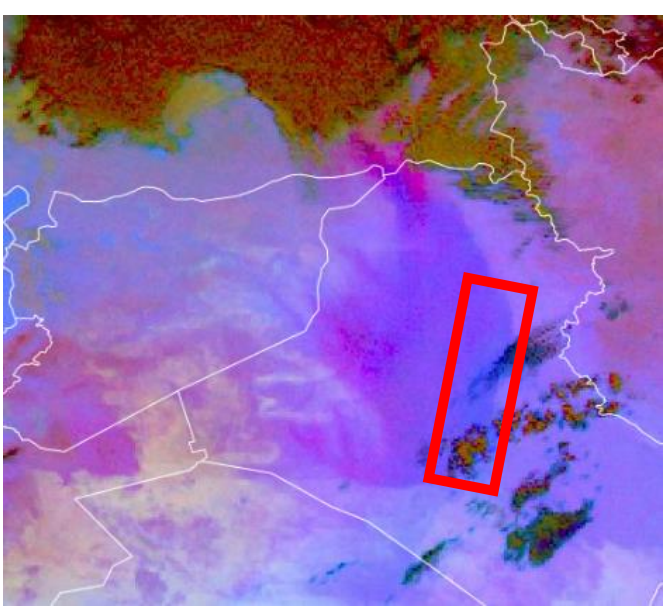
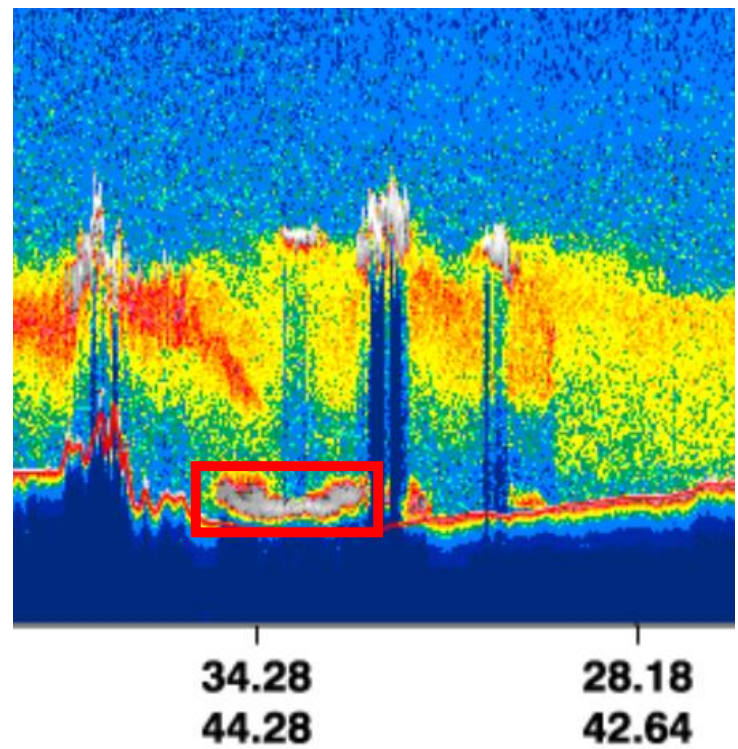
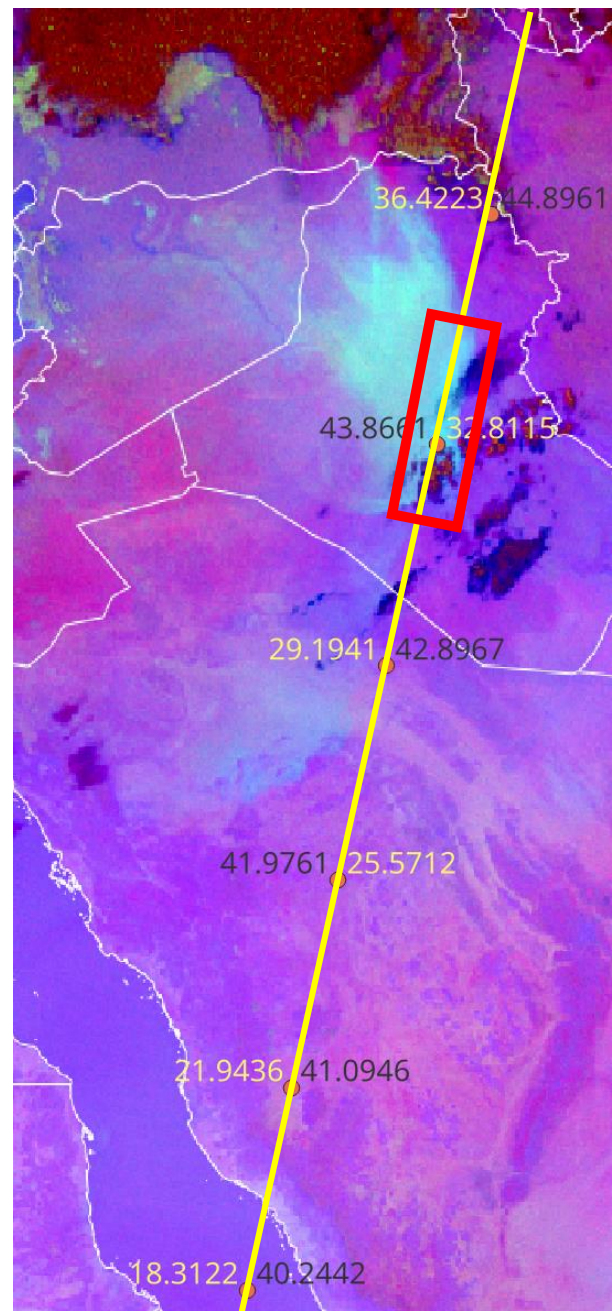


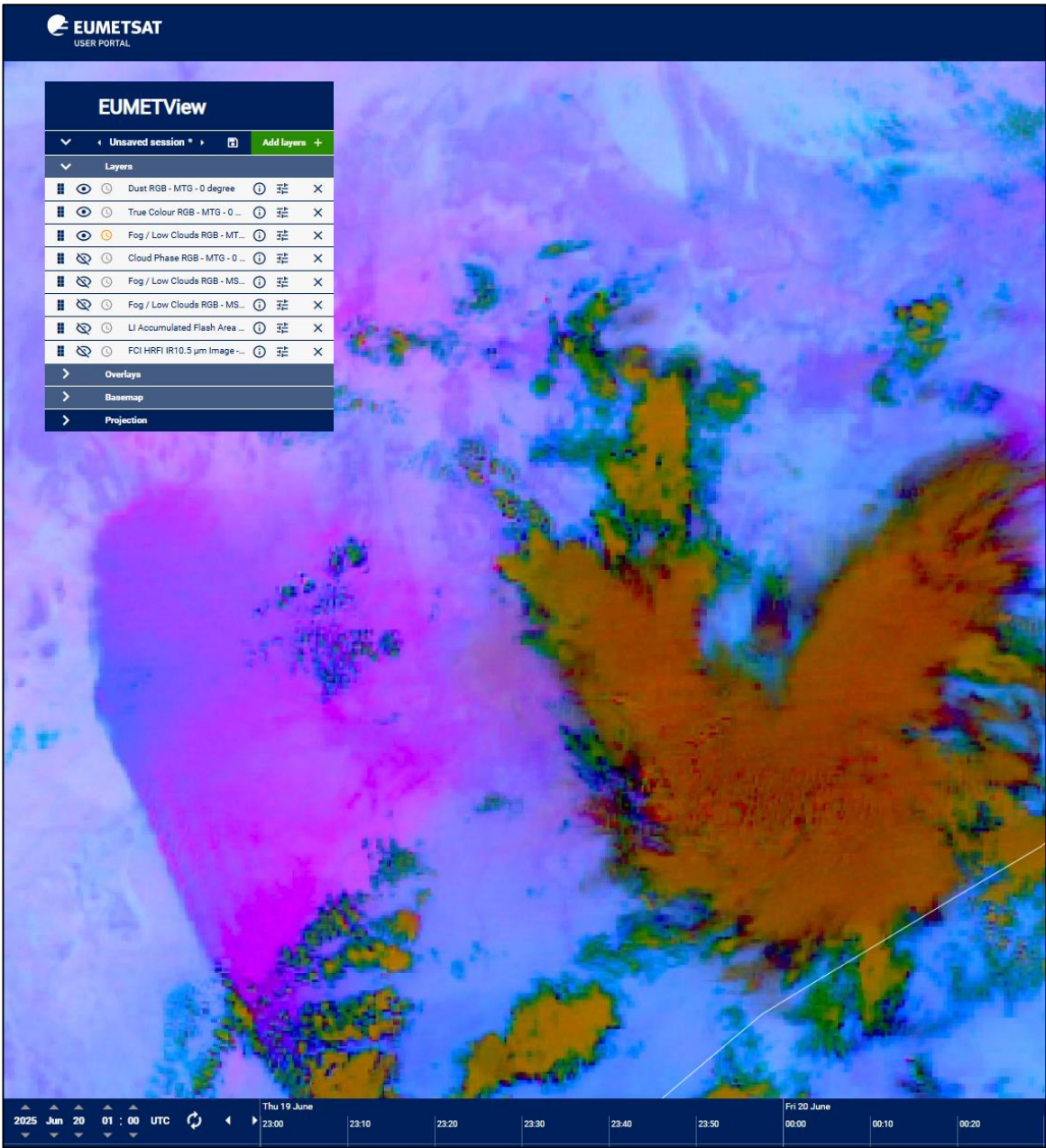
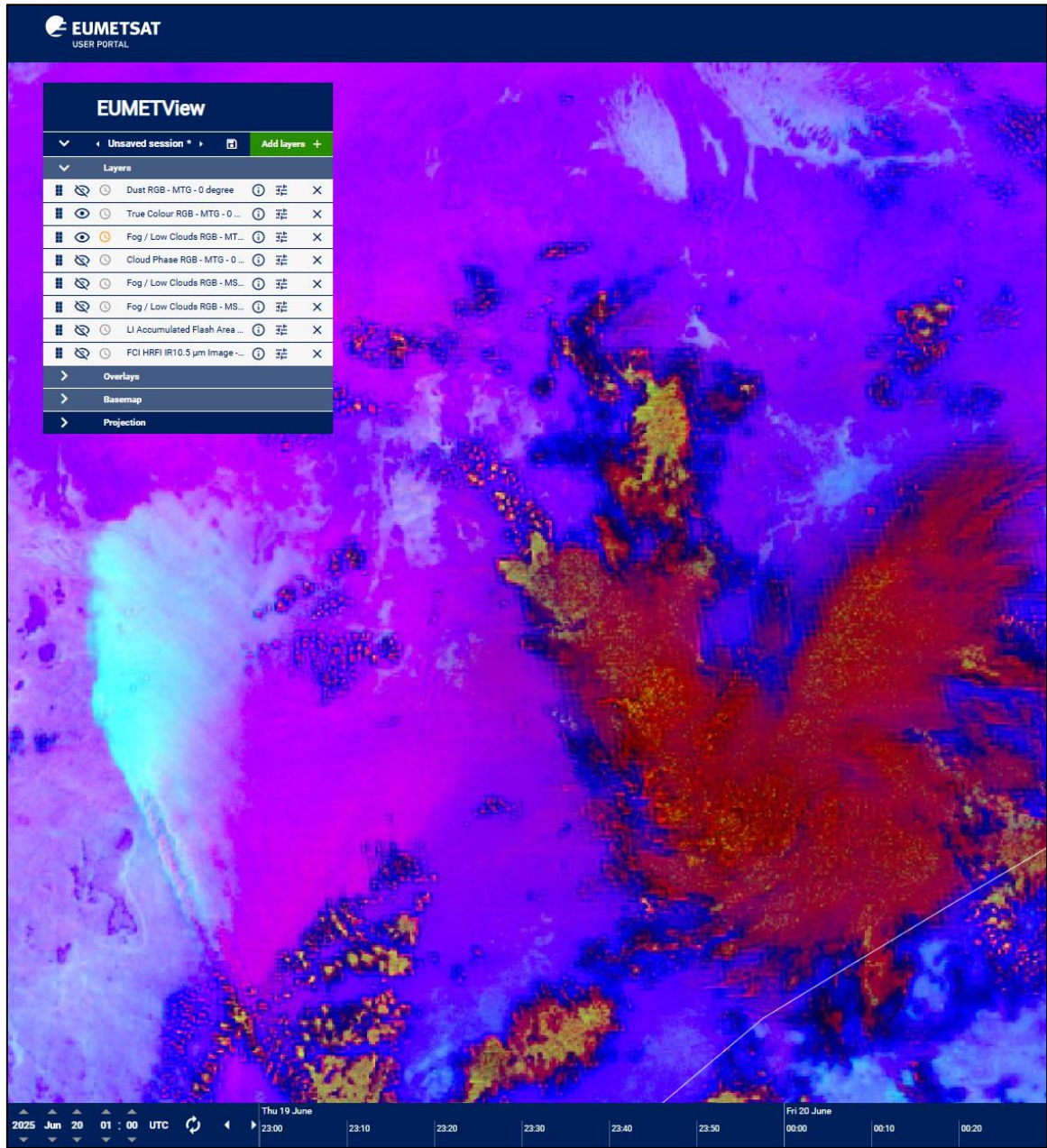
There is more if I have time !

Dust on Night Microphysics RGB



16 May 2022 0015 UTC





EUMETView



Default view *

[Add layers](#) +

Layers



Dust RGB - MSG - 0 degree



Dust RGB - MTG - 0 degree

FCI HRFI VIS0.6 μ m Image - ...

Dust RGB - MSG - Indian Oc...



Cloud Phase RGB - MTG - 0 ...



European HRV RGB - 0 degr...



European HRV RGB - MSG - ...



True Colour RGB - MTG - 0 ...



Overlays



Basemap



Projection

2025.05.25 0940UTC

▲ 2025 Jun 07 12 : 30 UTC ↺ ⏮ ⏭

May 2025

26

June 2025

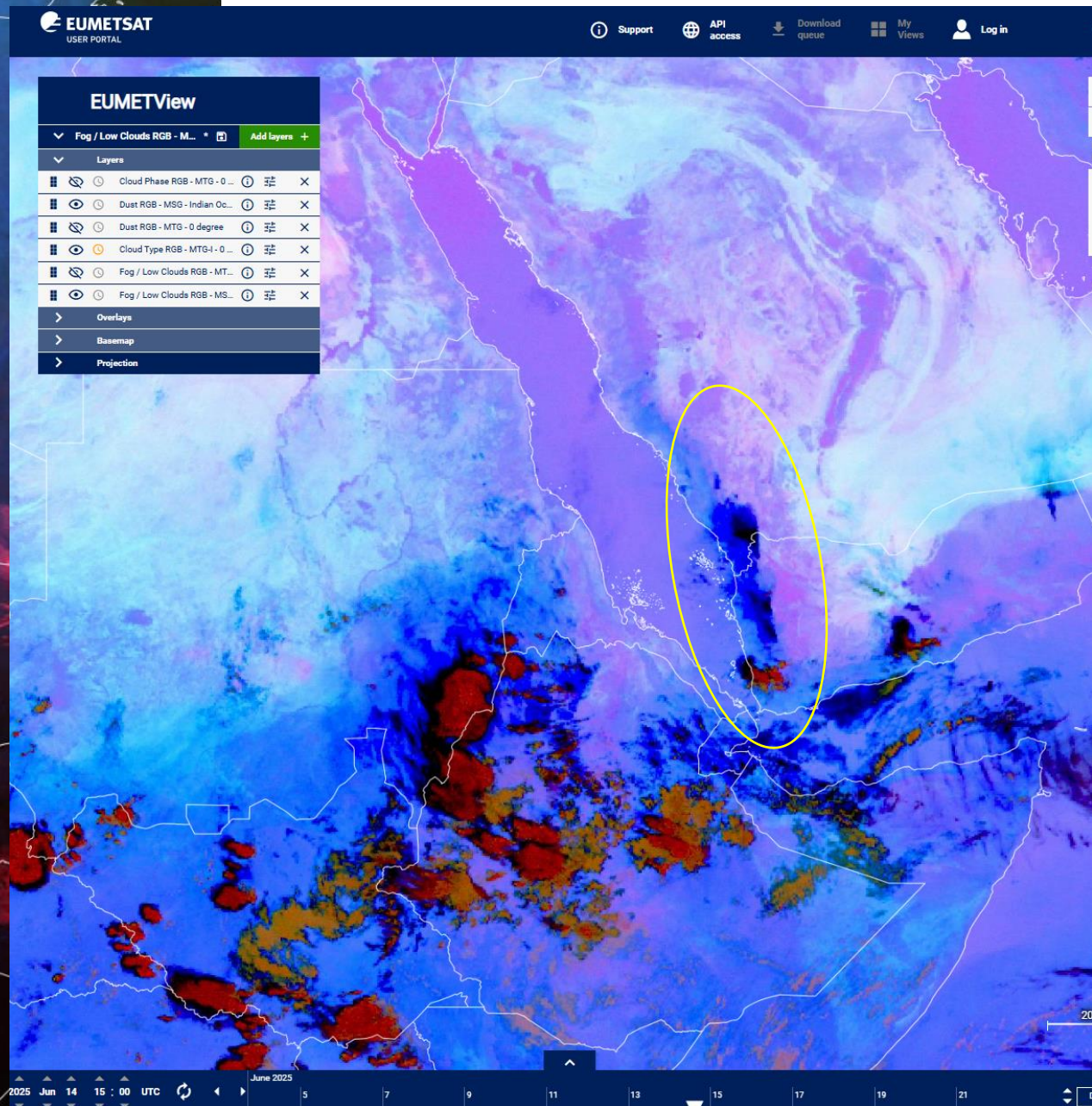
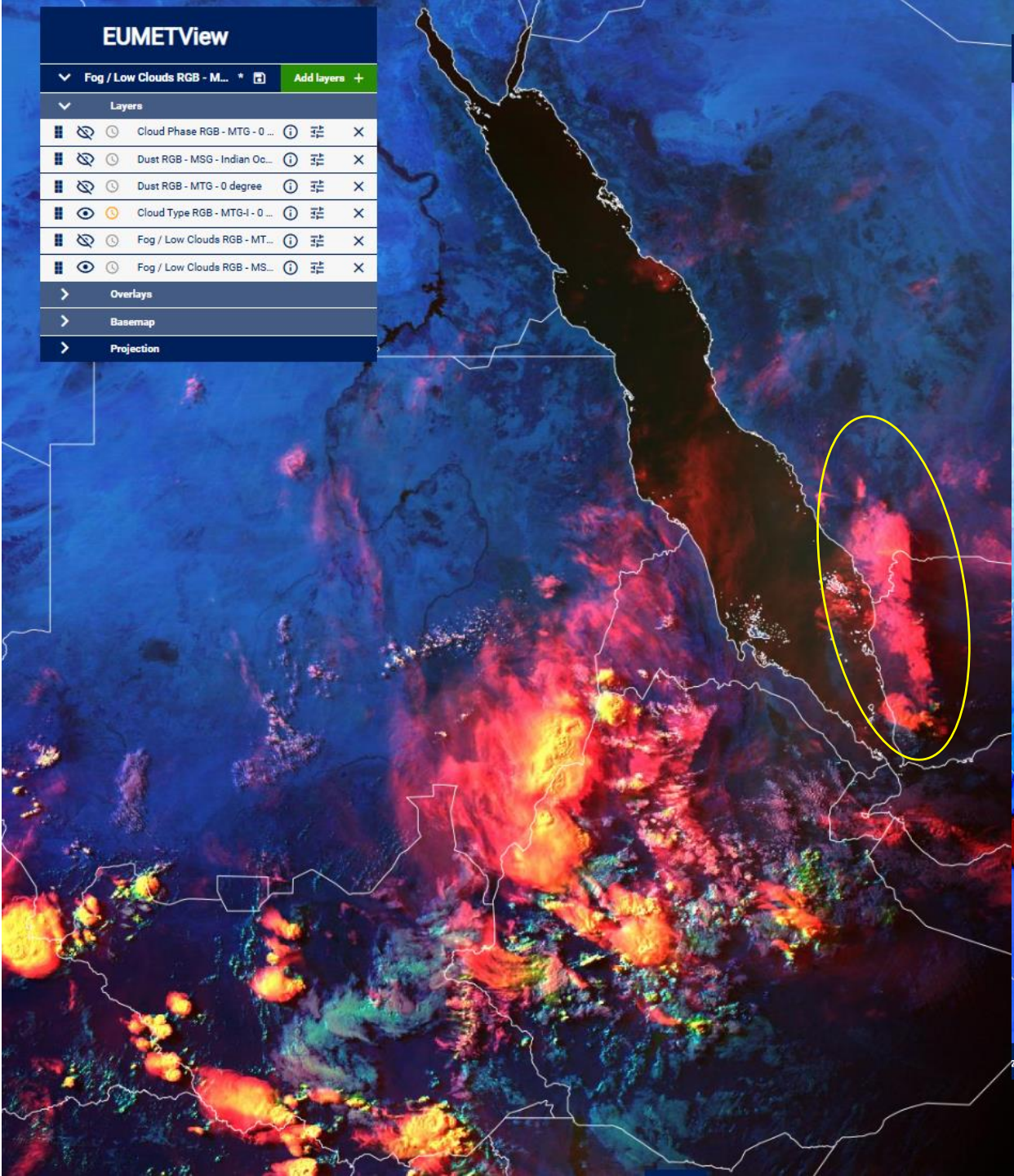
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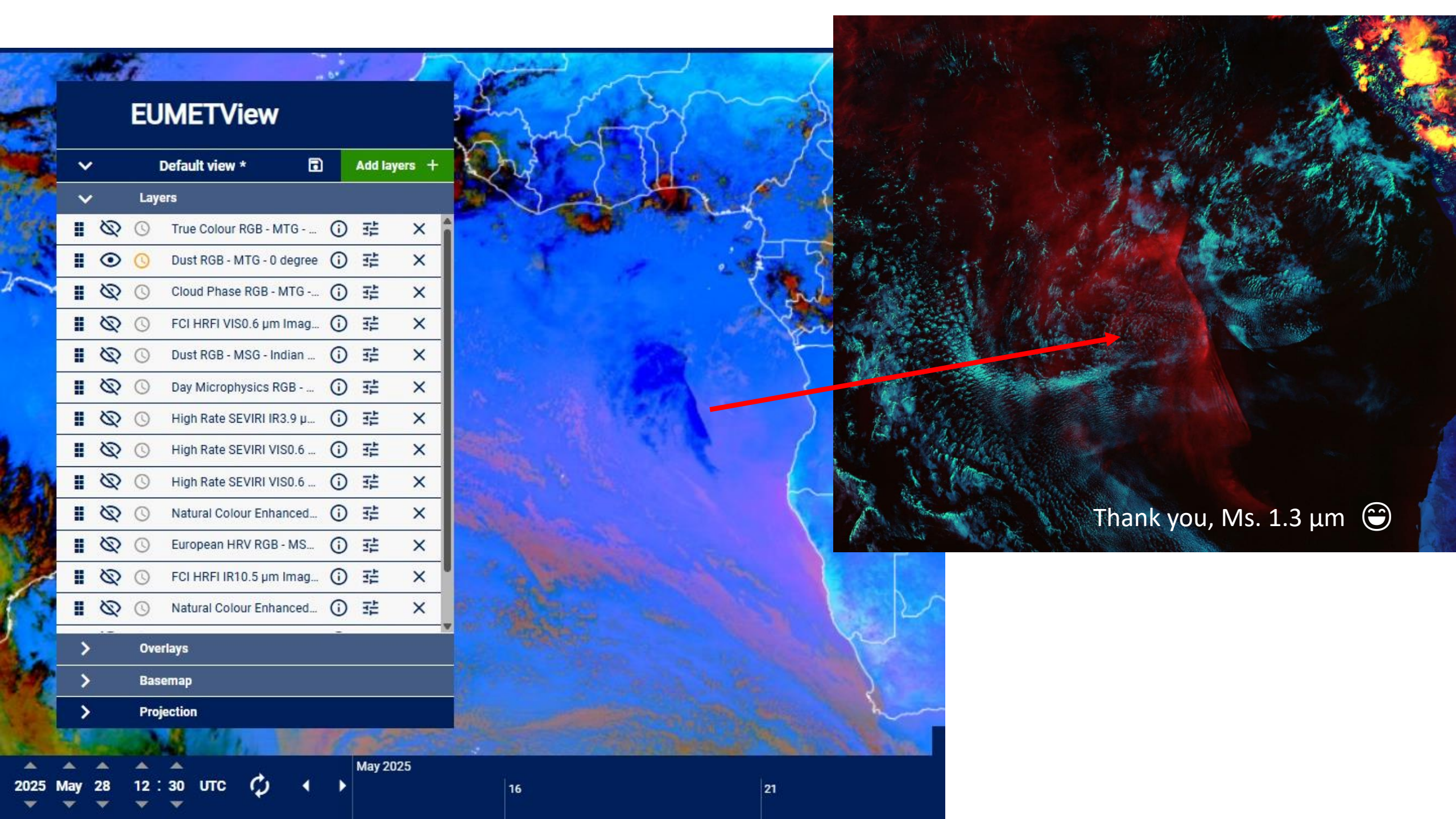
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11

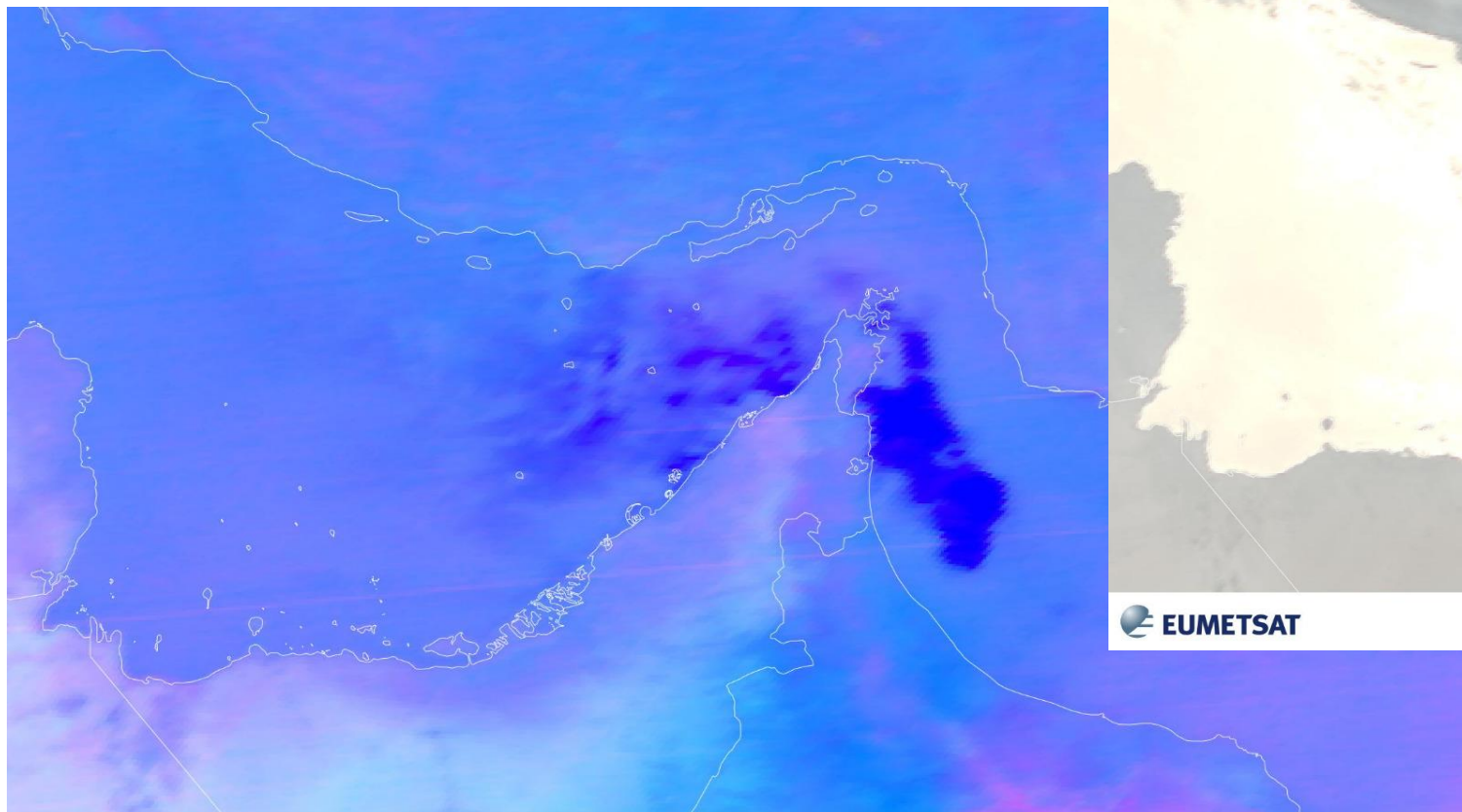
16

🕒 Dust RGB - MSG - Indian Ocean





Sun glint 10.5 um !



EUMETSAT

2025-06-11 03:00:00 UTC



EUMETSAT

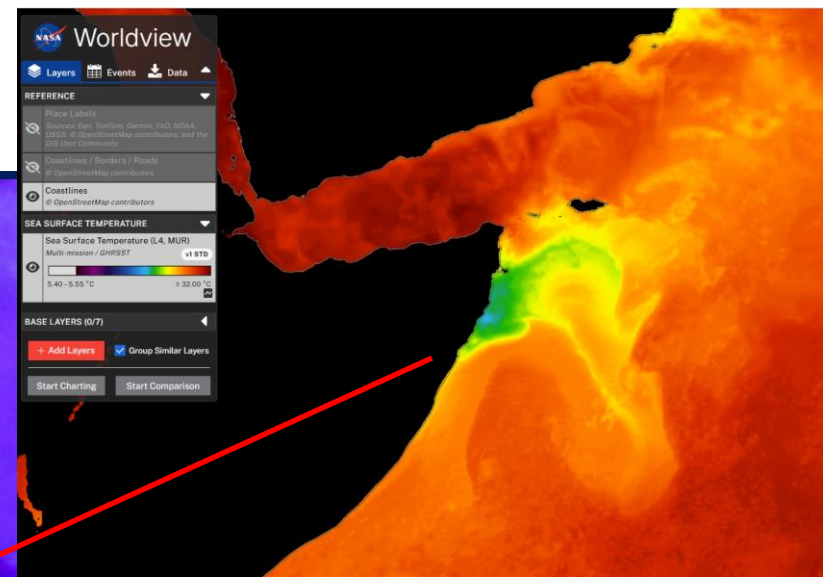
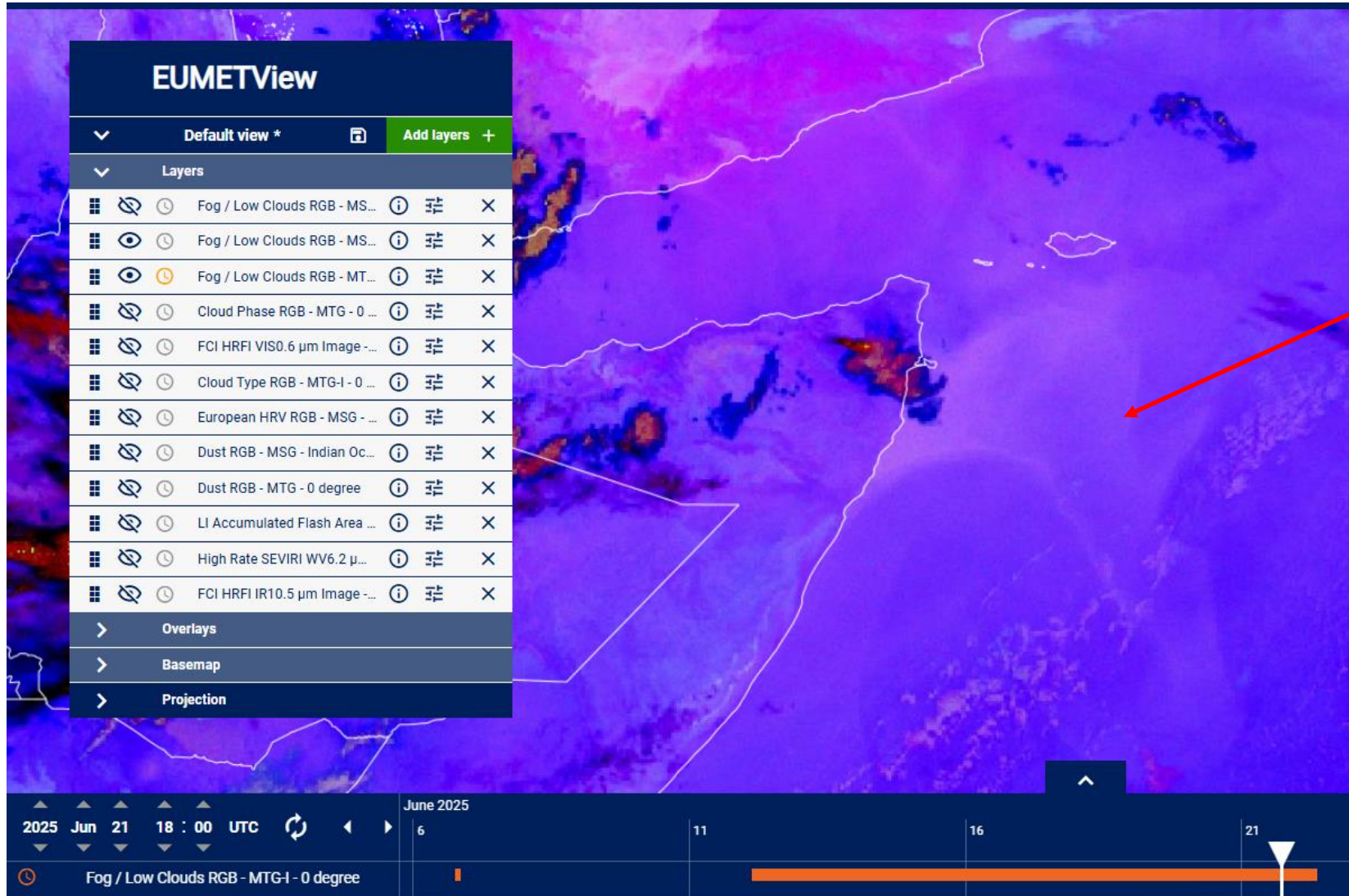
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IR12.3-IR10.5

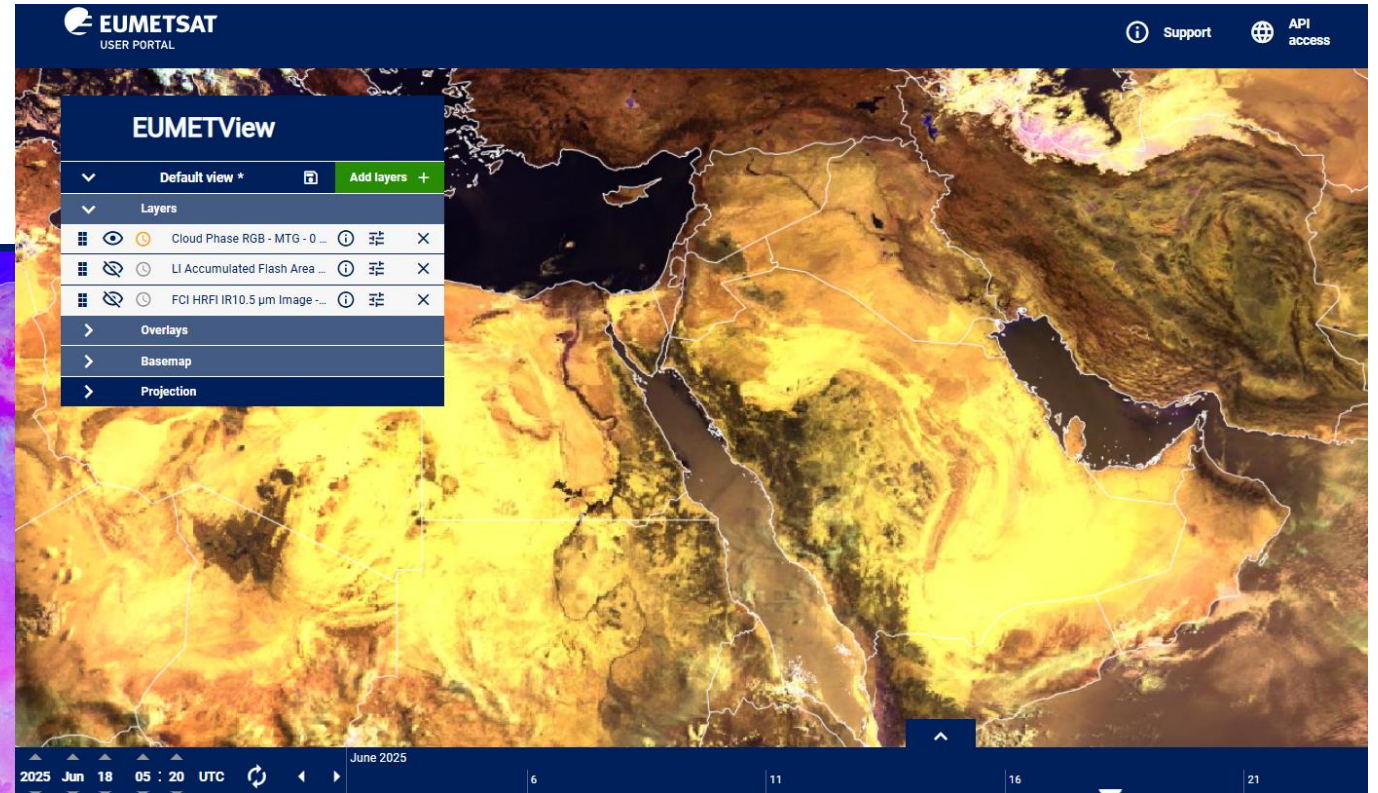
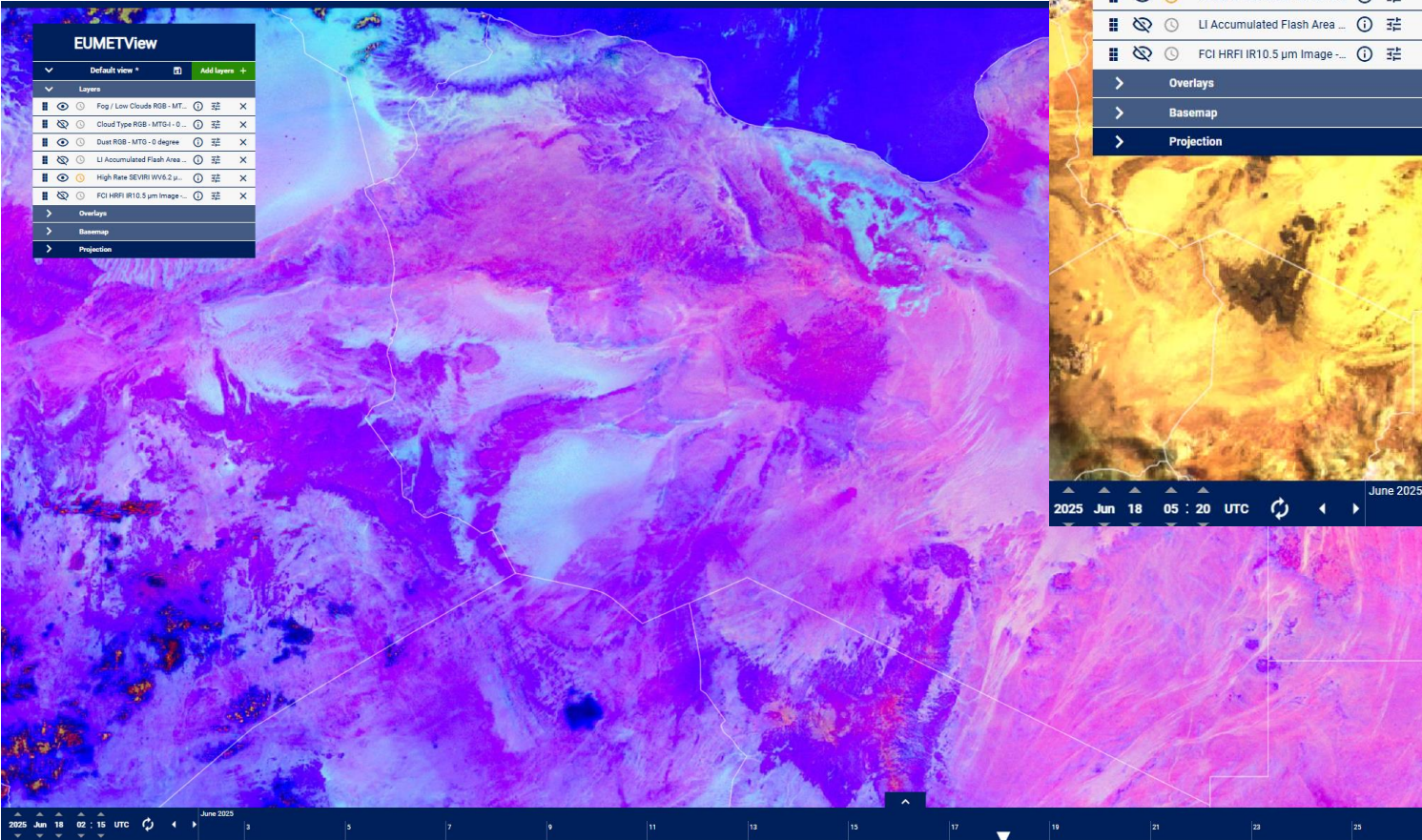
IR10.5-IR8.7

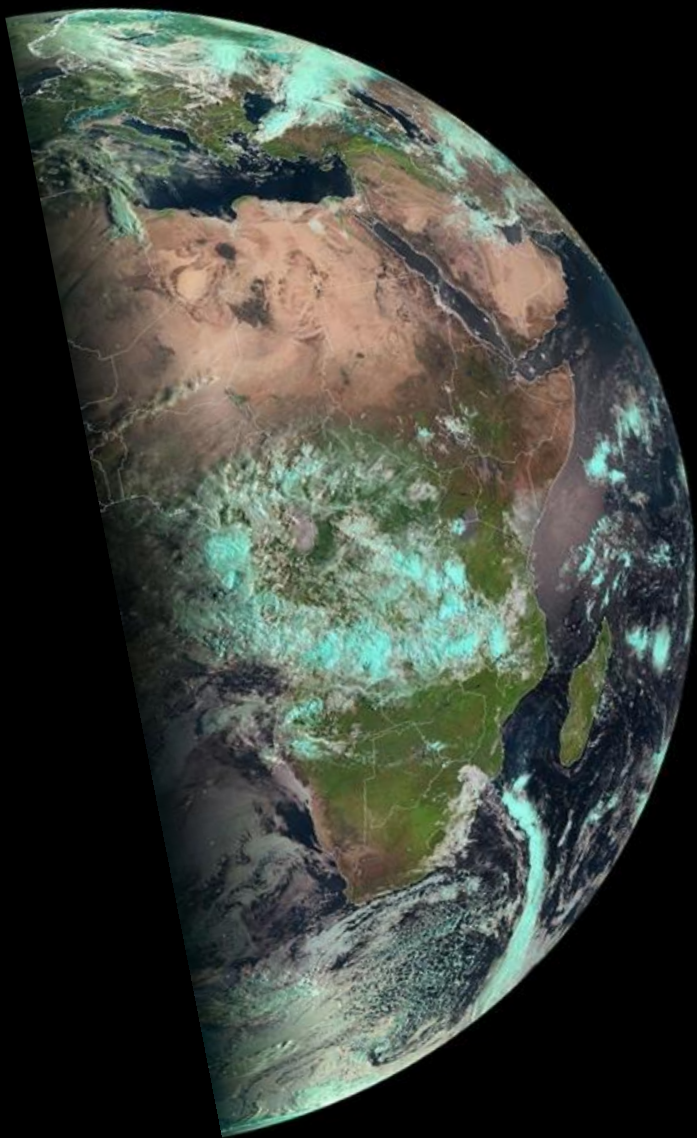
IR10.5

SST !



To the Geologist !





Thank You