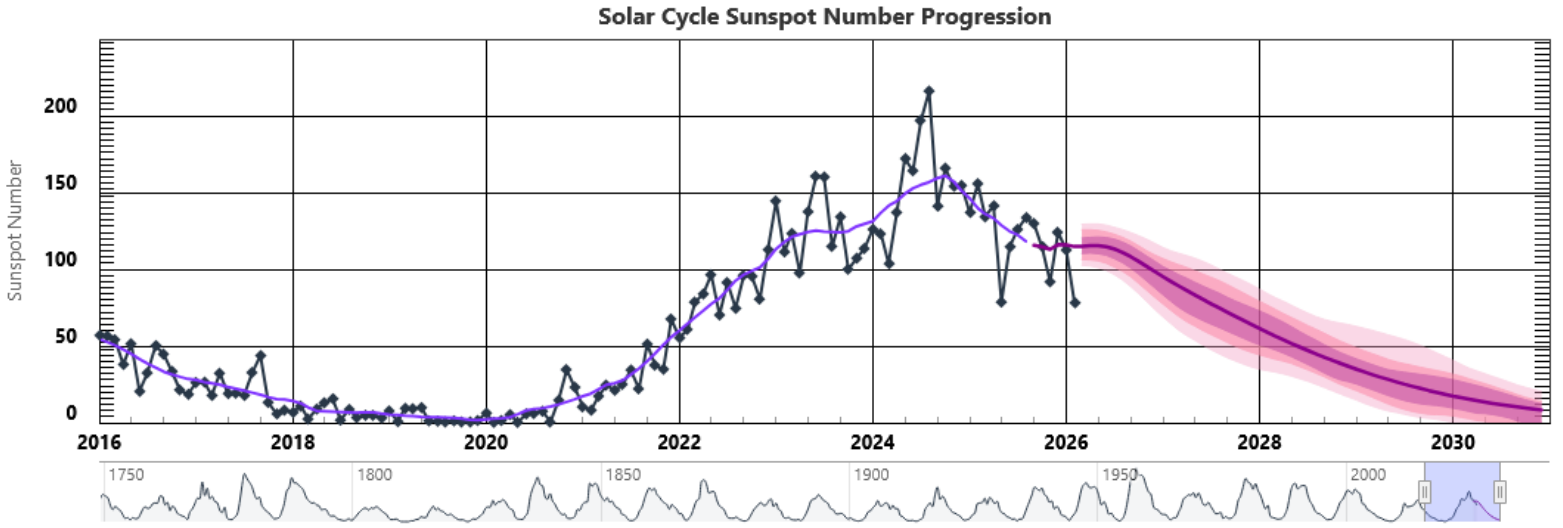
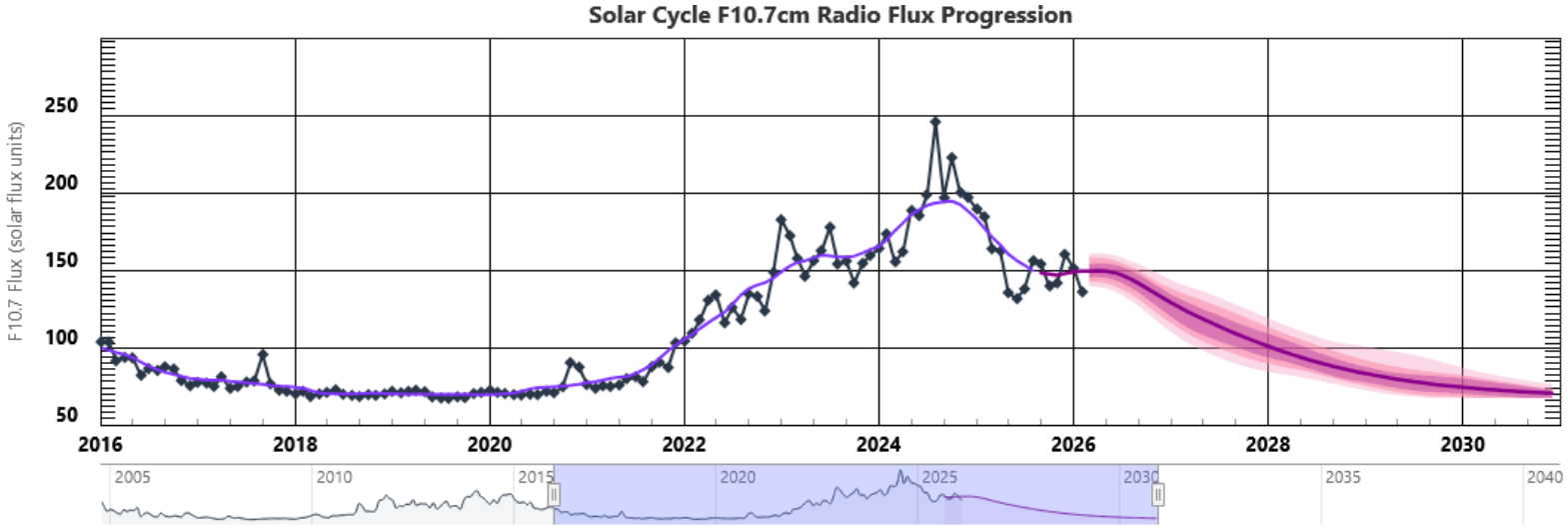
SOLAR WEATHER
3 MAR 2026

Lewis Thompson
W5IFQ

Taken by Ivar Sandland
on February 24, 2026 @
Bodø, Northern Norway

Alaska


Solar Cycle Sunspot Number Progression
Sunspot Number
200
150
100
50
0
2016
2018
2020
2022
2024
2026
2028
2030
1750
1800
1850
1900
1950
2000


Solar Cycle F10.7cm Radio Flux Progression
F10.7 Flux (solar flux units)
250
200
150
100
50
2016
2018
2020
2022
2024
2026
2028
2030
2005
2010
2015
2020
2025
2030
2035
2040

SolarHam

Indices: (3/3 @ 00:35 UTC) SFI 148 ▲1 SSN 82

3 Day Geomagnetic Forecast

Mar. 3	Mar. 4	Mar. 5
3-4 (G0)	3-4 (G0)	2-3 (G0)
Max Kp		
M-Lat 05% H-Lat 35%	M-Lat 05% H-Lat 35%	M-Lat 01% H-Lat 25%
Probabilities		

Latest SWPC Forecast (@ 00:30 + 12:30 UTC)

Detailed Forecast

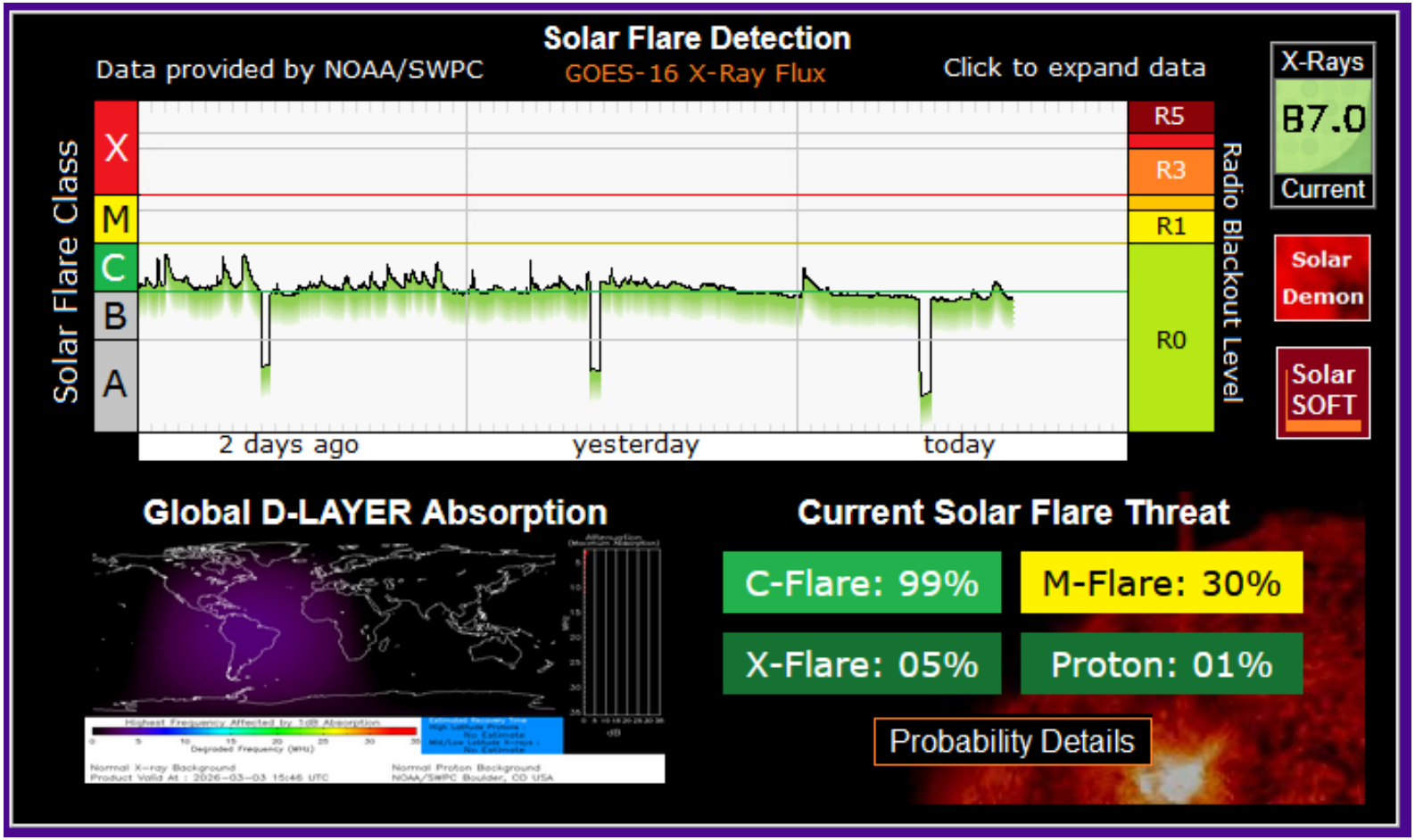
Visible Sunspot Regions

Sunspot Summary | SRS

AR 4384	B	N10E67	*Growing*
AR 4383	B	N15W23	*Stable*
AR 4381	B	N08E42	*Growing*
AR 4380	B	S21E25	*Declining*
AR 4378	B	N15E13	*Stable*

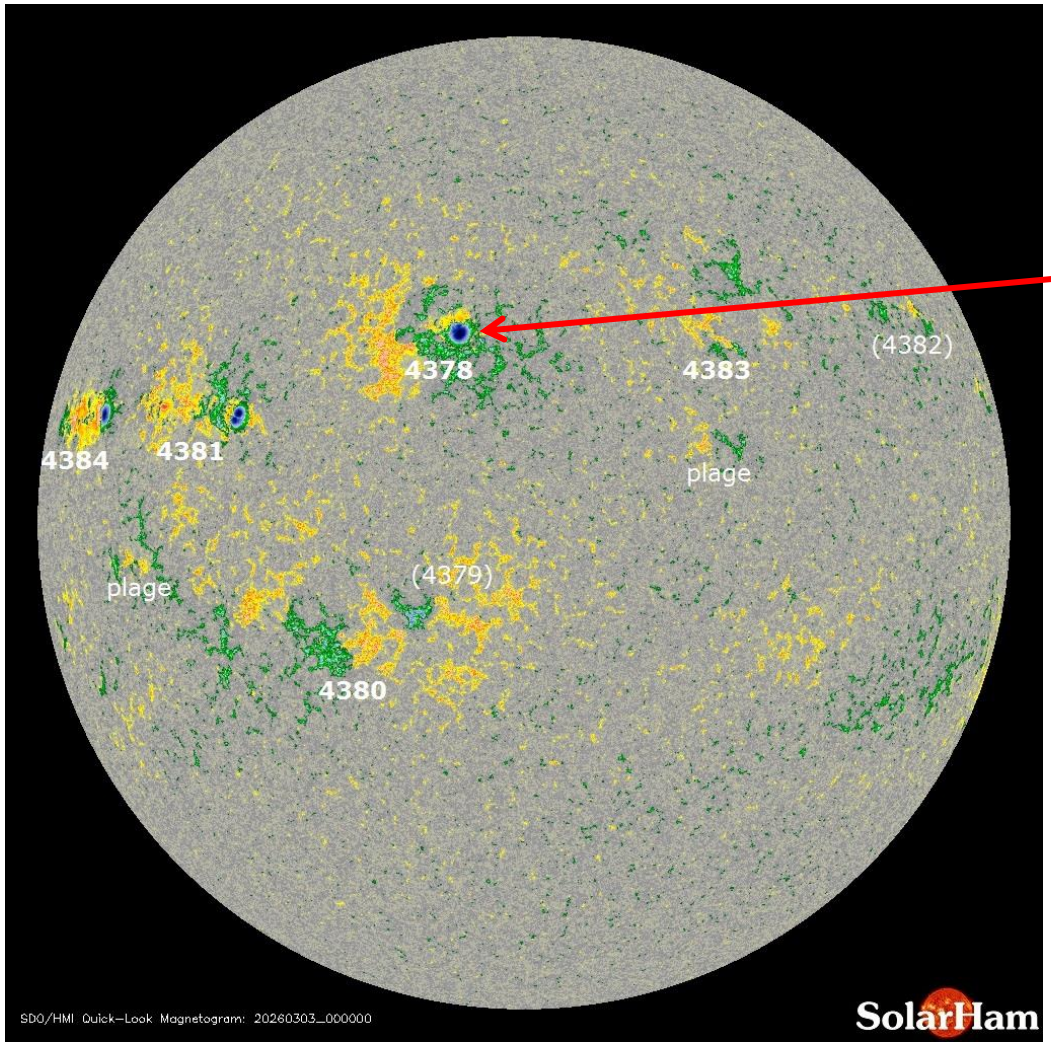
Updated @ 00:35 UTC (March 3)

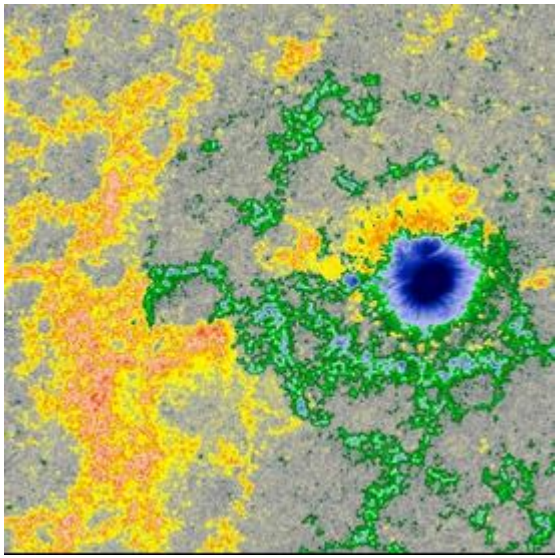
Data Archive


SolarHam
Solar Flare Detection
Data provided by NOAA/SWPC
GOES-16 X-Ray Flux
Click to expand data
Solar Flare Class
X
M
C
B
A
2 days ago
yesterday
today
R5
R3
R1
R0
Radio Blackout Level
X-Rays
B7.0
Current
Solar Demon
Solar SOFT
Global D-LAYER Absorption
Current Solar Flare Threat
C-Flare: 99%
M-Flare: 30%
X-Flare: 05%
Proton: 01%
Probability Details

Sun Spots

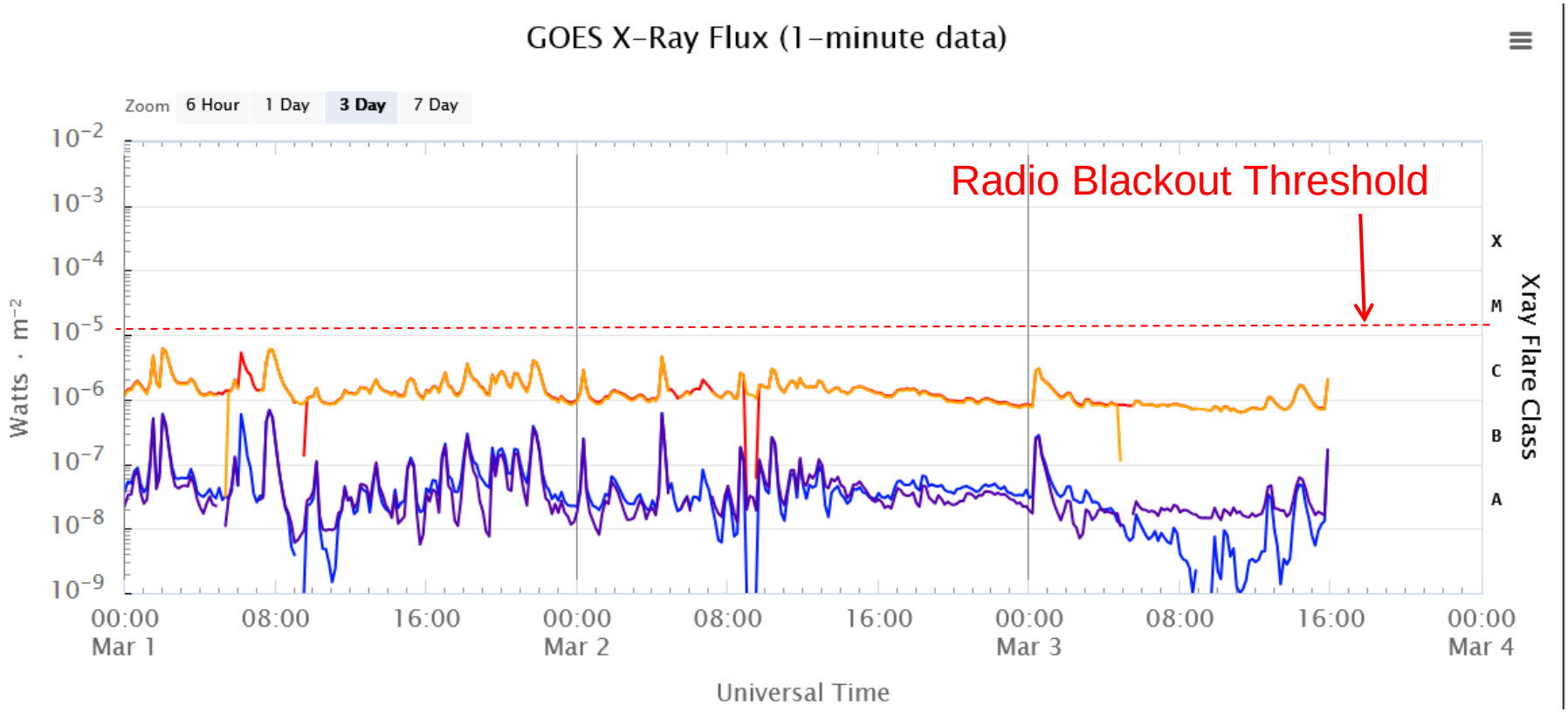
Magnetogram Image (Updated March 3, 2026)



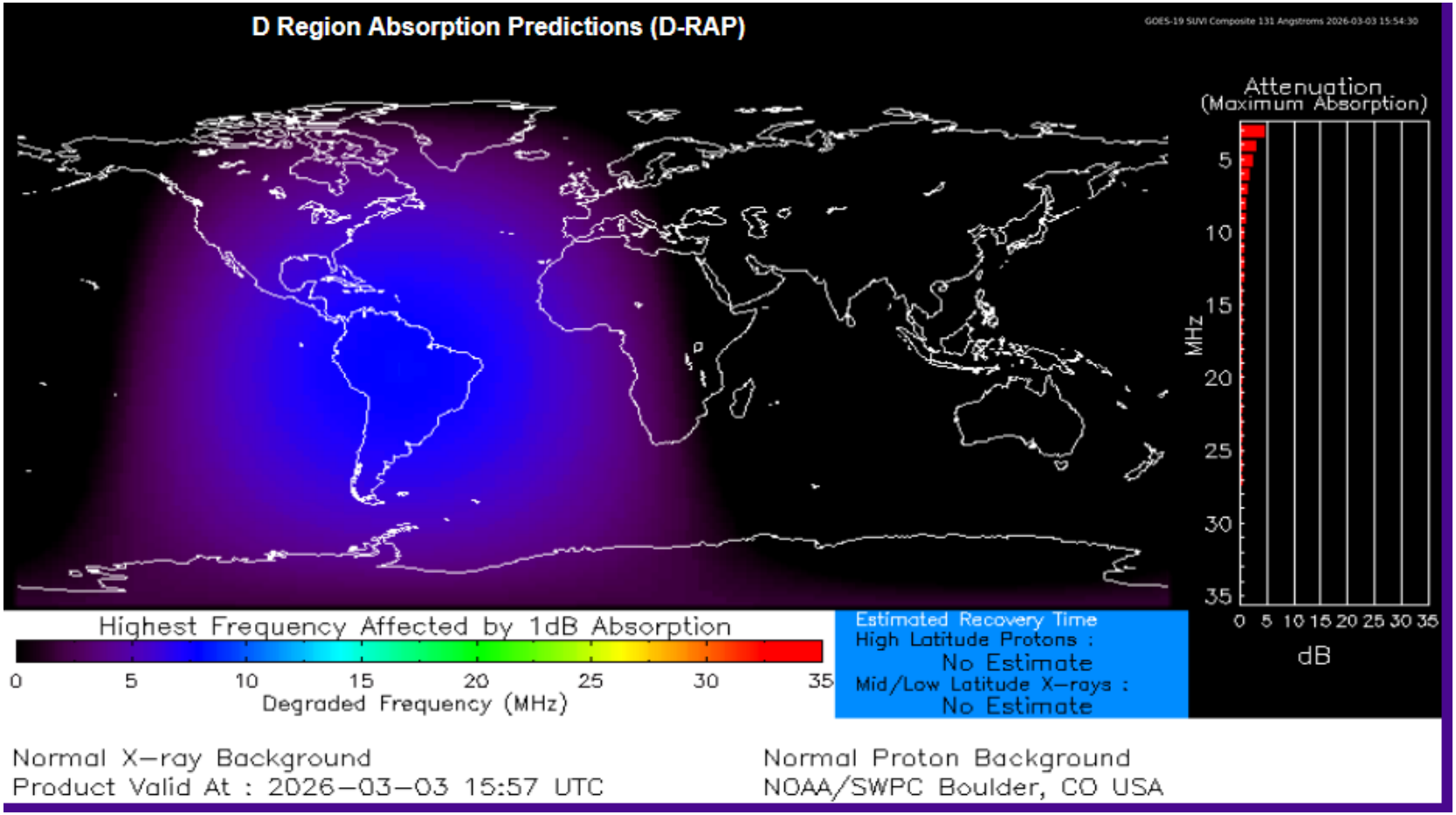


SS 4378 - Beta

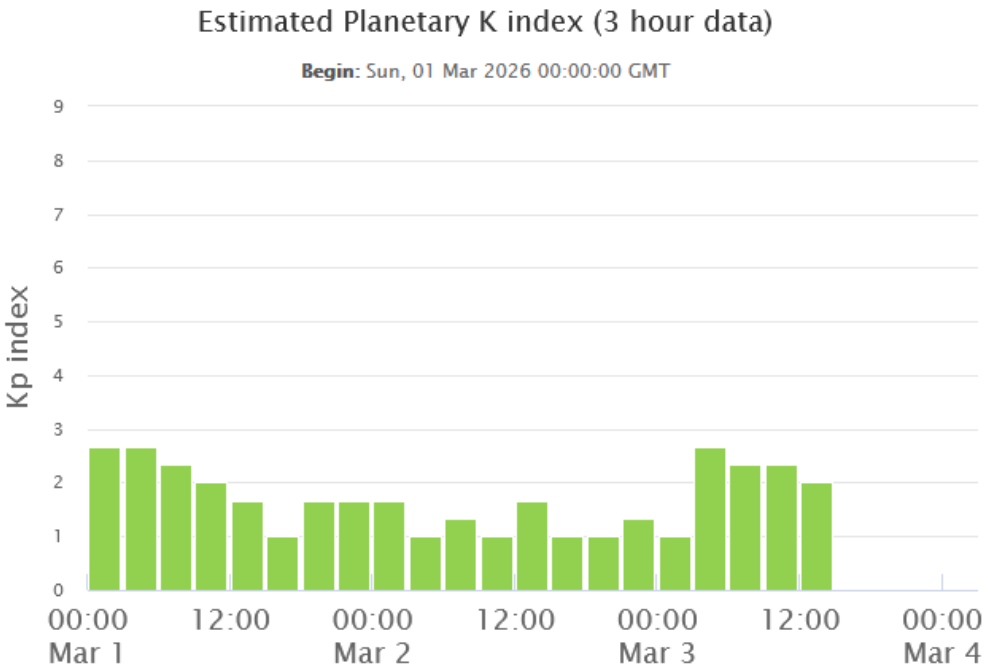
Solar X-Ray Flux: 1 – 3 MAR 2026



NOAA – D-Region Absorption Predictions



Earth’s Geomagnetic Activity



Generally, as planetary K-Index rises, critical frequency is suppressed.

K-Index	Effect
0-2	Inactive/Quiet, no impact on HF
3-4	Unsettled/Active, minor HF fade in higher latitudes
5-6	HF fade at higher latitudes
7-8	HF sporadic
9	HF impossible above 40M

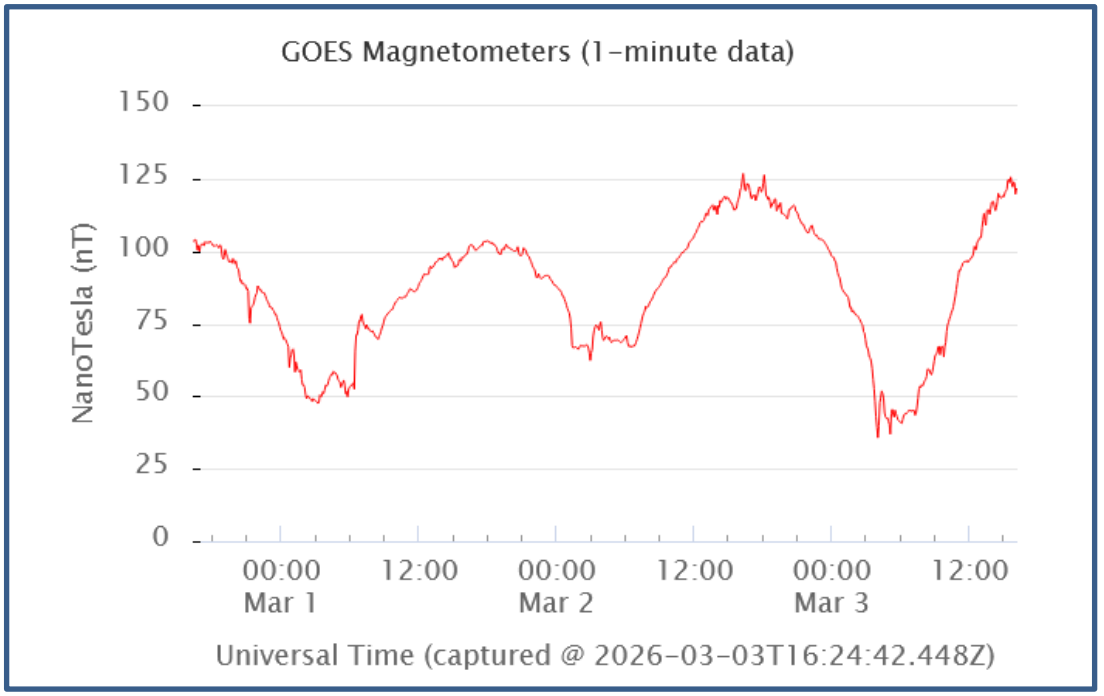
Geomagnetic Conditions: 3 MAR 2026

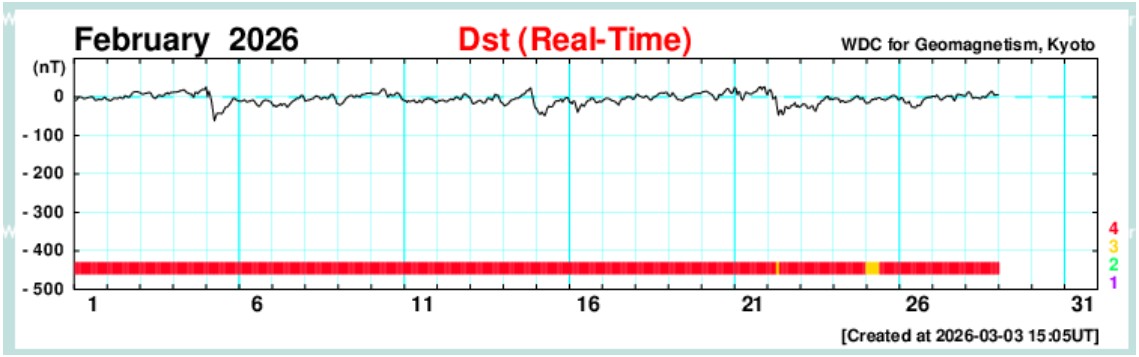
Solar wind:
Bz = 3.68 nT
speed = 384 km/sec
density = 3.98 protons/cm^3

(From – NOAA DSCOVR
In L1, Lagrange Point)

Dst = 28 nT (Ring Field)

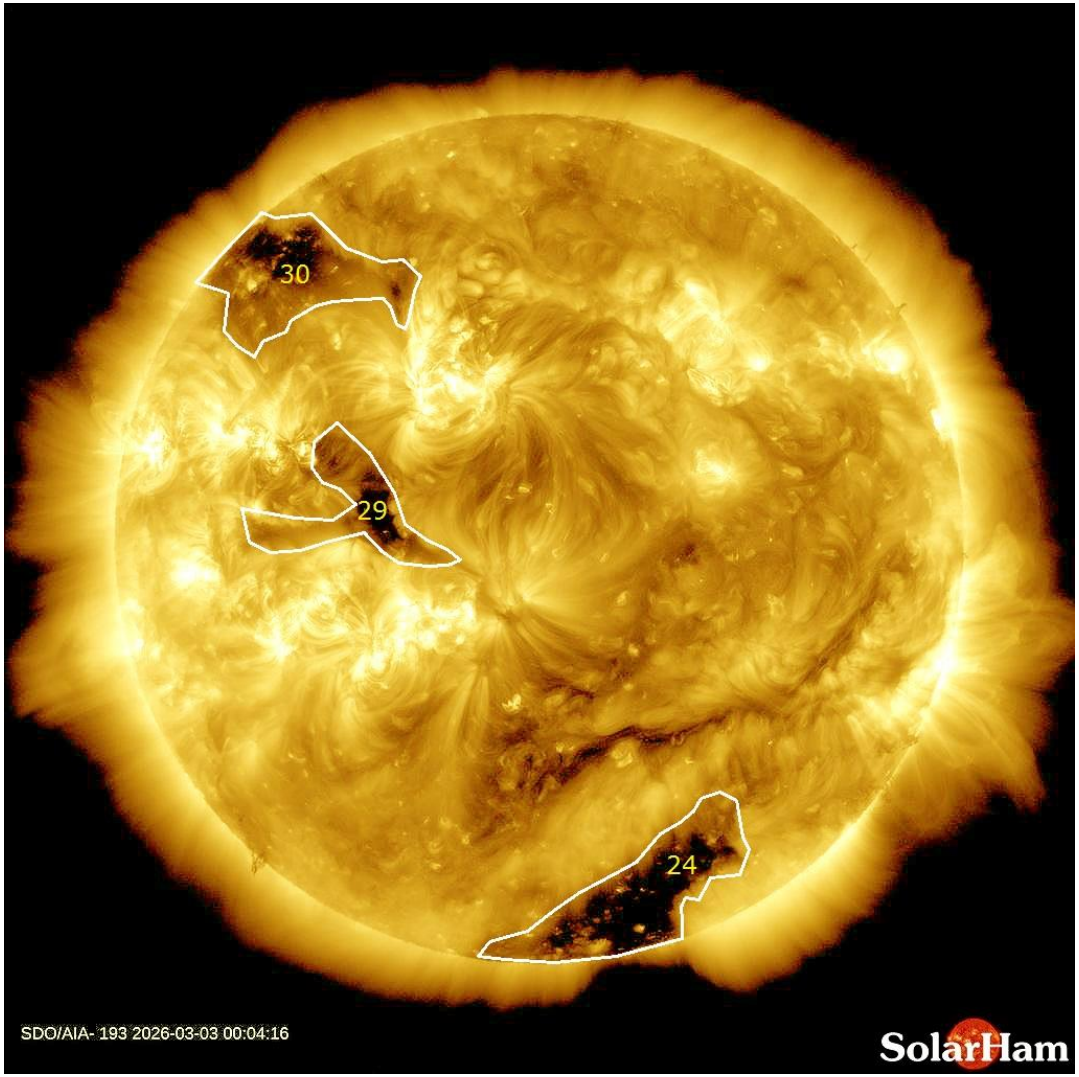
(From – Data Analysis Center
For Geomagnetics and Space
Magnetism – Kyoto University)





From – GOES 16
In geostationary orbit

Coronal Holes – 3 MAR 2026

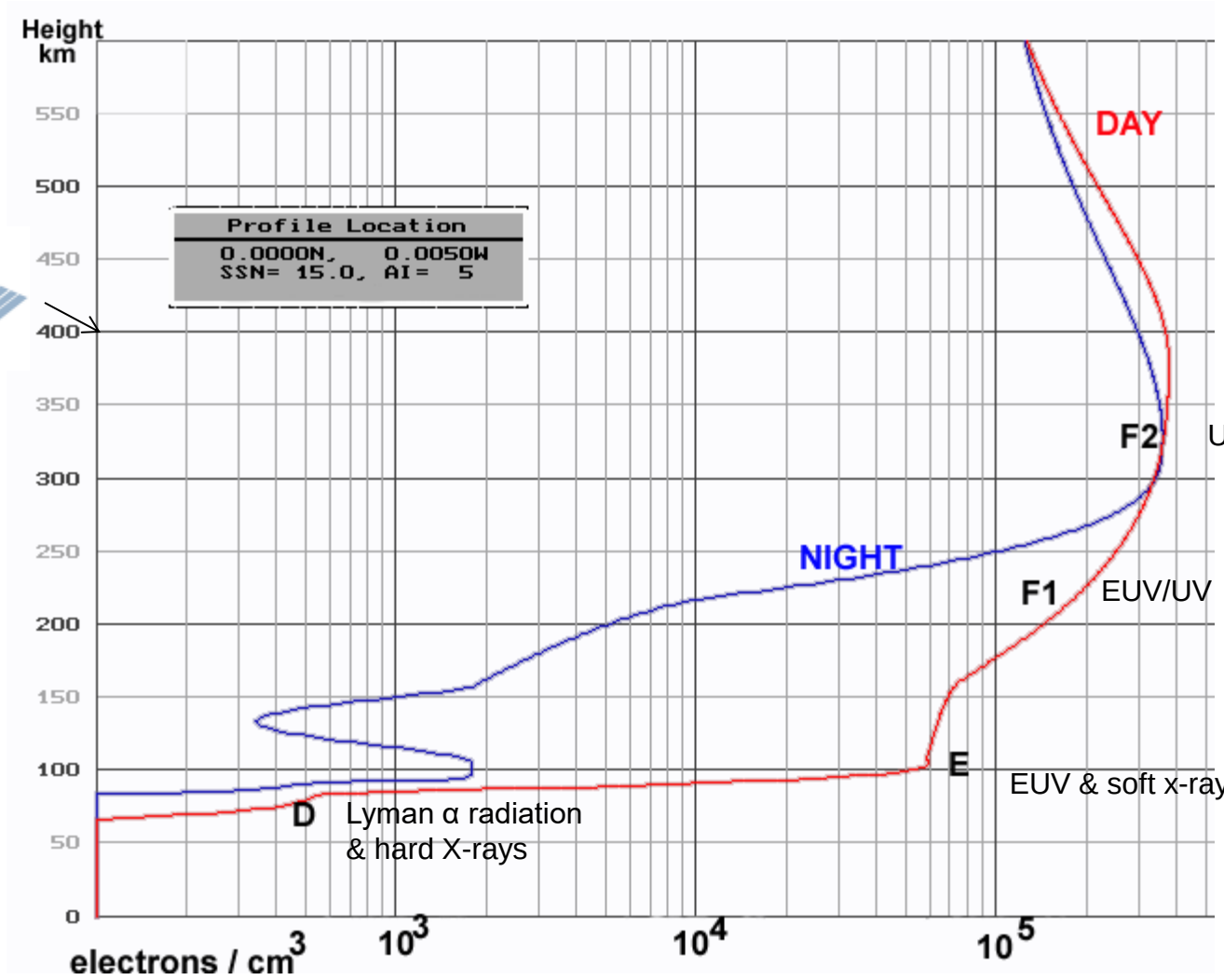


Analysis

Small coronal hole #29 will begin to face Earth later this week and will be monitored.

Ionosphere Creation

Gravity



Solar Radiation

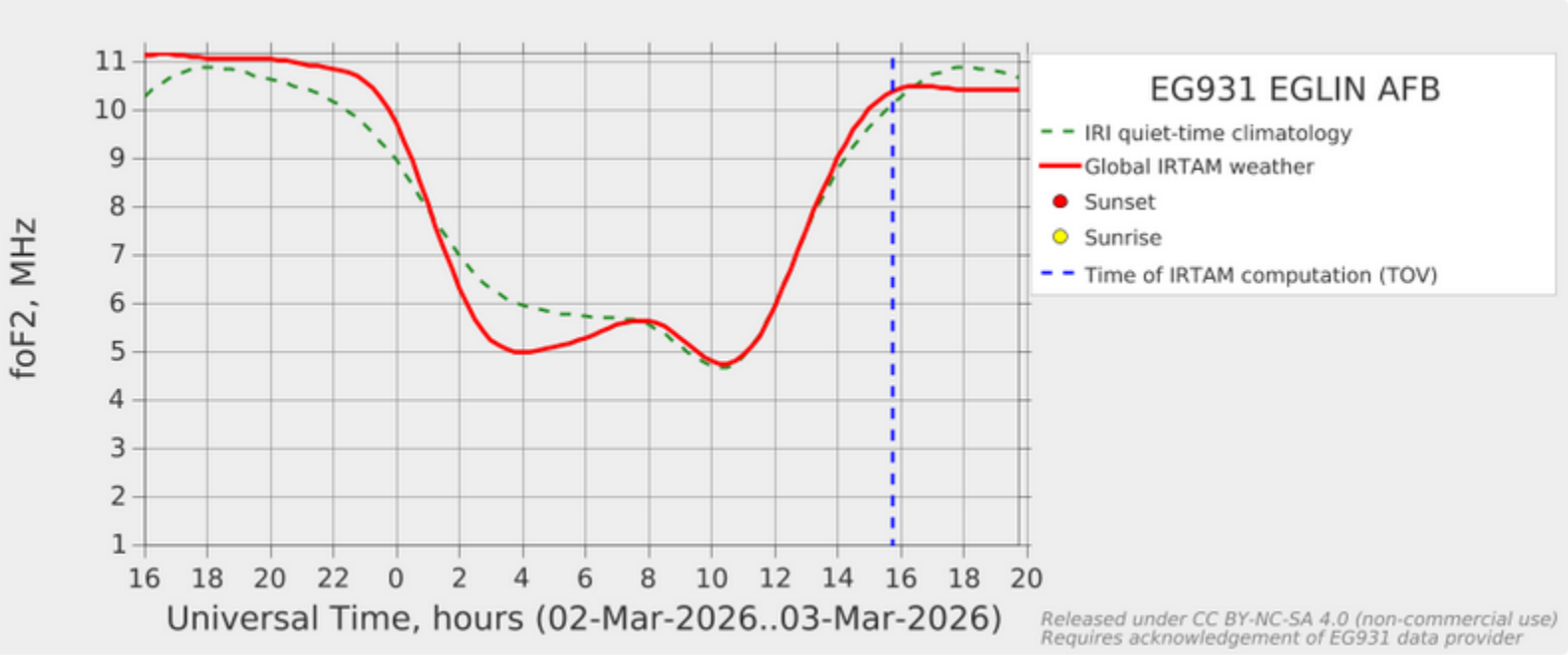
Monoatomic oxygen

Austin Ionosonde Status

- Austin Ionosonde is sending data to GIRO, but is still scheduled to shut down. Date unknown.
- Eglin when down on 20 Feb. and therefore its GAMBIT data is derived from a Ionospheric model.

GAMBIT foF2 Trending Chart for Eglin Ionosonde – Model only

https://www.region6armymars.org/resources/solarweather.php



GAMBIT foF2 Trending Chart for Austin Ionosonde

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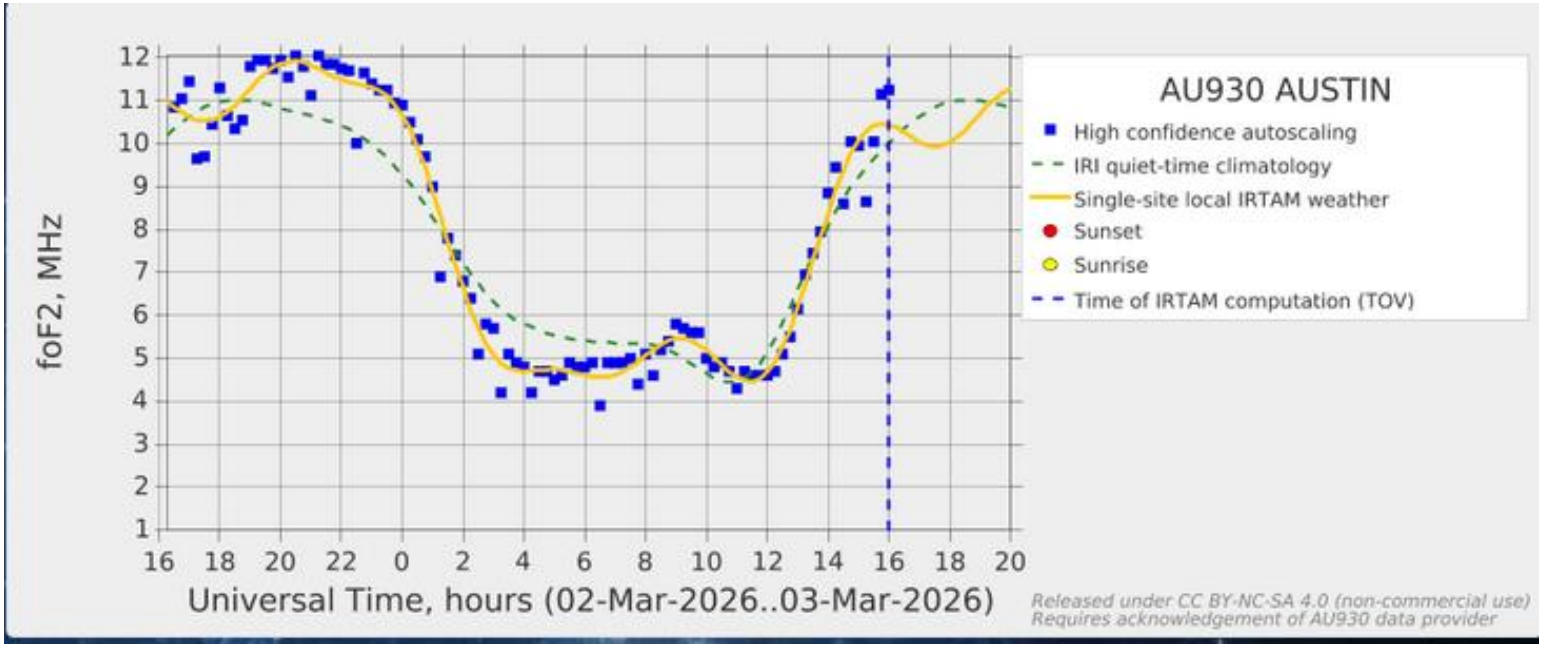
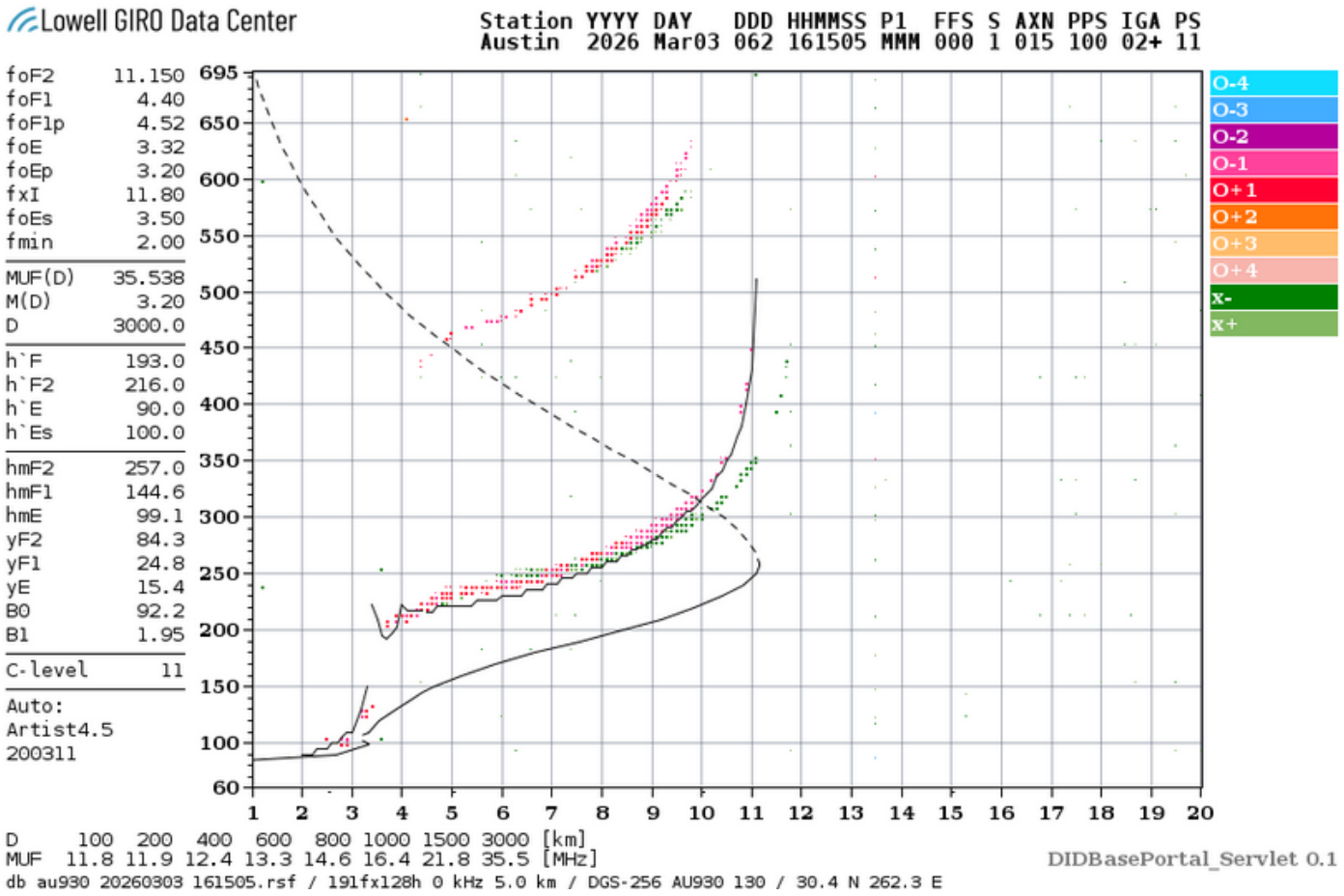


Use of GIRO DIDBASE

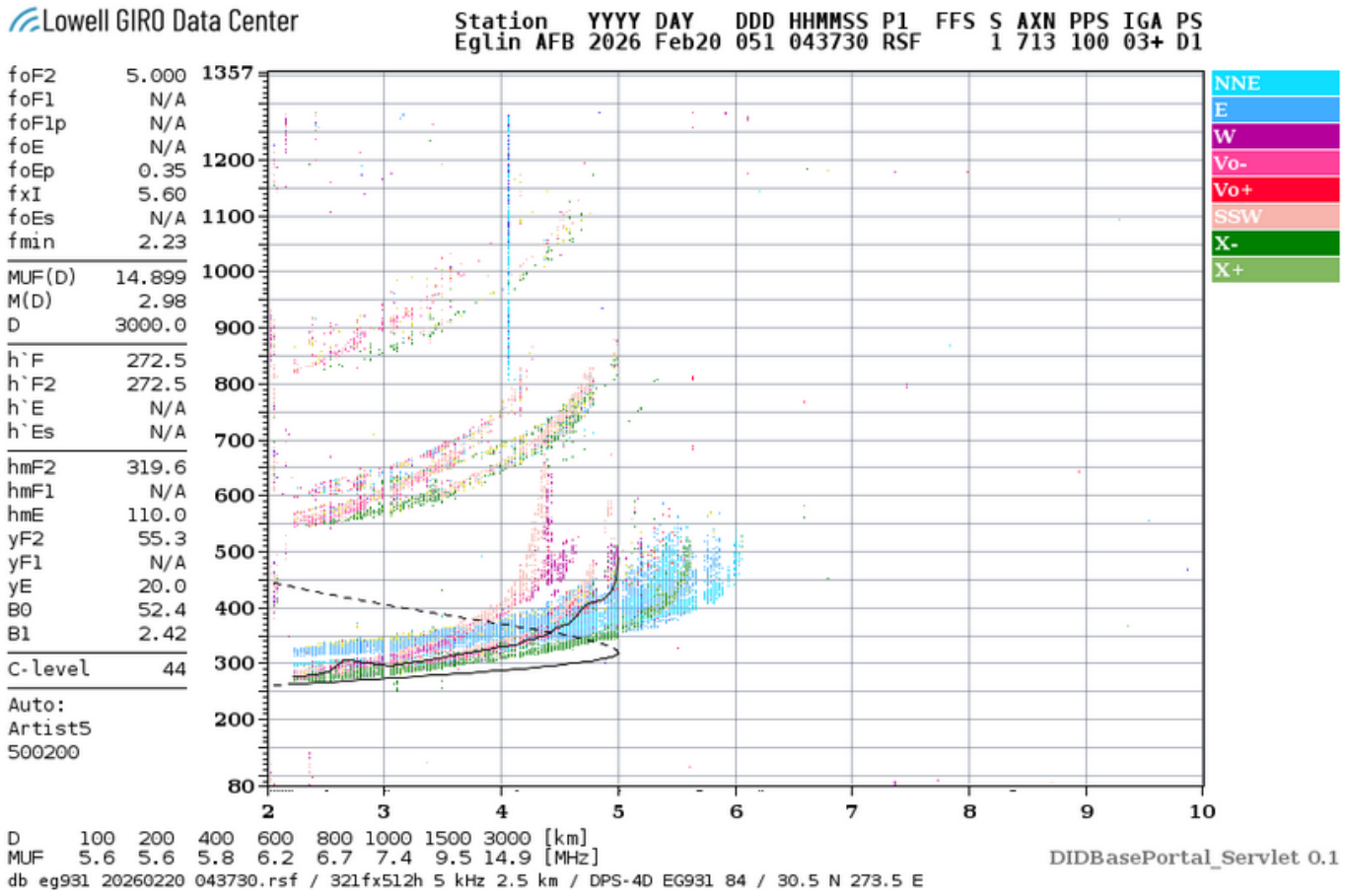
https://giro.uml.edu/didbase/

Eglin AFB
Or
Austin

Austin Ionosonde – 10:20 CST



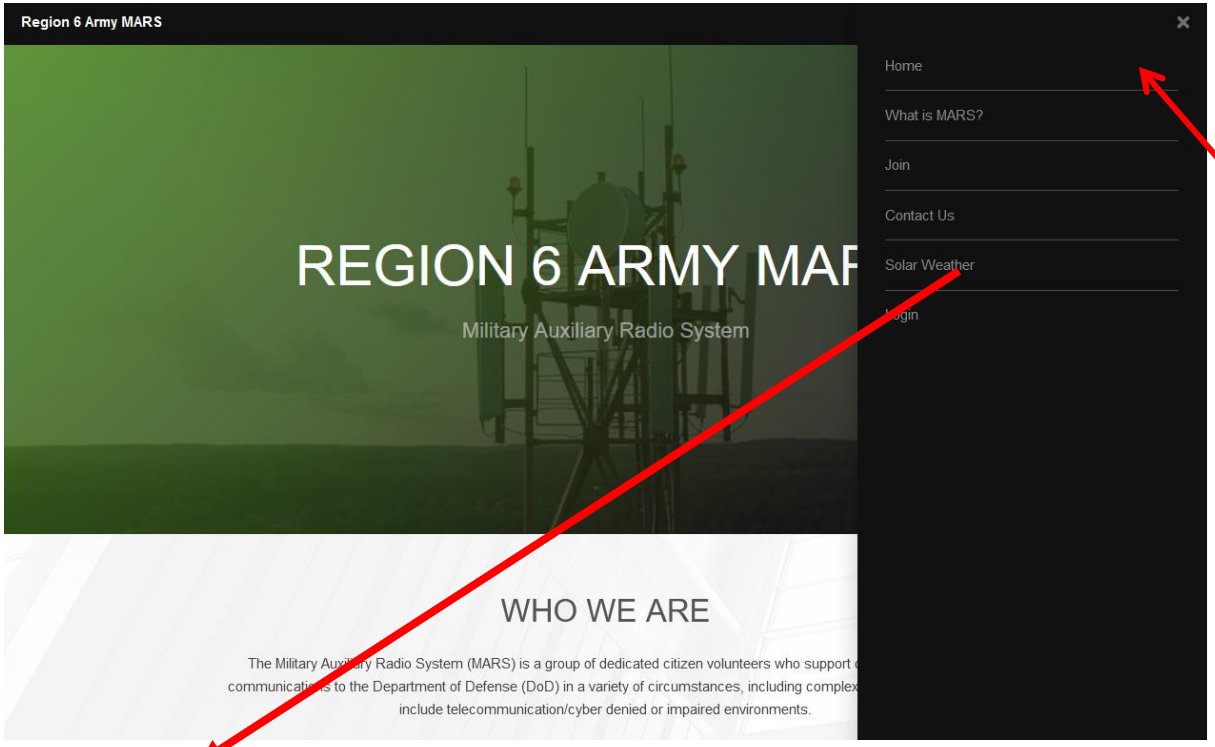
Last Ionogram from Eglin Ionosonde



Time Shift for Eglin Ionosonde

- Eglin AFB Ionosonde is east of Austin at about the same Latitude so sun angle is about the same (same solar insolation).
- What happens to the Ionosphere over Eglin will occur over Austin about 45 minutes later.
- This is simply a Longitude difference converted to time.
- So look at Eglin's foF2 45 minutes earlier to see what is going to happen over Austin.
- The most rapid change in foF2 occurs as the sun is rising and setting (morning and evening).

Solar Weather Data



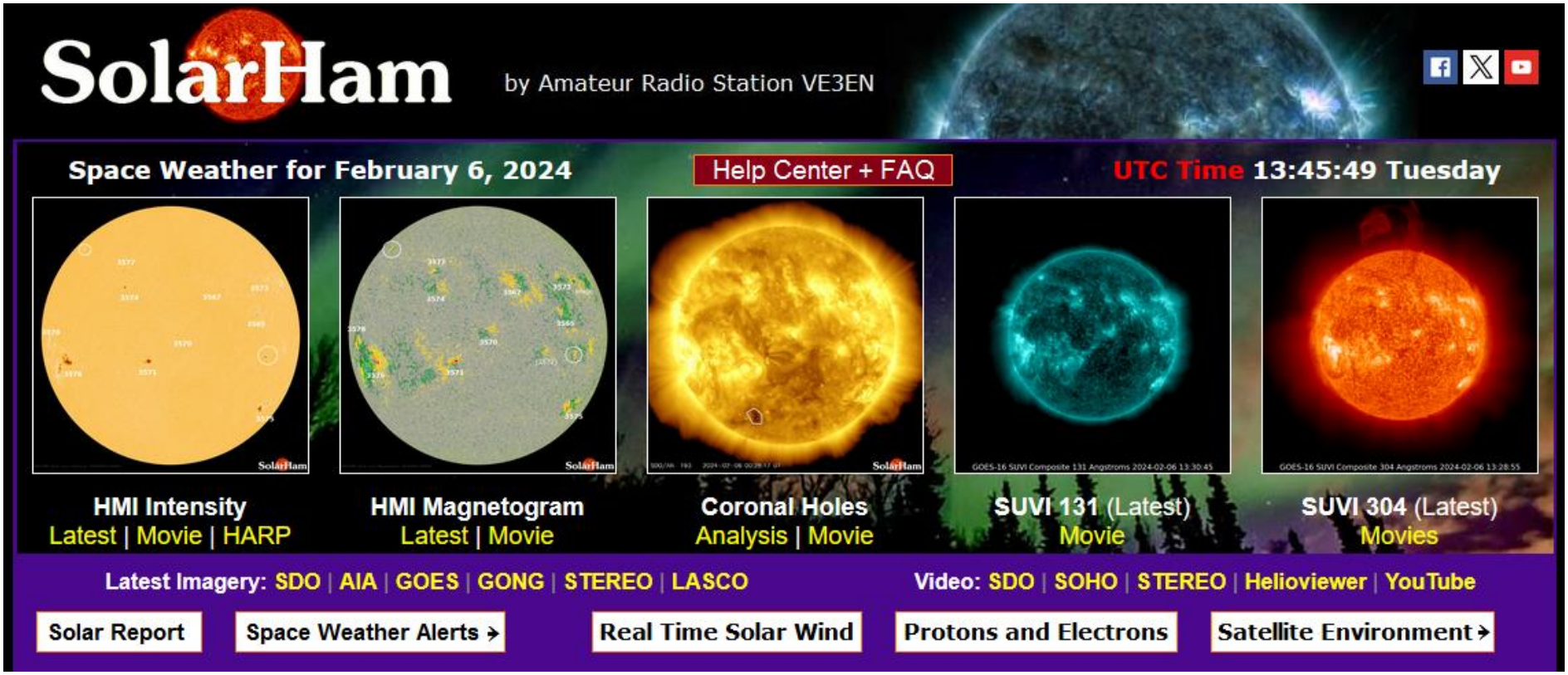
Menu

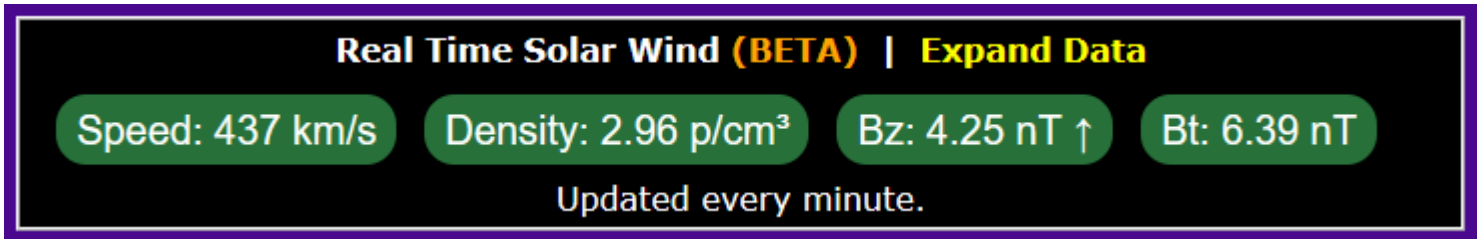
Solar Weather

All Ionosondes_
GAMBIT URL

- GAMBIT - Global Assimilative Model of Bottomside Ionosphere Timeline
  - Boulder
  - Eglin

- NOAA Solar Weather - Solar Weather plots of Kp and X-Ray and other solar emissions.
- Solen Solar Weather - Good general solar forecast from an individual.
- Solar Ham - SolarHam provides real time solar news, as well as consolidated data from various sources.


SolarHam
by Amateur Radio Station VE3EN
Space Weather for February 6, 2024
Help Center + FAQ
UTC Time 13:45:49 Tuesday
HMI Intensity
Latest | Movie | HARP
HMI Magnetogram
Latest | Movie
Coronal Holes
Analysis | Movie
SUVI 131 (Latest)
Movie
SUVI 304 (Latest)
Movies
Latest Imagery: SDO | AIA | GOES | GONG | STEREO | LASCO
Video: SDO | SOHO | STEREO | Helioviewer | YouTube
Solar Report
Space Weather Alerts
Real Time Solar Wind
Protons and Electrons
Satellite Environment


Real Time Solar Wind (BETA) | Expand Data
Speed: 437 km/s
Density: 2.96 p/cm³
Bz: 4.25 nT ↑
Bt: 6.39 nT
Updated every minute.

spaceweather.com

News and information about the Sun-Earth environment

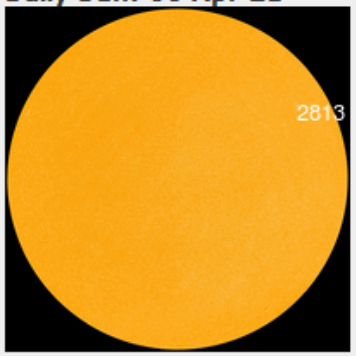
https://www.spaceweather.com/

Current Conditions

Solar wind
speed: **314.8** km/sec
density: **9.9** protons/cm^3
more data: ACE, DSCOVR
Updated: Today at 1225 UT

X-ray Solar Flares
6-hr max: **A1** 1027 UT Apr06
24-hr: **A1** 1515 UT Apr05
explanation | more data
Updated: Today at: 1230 UT

Daily Sun: 06 Apr 21



Sunspot AR2813 is decaying, and poses no threat for strong flares.
Credit: SDO/HMI

FLYING TO THE VOLCANO: Iceland's Geldingadalur volcano has turned into an popular tourist attraction---especially since auroras were sighted above the glowing lava. Early this morning, Tuesday, April 6th, Brian Emfinger saw auroras before he even reached the Reykjanes peninsula:

QUESTIONS?

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