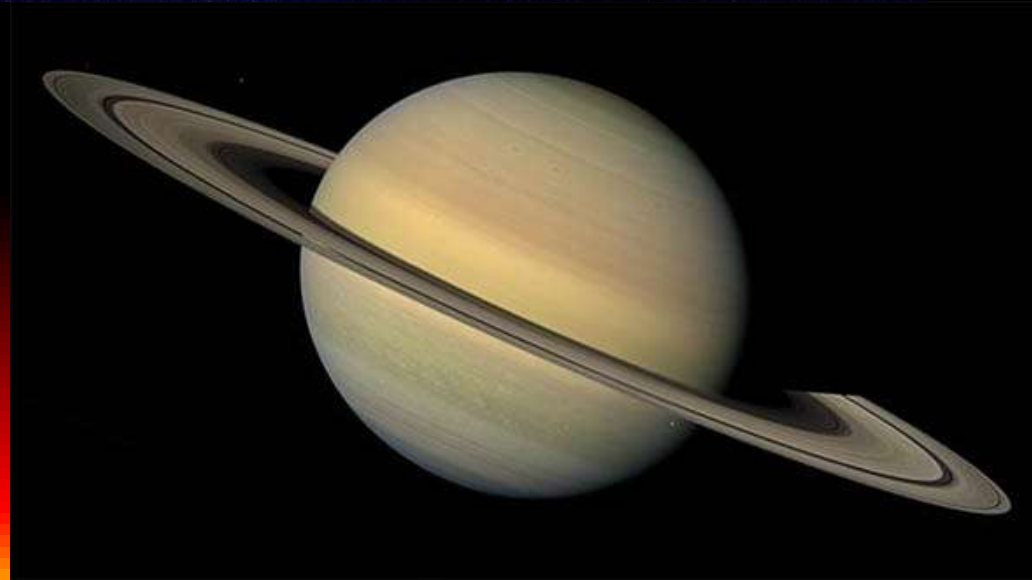


Fenomeni astronomici del 2026

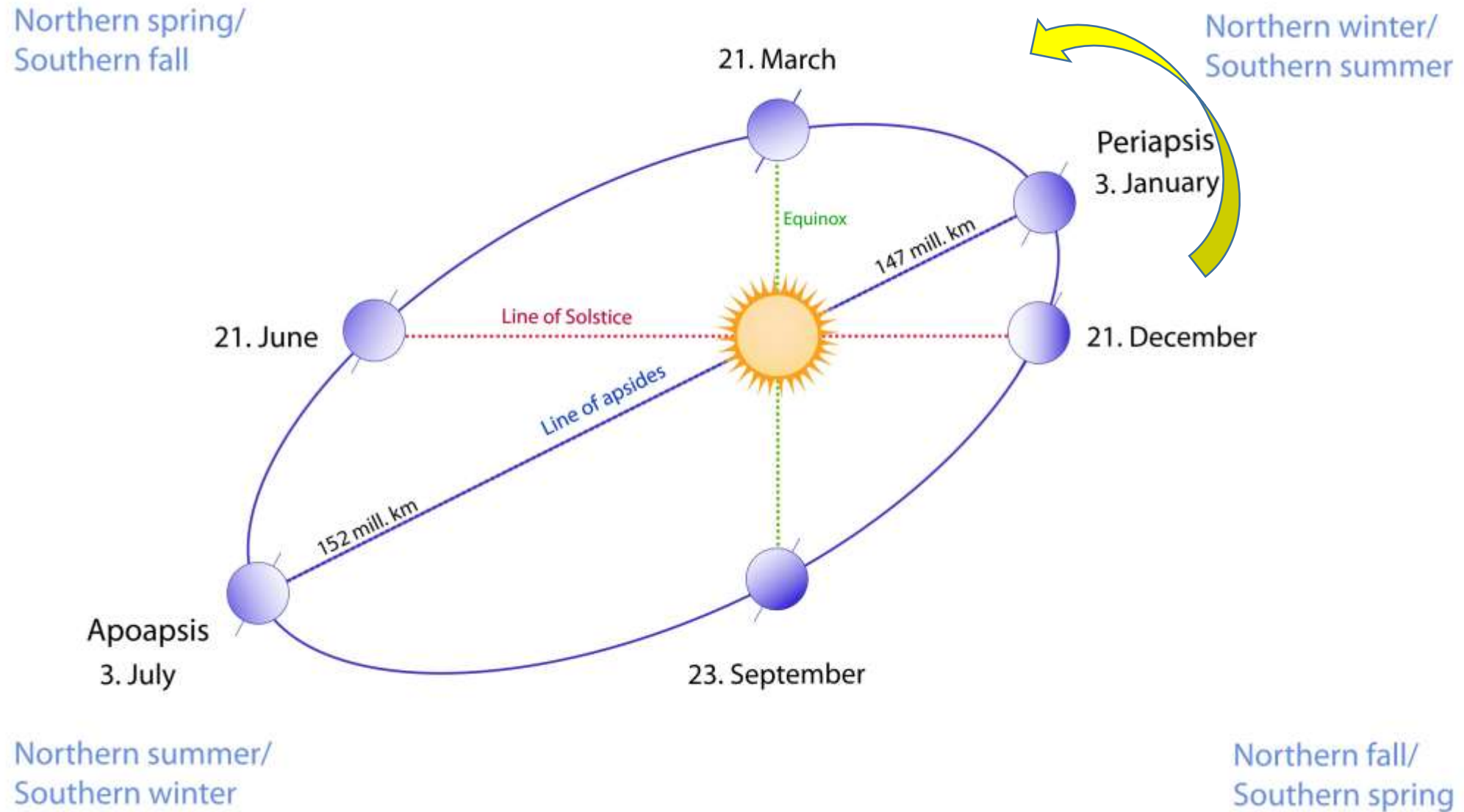


3 gennaio ore 17:00 Terra al perelio - distanza dal Sole 147 MKm (32',5)

6 luglio ore 17:57 Terra all'afelio - distanza dal Sole 152 MKm (31',5)



La linea che unisce perielio e afelio ruota lentamente, la data del perielio avanza di un giorno in circa 58 anni. Nel 1246 coincidevano. Compie una rivoluzione in circa 21000 anni



Eqinozi e sostizi del 2026

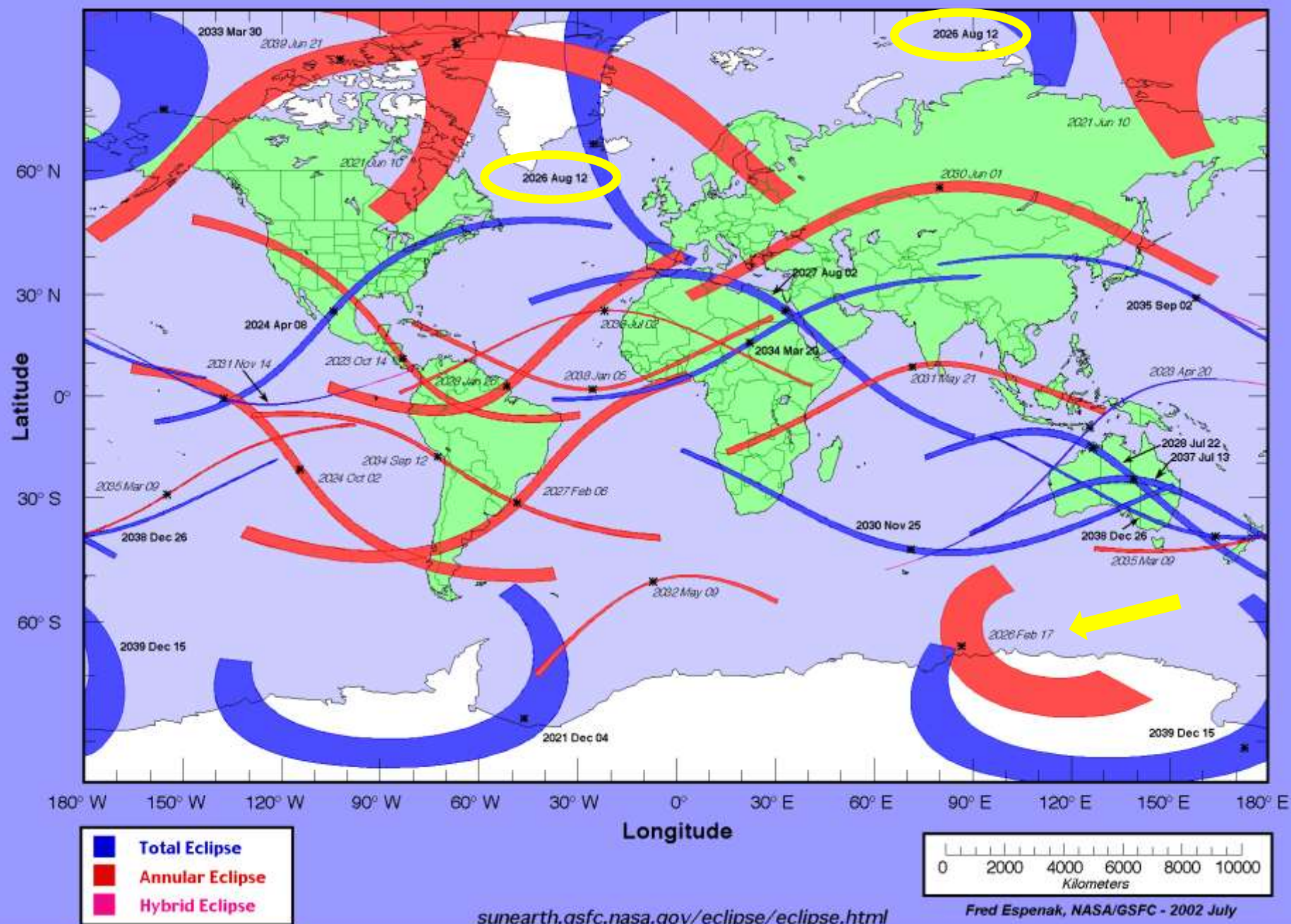
20 marzo alle 15:46	equinozio di primavera
21 giugno alle 9:25	solstizio d'estate
23 settembre alle 1:06	equinozio d'autunno
21 dicembre alle 21:51	solstizio d'inverno

Orari in Tempo Universale T.U.

Le eclissi del 2026

17	febbraio	eclisse anulare di Sole	☹️
3	marzo	eclisse totale di Luna	☹️
12	agosto	eclisse totale di Sole	😊
28	agosto	eclisse parziale di Luna	☹️

Total and Annular Solar Eclipse Paths: 2021 – 2040



Annular Solar Eclipse of 2026 Feb 17

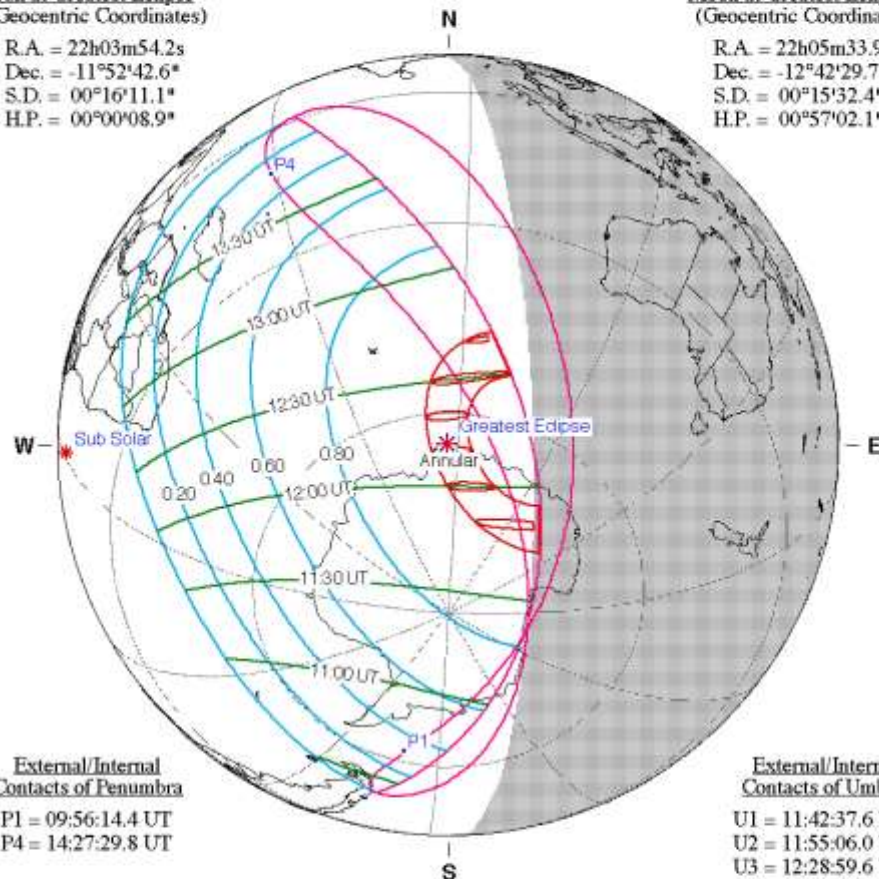
Geocentric Conjunction = 11:18:37.8 UT J.D. = 2461088.971271
 Greatest Eclipse = 12:11:44.6 UT J.D. = 2461089.008155
 Eclipse Magnitude = 0.9630 Gamma = -0.9742
 Saros Series = 121 Member = 61 of 71

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 22h03m54.2s
 Dec. = -11°52'42.6"
 S.D. = 00°16'11.1"
 H.P. = 00°00'08.9"

Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 22h05m33.9s
 Dec. = -12°42'29.7"
 S.D. = 00°15'32.4"
 H.P. = 00°57'02.1"



External/Internal Contacts of Penumbra

P1 = 09:56:14.4 UT
 P4 = 14:27:29.8 UT

External/Internal Contacts of Umbra

U1 = 11:42:37.6 UT
 U2 = 11:55:06.0 UT
 U3 = 12:28:59.6 UT
 U4 = 12:41:21.0 UT

Local Circumstances at Greatest Eclipse

Lat. = 64°43.1'S Sun Alt. = 12.3°
 Long. = 086°45.3'E Sun Azm. = 268.3°
 Path Width = 615.6 km Duration = 02m19.6s

Ephemeris & Constants

Eph. = Newcomb/ILE
 $\Delta T = 83.2$ s
 $k1 = 0.2724880$
 $k2 = 0.2722810$
 $\Delta b = 0.0^{\circ}$ $\Delta l = 0.0^{\circ}$

Geocentric Libration (Optical + Physical)

$l = -5.01^{\circ}$
 $b = 1.24^{\circ}$
 $c = -18.93^{\circ}$

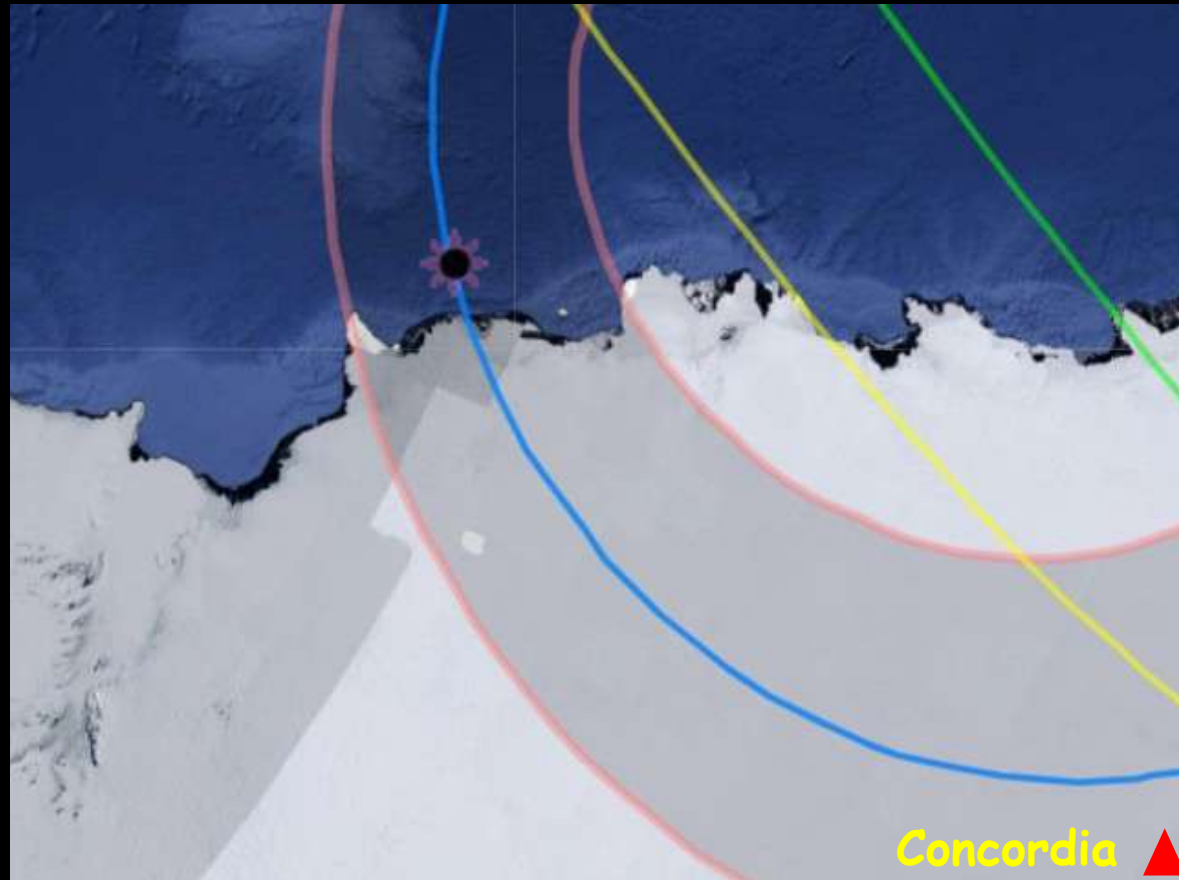
Brown Lun. No. = 1276



F. Espenak, NASA's GSFC - Fri, Jul 2,



17 febbraio eclisse anulare di Sole



Concordia ▲

▲ Zucchelli

75° 06' 04.33" S <—> -75.10120°
123° 26' 51.30" E <—> 123.44758°
3270.0m (10728ft)

2m 09.1s (annular solar eclipse)
2m 01.3s (lunar limb corrected)

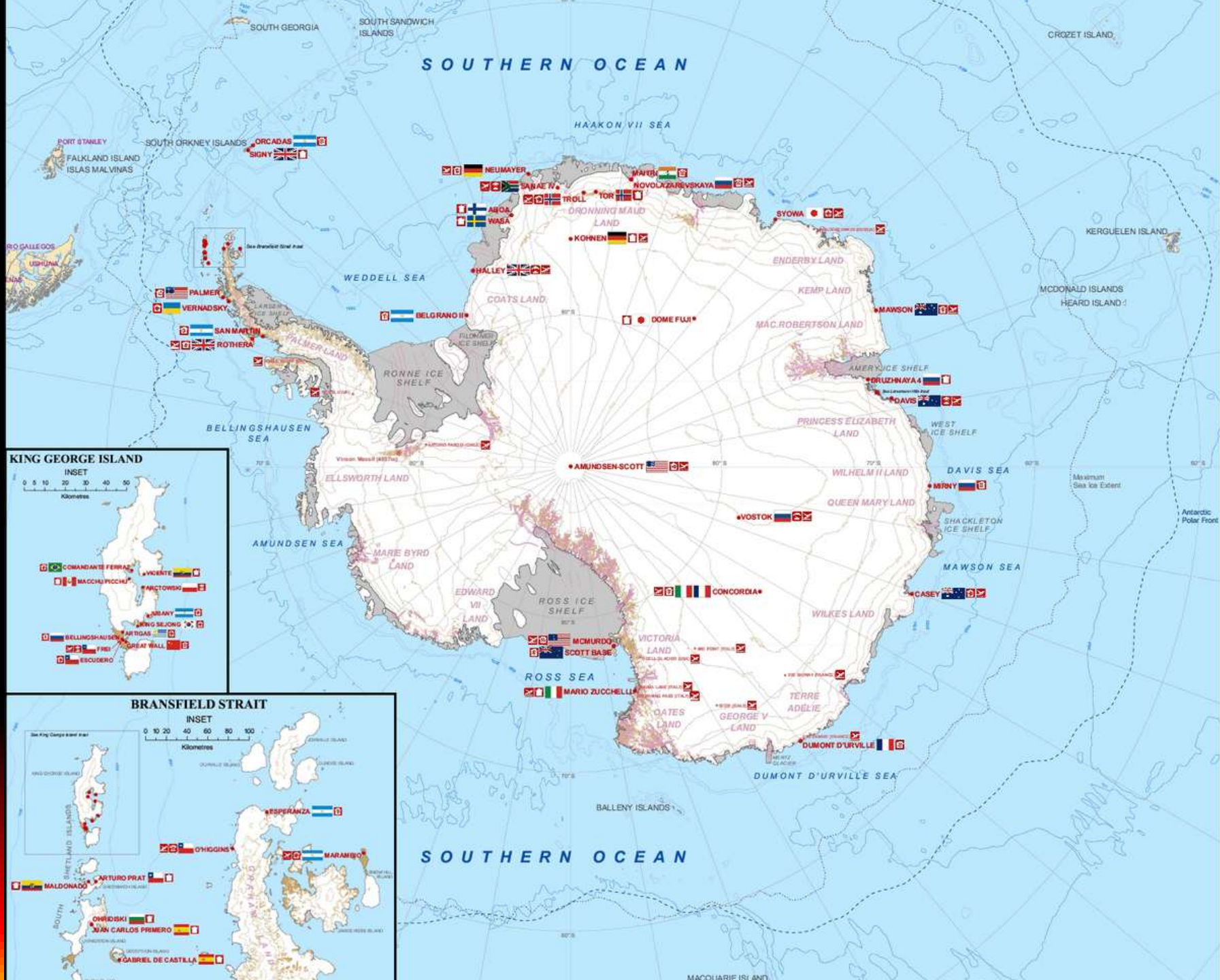
[Help](#)

Antumbral depth : 60.13% (185.9km)
123.3km (76.6mi)
Path width : 618.4km (384.2mi)
Obscuration : 92.309%



Magnitude at maximum : 0.97257
Moon/Sun size ratio : 0.96078

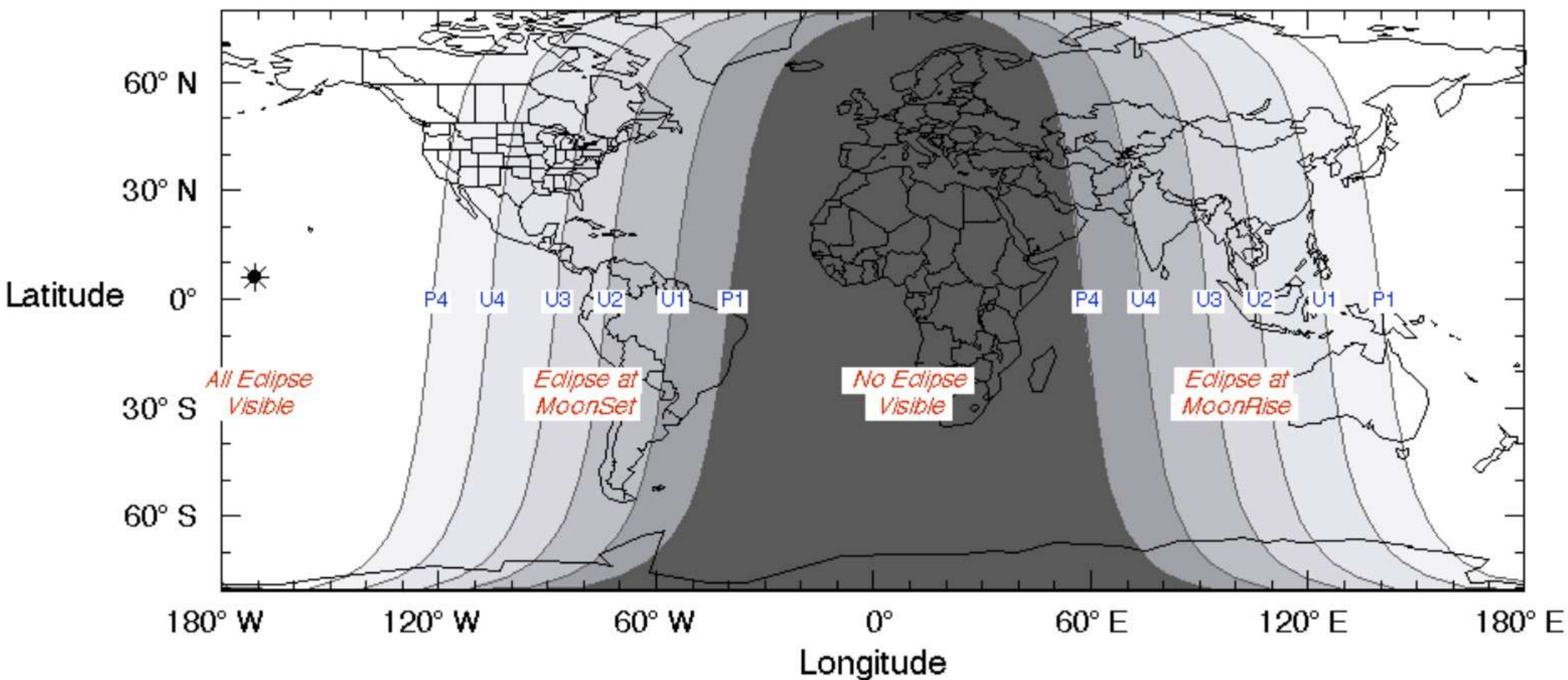
Event ($\Delta T=75.1s$; alt.=3270m)	Date	Time (UT)	Alt	Azi	P	V	LC
Start of partial eclipse (C1) :	2026/02/17	10:48:12.8	+08.4°	255.4°	243°	09.3	
Start of annular eclipse (C2) :	2026/02/17	11:46:30.6	+05.0°	241.4°	221°	10.2 +2.3s	
Maximum eclipse (MAX) :	2026/02/17	11:47:35.2	+04.9°	241.2°	154°	12.4	
End of annular eclipse (C3) :	2026/02/17	11:48:39.8	+04.8°	240.9°	088°	02.5 -5.5s	
End of partial eclipse (C4) :	2026/02/17	12:45:38.1	+01.9°	227.3°	065°	03.5	
Sunset (SET) :	2026/02/17	13:34	-00.2°	215.8°			



Total Lunar Eclipse of 2026 Mar 03

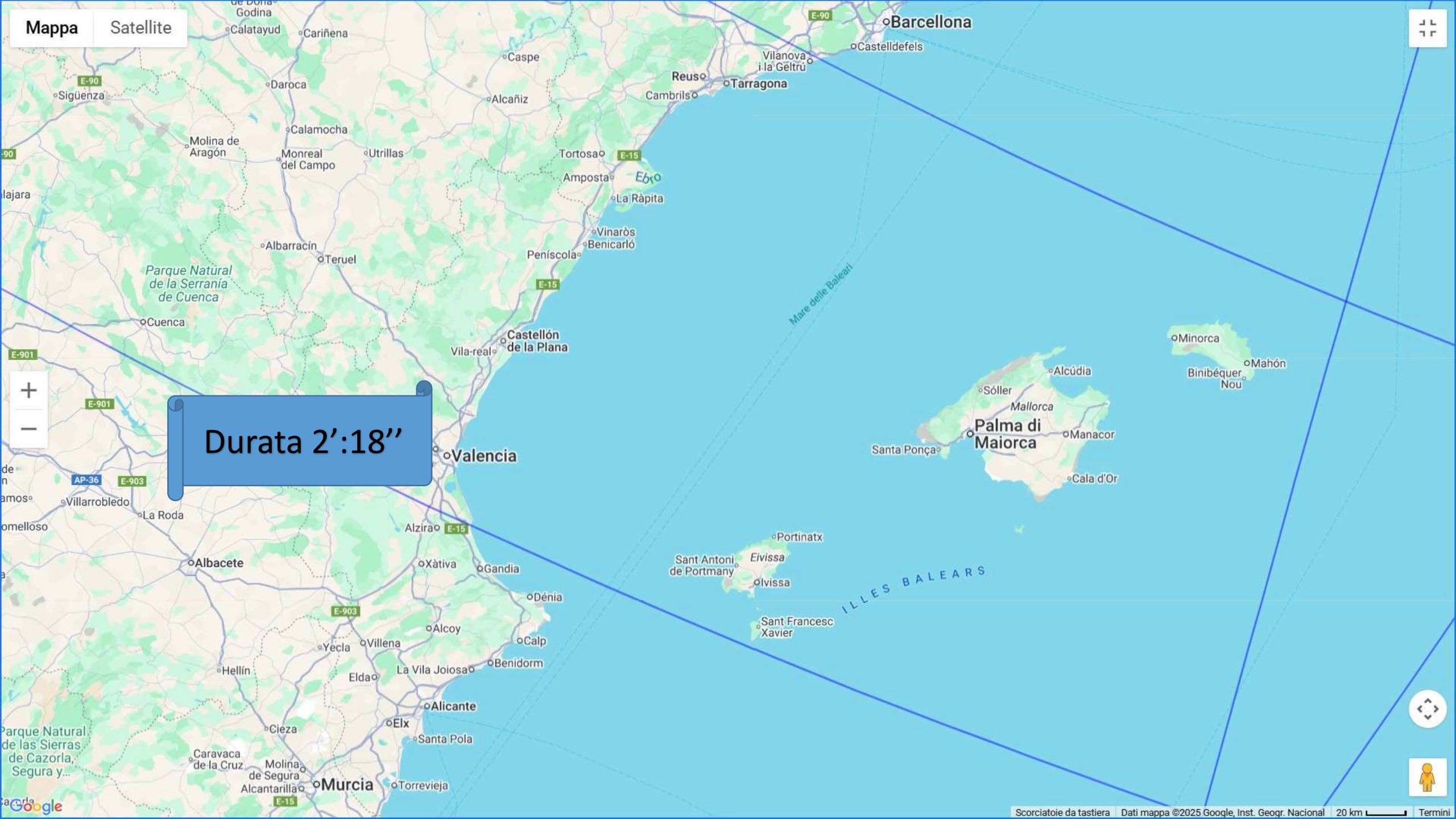
F. Espenak, NASA's GSFC

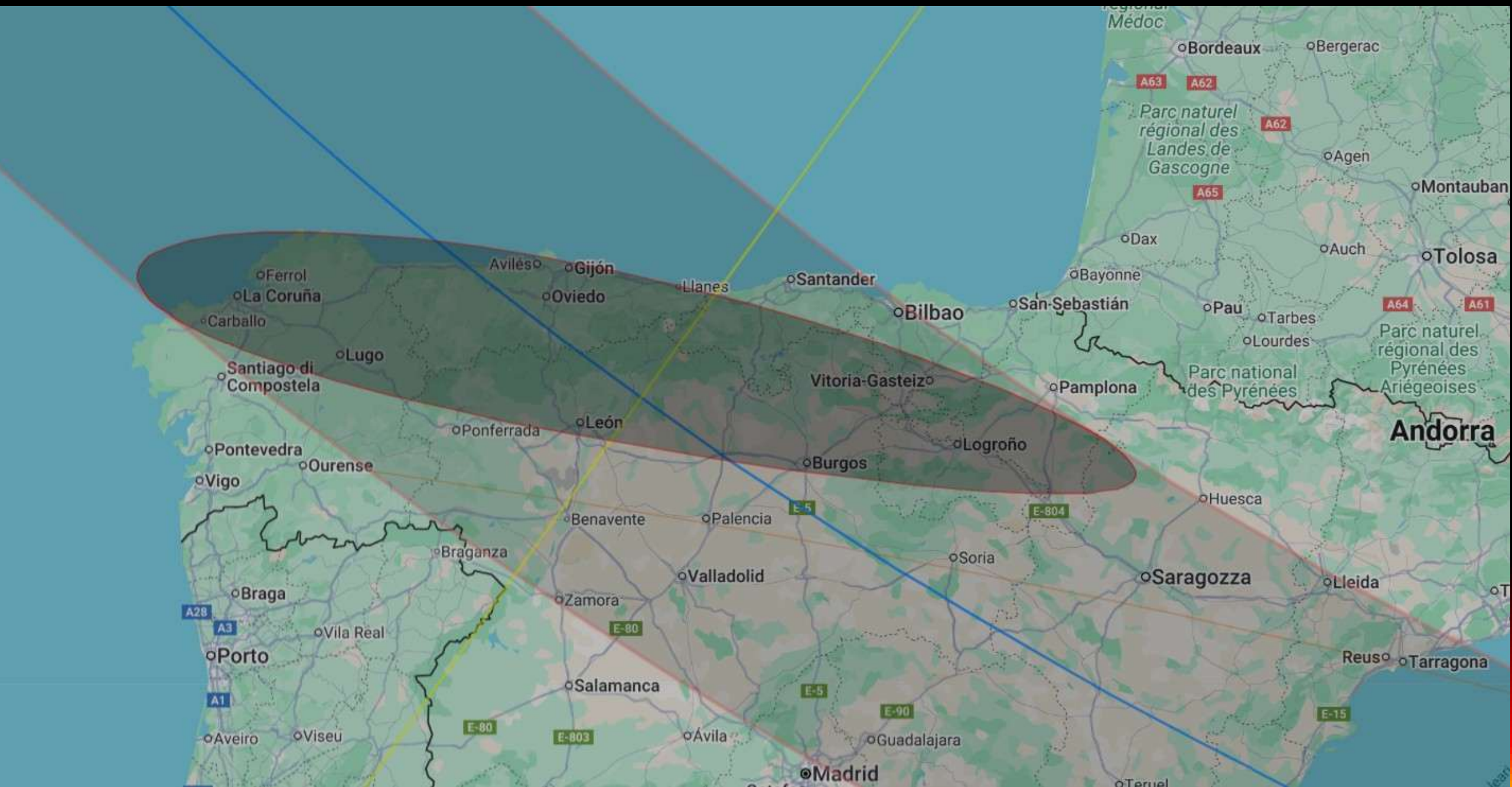
eclipse.gsfc.nasa.gov/eclipse.html



Mappa Satellite

Durata 2':18"





43° 12' 59.11" N <—> 43.21642°
5° 56' 47.36" W <—> -5.94649°
1548.0m (5079ft)

Umbral depth : 98.10% (148.6km)
2.9km (1.8mi)
Path width : 302.9km (188.2mi)
Obscuration : 100.00%

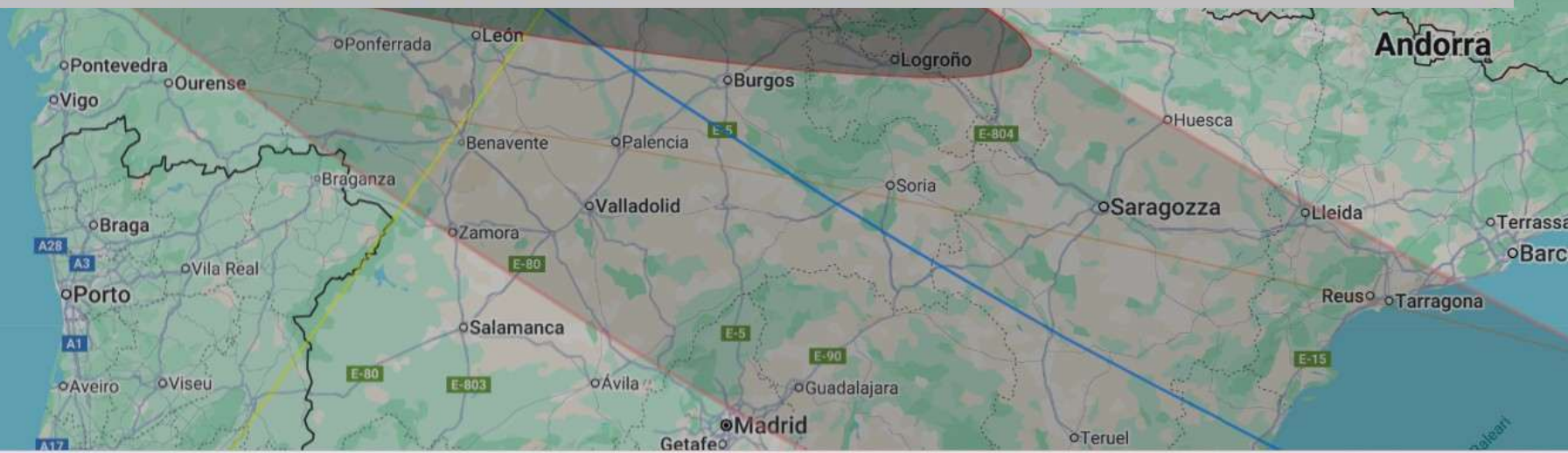


1m 48.9s (total solar eclipse)
1m 48.7s (lunar limb corrected)

[Help](#)

Magnitude at maximum : 1.01654
Moon/Sun size ratio : 1.03371
Umbral vel. : 2.208km/s (4940 mph)

Event ($\Delta T=69.1s$; alt.=1548m)	Date	Time (UT)	Alt	Azi	P	V	LC
Start of partial eclipse (C1) :	2026/08/12	17:31:37.3	+20.4°	280.7°	117°	09.7	-1.1s
Start of total eclipse (C2) :	2026/08/12	18:27:22.1	+10.3°	280.7°	117°	09.7	-1.1s
Maximum eclipse (MAX) :	2026/08/12	18:28:16.6	+10.2°	281.0°	299°	03.6	-1.3s
End of total eclipse (C3) :	2026/08/12	18:29:10.9	+10.0°	281.0°	299°	03.6	-1.3s
End of partial eclipse (C4) :	2026/08/12	19:21:21.9	+00.8°	291.3°			
Sunset (SET) :	2026/08/12	19:32	-00.8°	291.3°			



40° 24' 22.71" N <—> 40.40631°
0° 05' 38.97" E <—> 0.09416°
541.0m (1775ft)

1m 39.7s (total solar eclipse)
1m 39.6s (lunar limb corrected)

[Help](#)

Umbral depth : 99.19% (139.4km)
1.1km (0.7mi)
Path width : 281.0km (174.6mi)
Obscuration : 100.00%



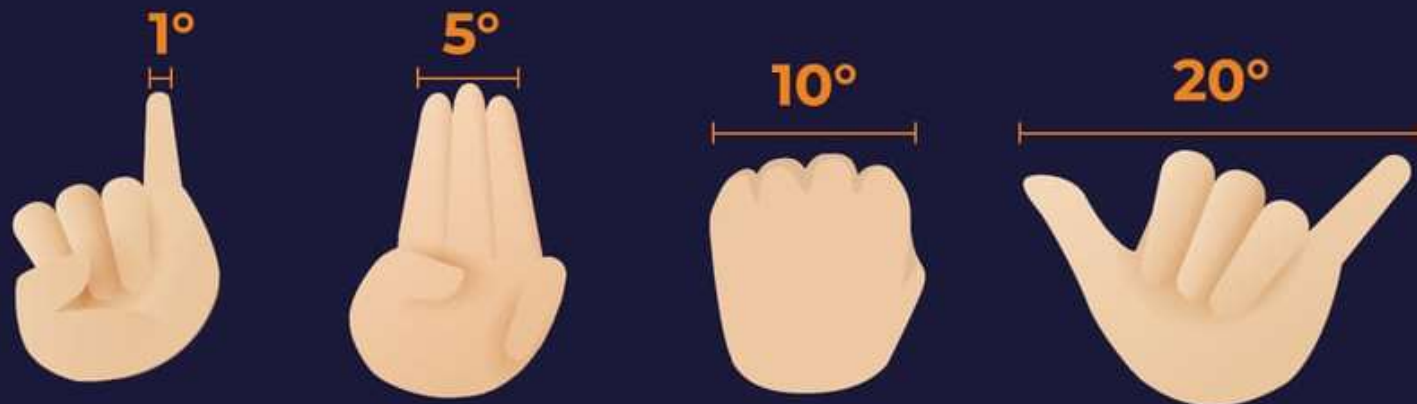
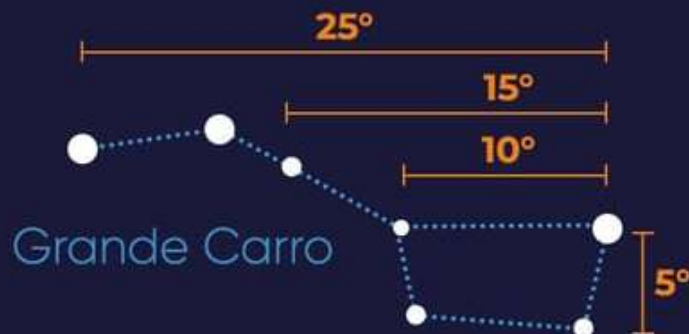
Magnitude at maximum : 1.01585
Moon/Sun size ratio : 1.03196
Umbral vel. : 5.201km/s (11634 mph)

Event ($\Delta T=69.1s$; alt.=541m)	Date	Time (UT)	Alt	Azi	P	V	LC
Start of partial eclipse (C1) :	2026/08/12	17:36:50.0	+14.8°	277.3°	118°	03.8	
Start of total eclipse (C2) :	2026/08/12	18:30:36.4	+04.7°	285.4°	117°	09.7	-1.1s
Maximum eclipse (MAX) :	2026/08/12	18:31:26.4	+04.6°	285.5°	117°	05.7	
End of total eclipse (C3) :	2026/08/12	18:32:16.1	+04.4°	285.7°	298°	03.6	-1.2s
Sunset (SET) :	2026/08/12	19:02	-00.8°	293.9°	116°	09.7	
End of partial eclipse (C4) :	2026/08/12	19:22:45.0*	-04.6°	293.9°	116°	09.7	



MODO PRATICO PER MISURARE GLI ANGOLI NEL CIELO

Se estendi la mano alla distanza del braccio, puoi usare le dita per stimare distanze e dimensioni angolari nel cielo.



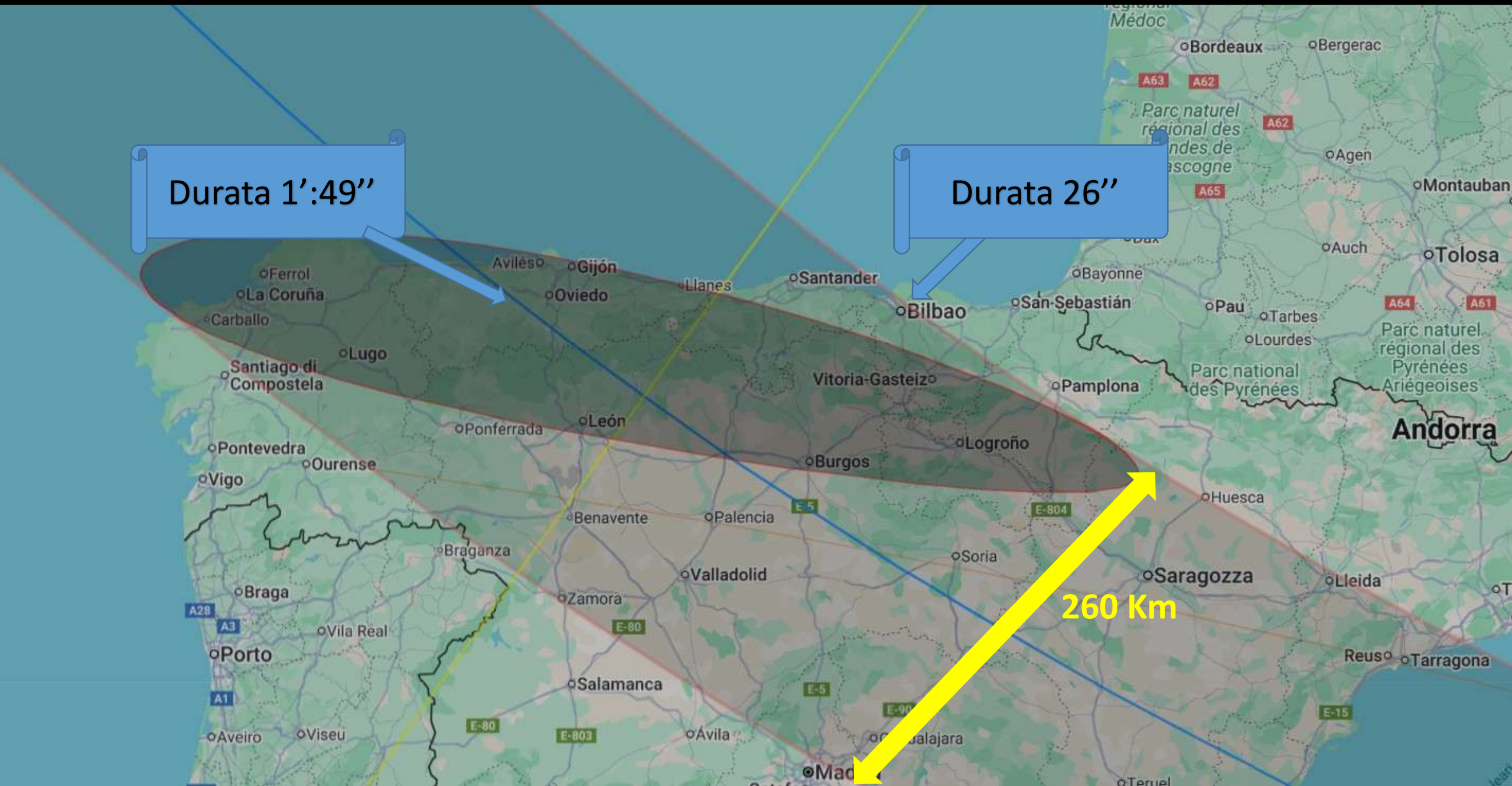
Questo metodo funziona per tutte le età e corporature, perché la lunghezza del braccio è proporzionale alla statura!



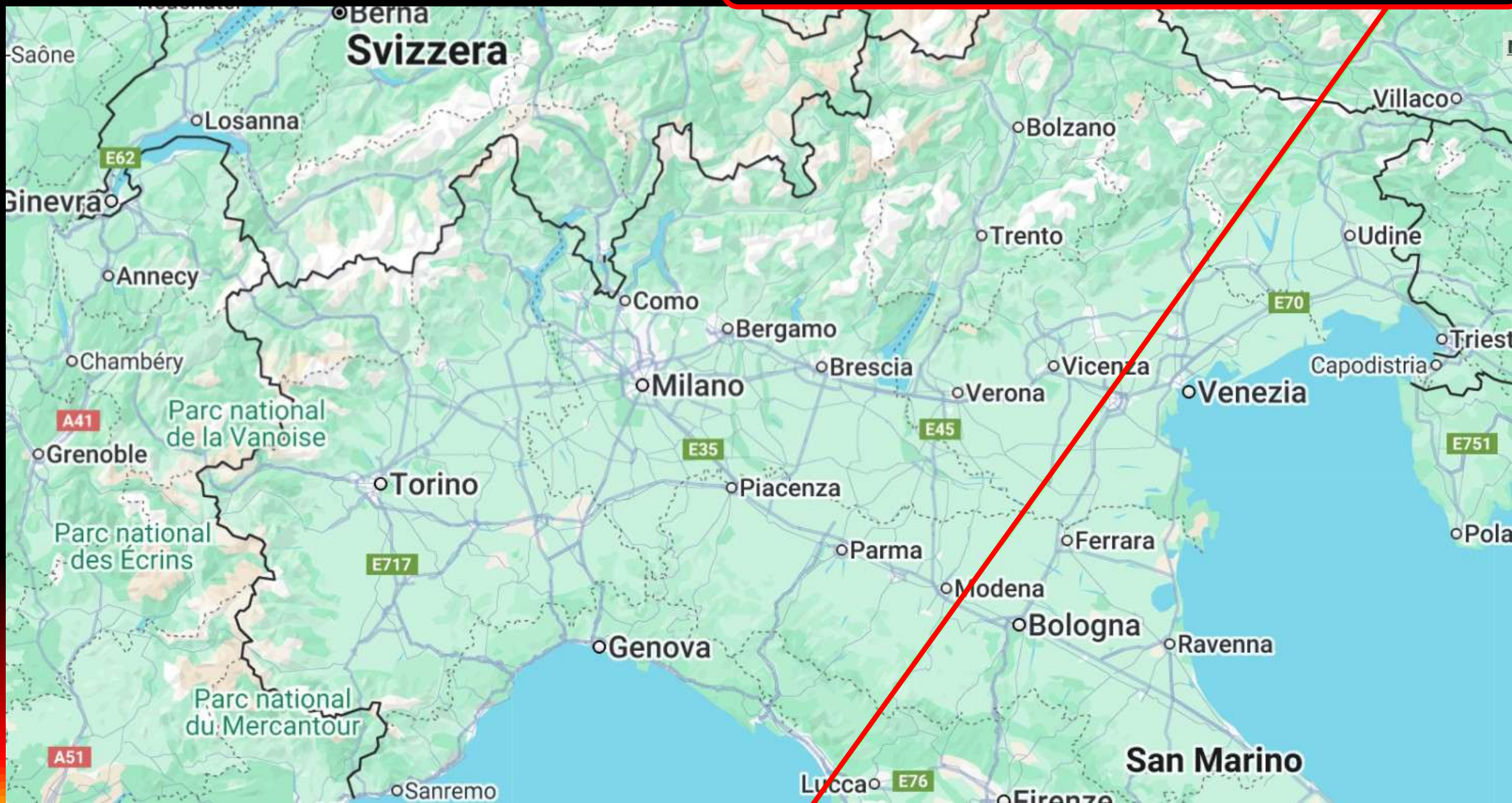
Durata 1':49"

Durata 26"

260 Km



Tramonto del Sole al massimo dell'eclisse



Bologna (Italy)

Azi. 290° Alt. 1° Obs (%): 87.5

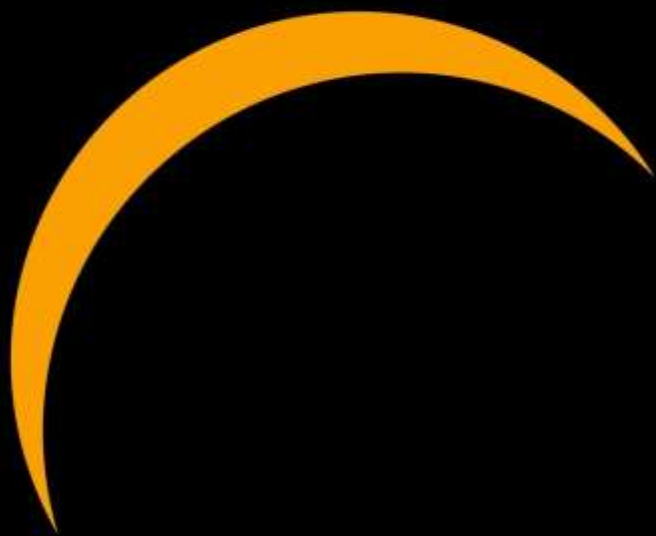
Time: 20h 16m 48s

Central European Summer Time

Greatest

Z

☐ Live



Bologna (Italy)

Azi. 291° Alt. 0° Obs (%): 92.1

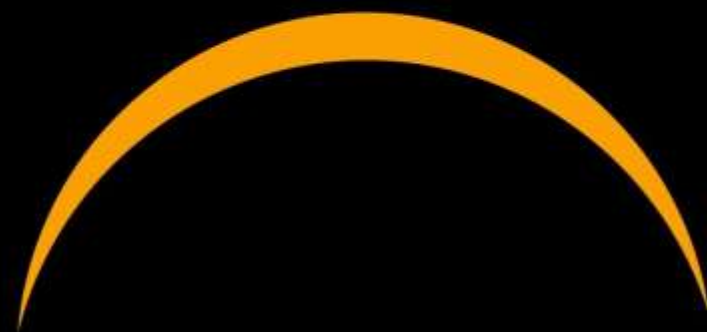
Time: 20h 19m 58s

Central European Summer Time

Greatest

Z

☐ Live



Partial Lunar Eclipse of 2026 Aug 28

Ecliptic Conjunction = 04:19:41.5 TD (= 04:18:26.0 UT)
Greatest Eclipse = 04:14:04.4 TD (= 04:12:49.0 UT)

Penumbra Magnitude = 1.9645 P. Radius = 1.2117° Gamma = 0.4964
Umbral Magnitude = 0.9299 U. Radius = 0.6840° Axis = 0.4647°

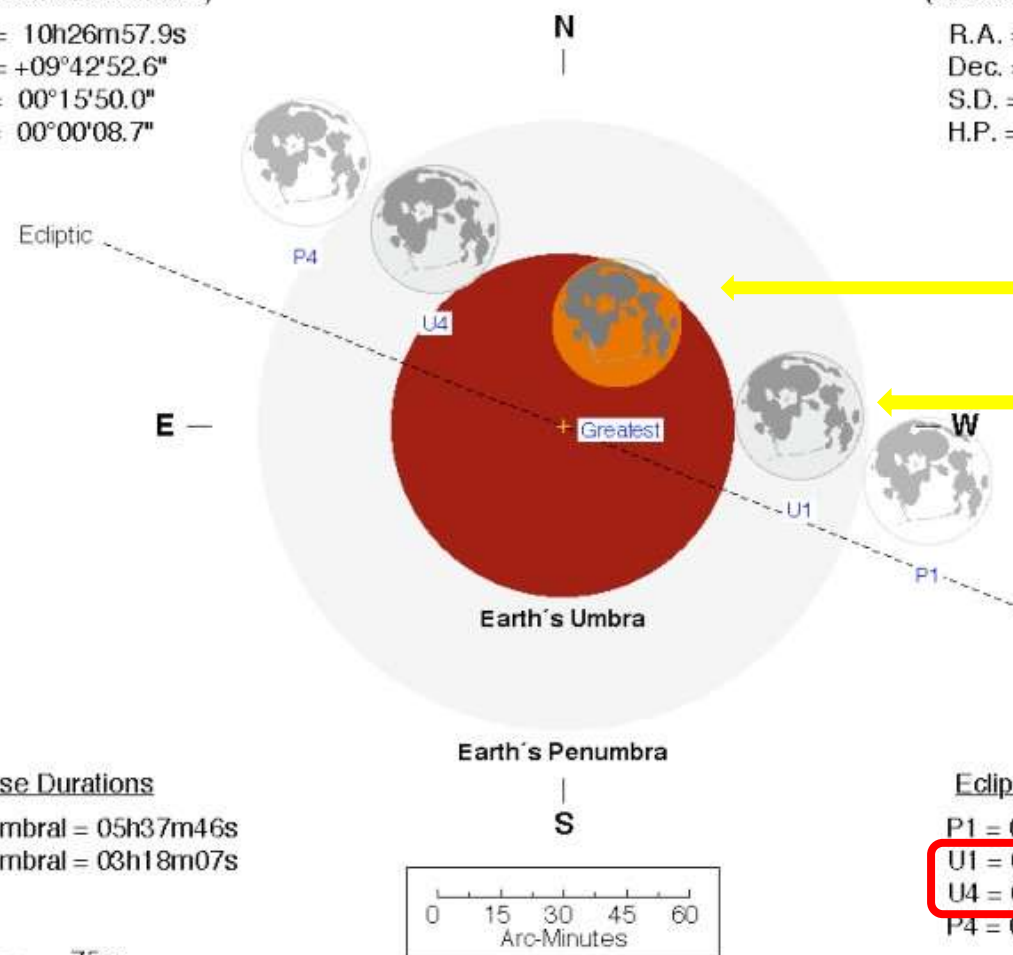
Saros Series = 138 Member = 30 of 83

Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 10h26m57.9s
Dec. = +09°42'52.6"
S.D. = 00°15'50.0"
H.P. = 00°00'08.7"

Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 22h26m06.3s
Dec. = -09°18'03.5"
S.D. = 00°15'18.2"
H.P. = 00°56'09.9"



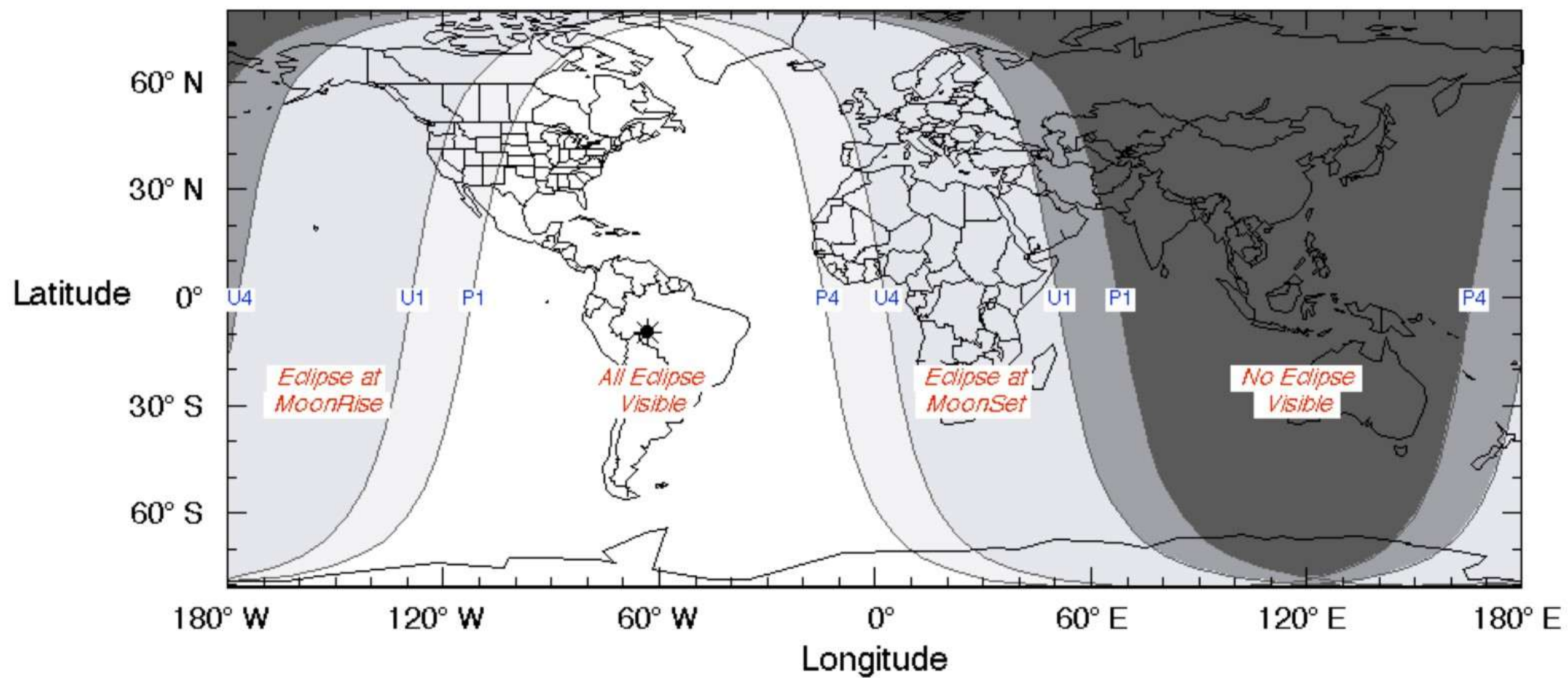
Eclipse Durations

Penumbra = 05h37m46s
Umbral = 03h18m07s

$\Delta T = 75$ s
Rule = CdT (Danjon)
Eph. = VSOP87/ELP2000-85

Eclipse Contacts

P1 = 01:23:55 UT
U1 = 02:33:48 UT
U4 = 05:51:55 UT
P4 = 07:01:41 UT



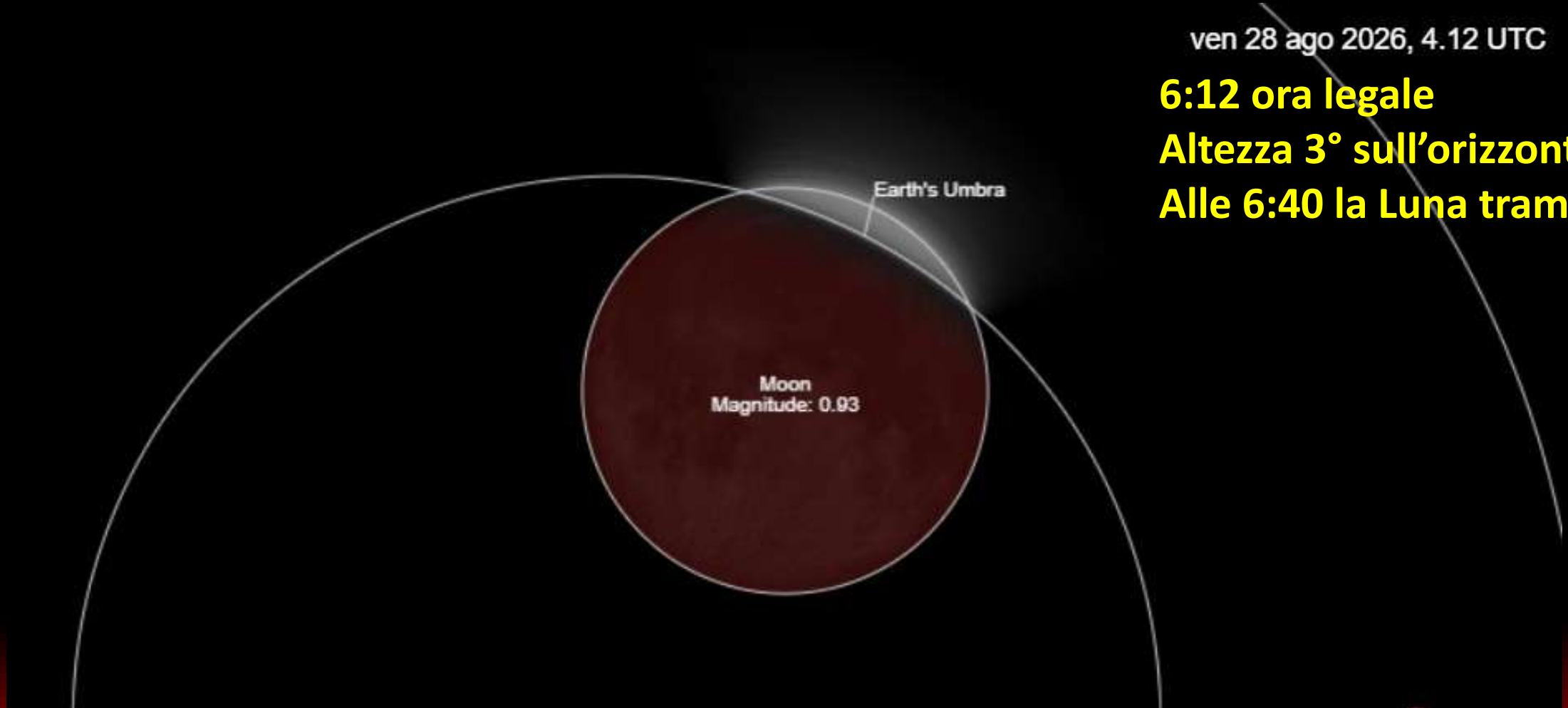
Bologna e nord Italia

ven 28 ago 2026, 4.12 UTC

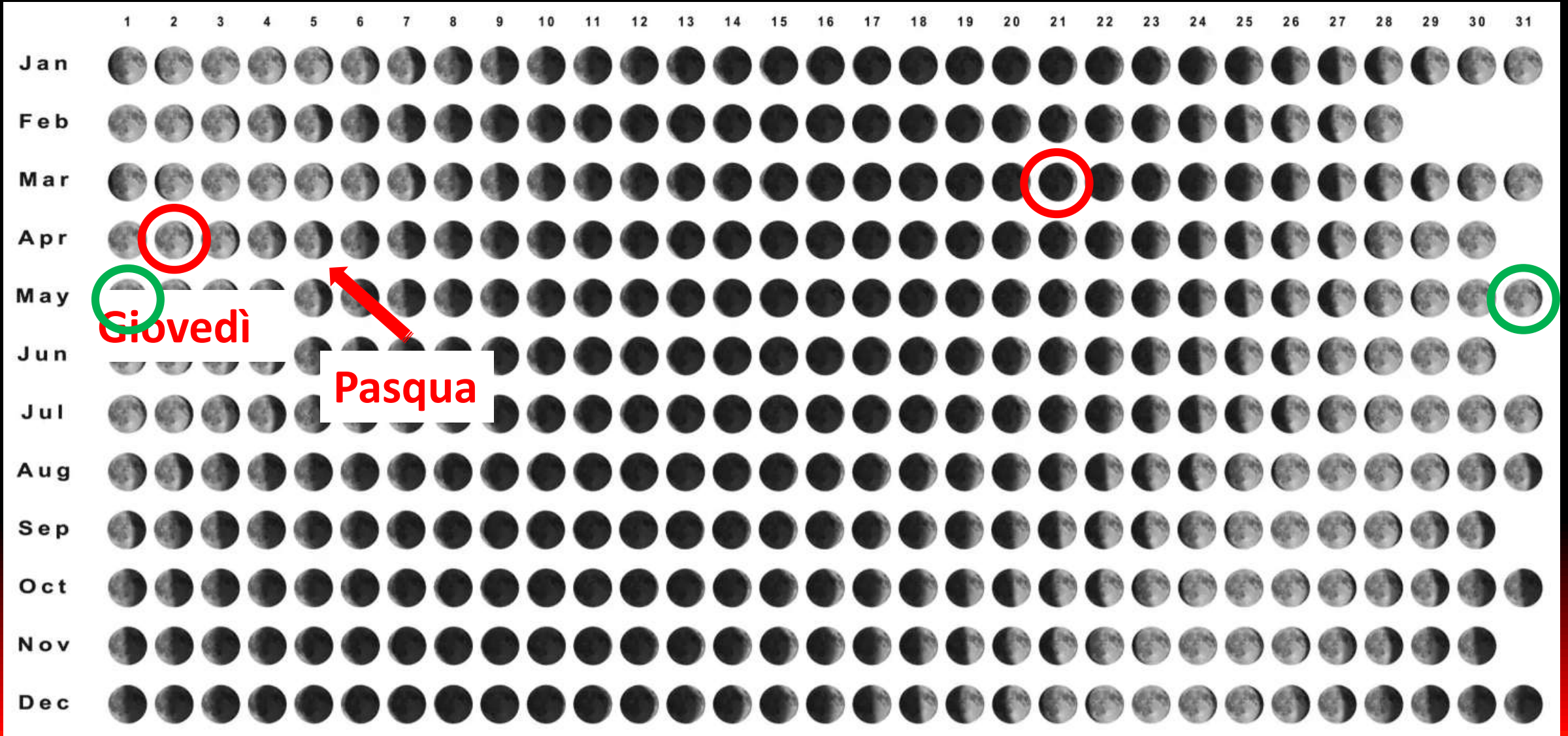
6:12 ora legale

Altezza 3° sull'orizzonte

Alle 6:40 la Luna tramonta



Pasqua 5 aprile 2026





SUPER FULL MOON

Jan 3
10:04 AM
362,782.154 km

Nov 24
02:55 PM
361,151.857 km

Dec 24
01:29 AM
357,046.846 km

Perigei e apogei lunari

min. 356000 max. 406700 Km



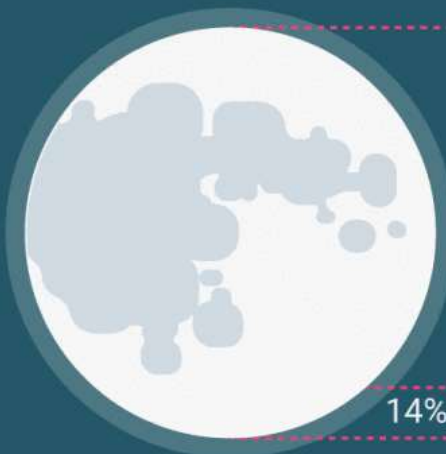
MICRO FULL MOON

May 1
05:24 PM
401,726.307 km

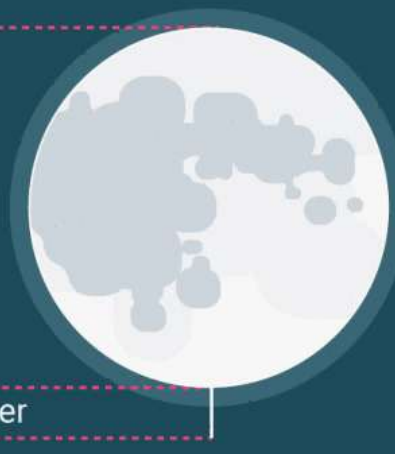
May 31
08:46 AM
405,699.919 km

Jun 29
11:58 PM
404,896.959 km

Supermoon (Perigee)



Micromoon (Apogee)

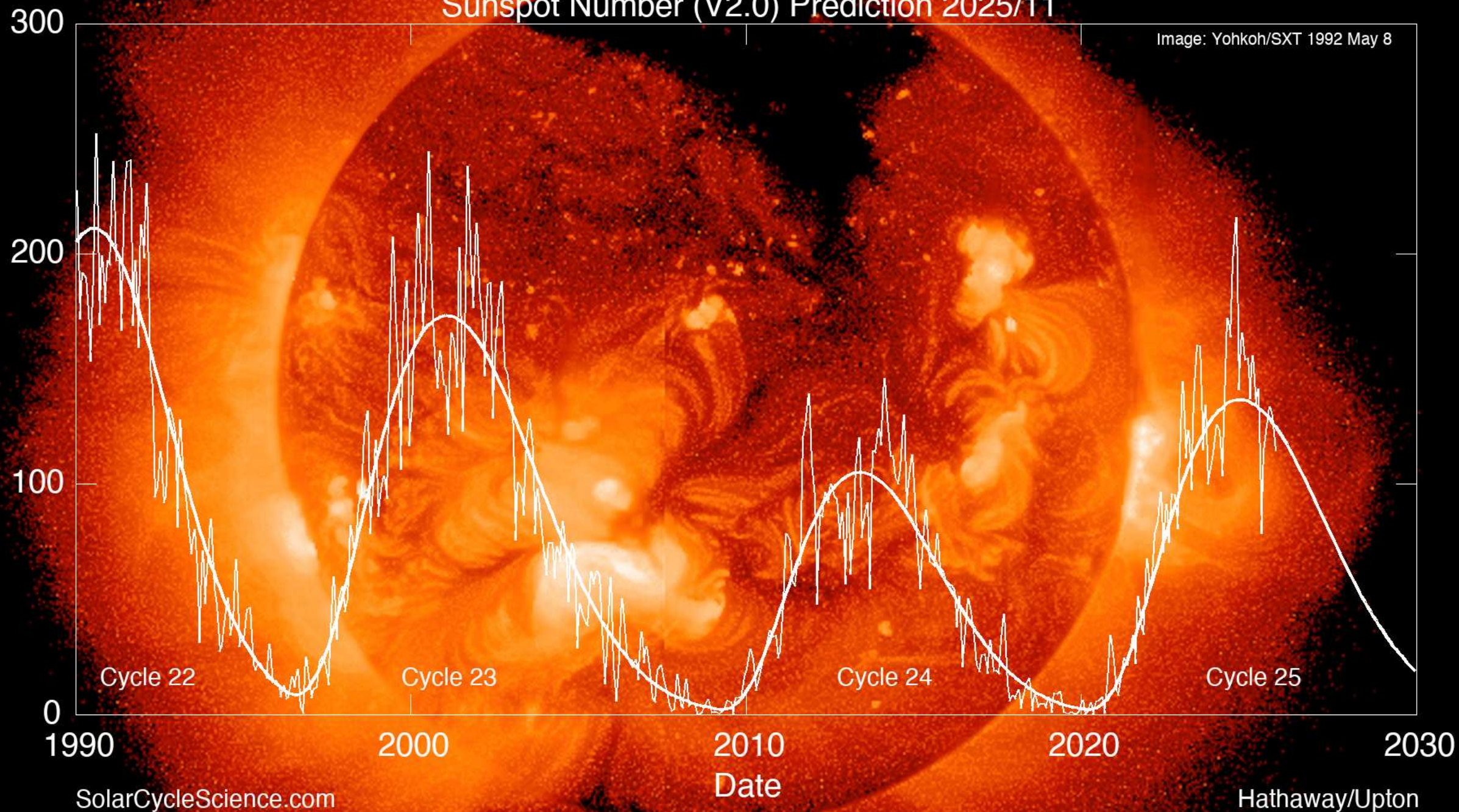


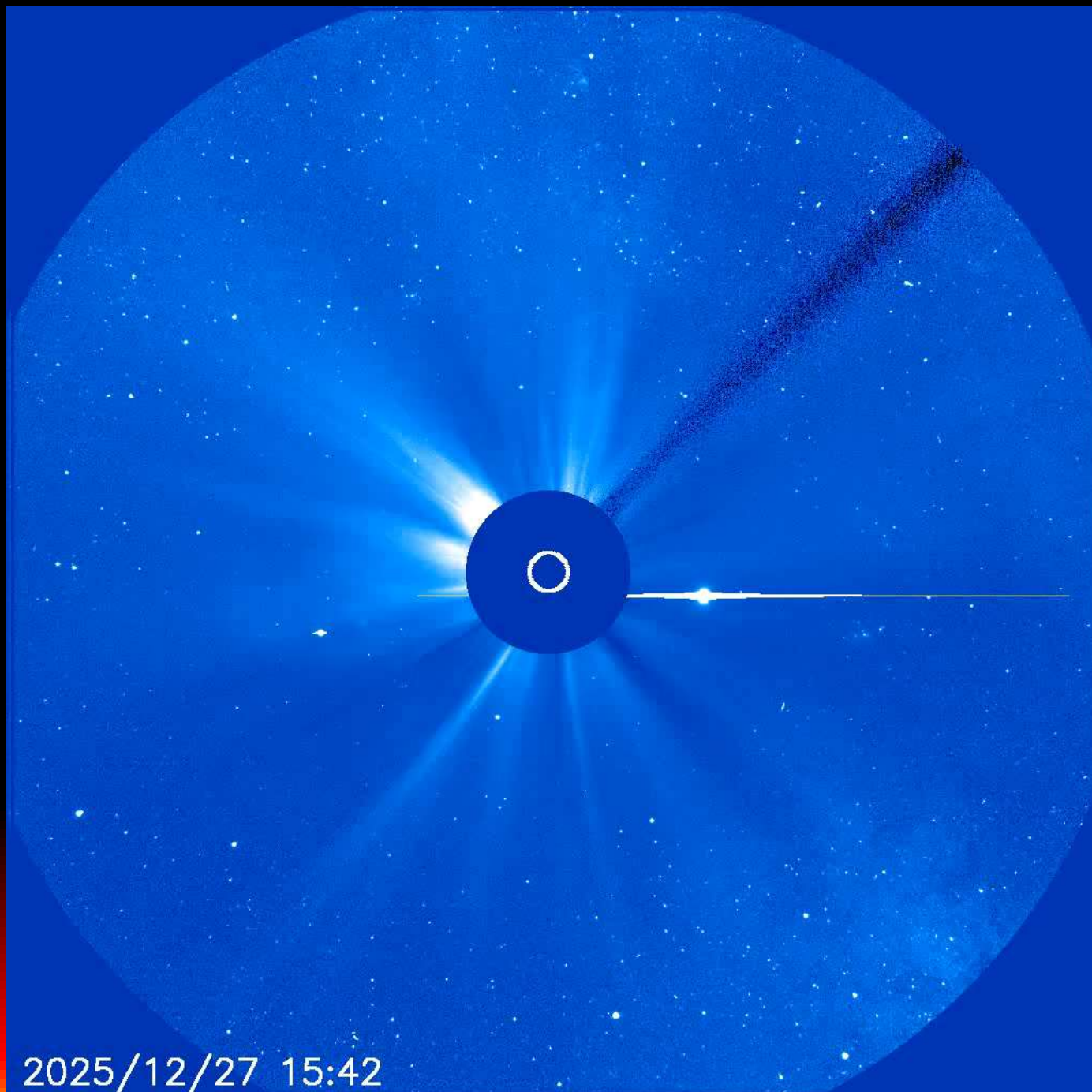
14% Bigger

30% Brighter

Sunspot Number (V2.0) Prediction 2025/11

Image: Yohkoh/SXT 1992 May 8





2025/12/27 15:42

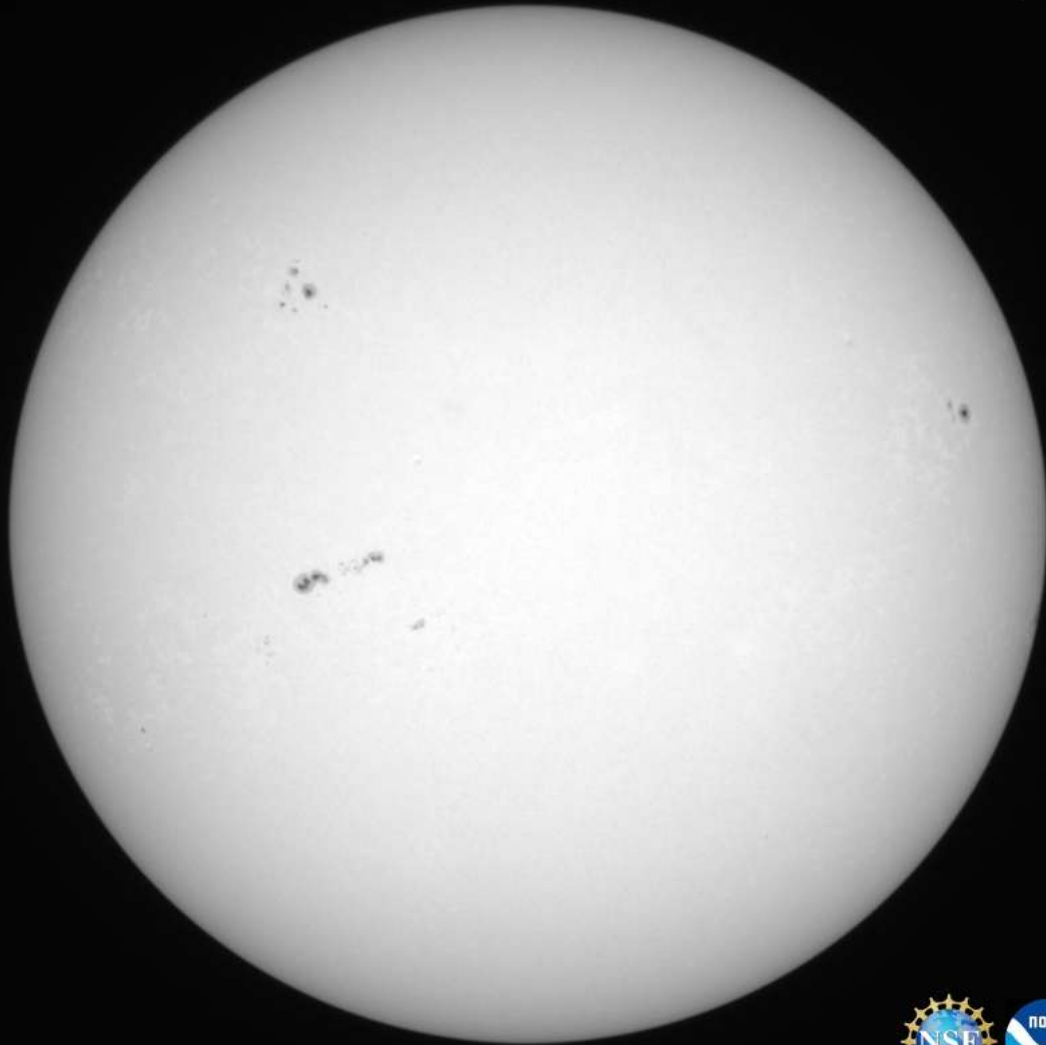
Il Sole in luce visibile e nella banda di emissione dell'Idrogeno

NSO/GONG 677nm

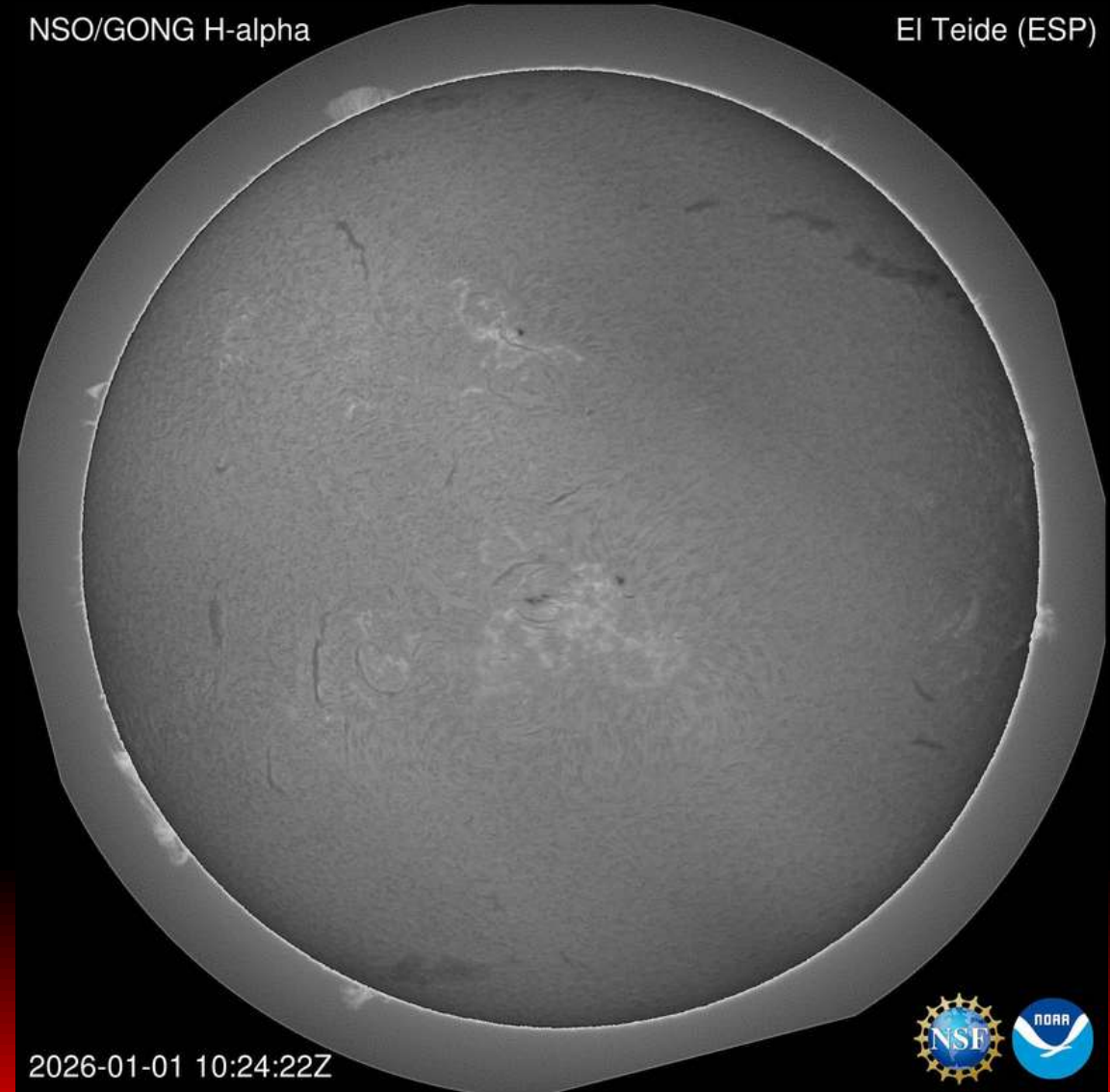
El Teide (ESP)

NSO/GONG H-alpha

El Teide (ESP)



2025-12-30 16:24Z



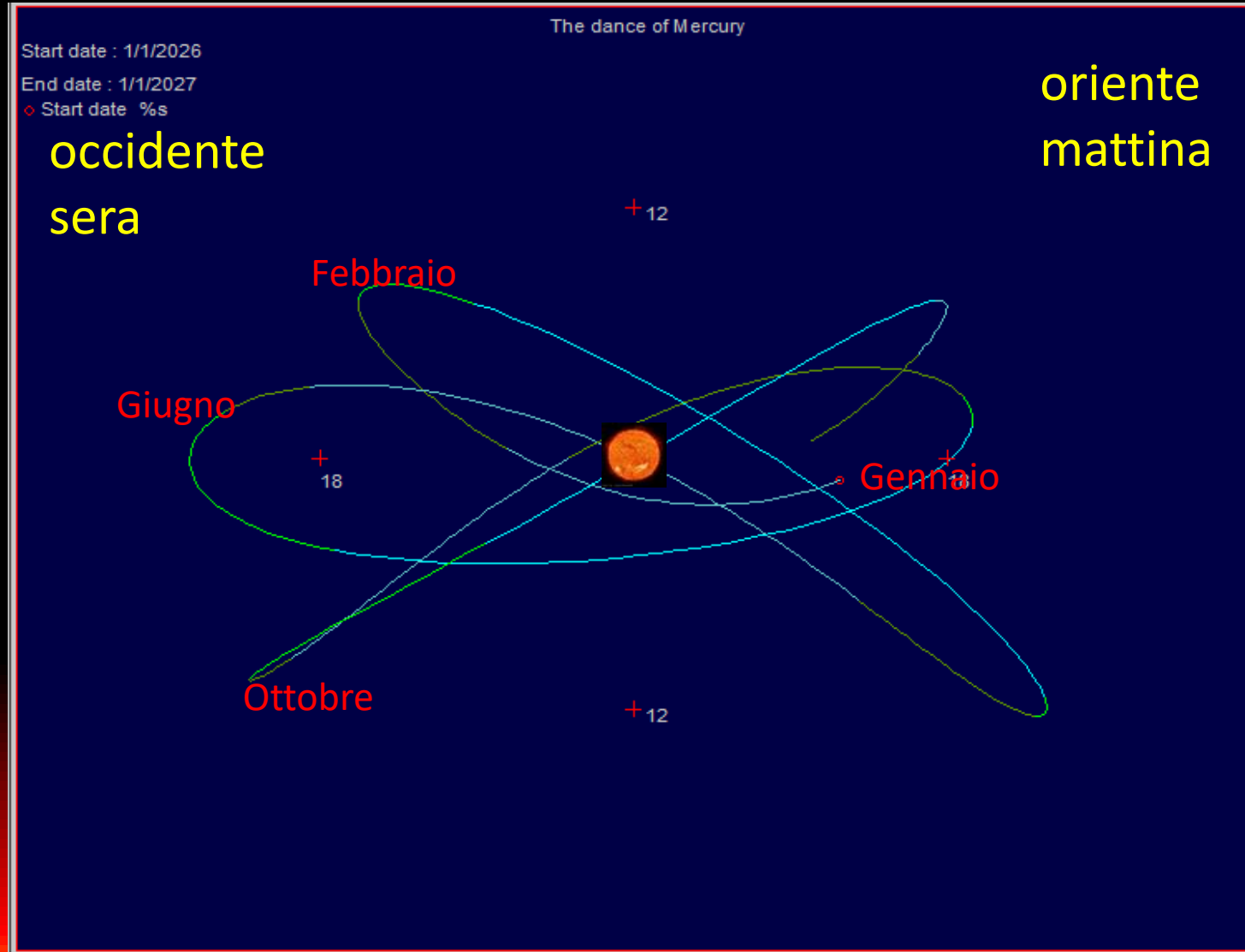
2026-01-01 10:24:22Z



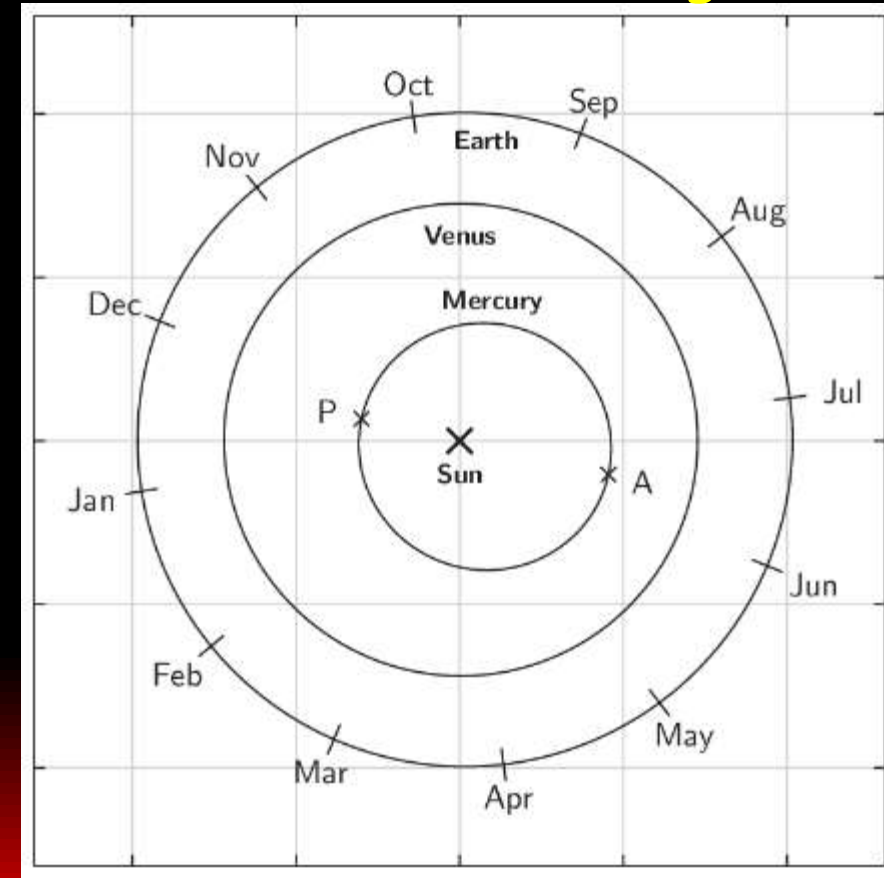
Dal sito: gong.nso.edu/

Visibilità dei pianeti nel 2026

Mercurio



Periodo orbitale 88 giorni



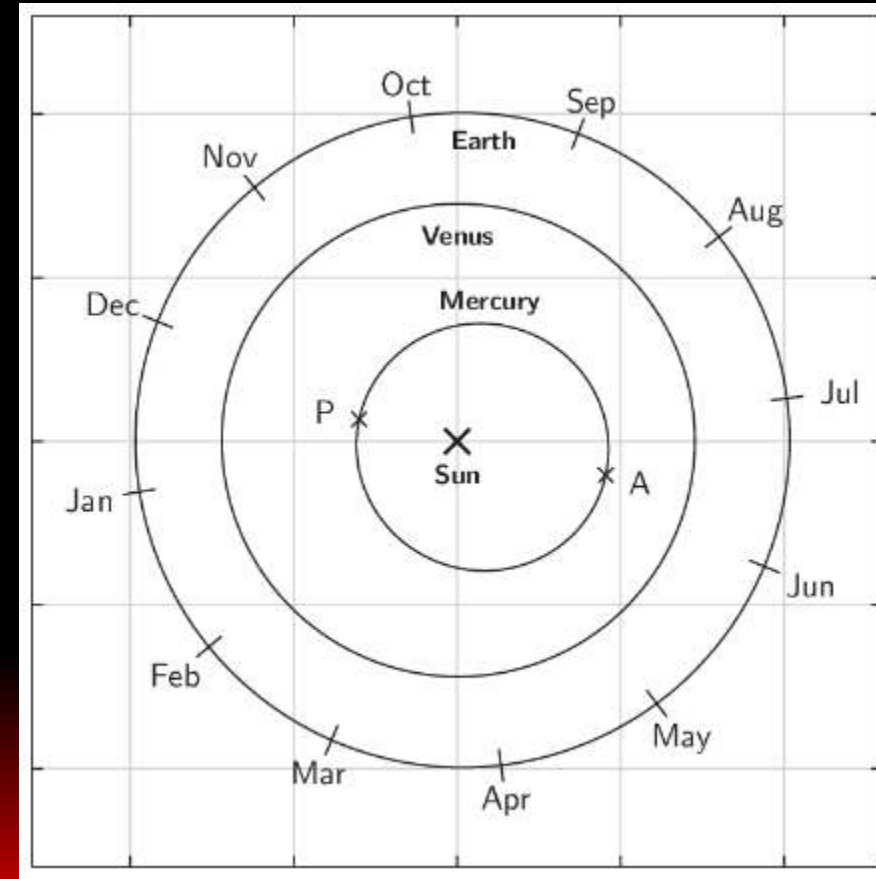
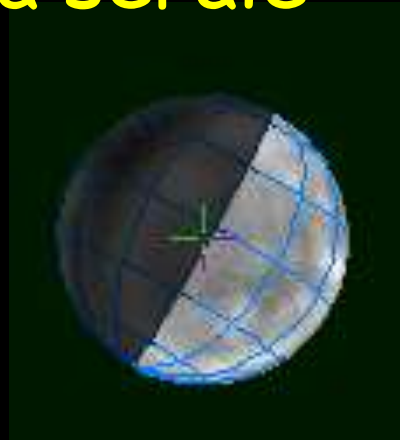
Visibilità dei pianeti nel 2026

Mercurio

5-25 Febbraio ottima visibilità serale
max il 19

Giugno visibilità serale
max il 15

Ottobre a metà mese dopo il tramonto



Venere

Sarà visibile dopo il tramonto del sole da
Febbraio fino ad Ottobre

Il 12 giugno massima altezza
sull'orizzonte

Il 14/15 Agosto massima elongazione dal
Sole

18/22 settembre massima luminosità -4.2



Visibilità dei pianeti nel 2026

Marte sarà in opposizione il **19/febbraio/2027**
Giove sarà in opposizione il 10/gennaio
Saturno sarà in opposizione il 4/ottobre
Urano sarà in opposizione il 25/novembre
Nettuno sarà in opposizione il 26/settembre
Plutone sarà in opposizione il 27/luglio

Marte: periodo orbitale 687 giorni (terrestri) periodo sinodico 780 giorni (764-810)

Opposition Date	Constellation		Declination	Apparent Magnitude	Apparent Diameter (arcsecs)	View from Earth (North up)	% of Max. Size	Distance (AU)*	
								from Earth	from Sun
2012 March 3		Leo	+10°.2	-1.2	13".9		54	0.6745	1.6646
2014 April 8		Vir	-5°.1	-1.5	15".1		58	0.6219	1.6226
2016 May 22		Sco	-21°.6	-2.0	18".4		71	0.5101	1.5224
2018 July 27		Cap	-25°.4	-2.8	24".2		94	0.3862	1.4000
2020 October 13		Psc	+5°.5	-2.6	22".4		87	0.4181	1.4154
2022 December 8		Tau	+24°.9	-1.8	17".0		66	0.5492	1.5340
2025 January 16		Gem	+25°.1	-1.4	14".5		56	0.6435	1.6261
2027 February 19		Leo	+15°.2	-1.2	13".8		54	0.6780	1.6651

786

770

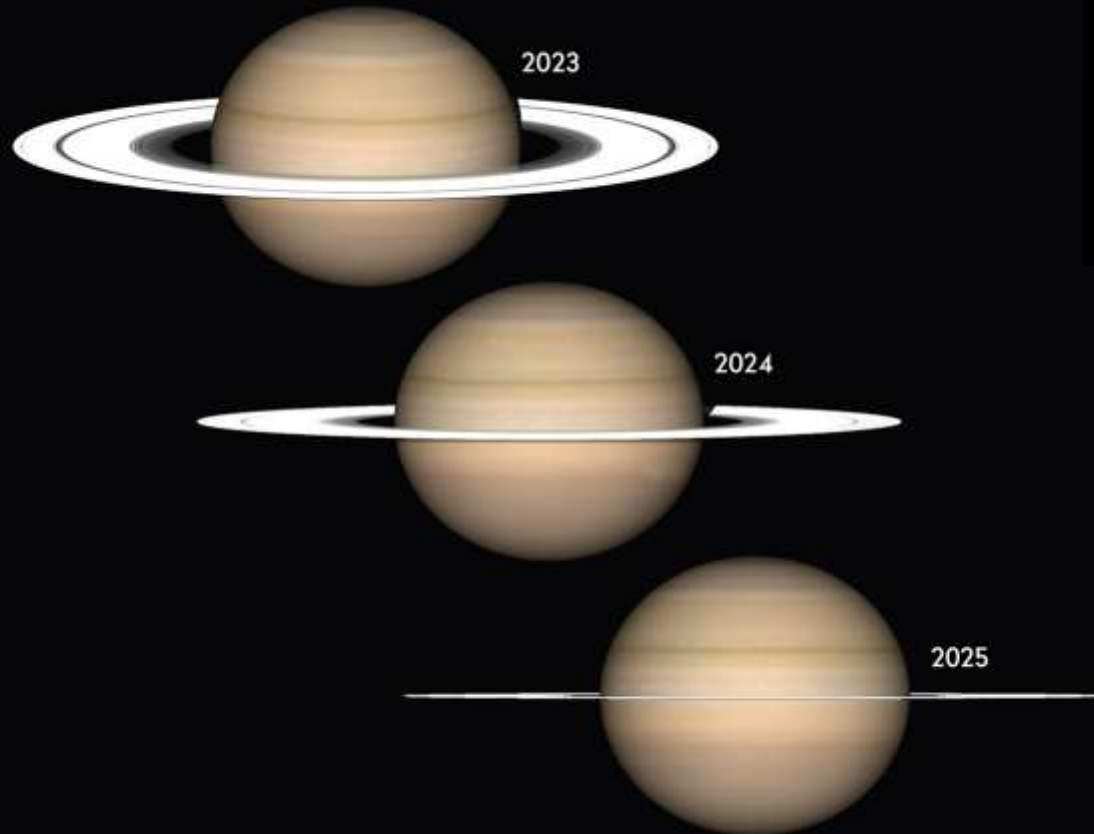
764

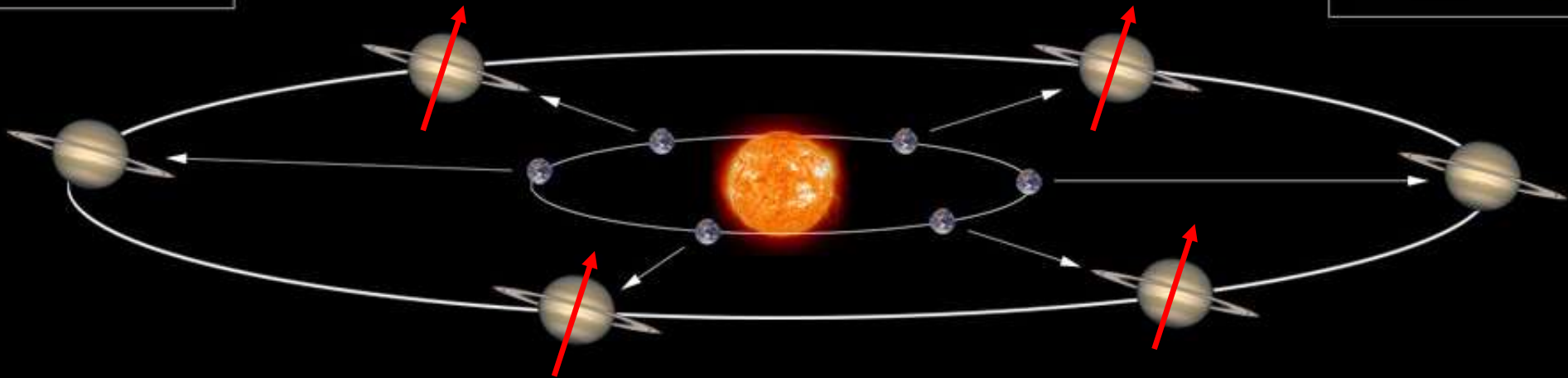
Giove: periodo orbitale 11,8 anni
periodo sinodico 399 giorni

Opposizione il 10 gennaio 2026

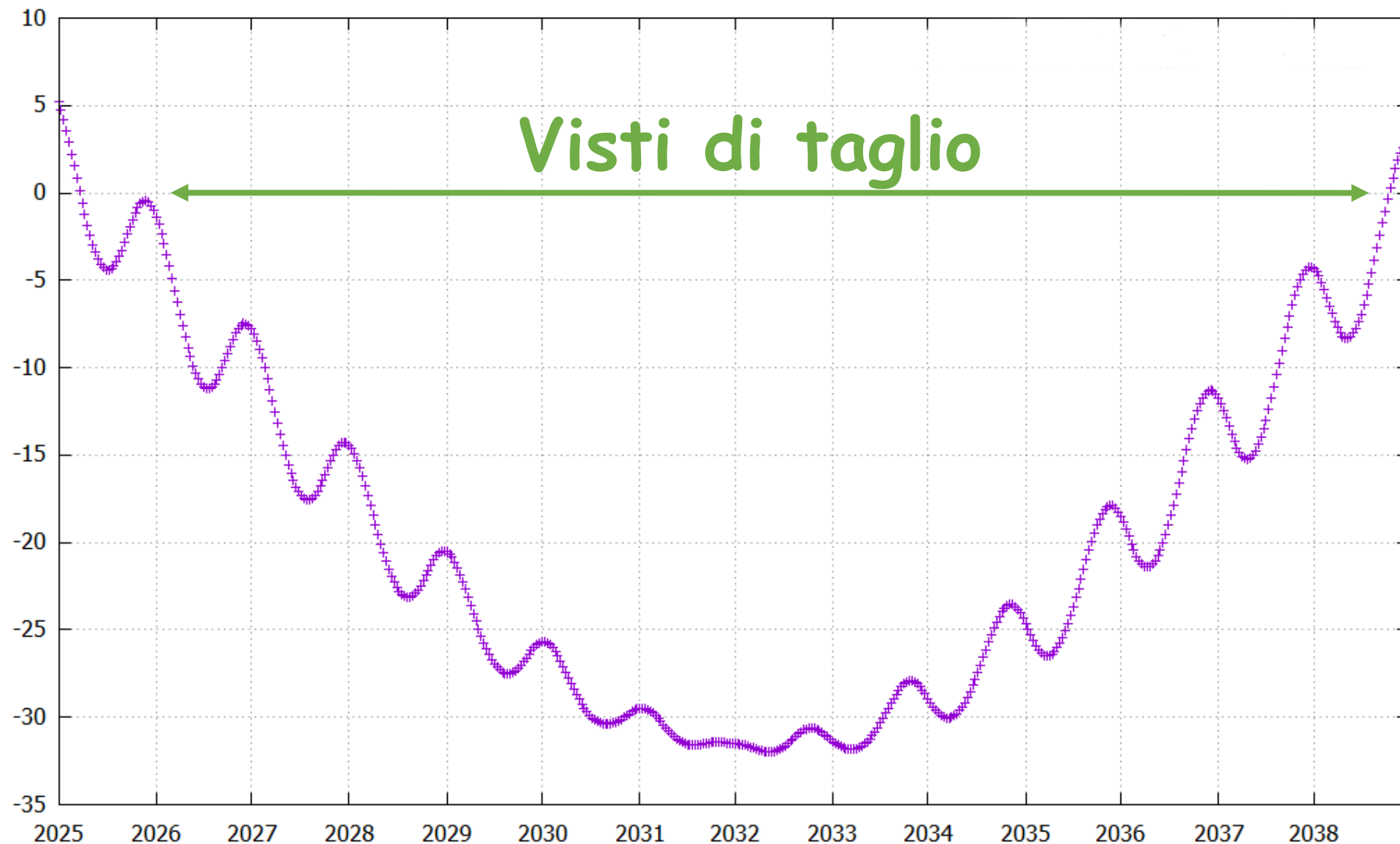
Apparition Period	Opposition Circumstances										Superior Conjunction	
	Opposition Date	Constellation	Declination	Apparent Magnitude	Diameter (arcsecs)		Tilt	View from Earth (North up)	Distance (AU)*			
					Equatorial	Polar			from Earth	from Sun		
2025/26	2026 Jan 10	♊	Gem	+22°.2	-2.7	46".6	43".6	+1°.4		4.2317	5.2151	2026 Jul 29
2026/27	2027 Feb 11	♌	Leo	+15°.1	-2.5	45".2	42".3	-0°.4		4.3611	5.3478	2027 Aug 31
2027/28	2028 Mar 12	♌	Leo	+4°.3	-2.5	44".4	41".5	-2°.0		4.4405	5.4337	2028 Sep 30
2028/29	2029 Apr 12	♍	Vir	-7°.3	-2.5	44".3	41".4	-3°.1		4.4491	5.4512	2029 Oct 30

**Saturno: periodo orbitale 29,45 anni
periodo sinodico 378 giorni**





Visibilità degli anelli di Saturno periodo 2025-2038





Apparition Period	Opposition Circumstances											Superior Conjunction
	Opposition Date	Constellation		Declination	Apparent Magnitude	Diameter (arcsecs)		Ring Tilt	View from Earth (North up)	Distance (AU)*		
						Globe	Ring			from Earth	from Sun	
2023/24	2023 Aug 27		Aqr	-11°.7	+0.3	19".0	43".0	+9°.0		8.7629	9.7729	2024 Feb 28
2024/25	2024 Sep 8		Aqr	-7°.5	+0.4	19".2	43".5	+3°.7		8.6580	9.6647	2025 Mar 12
2025/26	2025 Sep 21		Psc	-2°.9	+0.5	19".4	43".9	-1°.8		8.5467	9.5498	2026 Mar 25
2026/27	2026 Oct 4		Cet	+1°.9	+0.5	19".7	44".6	-7°.4		8.4342	9.4336	2027 Apr 7
2027/28	2027 Oct 18		Psc	+6°.8	+0.3	20".0	45".3	-12°.8		8.3260	9.3213	2028 Apr 20

Cometa Lemmon C/2025 A6

Ci ha fatto compagnia fra Novembre e Dicembre 2025

Comete ☹️



Comet C/2025 A6 (Lemmon)
Oct 24, 2025, 18:50 UTC,
Canon 700D + Samyang 135 mm F/2; 30x14 s
A. Carbognani, INAF-OAS

Cometa 3I Atlas

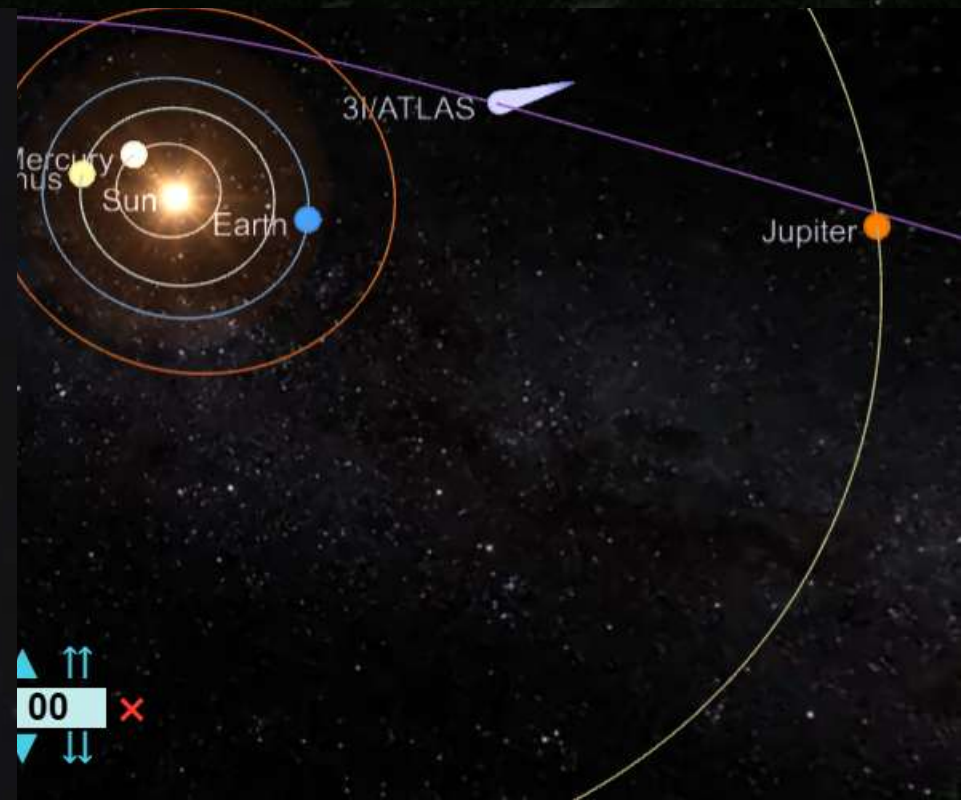
Cometa di origine interstellare

Perielio 29 ottobre 2025

Velocità di ingresso nel sistema solare 58 Km/s

Massima 68 Km/s

Velocità di fuga dal sistema solare 42 Km/s



Cometa 24P / Schaumasse

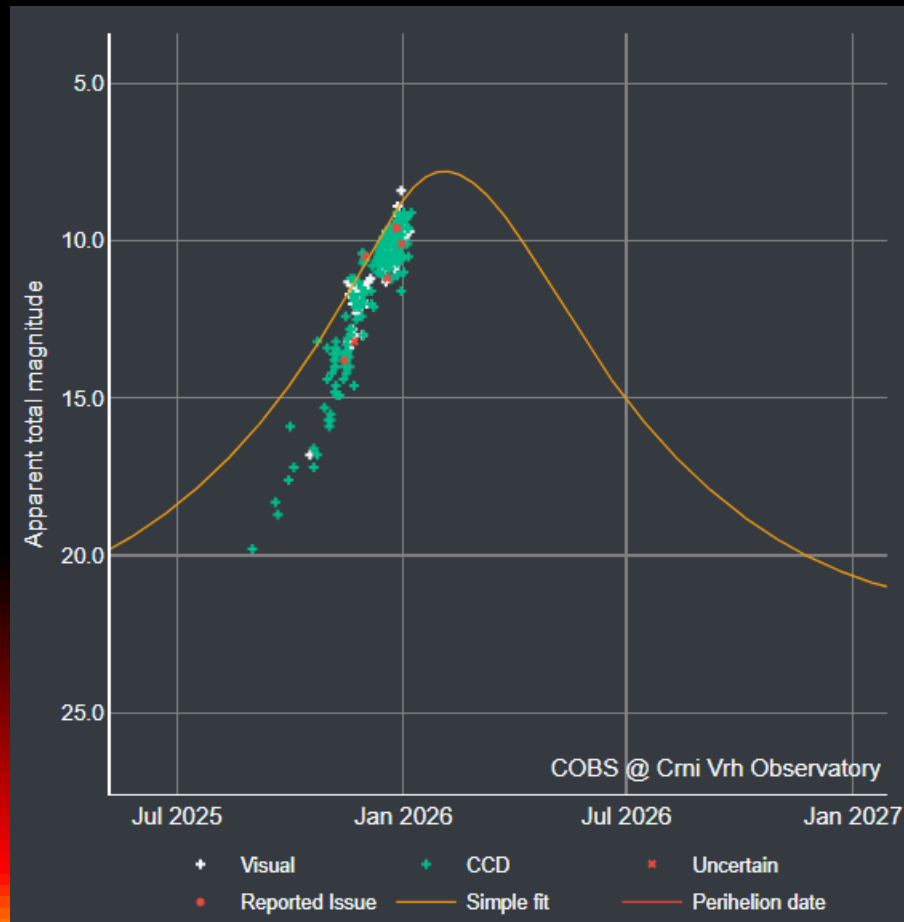
• **Perielio:** 8 gennaio 2026

Minima distanza dalla Terra 4 gennaio 2026

Miglior visibilità da: entrambi gli emisferi

Raggiunge la mag 8 a fine 2025 ed inizio 2026

rendendosi osservabile prima dell'alba con buoni binocoli o telescopi



Comete ☹️



Sciame meteorici

Sciame	Periodo	Max	ZHR	Luna
Quadrantidi	28/dic – 12/gen	3 gen	80	LP
Eta-Aquaridi	19/apr – 28/mag	6 mag	50	LP+5
Perseidi	17/lug – 24/ago	12 ago	100	LN
Orionidi	2/ott – 7/nov	21 ott	20	PQ+3
Geminidi	4/dic – 20/dic	14 dic	150	PQ-3

Per restare informati, tutti i mesi
"il cielo del mese"



Canale youtube www.youtube.com/@ominodellestelle

Grazie per l'attenzione

Un sereno 2026 a tutti !!!!!!!