



# Visibility charts from European Southern Observatory, La Silla

## 1 Epochs

- CHART 1: 2024-12-09

## 2 Cuts applied to the selection

Quantity	Condition	Description	Units
Alt	> 30	Maximum altitude	deg
$\widehat{SEO}$	> 30	Solar elongation	deg
$\widehat{MEO}$	> 5	Lunar elongation	deg
$m_V$	n.a.	Apparent magnitude	mag
$\alpha$	n.a.	Phase angle	deg
$\phi$	n.a.	Apparent diameter	arcsec
$\mathcal{D}$	> 0	Minimum duration of visibility	min

Visibility computed between civil twilights.

### 3 Meaning of displayed quantities

Quantity	Description	Units
Target	Target designation	–
$m_V$	Apparent magnitude	mag
$\phi$	Apparent diameter	arcsec
$\mathcal{D}$	Duration of visibility window	h:m
Alt	Altitude	deg
Az.	Azimuth	deg
RA	Right Ascension	h:m:s
DEC	Declination	d:m:s
Rate	Apparent non-sidereal motion	arcsec/h
$\lambda_G$	Galactic longitude	deg
$\beta_G$	Galactic latitude	deg
$r$	Range to observer	au
$\Delta$	Heliocentric distance	au
$\alpha$	Solar phase angle	deg
$\widehat{\text{SEO}}$	Solar elongation	deg
$\widehat{\text{MEO}}$	Moon elongation	deg

For each target, the values are reported at the time of the highest altitude.

### Credits

**ViSiON** (**V**isibility **S**ervice for **O**bserving **N**ights) has been developed by Benoît Carry and Jérôme Berthier at IMCCE.

If ViSiON was helpful for your research, please add the following in your acknowledgments: “This publication makes use of the Virtual Observatory Web service ViSiON, developed by IMCCE and OCA.”

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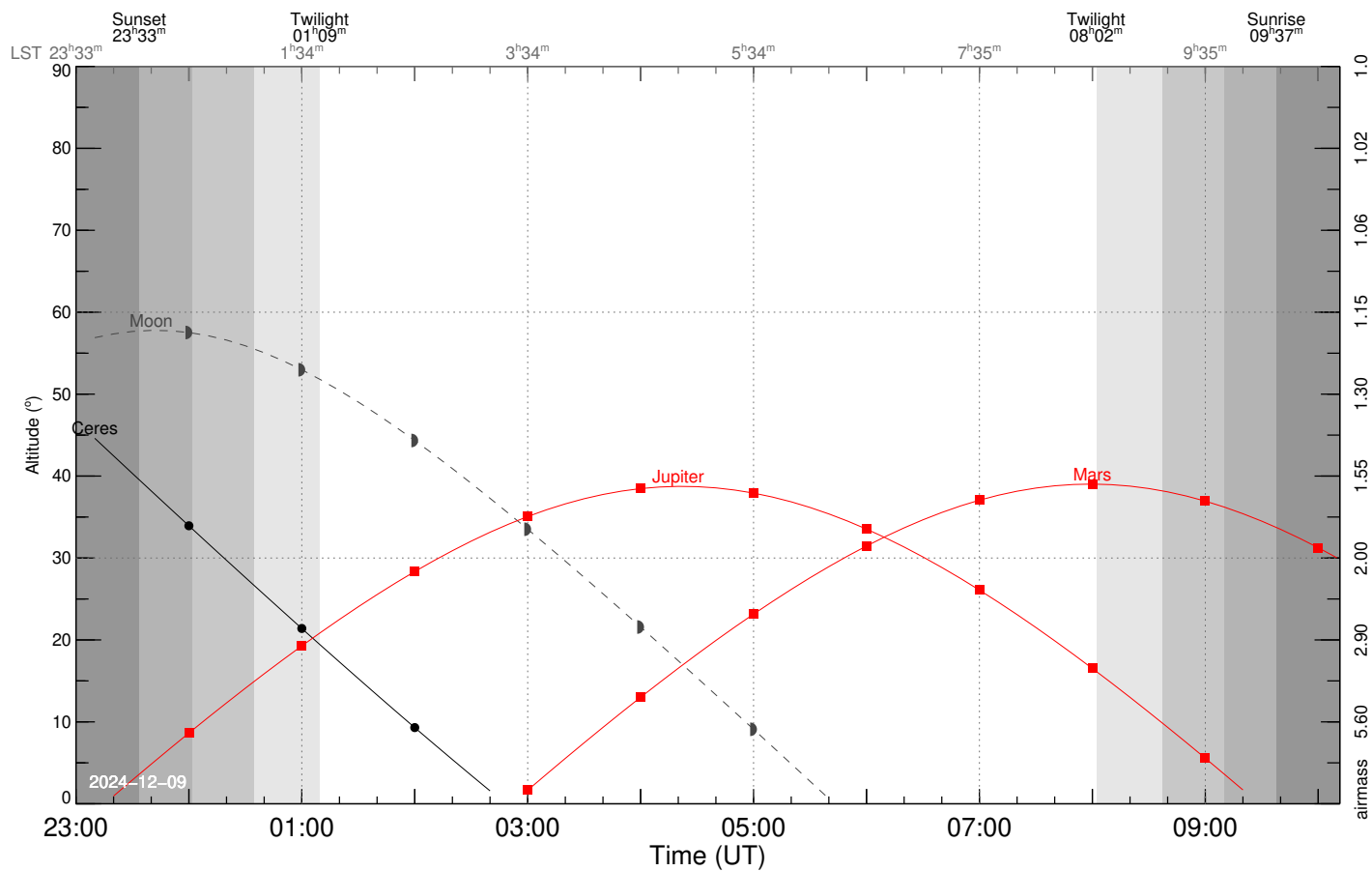
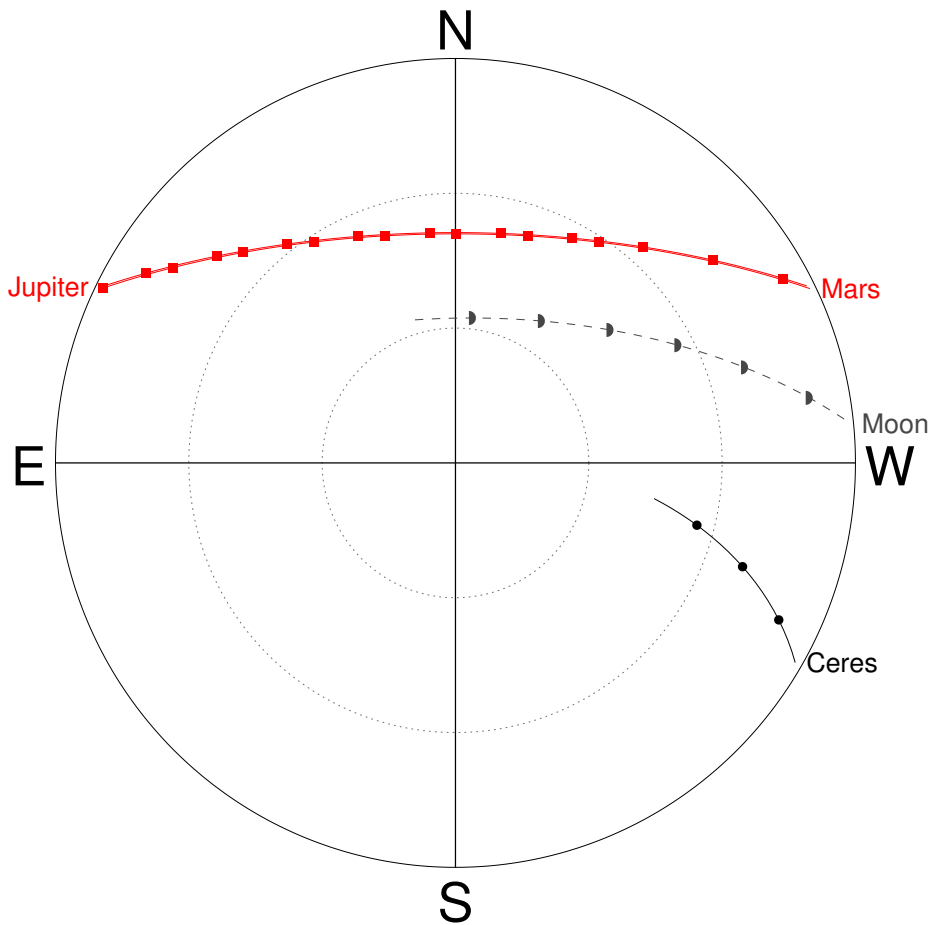


Figure 1: Airmass charts for epoch 2024-12-09












Target	$m_V$	$\phi$	$\mathcal{D}$	Alt	Az.	RA	DEC	Rate	$\lambda_G$	$\beta_G$	$r$	$\Delta$	$\alpha$	$\widehat{SEO}$	$\widehat{MEO}$	Links
Moon	-10.51	1972	$9^h 00^m$	57	348	$0^h 20^m 50^s$	$3^\circ 04' 45''$	1493	289	-58	0.002	0.986	71.9	107.9	0.0	 - 
1 Ceres	9.26	0.32	$10^m$	31	254	$20^h 17^m 54^s$	$-26^\circ 51' 33''$	52	376	-30	3.61	2.97	13.1	43.0	65.7	  - 
Jupiter	-2.81	47.12	$4^h 19^m$	38	0	$4^h 57^m 43^s$	$21^\circ 59' 47''$	20	360	-12	4.09	5.08	0.5	177.2	67.8	 - 
Mars	-0.71	12.48	$3^h 20^m$	39	359	$8^h 35^m 35^s$	$21^\circ 43' 10''$	11	383	32	0.75	1.59	27.1	132.6	115.6	 - 

Table 1: Ephemerides summary for epoch 2024-12-09, values are reported at the time of the highest altitude.