

# **The Atlanta Astronomy Club**

## **Charlie Elliot Chapter**

### **Observing 101**

# Observing 101 - November

- Astro Events
- Featured Objects
- Target List

# Astro Events

## Tonight:

- Sunset at 6:39 PM
- Moon sets at 6:53 PM
- Mercury sets at 7:13 PM
- Mars sets at 7:51 PM
- Jupiter sets at 4:05 AM
- Uranus sets at 4:21 AM
- Neptune sets at 12:54 AM

# Astro Events

Tomorrow morning:

- Great red spot transit 3:25 AM
- Saturn rises at 4:22 AM
- Venus rises at 5:55 AM

# Our Solar System the week of November 6-13

- Mercury - Hidden in the glare of sunset
- Venus - East dawn sky below Spica / Saturn
- Mars - Disappears in the west at sunset
- Jupiter - South / SE at dusk Pisces / Aquarius
- Saturn - East / Southeast early dawn - Virgo
- Uranus - SE at dusk - 3 degrees east of Jupiter
- Neptune – South at sunset - Capricornus

# Astro Events

## This months headlines:

- Saturn Returns in the morning sky
- Comet 103P Hartley soars the Winter Triangle
- Asteroid Hebe sails on Cetus the Whale

# Astro Events

## This month's events ...

- Nov 6 – New moon
- Nov 7 – Io transits Jupiter 9:38PM
- Nov 9 - Mars 4° North of Antares 11:00PM
- Nov 16 – Jupiter occults Io/Europa 12:05AM
- Nov 17 – Leonid meteor shower peaks
- Nov 20 - Mercury 1.7° South of Mars
- Nov 21 - Full moon
- Nov 28 - Io transits Jupiter 7:47PM

# Astro Events

## Next month's events ...

- Dec 1 – Mercury at Greatest East Elongation
- Dec 2 – Moon 6° South of Venus
- Dec 4 - Next CE Meeting



# Dusk, Nov 7 and 8

*20 minutes after sunset*



Moon  
Nov 8

Use binoculars

Mars

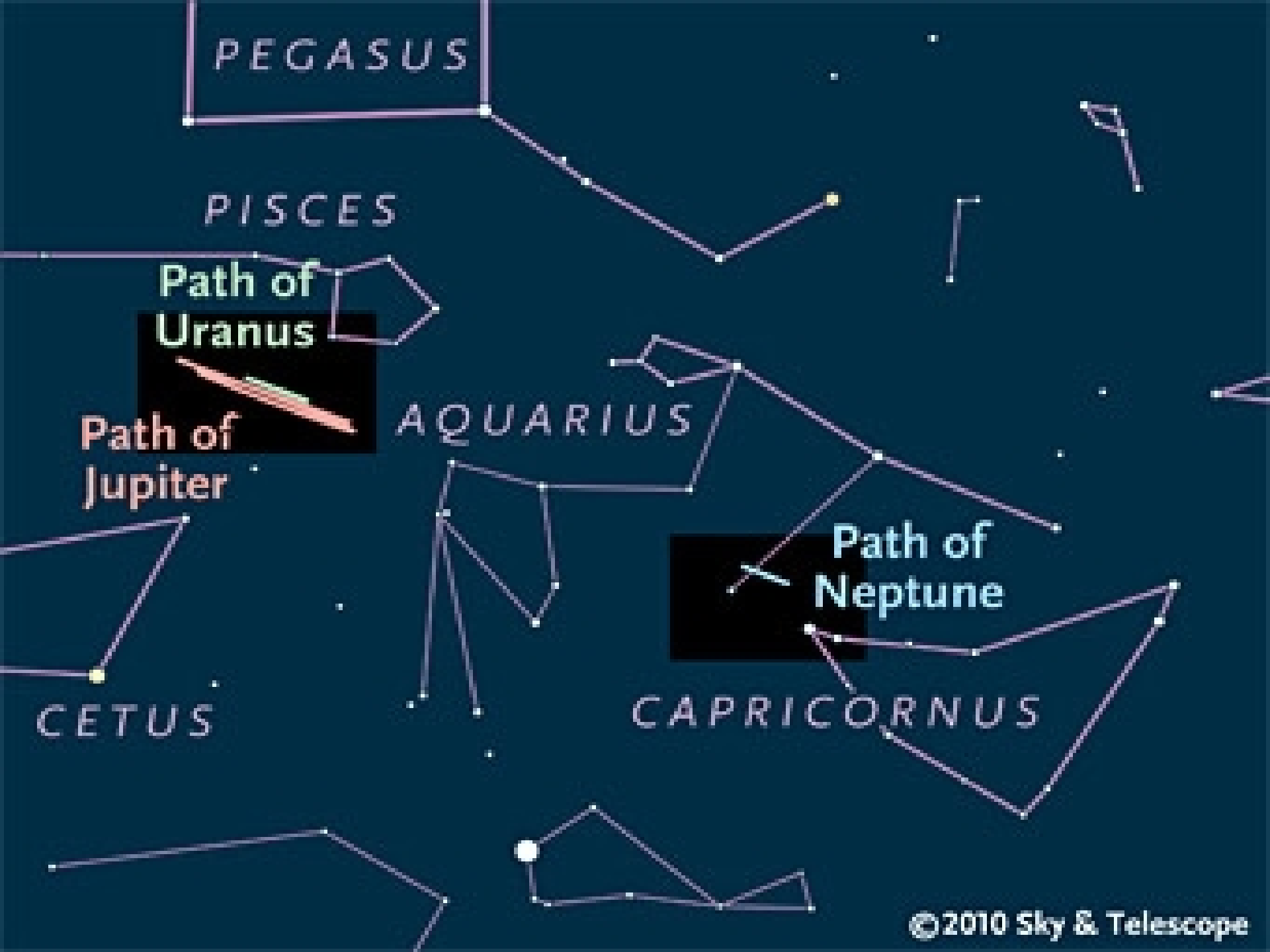
Antares

Moon  
Nov 7

Mercury

**Looking Southwest**





PEGASUS

PISCES

Path of  
Uranus

Path of  
Jupiter

AQUARIUS

Path of  
Neptune

CETUS

CAPRICORNUS



CRATER

Arcturus ●

● Saturn

BOÖTES

● VIRGO

CORVUS ●

● Spica

Venus ✨

┌───┐  
5°

**Mid-November, 1 hour before sunrise**  
**Looking east-southeast**

URSA MAJOR

HYDRA

**Radiant**

Regulus

LEO

Alphard

Denebola

10°

**November 17, 3 A.M.  
Looking east**



SAGITTARIUS

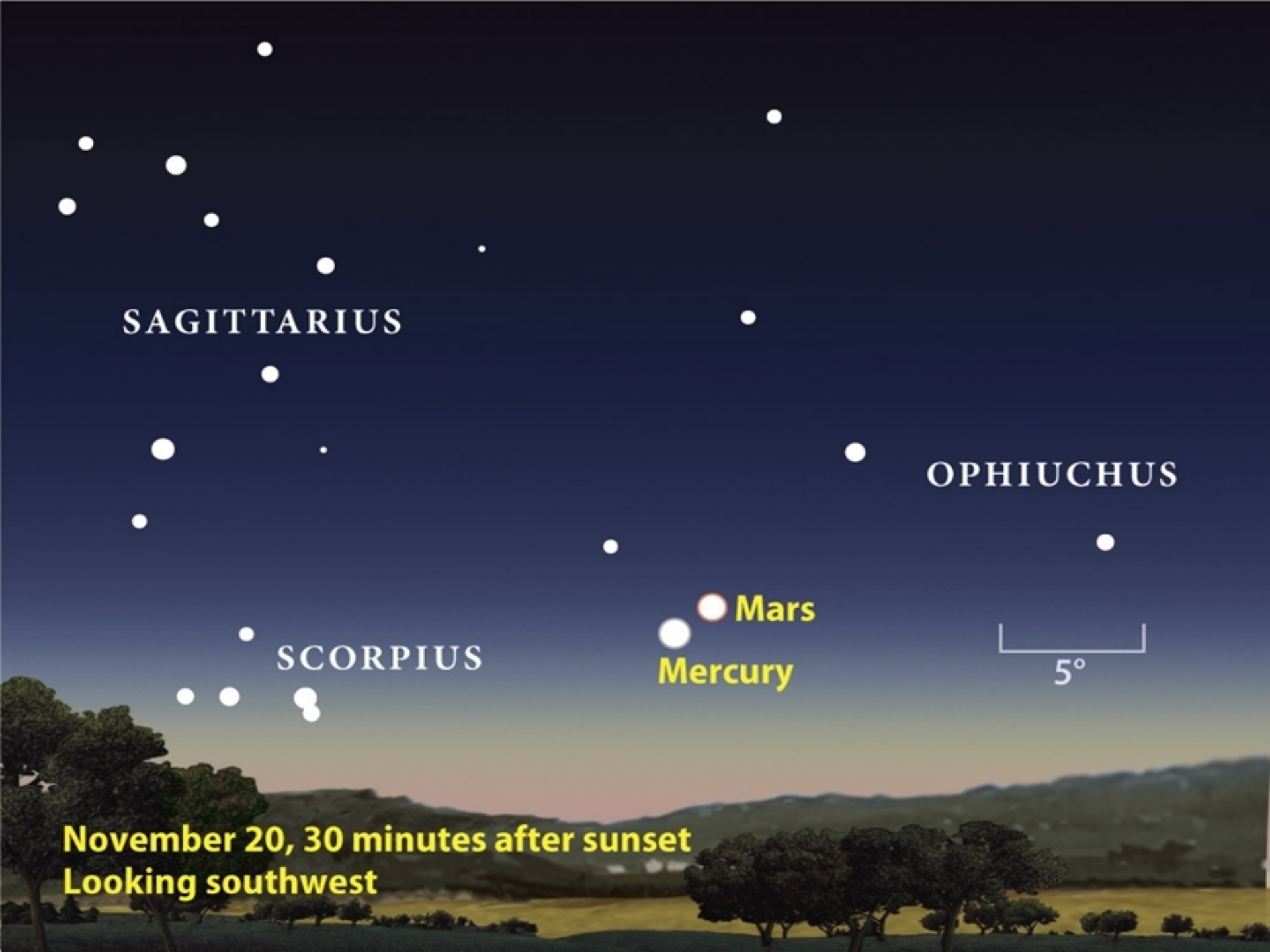
OPHIUCHUS

SCORPIUS

Mars  
Mercury

5°

November 20, 30 minutes after sunset  
Looking southwest





CANIS MINOR

N

Nov 1

$\beta$

Procyon

6

E

Path of Comet  
103P/Hartley

$\delta$

11

MONOCEROS

16

$\alpha$

21

26

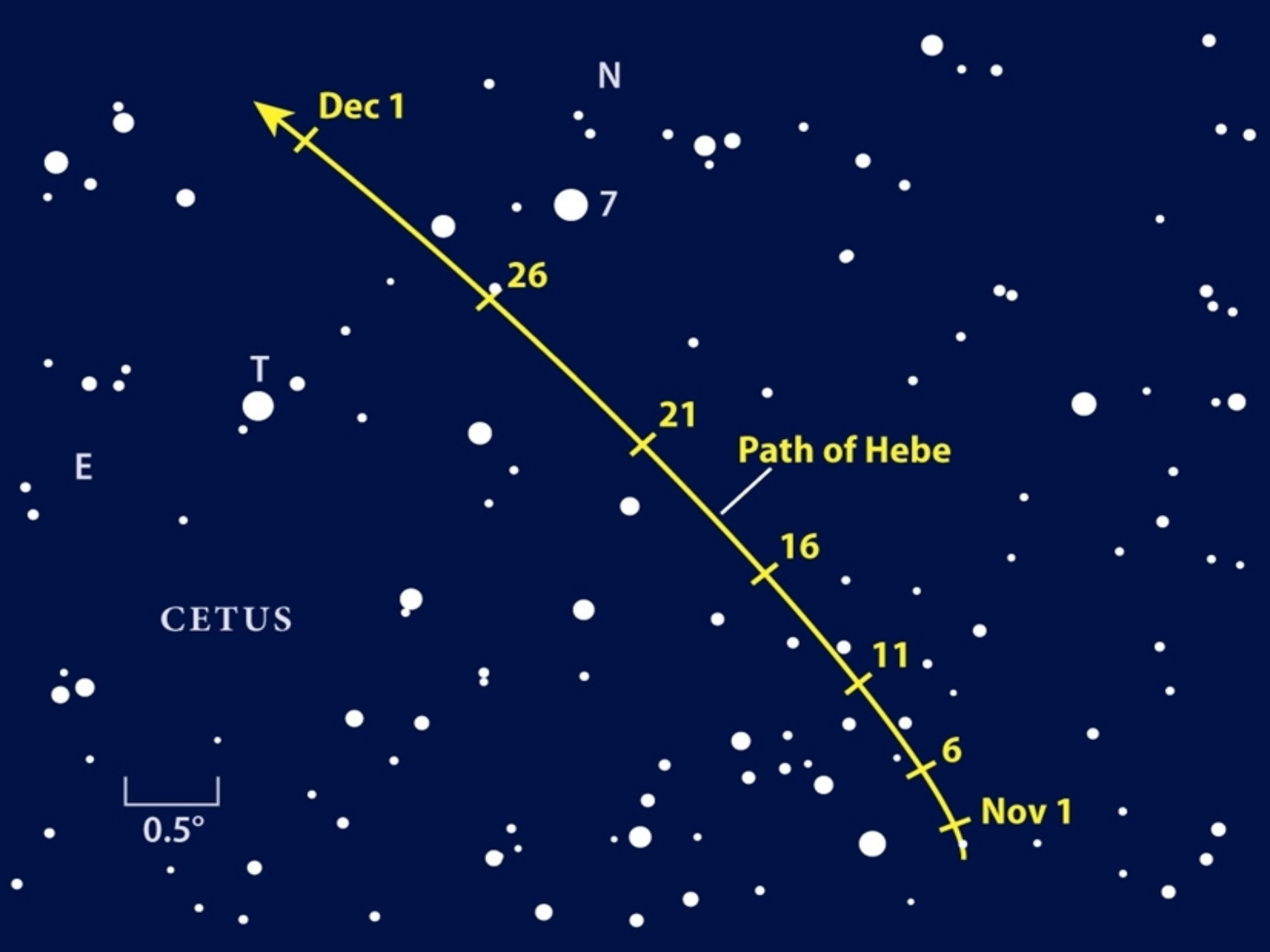
Dec 1

5°

Sirius

CANIS MAJOR

$\beta$



BOÖTES

Arcturus ●

VIRGO

● Saturn

CORVUS

● Spica

Venus



Moon

┌──────────┐  
10°

December 2, 1 hour before sunrise  
Looking southeast



# Target List

## Small Telescopes & Binoculars

Object	Type	Mag	Size	Constellation
M31	Galaxy	4.3	189'	Andromeda
M33	Galaxy	6.2	68'	Triangulum
NGC253	Galaxy	7.1	26'	Sculptor
M2	Globular Cluster	7.5	13'	Aquarius
M15	Globular Cluster	7.5	12'	Pegasus
M30	Globular Cluster	8.5	11'	Capricornus
M34	Open Cluster	6.0	35'	Perseus
NGC869/884	Open Cluster	5.3	29'	Perseus
M45	Open Cluster	1.6	120'	Taurus
M27	Nebula	7.5	15.2'	Vulpecula
M57	Nebula	9.5	2.5'	Cygnus

# Target List

## Intermediate / Advanced

Object	Type	Mag	Size	Constellation
NGC6946	Galaxy	8.8	11'	Cygnus
NGC7331	Galaxy	9.5	11'	Pegasus
M110	Galaxy	8.9	19'	Sculptor
NGC6934	Globular Cluster	8.7	6'	Delphinus
NGC7006	Globular Cluster	10.4	3'	Pegasus
NGC6866	Open Cluster	7.6	6'	Cygnus
NGC6882	Open Cluster	8.1	10'	Vulpecula
NGC6885	Open Cluster	8.1	7'	Vulpecula
NGC6910	Open Cluster	7.4	7'	Cygnus
NGC6543	Cat's Eye Nebula	8.3	0.4'	Draco
NGC7662	Blue Snowball	8.3	0.5'	Andromeda

# Web Links

- Astronomy Magazine  
[www.astronomy.com](http://www.astronomy.com)
- Sky & Telescope  
[www.skyandtelescope.com](http://www.skyandtelescope.com)

**Clear Skies!**