

# May Sky 2024

at night

Notes from the  
Smoky Mountain Astronomical Society  
aka the SMAS



# Remember the Zodiac?

Aries

Taurus

Gemini

Cancer

Leo

Virgo

Libra

Scorpio

(Ophiuchus)

Sagittarius

Capricorn

Aquarius

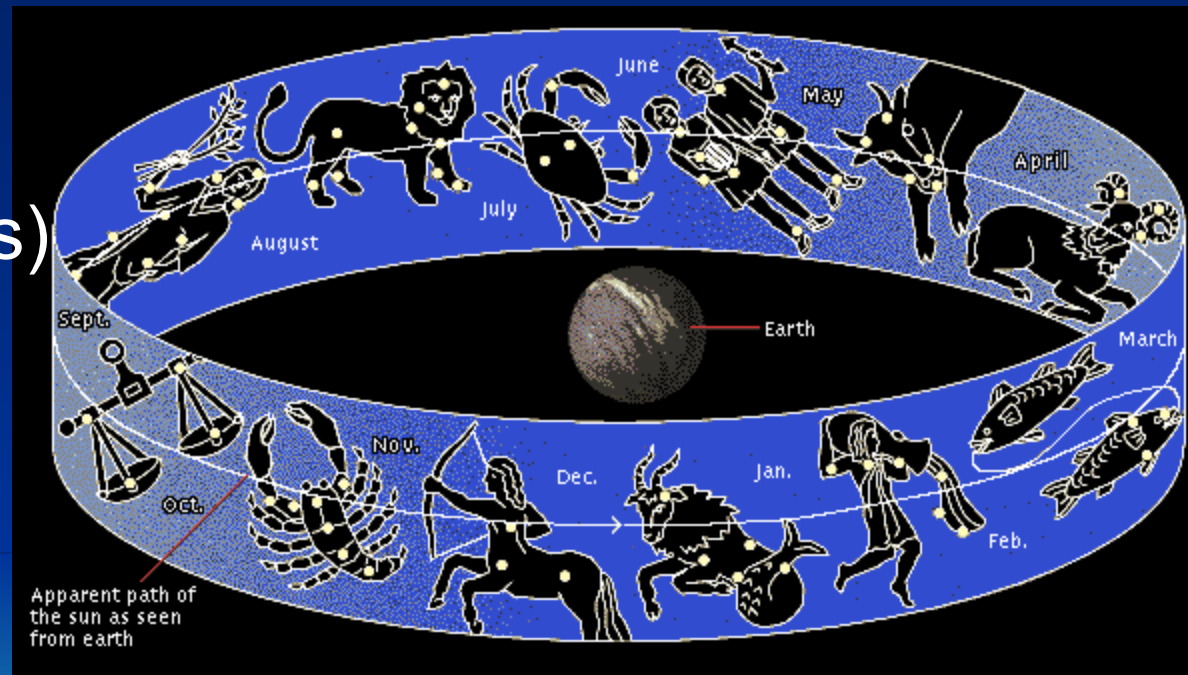
Pisces



# How Do We Remember the Zodiac?

The Ramble Twins Crab Liverish; Scaly Scorpions Are Good Water Fish.

Aries	Libra
Taurus	Scorpio
Gemini	(Ophiuchus)
Cancer	Sagittarius
Leo	Capricorn
Virgo	Aquarius
	Pisces



# Dates of the Zodiac?

The Ramble Twins Crab Liverish; Scaly Scorpions Are Good Water Fish.

♈ Aries (Ram): March 21–April 19

♉ Taurus (Bull): April 20–May 20

♊ Gemini (Twins): May 21–June 21

♋ Cancer (Crab): June 22–July 22

♌ Leo (Lion): July 23–August 22

♍ Virgo (Virgin): August 23–September 22

♎ Libra (Balance): September 23–October 23

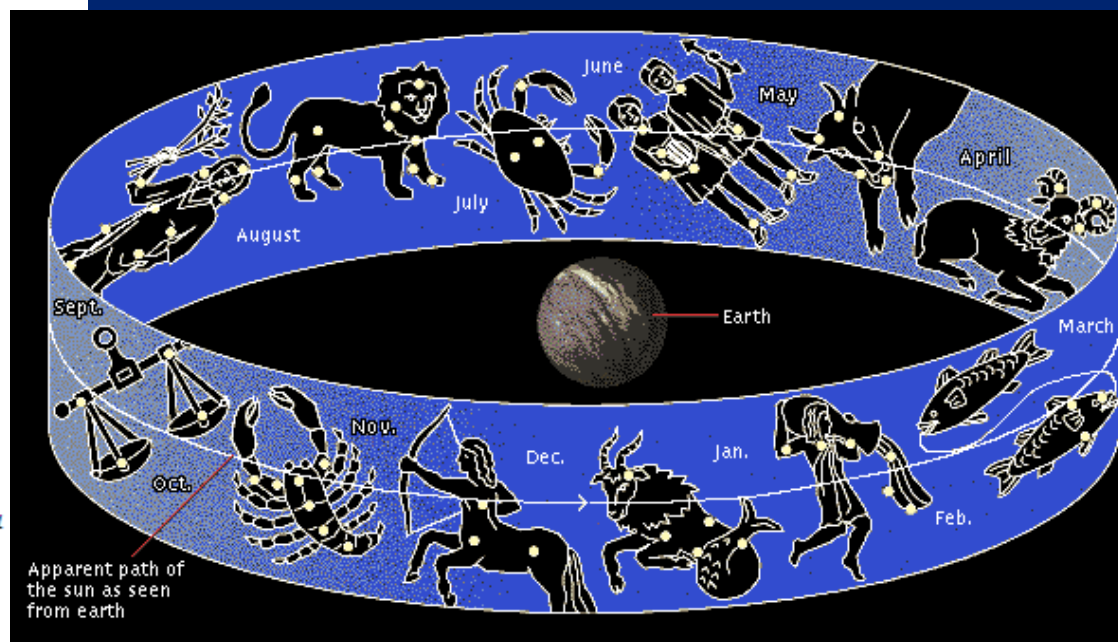
♏ Scorpius (Scorpion): October 24–November 21

♐ Sagittarius (Archer): November 22–December 21

♑ Capricornus (Goat): December 22–January 19


♒ Aquarius (Water Bearer): January 20–February 18


♓ Pisces (Fish): February 19–March 20





# May Sun is in Zodiac Where?


The Ramble Twins Crab Liverish; Scaly Scorpions Are Good Water Fish.


 Aries (Ram): March 21–April 19


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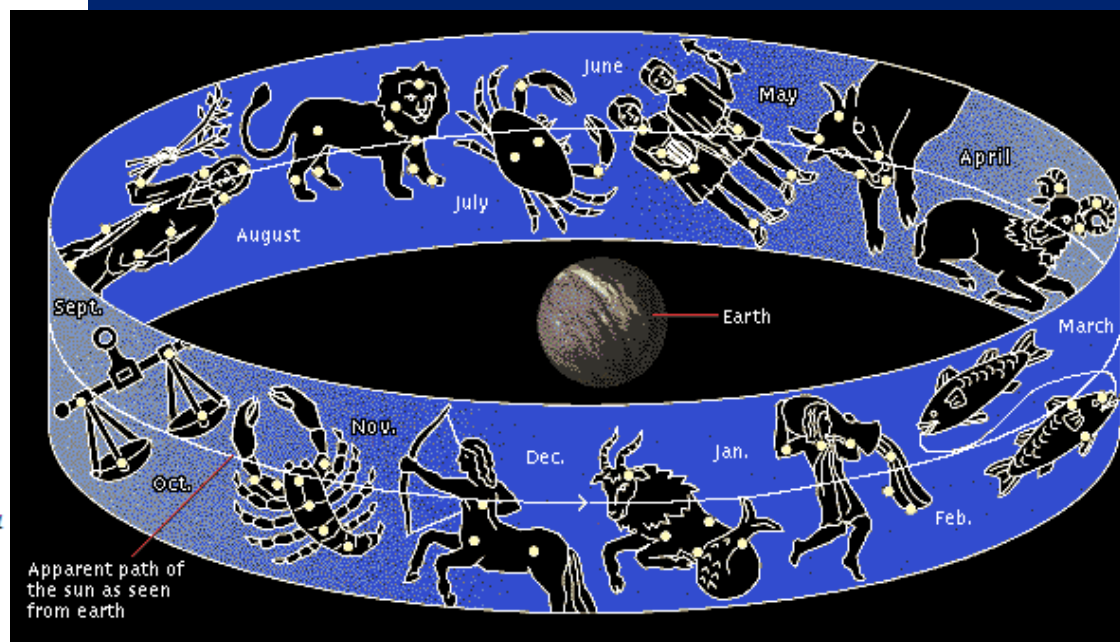
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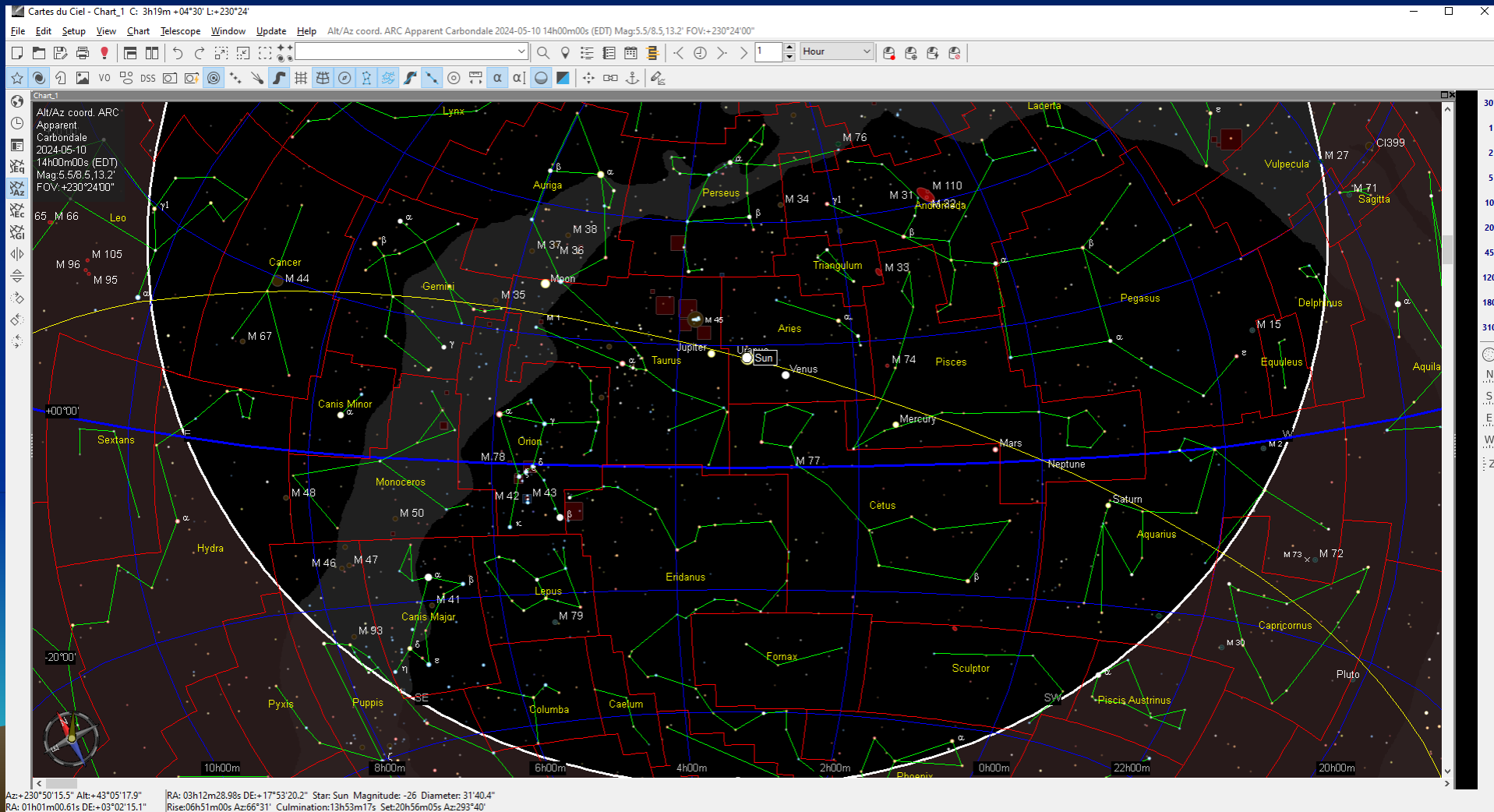
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 Pisces (Fish): February 19–March 20



# Sun is in Taurus? NO.

# The Ramble Twins Crab Liverish;Scaly Scorpions Are Good Water Fish.

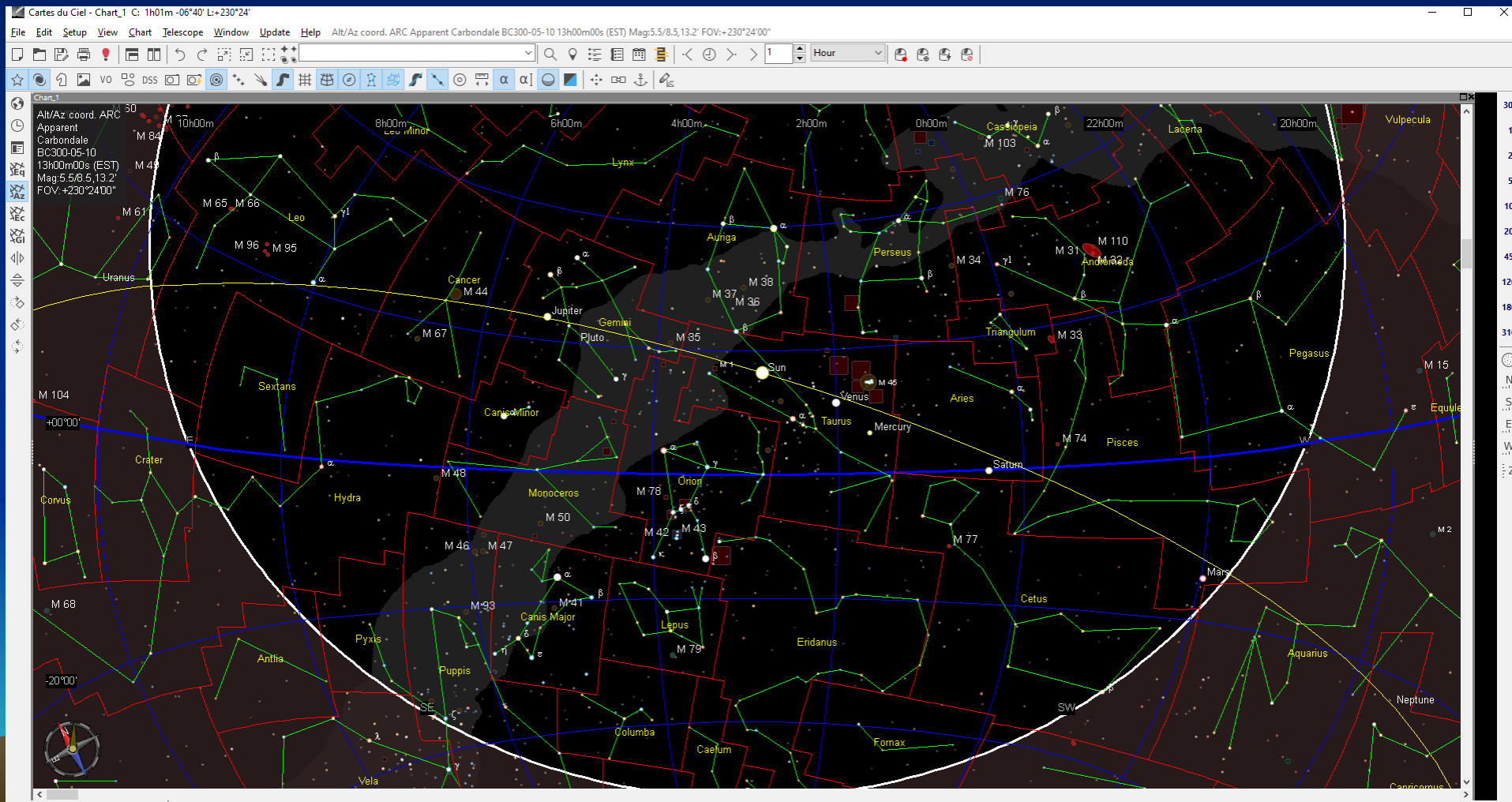




# 300 BCE Dates of the Zodiac!

## Sun is in Taurus

The Ramble Twins Crab Liverish;Scaly Scorpions Are Good Water Fish.



# Reflect Just How Bad Astrology Is.

Not only can Astrologers not predict the future  
they **CANNOT** predict the present!

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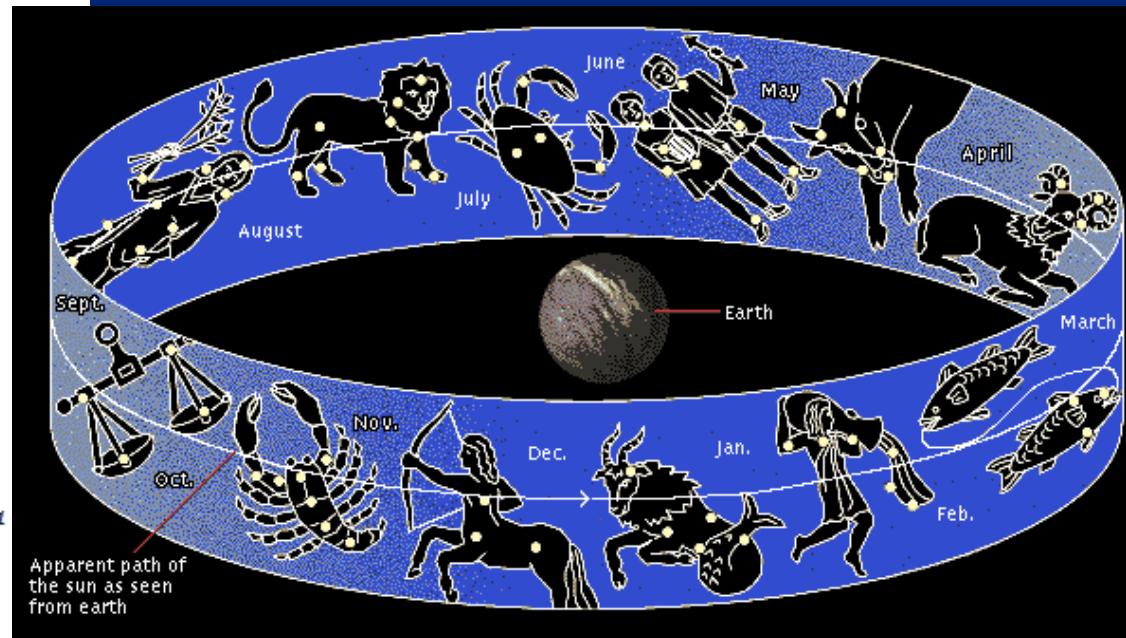
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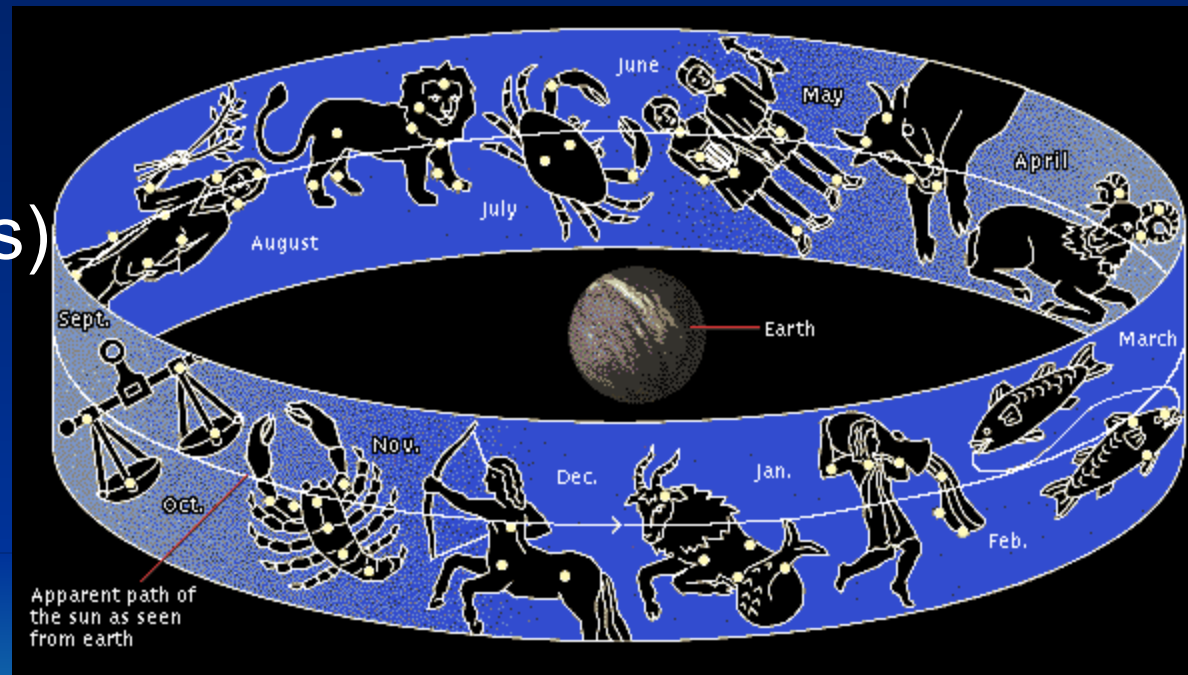




# Sun in Taurus, What is Night Sky? At Sunset? At Midnight?

The Ramble Twins Crab Liverish; Scaly Scorpions Are Good Water Fish.

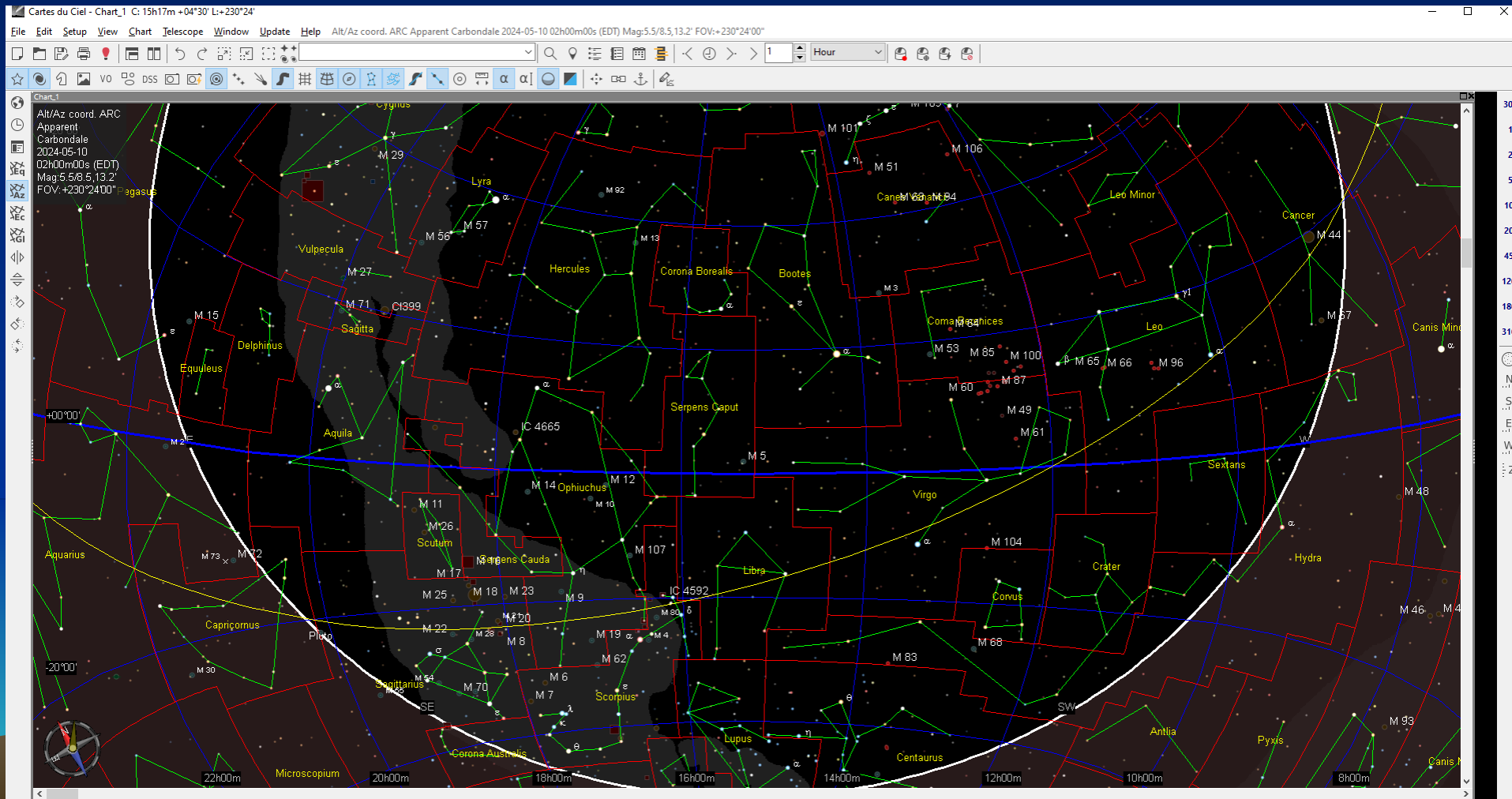
Aries	Libra
Taurus	Scorpio
Gemini	(Ophiuchus)
Cancer	Sagittarius
Leo	Capricorn
Virgo	Aquarius
	Pisces



# At Midnight (about 2 AM)

Libra is high in the sky.

Late Spring full moon way below the celestial equator.  
Note Corona Borealis overhead. Milk Way Rising.

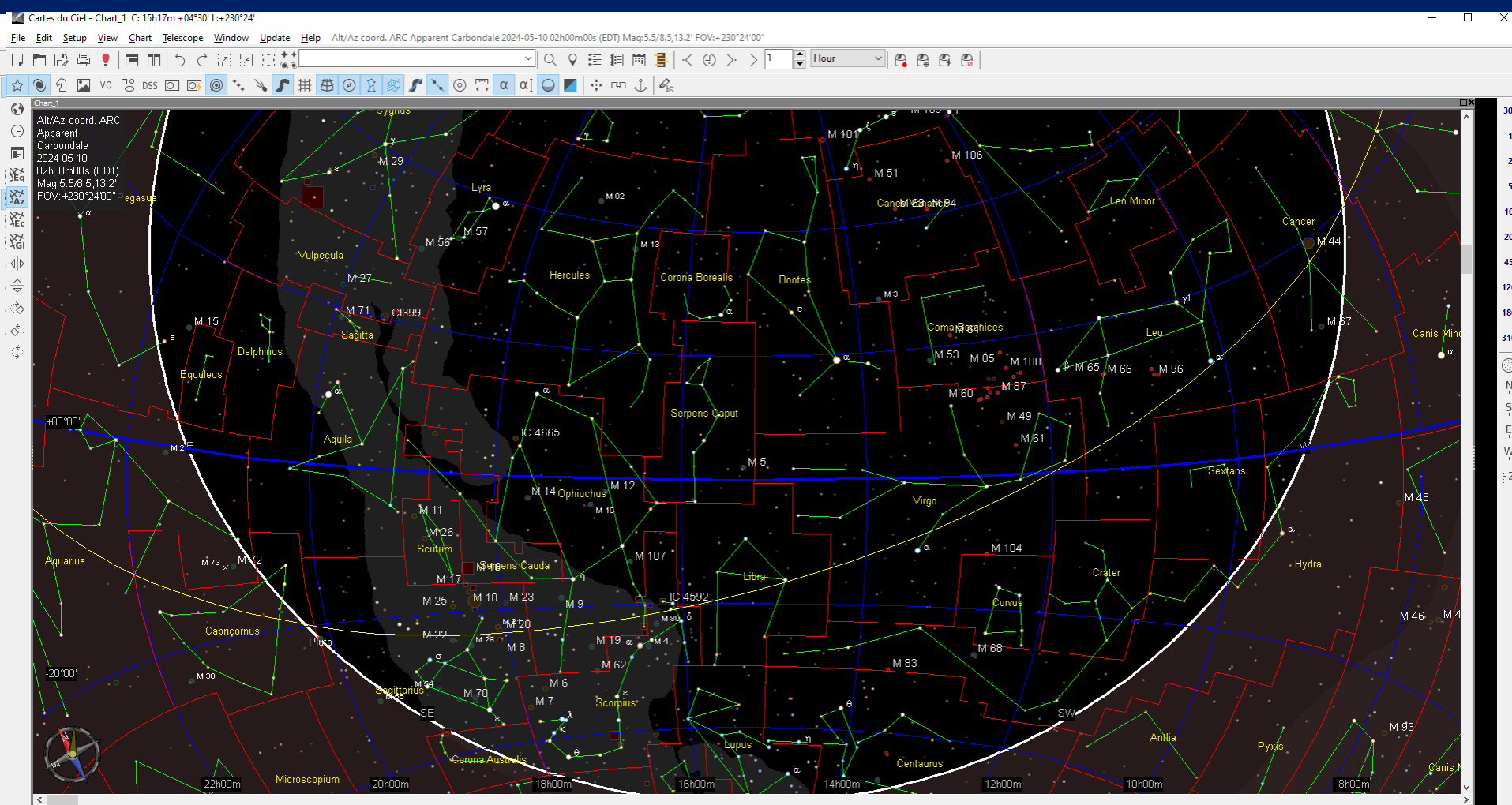




# Midnight at Corona Borealis.

# A predicted nova for 2024,

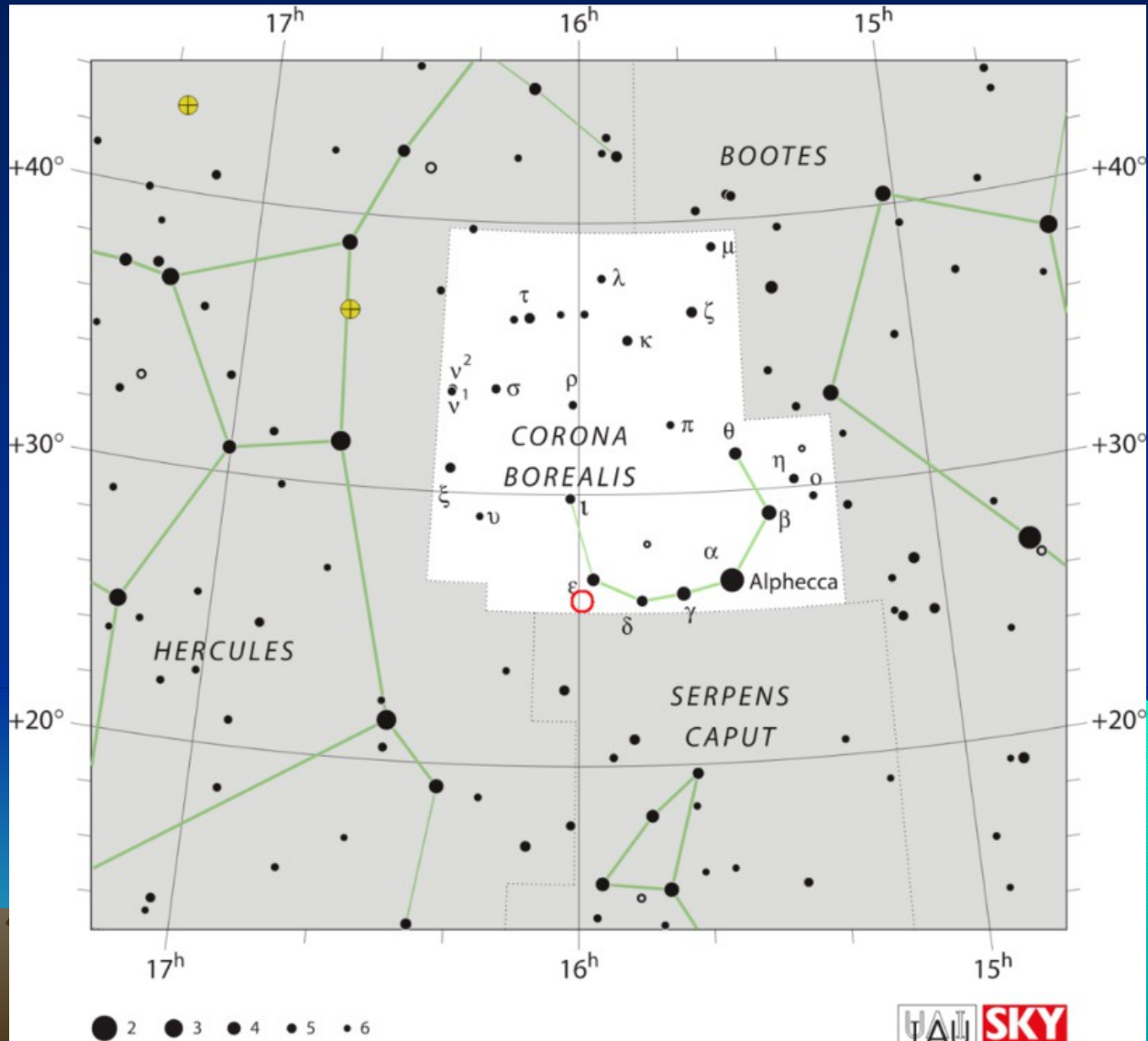
T CrB is a binary system, meaning a solar system with two stars



$\Delta Az: +197^{\circ}02'54.5''$  Alt:  $+65^{\circ}45'22.3''$   
pRA: 14h48m42.22s DE:  $+14^{\circ}19'07.9''$

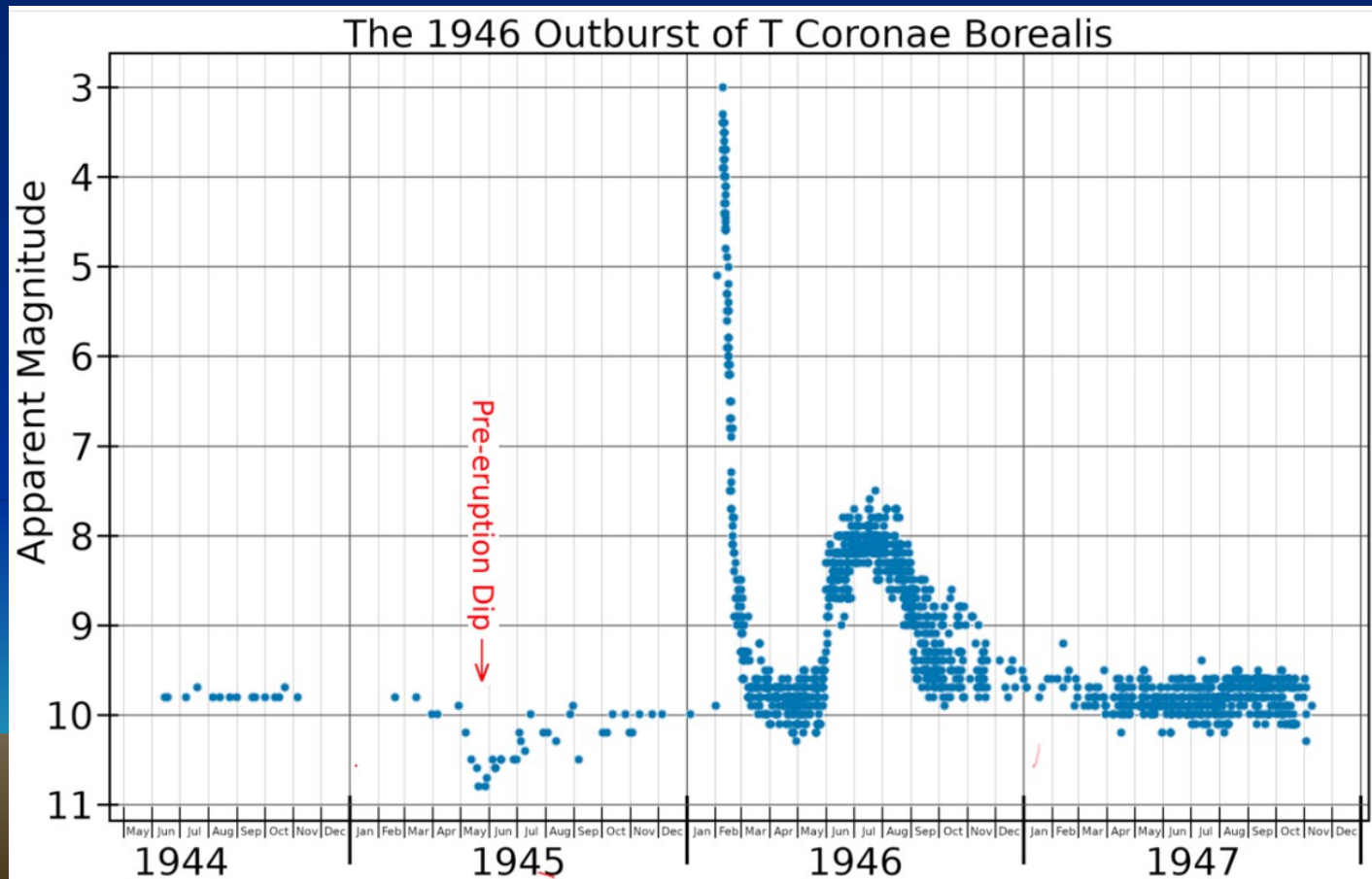
# Location of T CrB

From: [https://en.wikipedia.org/wiki/T\\_Coronae\\_Borealis](https://en.wikipedia.org/wiki/T_Coronae_Borealis)



# From Wikipedia

T Coronae Borealis (T CrB), nicknamed the Blaze star, is a recurrent nova in the constellation Corona Borealis.[11] It was first discovered in outburst in 1866 by John Birmingham,[12] although it had been observed earlier as a 10th magnitude star.[13] It may have been observed in 1217 and in 1787 as well.[14][15] It is expected to undergo an outburst again in 2024.





# From AAVSO.ORG

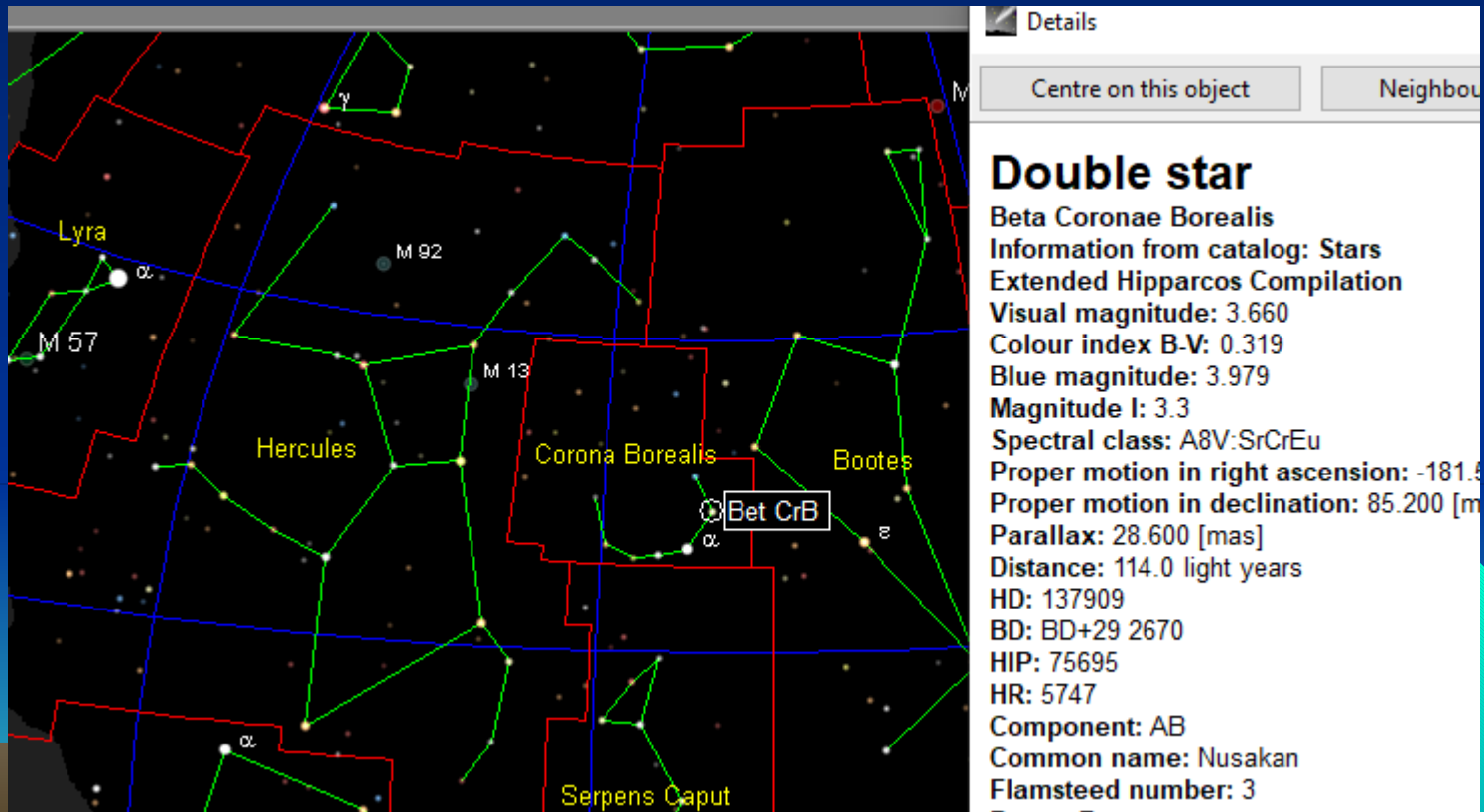
See: [aavso.org/news/t-crb-pre-eruption-dip](https://aavso.org/news/t-crb-pre-eruption-dip)



The screenshot shows a web browser window with the address bar displaying [aavso.org/news/t-crb-pre-eruption-dip](https://aavso.org/news/t-crb-pre-eruption-dip). The browser's tab bar includes several open tabs: "Mail - forrestericks...", "Maryville, TN 10-D...", "Maryville, TN Weat...", "National Forecast C...", "Astro", and "How To Use | Foll...". The AAVSO website header features the organization's logo on the left, a "Login" button with a right-pointing arrow on the right, and a "Who We Are" dropdown menu. Below the header, a breadcrumb trail reads "Home / News and Announcements". The main content area has a large title "Announcing T CrB pre-eruption dip" and a subtitle "Recurrent nova T CrB has just started its Pre-eruption Dip in March/April 2023, so the eruption should occur around 2024.4±0.3". The authors are listed as "B. E. Schaefer (Louisiana State Univ.), B. Kloppenborg (AAVSO), E. O. Waagen (AAVSO), and the AAVSO observers". The text body begins with "T Coronae Borealis (T CrB) is a famous recurrent nova with known eruptions in the years 1217, 1787, 1866, and 1946. Many workers have realized that the rise in brightness from its low state (1954.5 to 2015.0) to its high state (2015.0 to the present) is a precursor and harbinger for an upcoming eruption around 2025.5±1.3 or so (Munari et al. 2016; Schaefer 2023). A distinct and under-appreciated close-up harbinger is the unique and mysterious Pre-eruption Dip (Schaefer 2023). The Dip in 1945-1946 started around 1945.0 (1.1±0.3 years before the 1946 eruption), with the B-band magnitude fading from near 10.5 to 12.0 mag, while the V-band magnitude faded from around 9.8 to 12.3 mag. This fading ended abruptly with the nova eruption."

# From Cartes du Ciel

If T Coronae Borealis (T CrB), reaches third magnitude, it will be brighter than all but the alpha star in the crown. The second brightest star is magnitude 3.66. (Alpha CrB is magnitude 2.2)



# Night Sky in Stellarium

Free at: <https://stellarium.org/>



Date and Time										Julian Day			
Date and Time													
2024	-	5	-	10	22	:	0	:	0				

# Stellarium

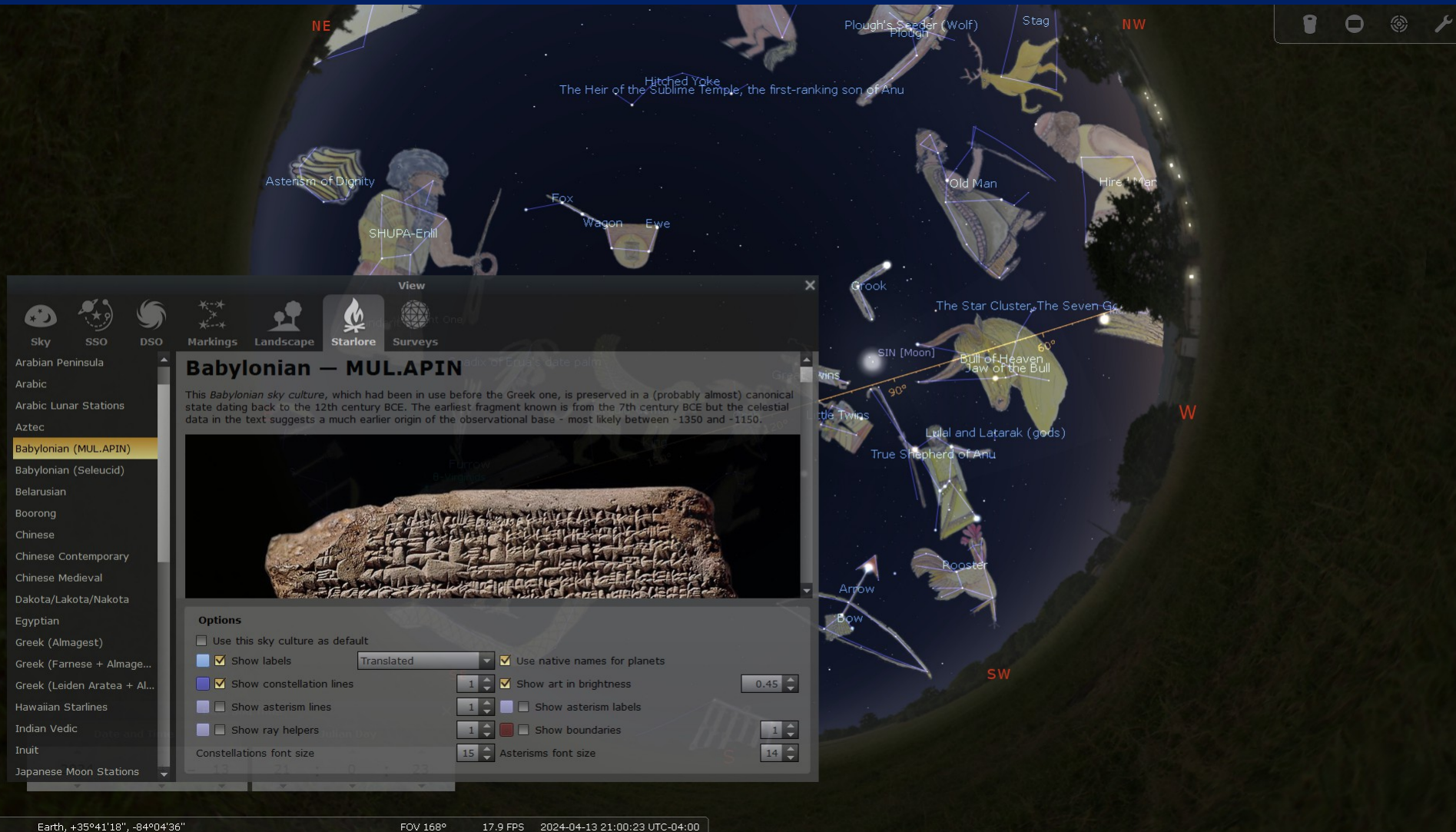
With Art Work!





# Stellarium

## Babylonian, Mul.Apin Art Work!



# Babylonian, Mul.Apin Art Work!

## Note Corona Borealis becomes Asterism of Dignity

## Virgo becomes furrow with wheat

## Corvus is a Raven

**$\alpha$  CrB - 5 CrB - HIP 76267 - SAO 83893 - HD 139006 - HR 5793**

Type: **eclipsing binary system** (EA/DM)  
Magnitude: **2.20** (reduced to **2.40** by **1.56** Airmasses)  
Absolute Magnitude: 0.39  
Color Index (B-V): **0.04**  
Magnitude range: **2.21+2.32/0.25** (Photometric system: B)  
RA/Dec (J2000.0): 15h34m42.94s/+26°42'45.5"  
RA/Dec (on date): 15h35m44.56s/+26°37'51.6"  
HA/Dec: 20h05m26.70s/+26°38'22.7" (apparent)  
Az./Alt.: +83°04'05.3"/+39°44'48.8" (apparent)  
Gal. long./lat.: +41°52'05.5"/+53°45'57.1"  
Supergal. long./lat.: +94°23'50.9"/+42°20'38.4"  
Ecl. long./lat. (J2000.0): +222°18'17.8"/+44°19'25.1"  
Ecl. long./lat. (on date): +222°38'45.2"/+44°19'16.7"  
Ecliptic obliquity (on date): +23°26'18.6"  
Mean Sidereal Time: 11h41m06.7s  
Apparent Sidereal Time: 11h41m06.4s  
Rise: 18h27m  
Transit: 1h54m  
Set: 9h21m  
IAU Constellation: CrB  
Distance: 75.05±0.45 ly  
Proper motion: 149.95 mas/yr towards 126.7°  
Proper motions by axes: 120.27 -89.58 (mas/yr)  
Parallax: 43.460±0.280 mas  
Spectral Type: A1IV  
Period: 17.3599 days  
Next minimum light: 2024-05-22 08:24:20 UTC  
Duration of eclipse: 3% (0d 12h 29m 56.8758s)  
Solar Az./Alt.: +307°27'20"/-16°26'44"  
Lunar Az./Alt.: +291°49'35"/+18°13'18"



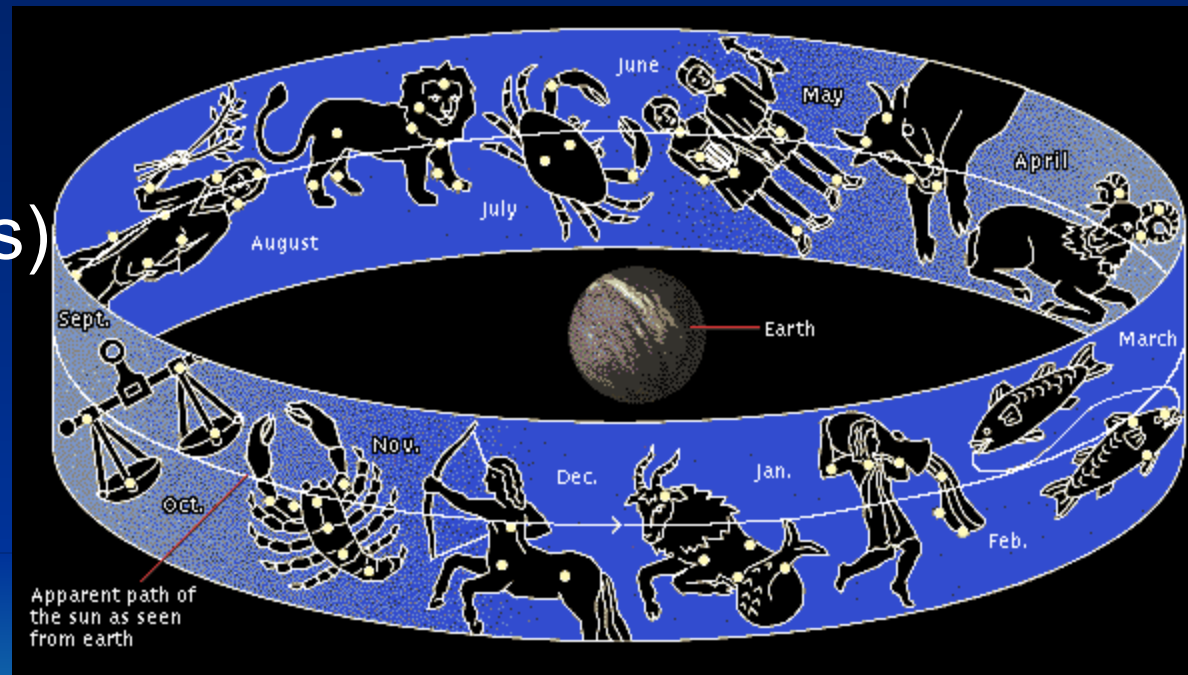
Date and Time		Date and Time		Julian Day	
2024	-	5	-	10	22 : 0 : 0



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# Review

- Sunset, Lion is high.
- Finally the milky way at midnight (2 AM).
- Watch for a “new” star or jewel in the crown.



# Most Accurate Horoscope

Unless you go out to look,...

<i>Aries</i>	The stars and planets will not affect your life in any way.
<i>Taurus</i>	The stars and planets will not affect your life in any way.
<i>Gemini</i>	The stars and planets will not affect your life in any way.
<i>Cancer</i>	The stars and planets will not affect your life in any way.
<i>Leo</i>	The stars and planets will not affect your life in any way.
<i>Virgo</i>	The stars and planets will not affect your life in any way.
<i>Libra</i>	The stars and planets will not affect your life in any way.
<i>Scorpio</i>	The stars and planets will not affect your life in any way.
<i>Sagittarius</i>	The stars and planets will not affect your life in any way.
<i>Capricorn</i>	The stars and planets will not affect your life in any way.
<i>Aquarius</i>	The stars and planets will not affect your life in any way.
<i>Pisces</i>	The stars and planets will not affect your life in any way.









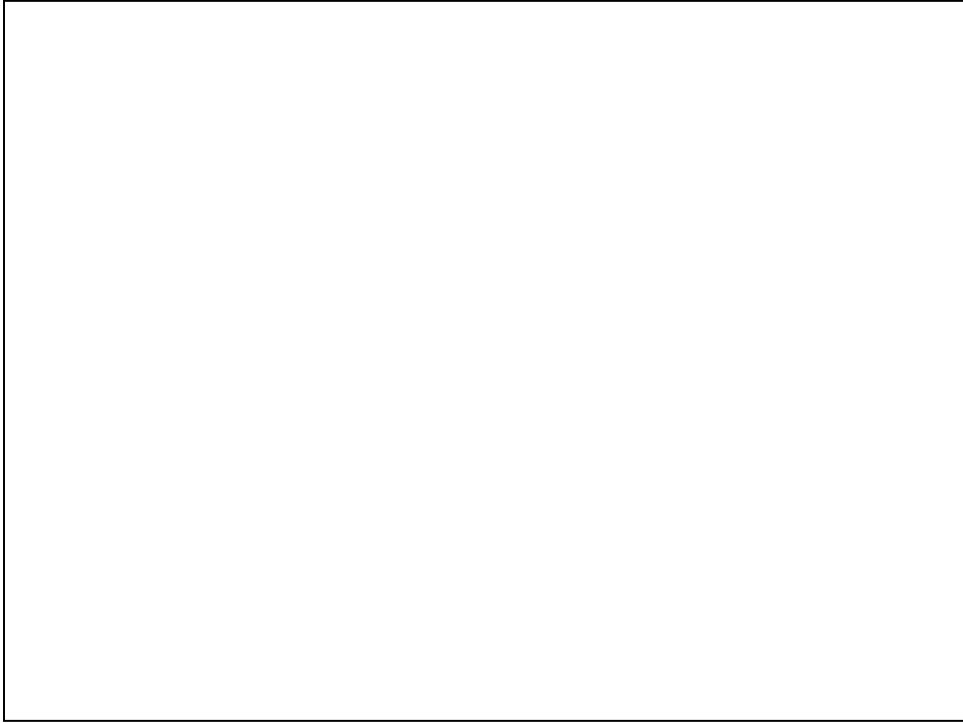






**The sun crossing from the south of the celestial equator to the north is the beginning of spring and marked the new year in antiquity.**

**In antiquity the sun crossing is called the first point of Aires. Why?**



**In 300 BC the sun did cross the celestial equator in Aries.**

























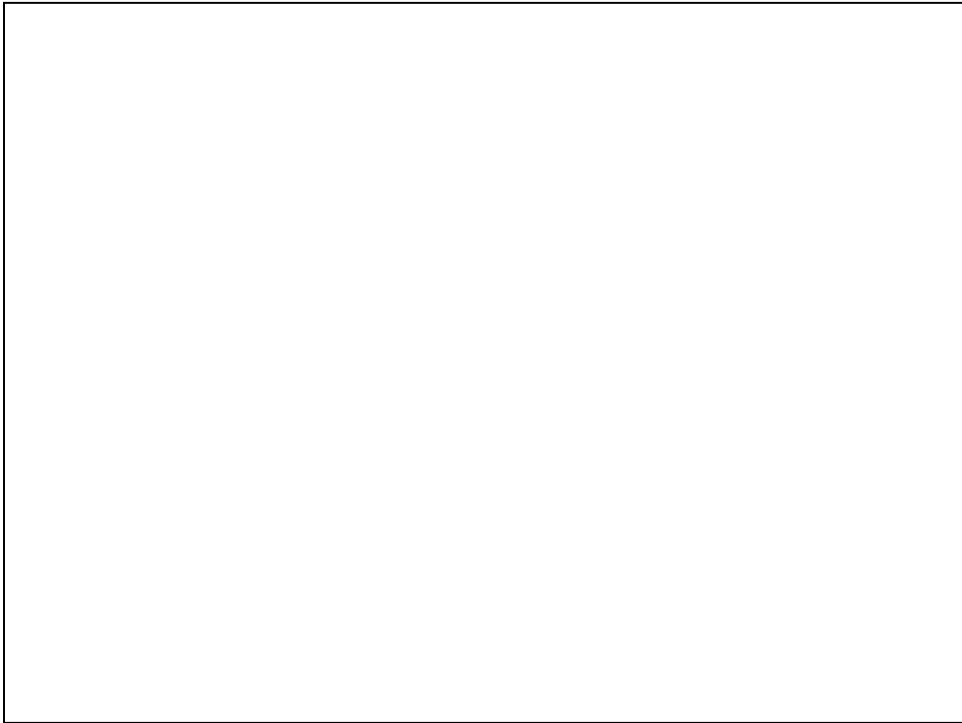








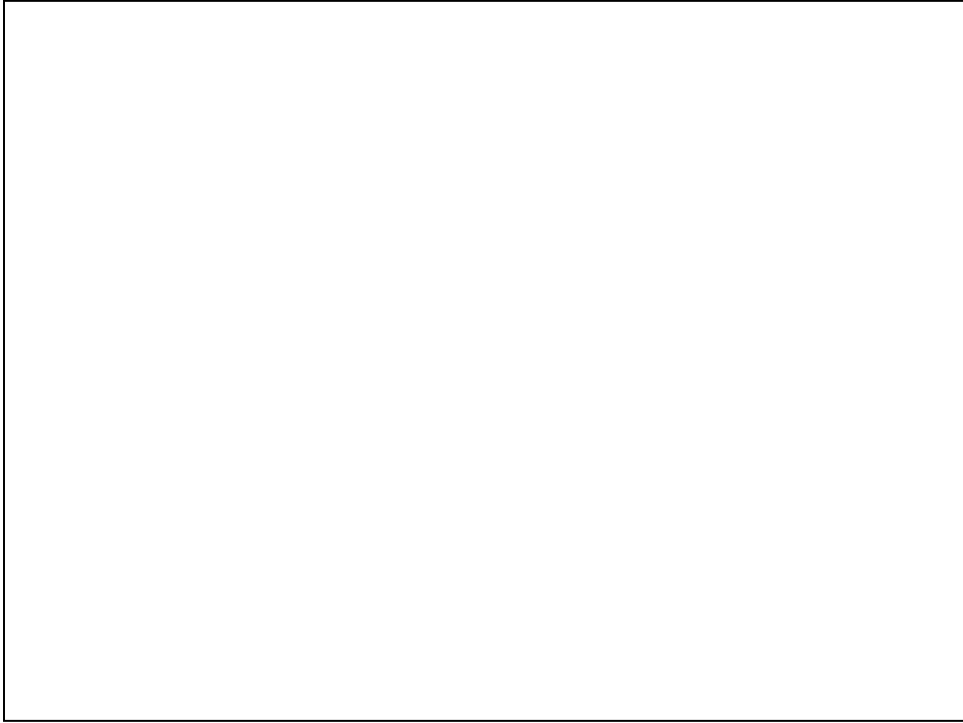




**Review.**

**Any questions?**

**Have I confused anyone?**



**So get out and look!**