

10⁶

10⁵

10⁴

10³

10²

10¹

10⁰

10⁻¹

10⁻²

10⁻³

10⁻⁴

10⁻⁵

O5 B0 B5 A0 A5 F0 F5 G0 G5 K0 K5 M0 M5 M7

30,000 20,000 10,000 6,000 4,000 2,500

Eta Carinae

Theta¹ C Orionis

1-million-year lifespan

Spica

10 million years

Alkaid

100 million years

Regulus

Vega

Sirius A

1 billion years

Altair

Procyon A

10 billion years

Sun

Tau Ceti

Alpha Centauri B

Epsilon Eridani

100 billion years

Barnard's Star

Proxima Centauri

Wolf 359

1 trillion years

Rigel

Deneb

Polaris

Arcturus

Aldebaran

Capella Aa

Betelgeuse

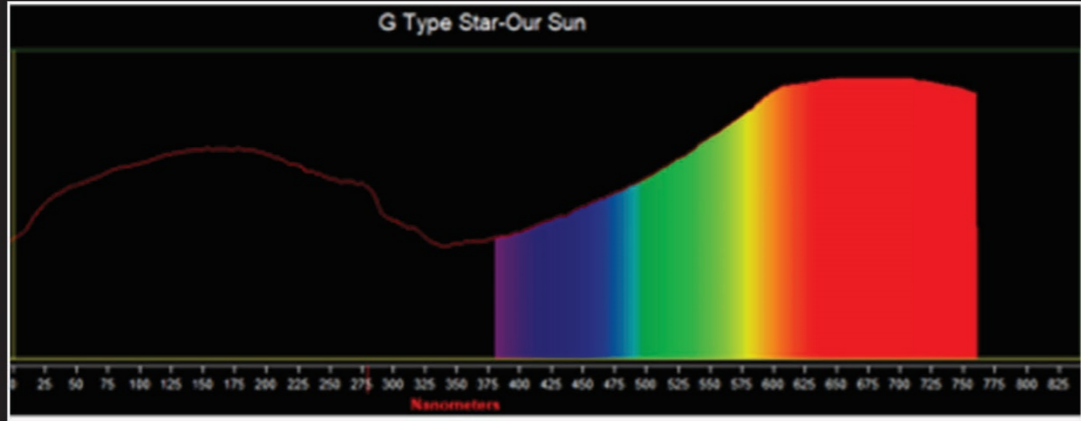
Mu Cephei

Antares

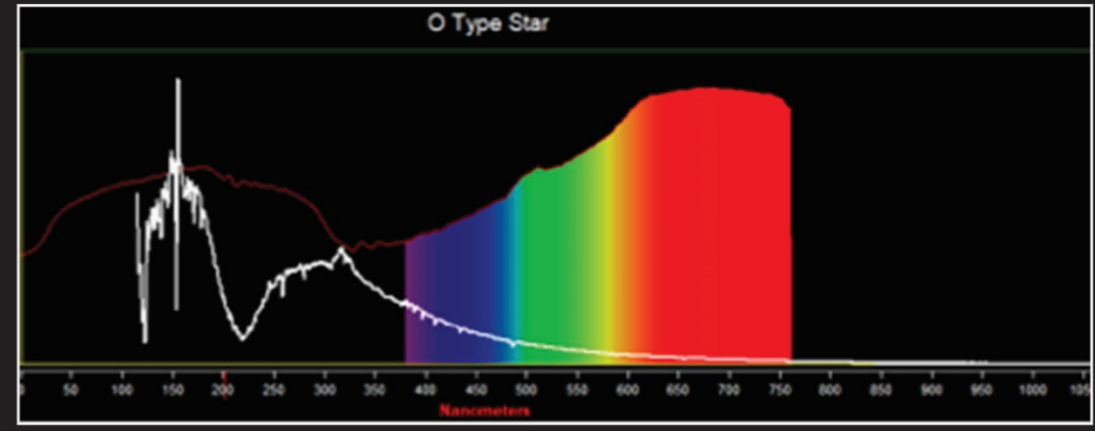
Mira

Sirius B

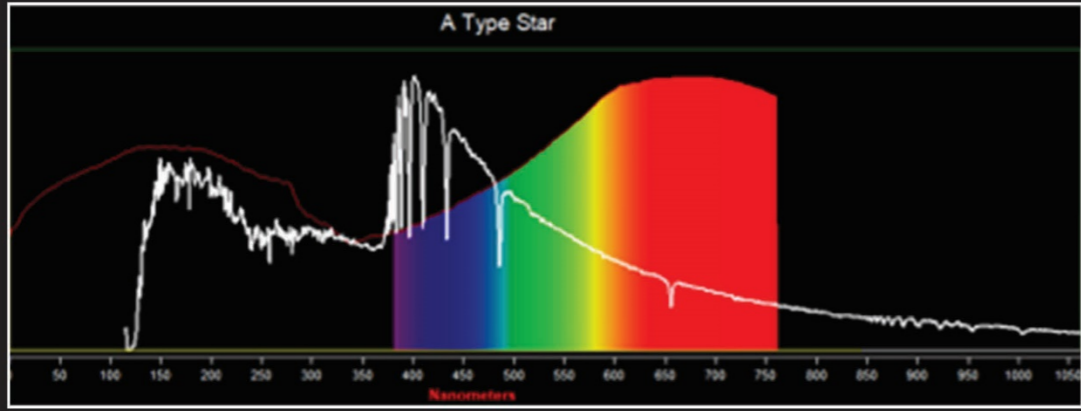
Procyon B



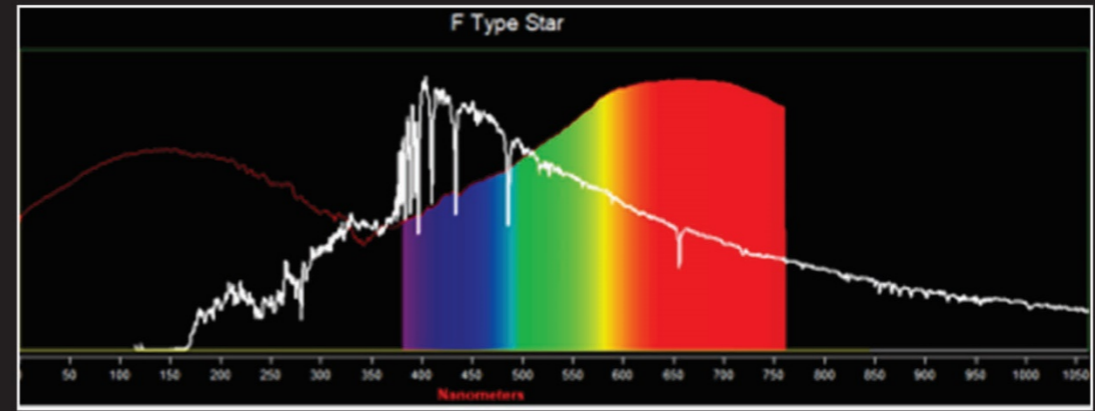
G



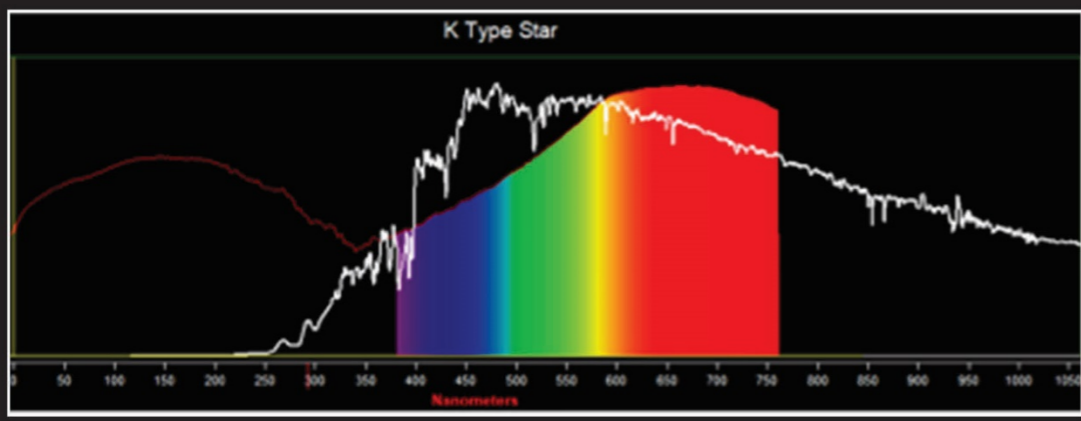
O



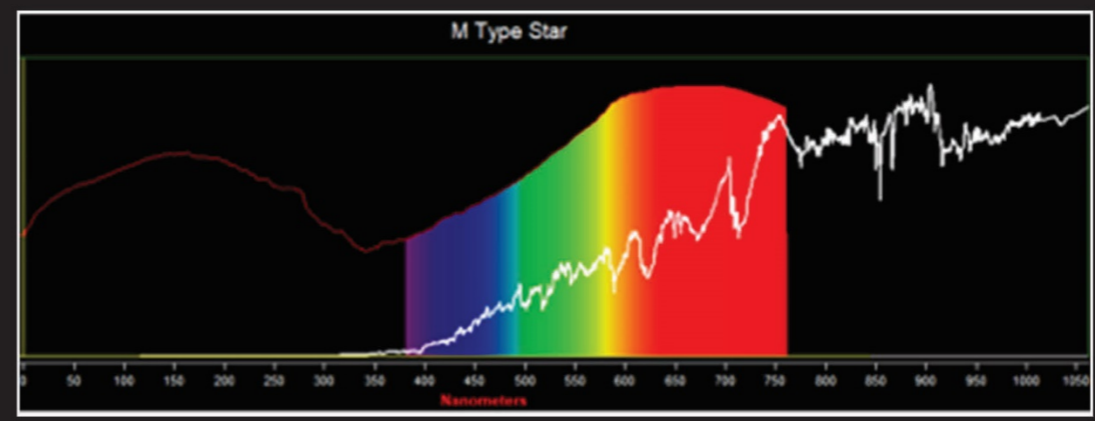
A



F



K

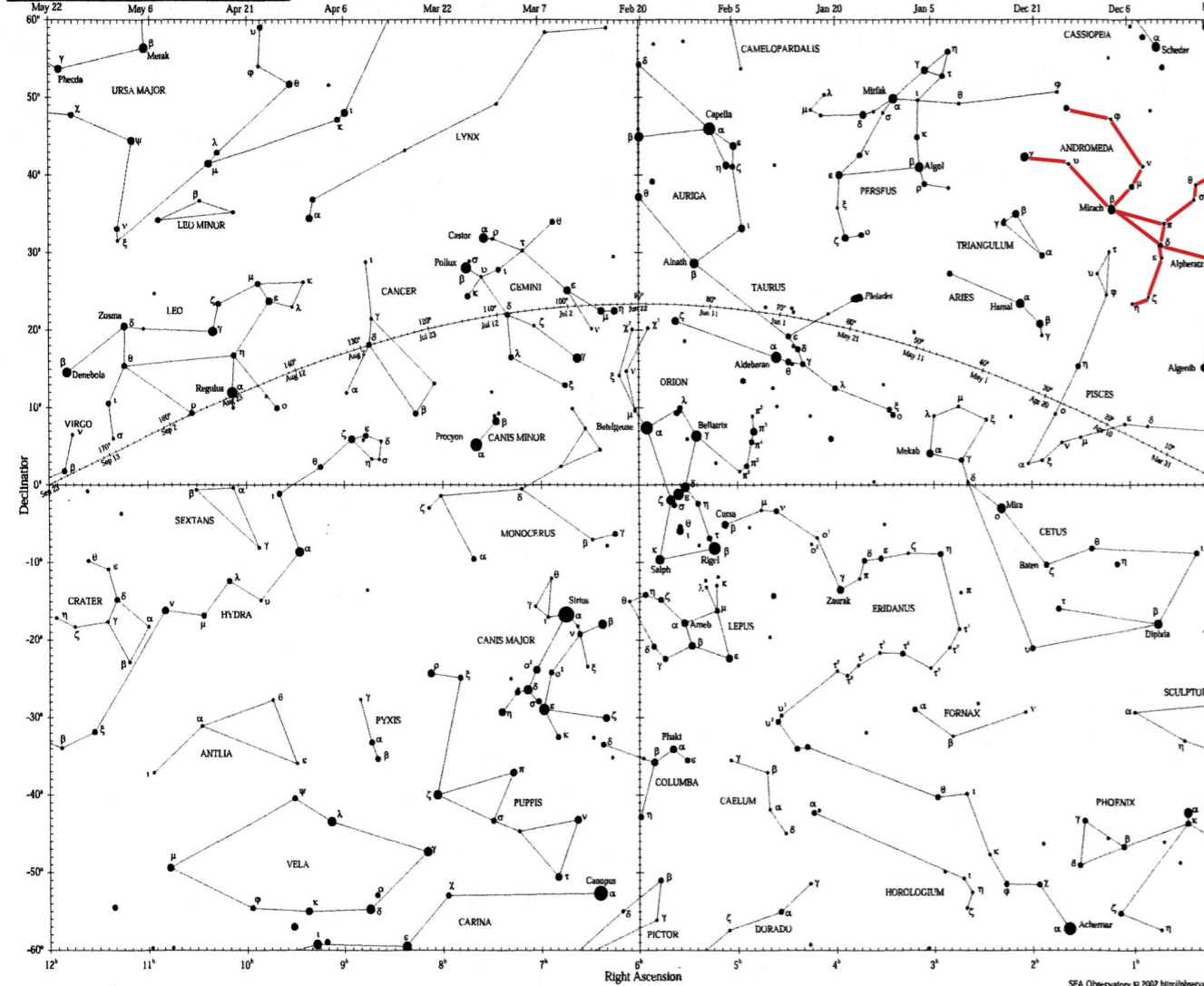


M

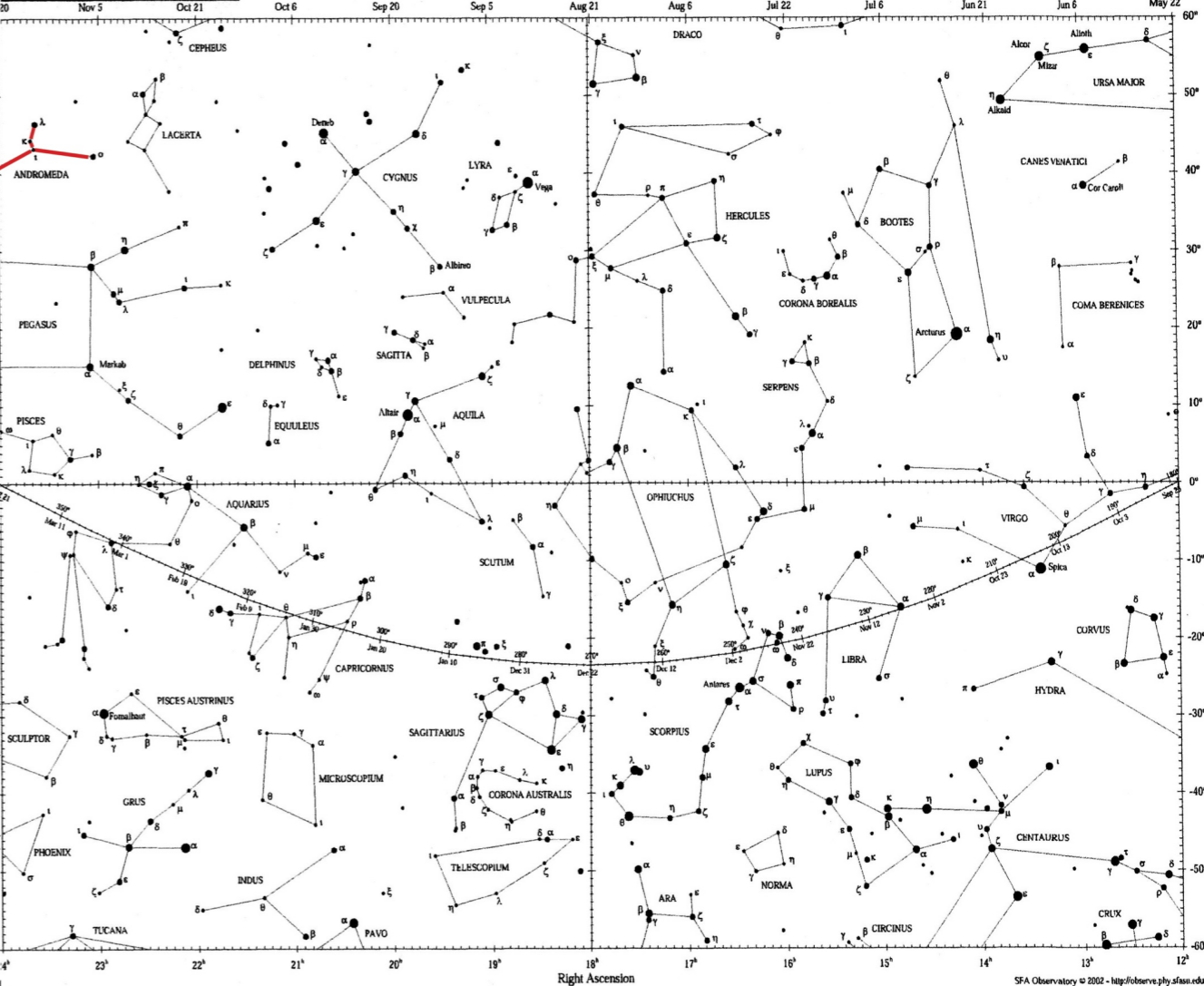
Greek Alphabet and Symbols

A α Alpha	B β Beta	Γ γ Gamma	Δ δ Delta	Ε ε Epsilon	Ζ ζ Zeta
Η η Eta	Θ θ Theta	Ι ι Iota	Κ κ Kappa	Λ λ Lambda	Μ μ Mu
Ν ν Nu	Ξ ξ Xi	Ο ο Omicron	Π π Pi	Ρ ρ Rho	Σ σ, ς Sigma
Τ τ Tau	Υ υ Upsilon	Φ φ Phi	Χ χ Chi	Ψ ψ Psi	Ω ω Omega

SFA Star Chart 2 - Equatorial Region



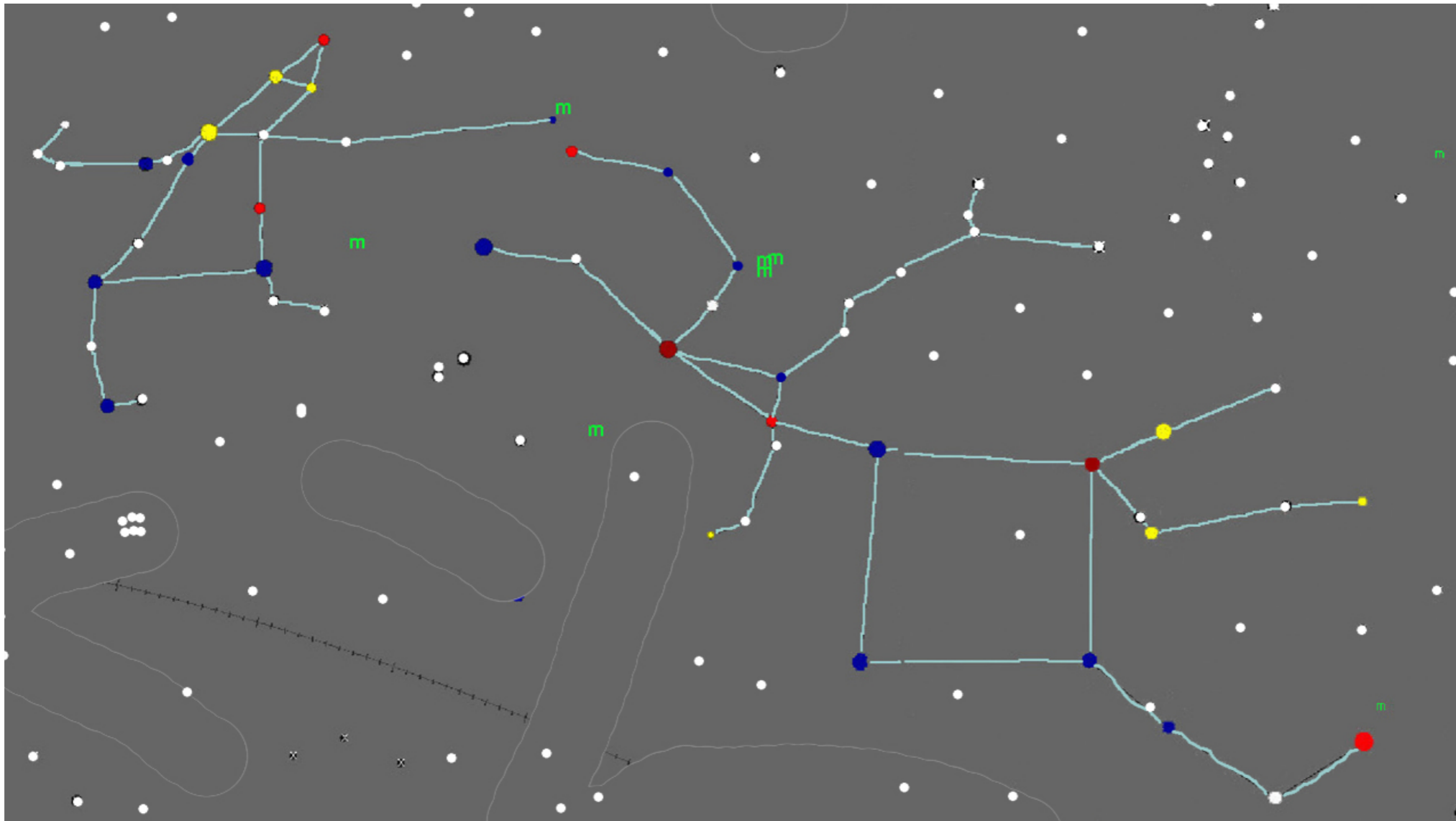
Star Chart 3 - Equatorial Region



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Perseus-Andromeda-Pegasus



O_B Blue_White = 10,000-60,000K

G Yellow = 5,000-7,000k

A_F White_Yellow = 6,000-10,000k

K_M Orange_Red= 1300-5000k

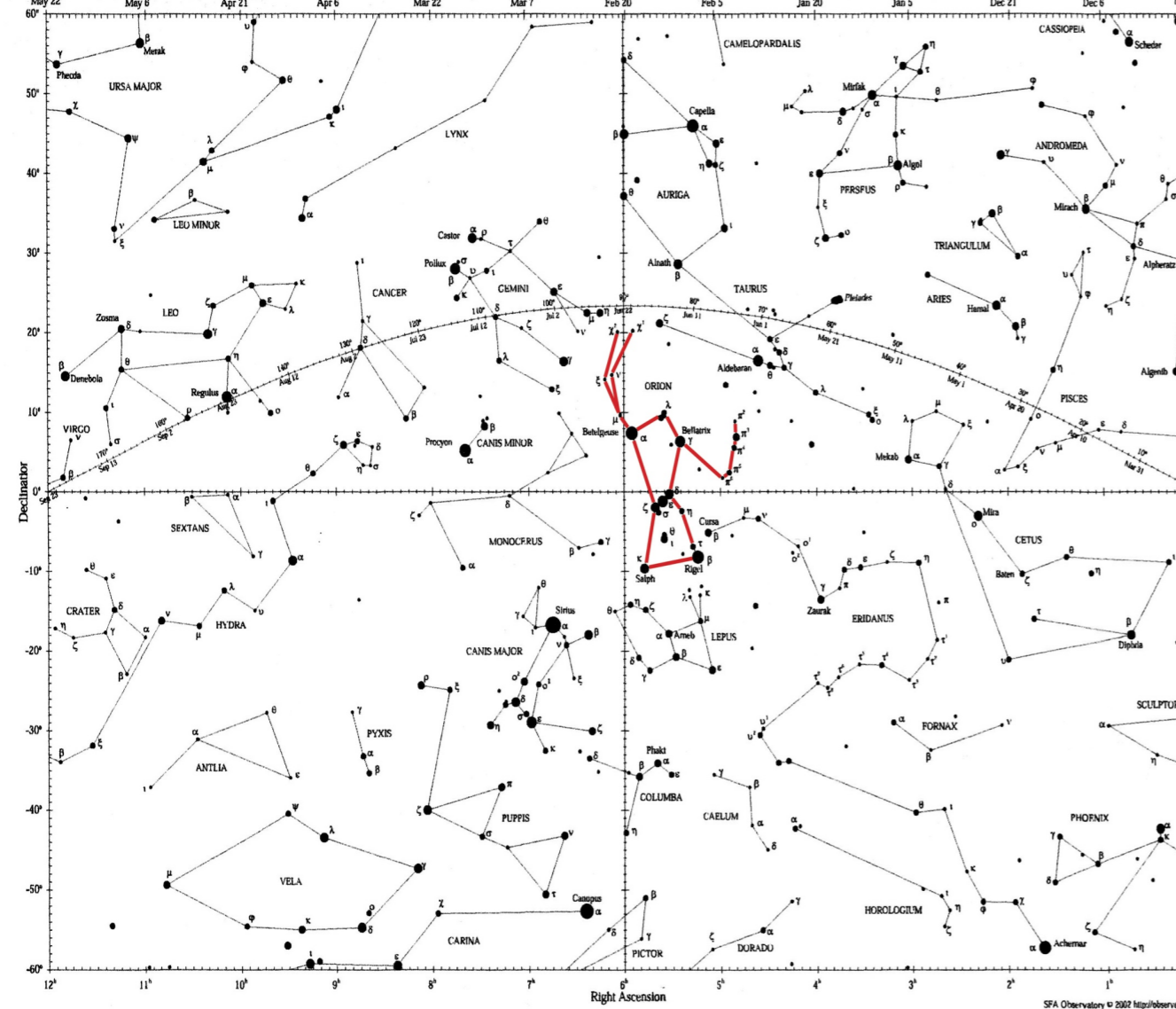
Green = Messier Objects

NOTE: Kelvin \approx C above 1500C

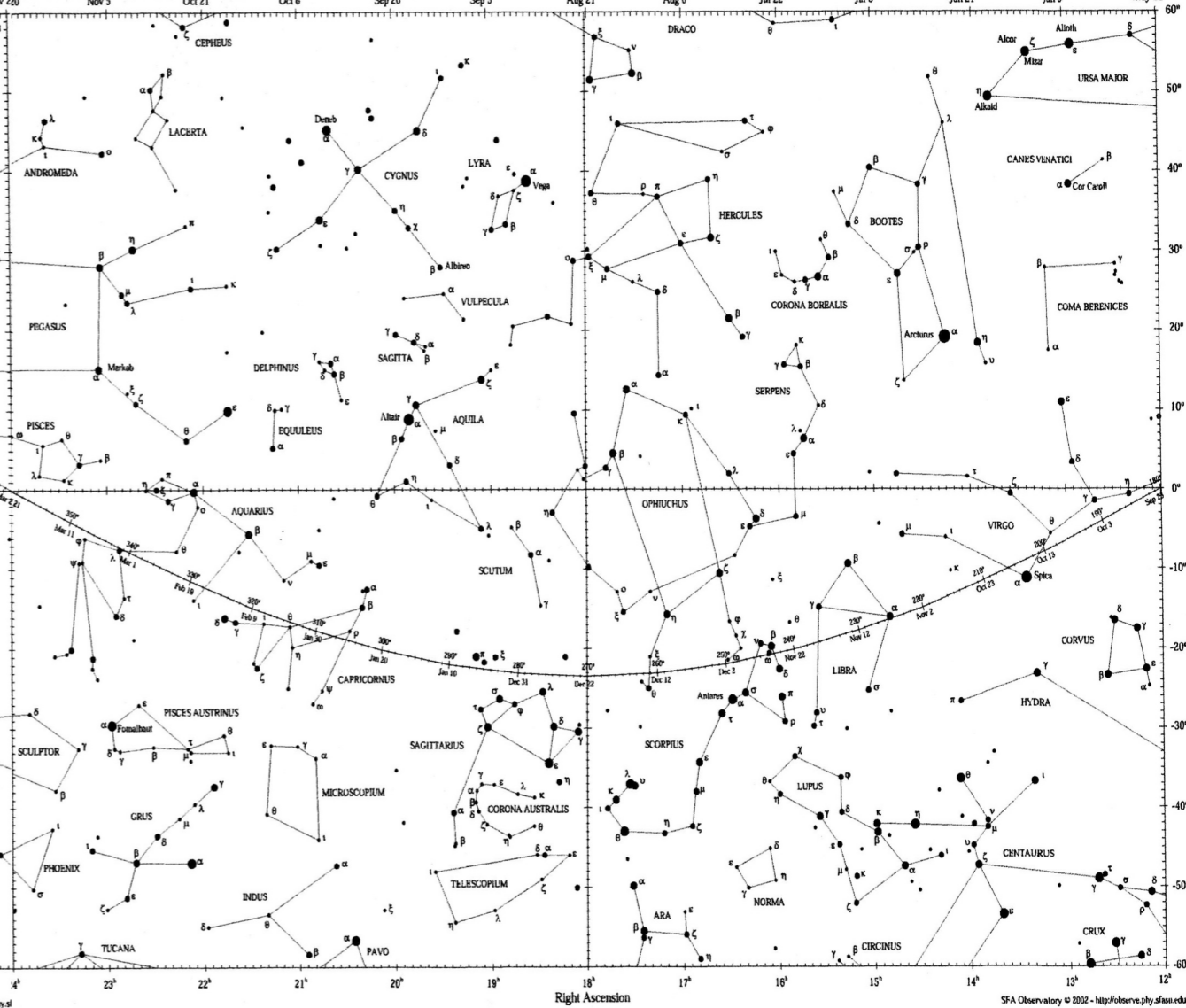




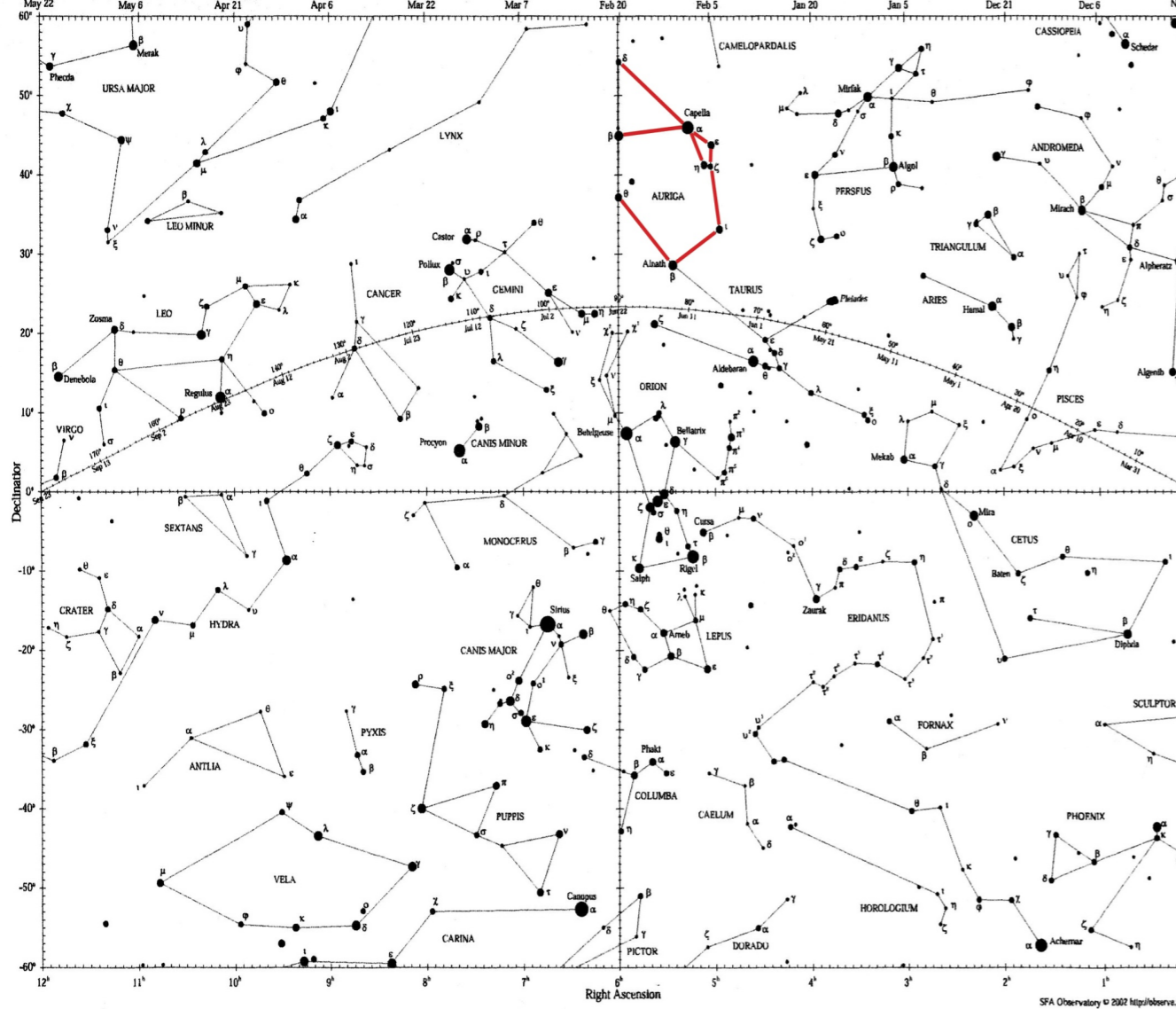
SFA Star Chart 2 - Equatorial Region



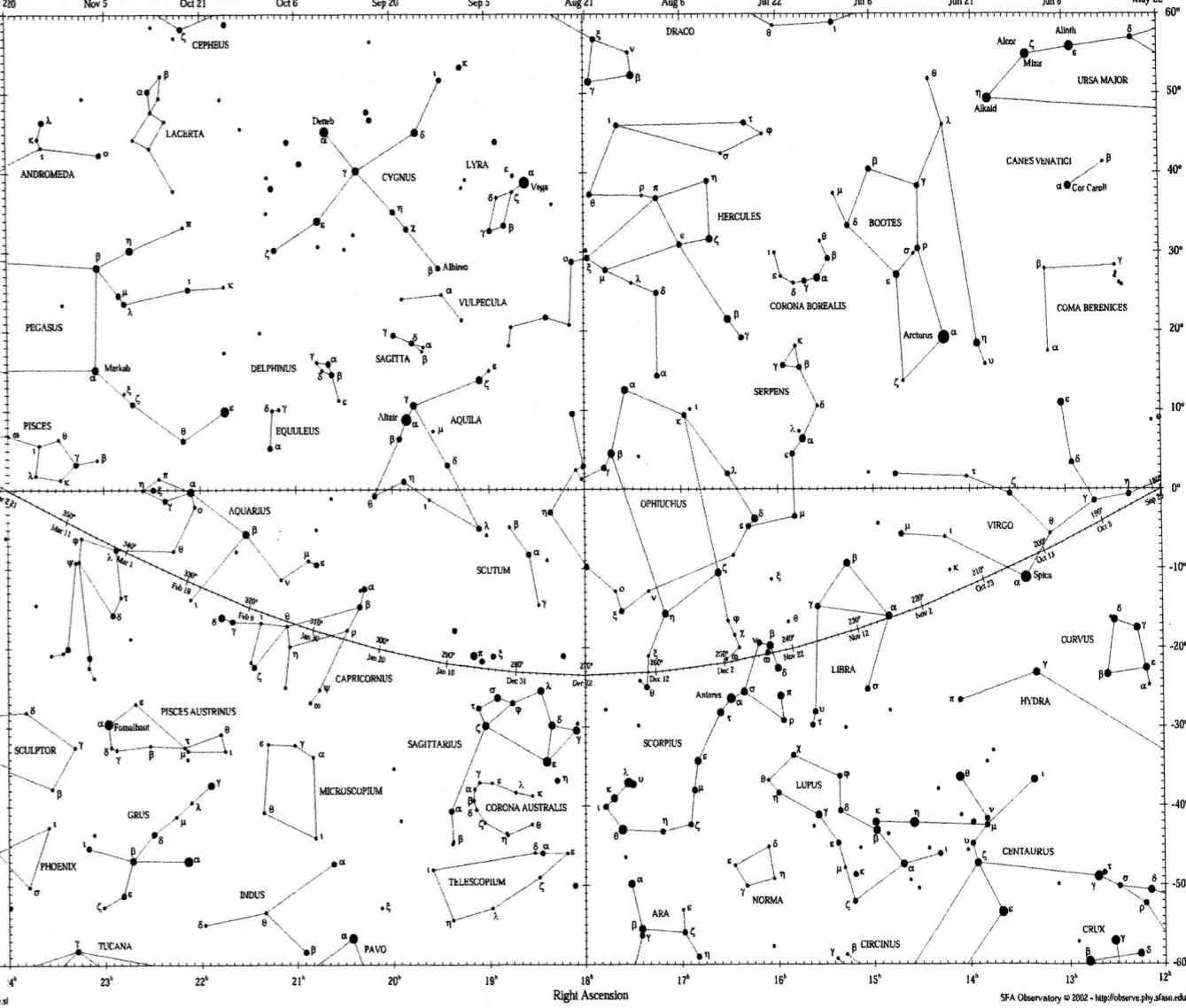
Star Chart 3 - Equatorial Region



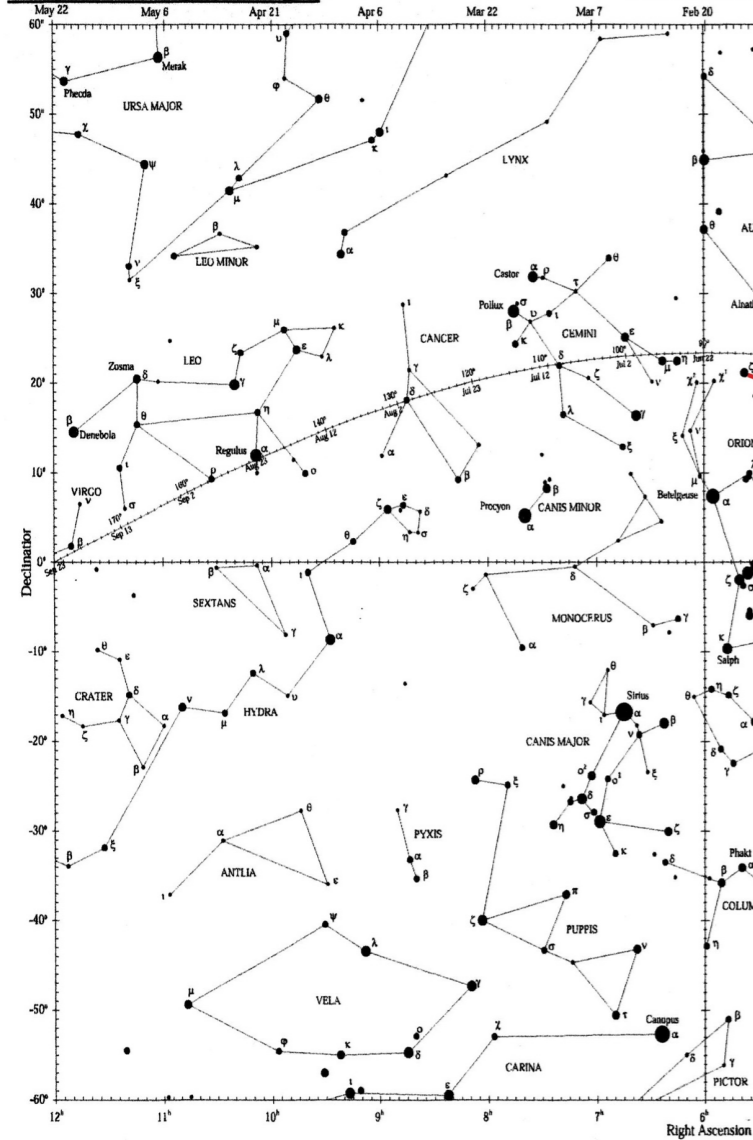
SFA Star Chart 2 - Equatorial Region



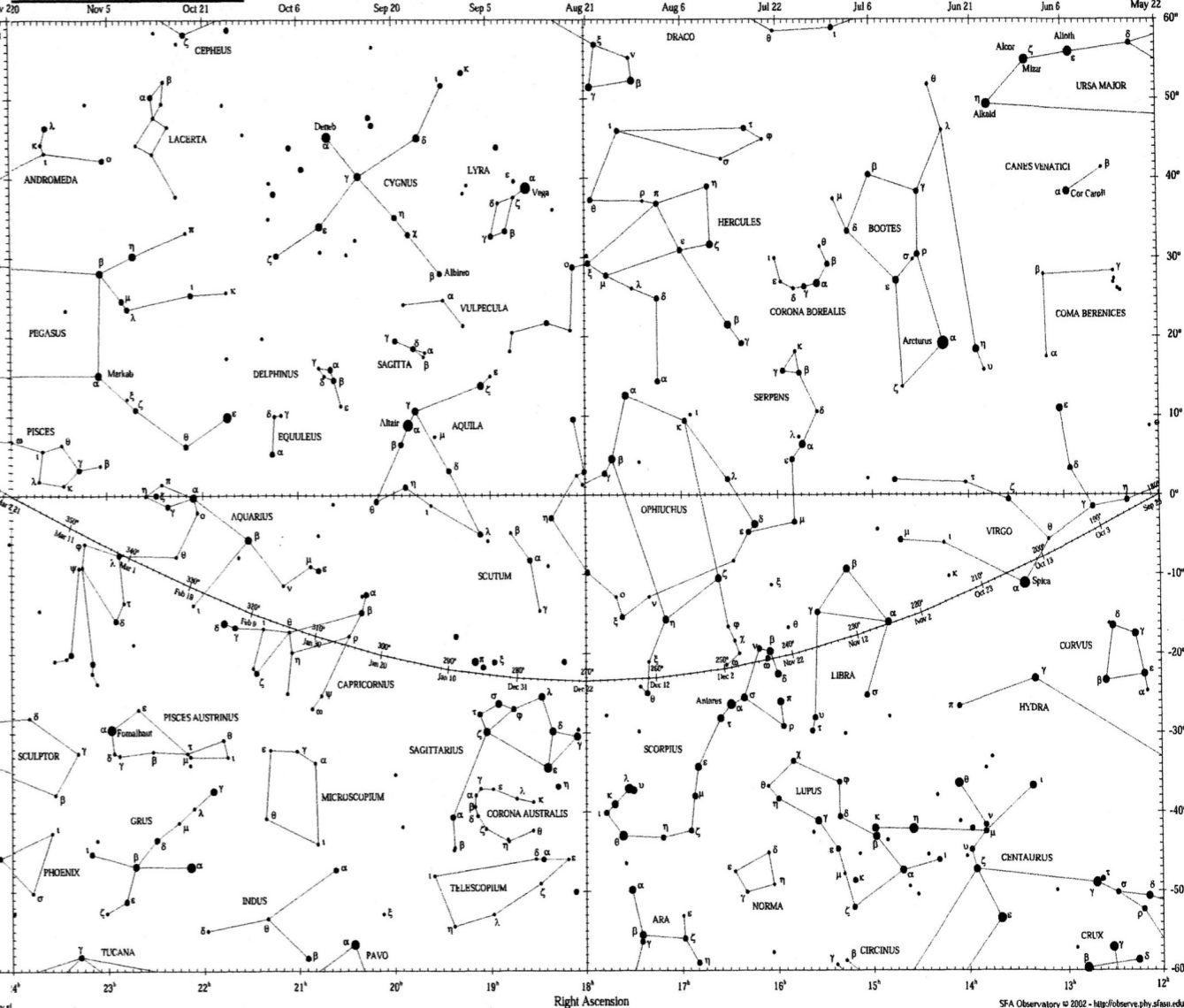
Star Chart 3 - Equatorial Region

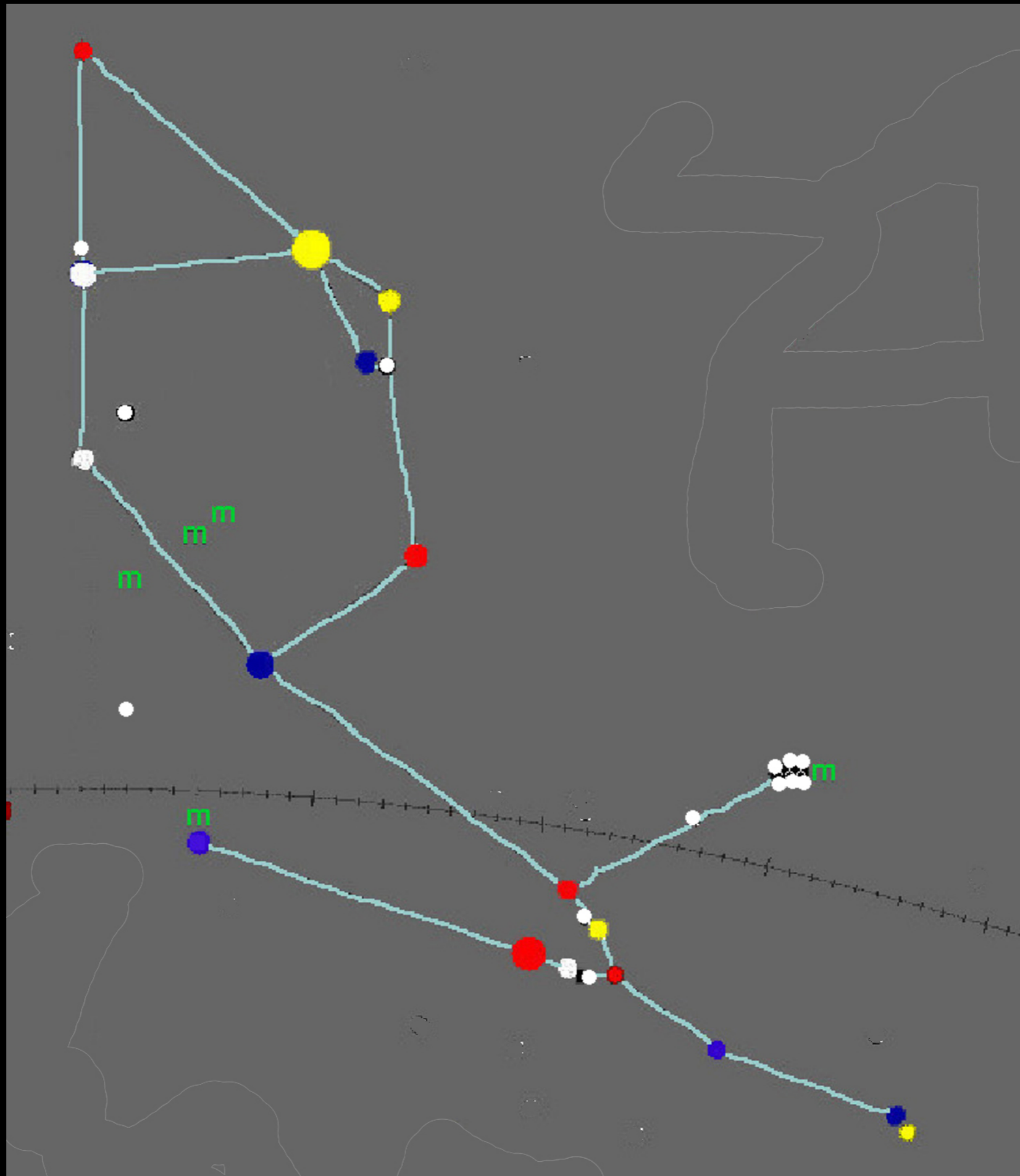


SFA Star Chart 2 - Equatorial Region

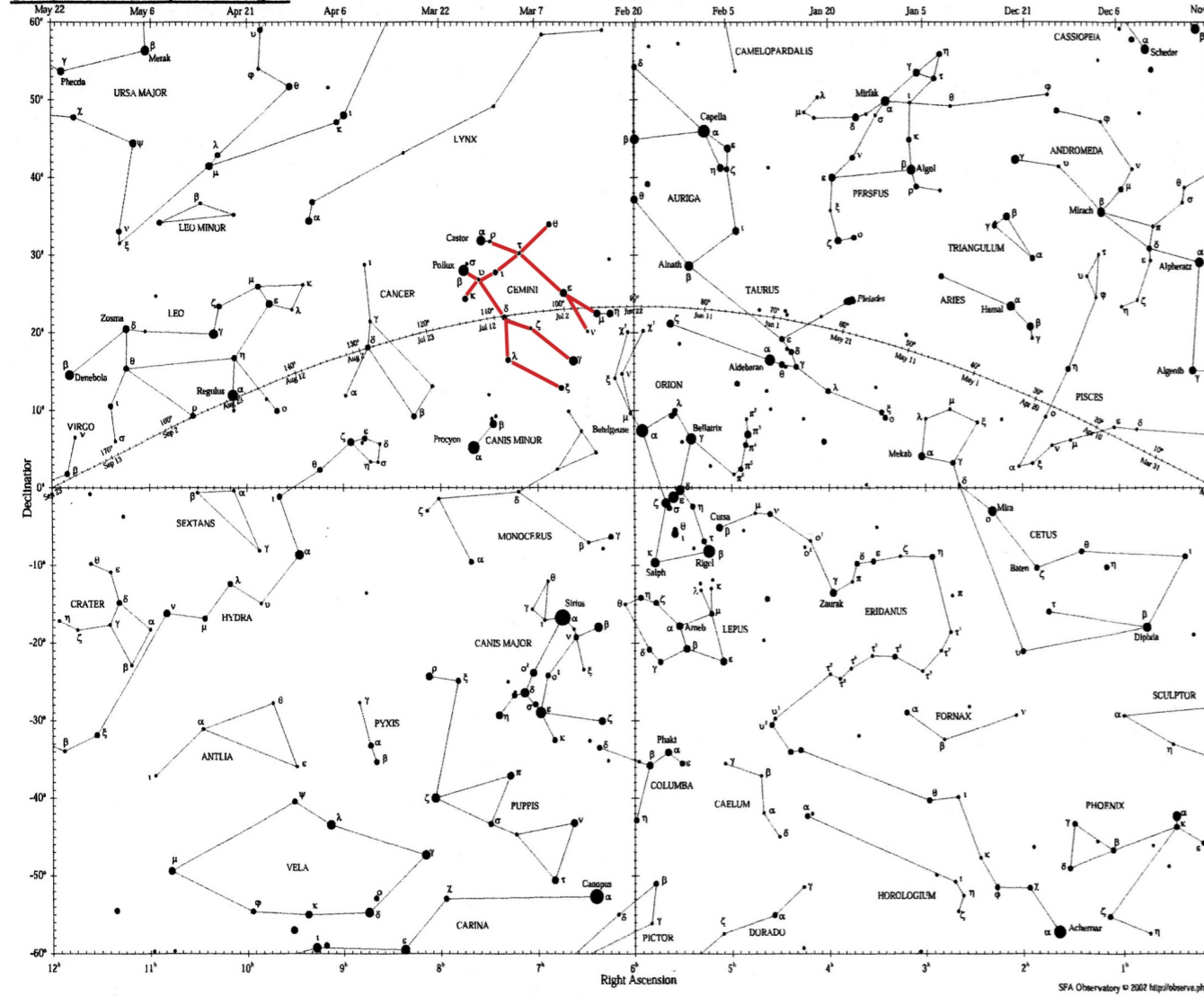


Star Chart 3 - Equatorial Region

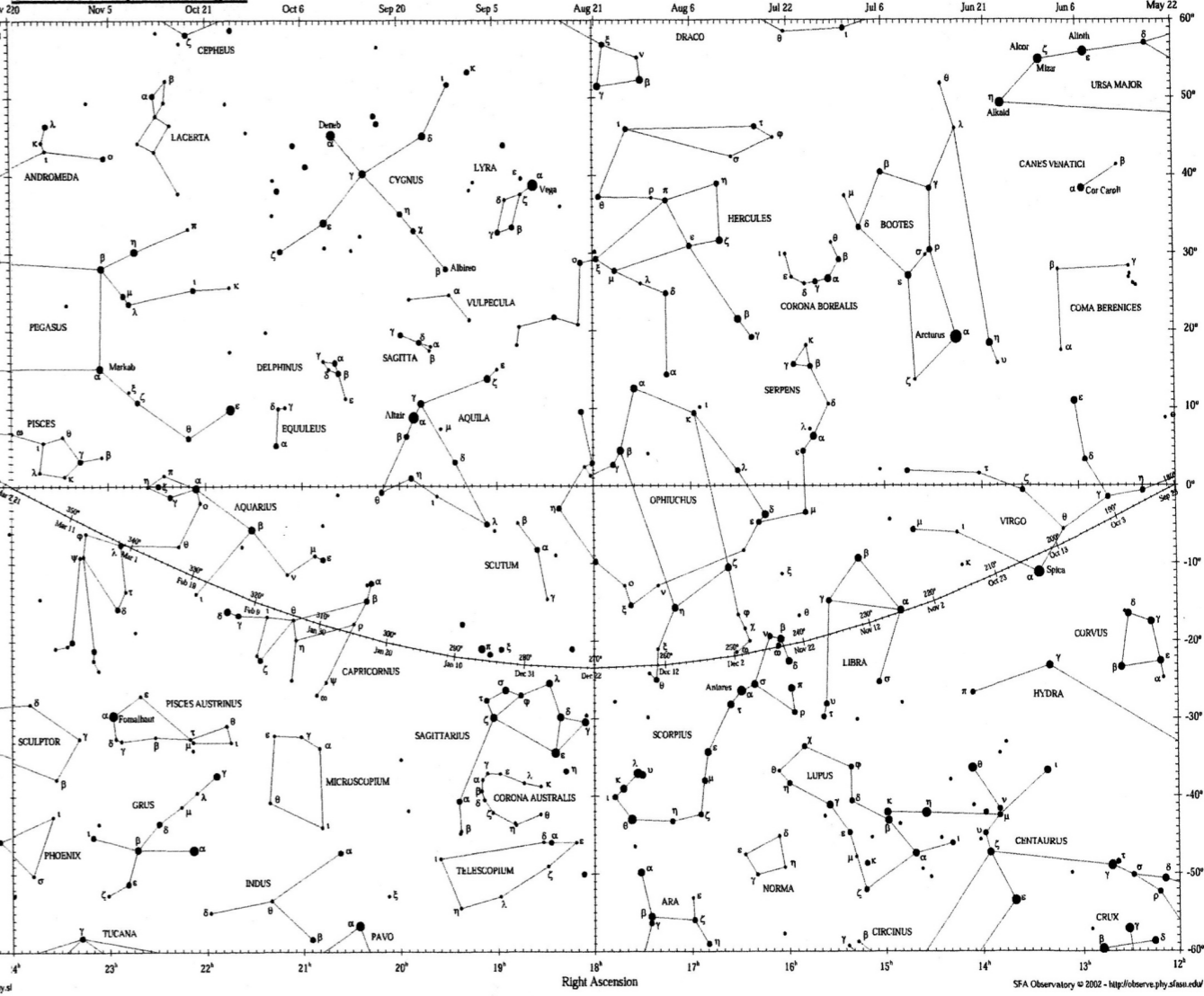




SFA Star Chart 2 - Equatorial Region

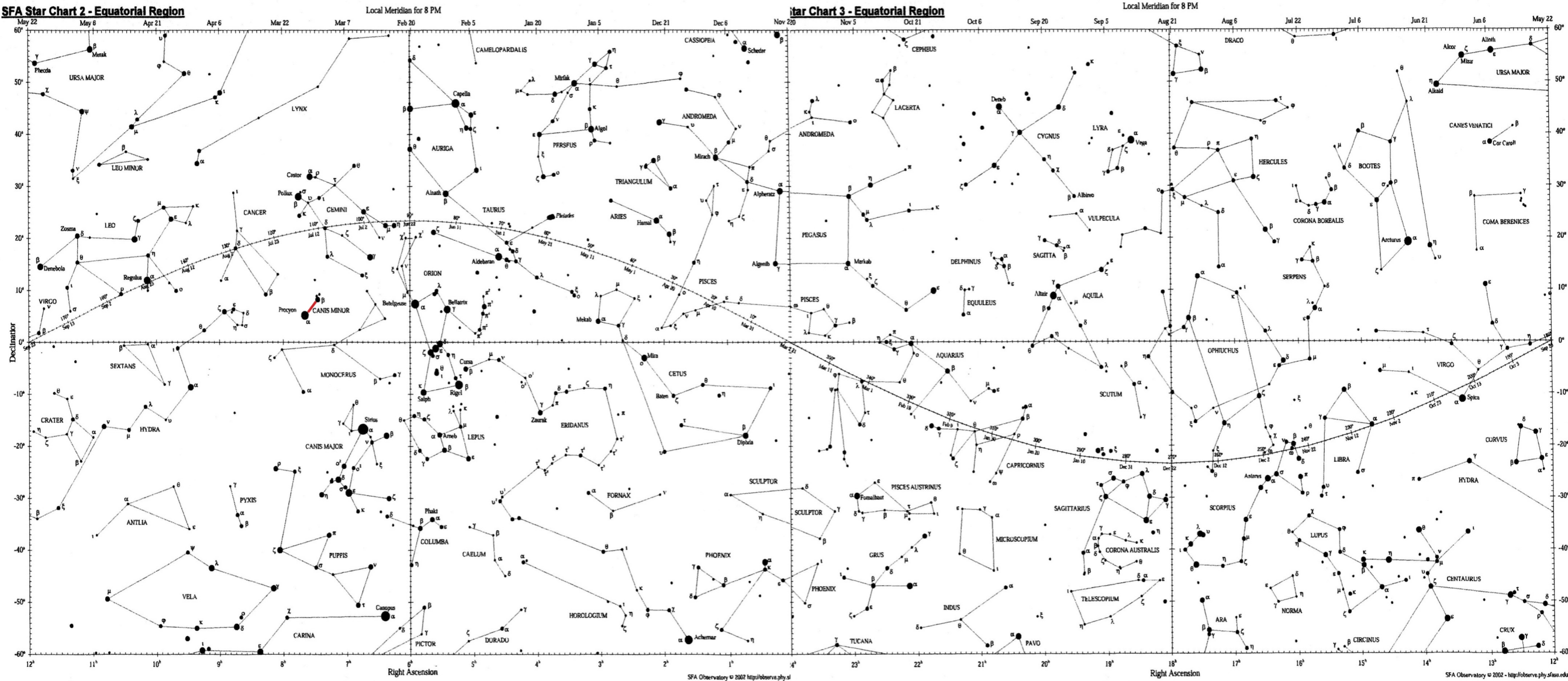


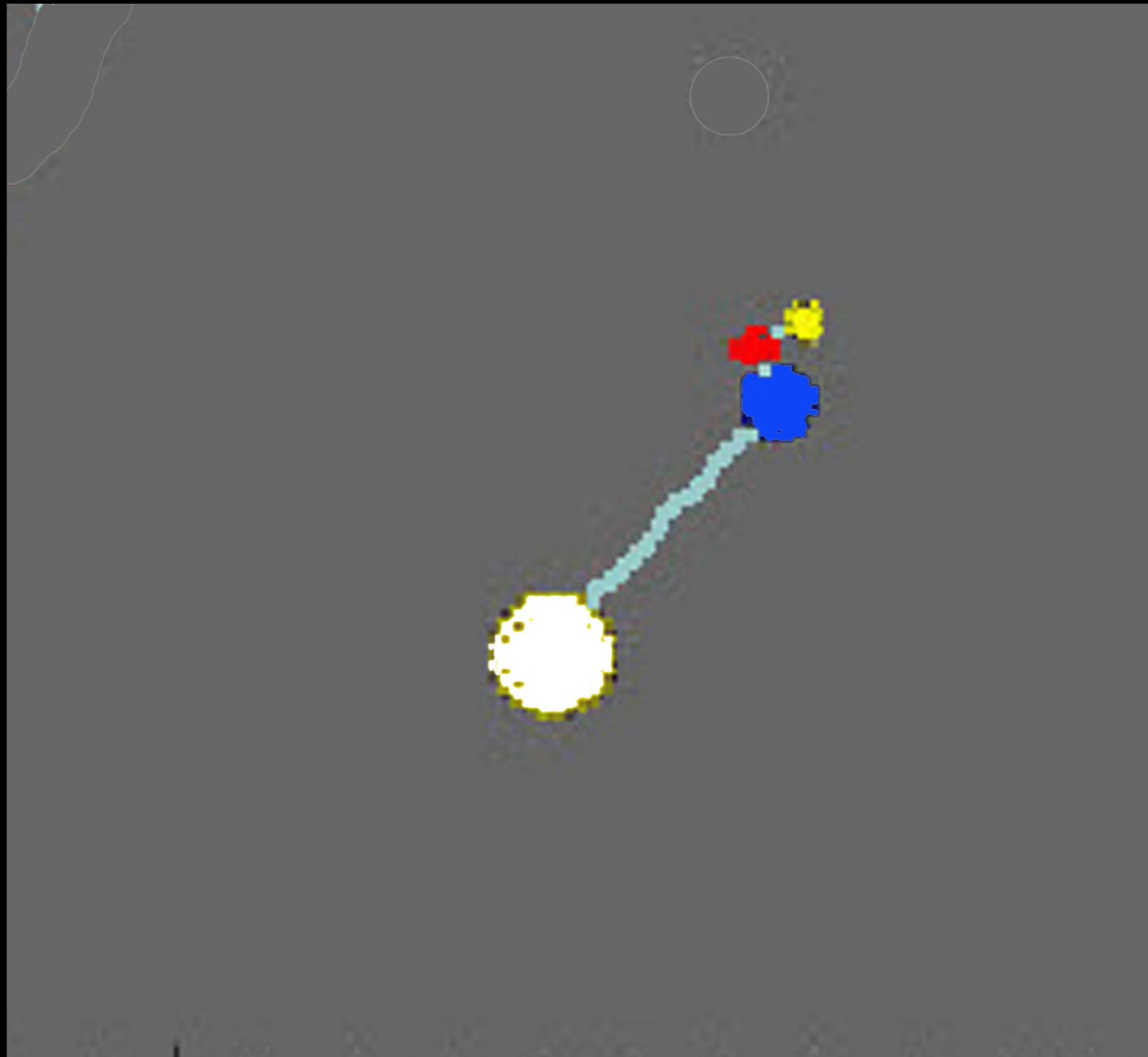
Star Chart 3 - Equatorial Region



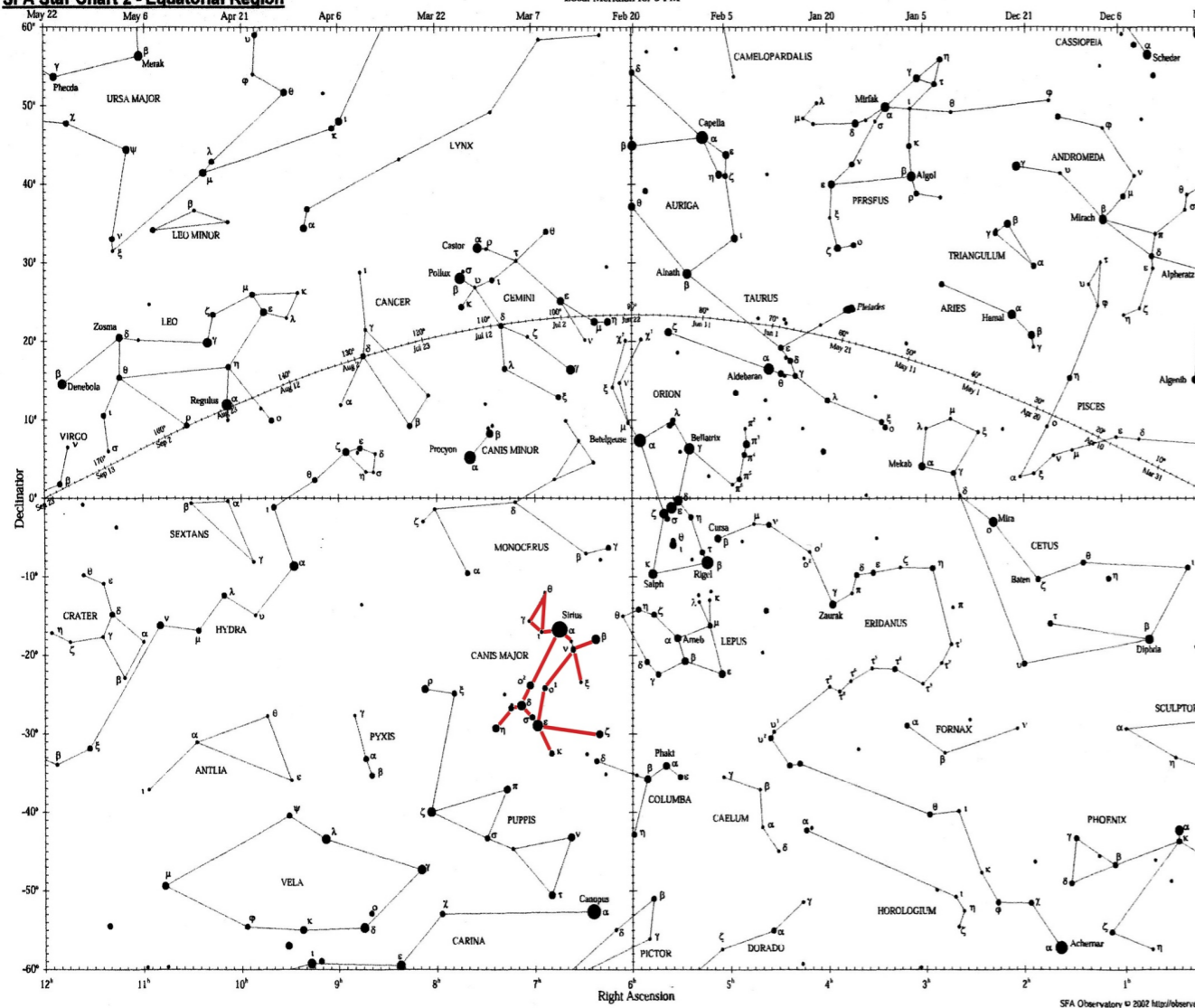
SFA Star Chart 2 - Equatorial Region

Star Chart 3 - Equatorial Region

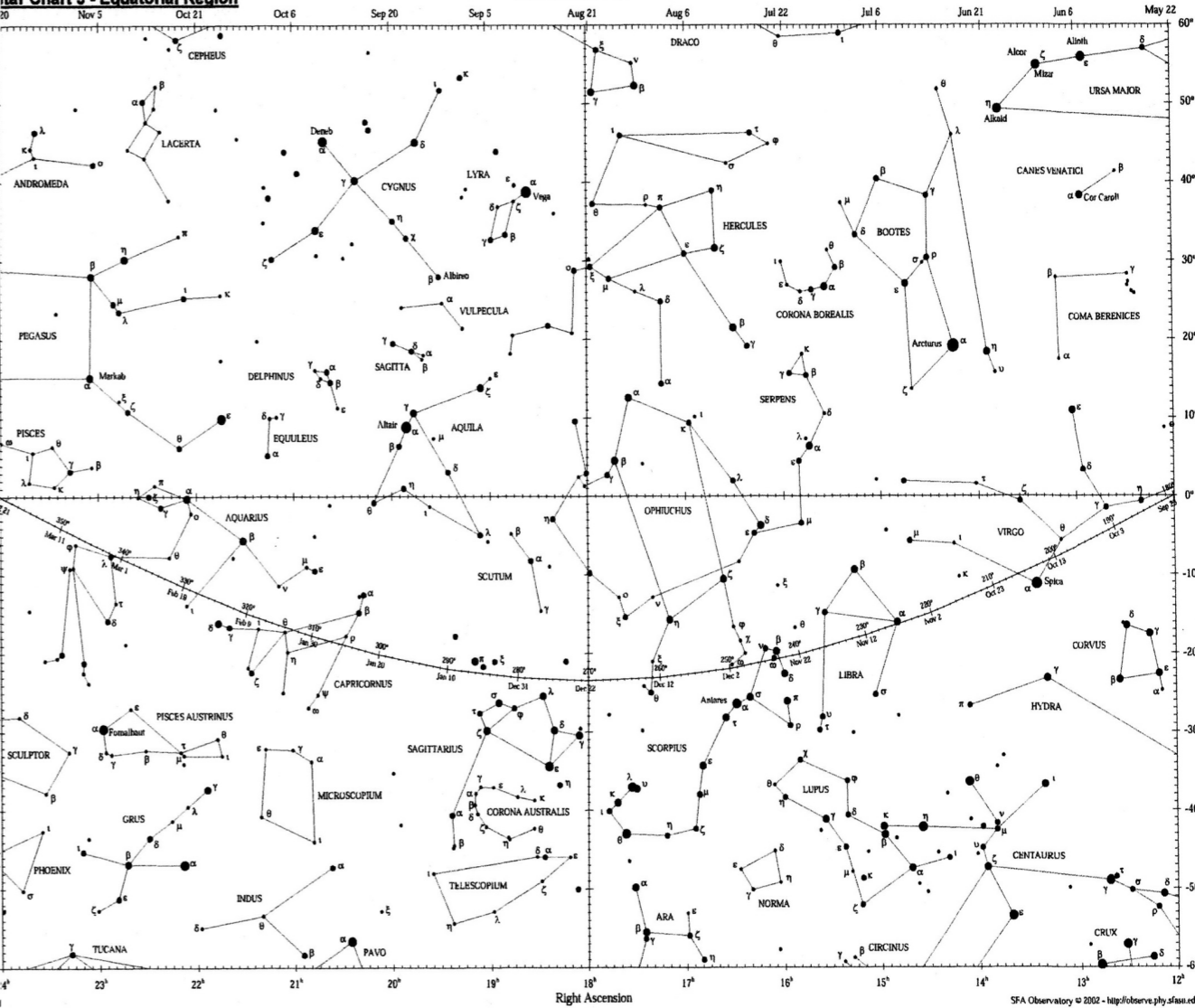


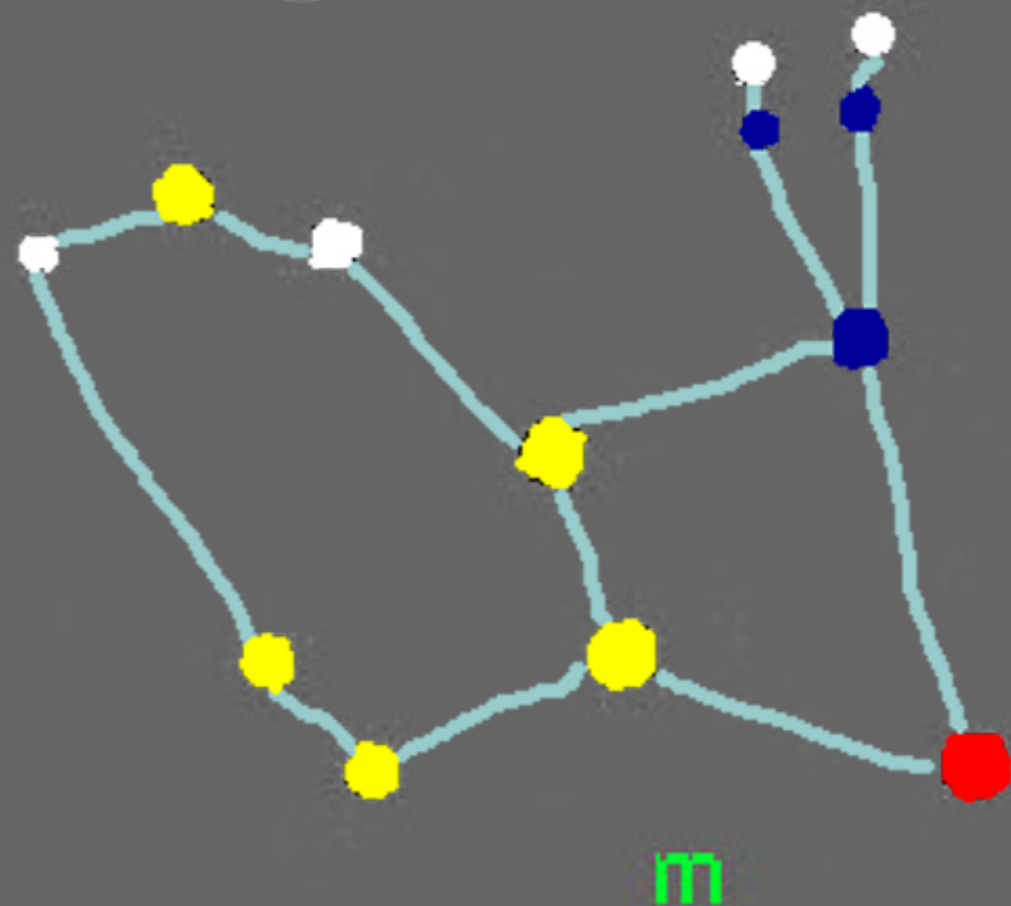
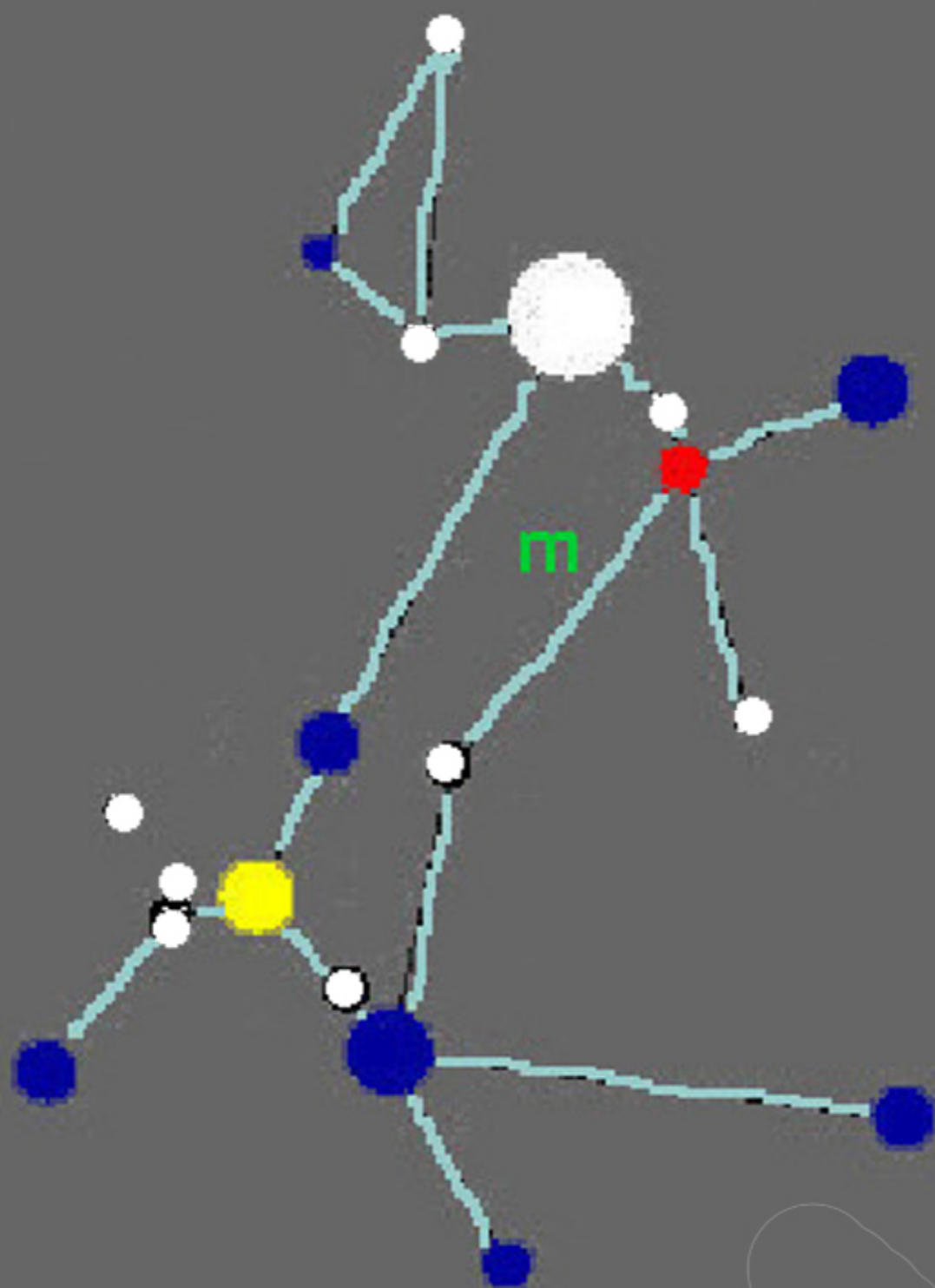


SFA Star Chart 2 - Equatorial Region



Star Chart 3 - Equatorial Region





MESSIER OBJECTS

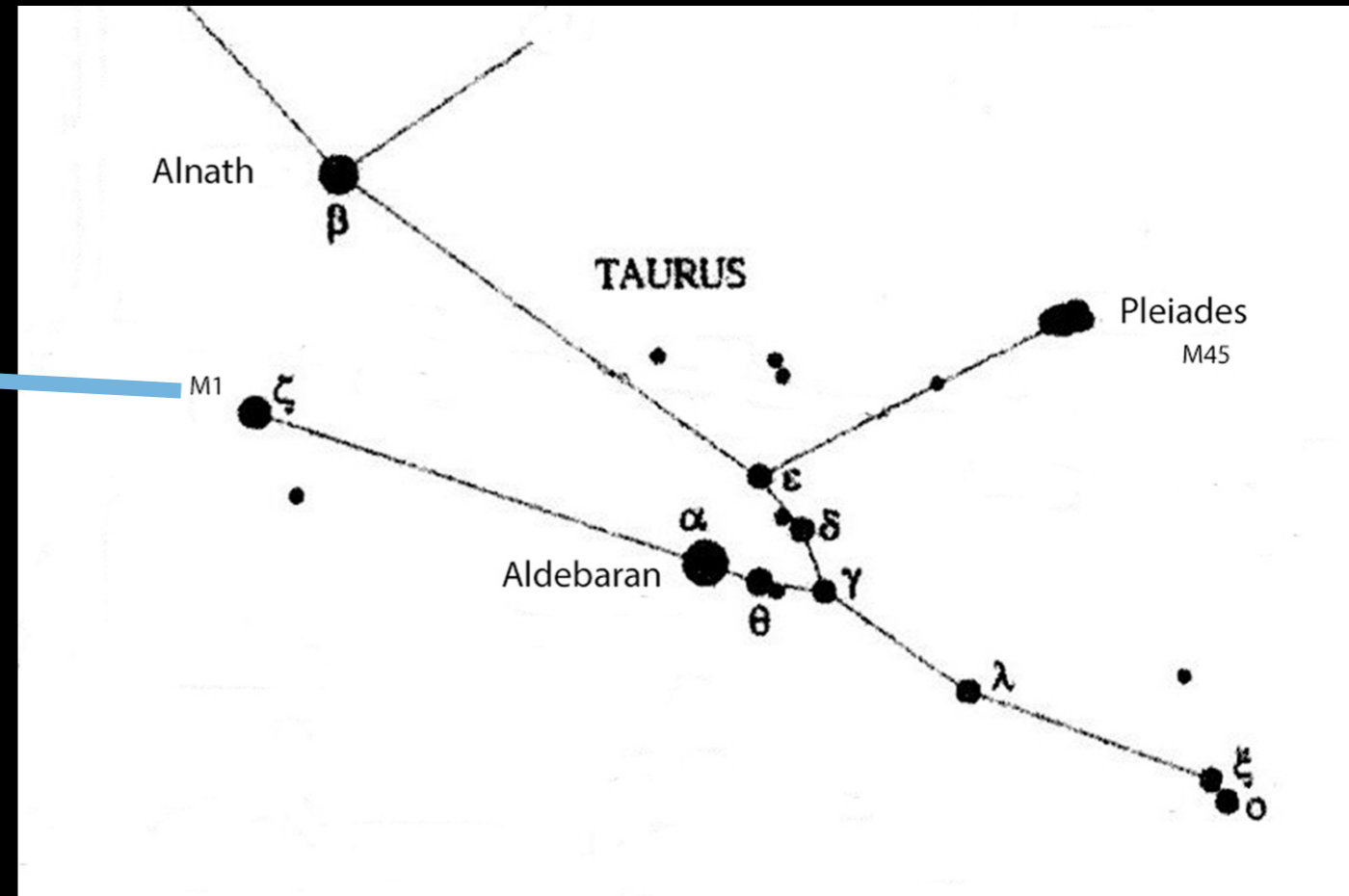
Charles Messier; French astronomer, teacher 1730-1817

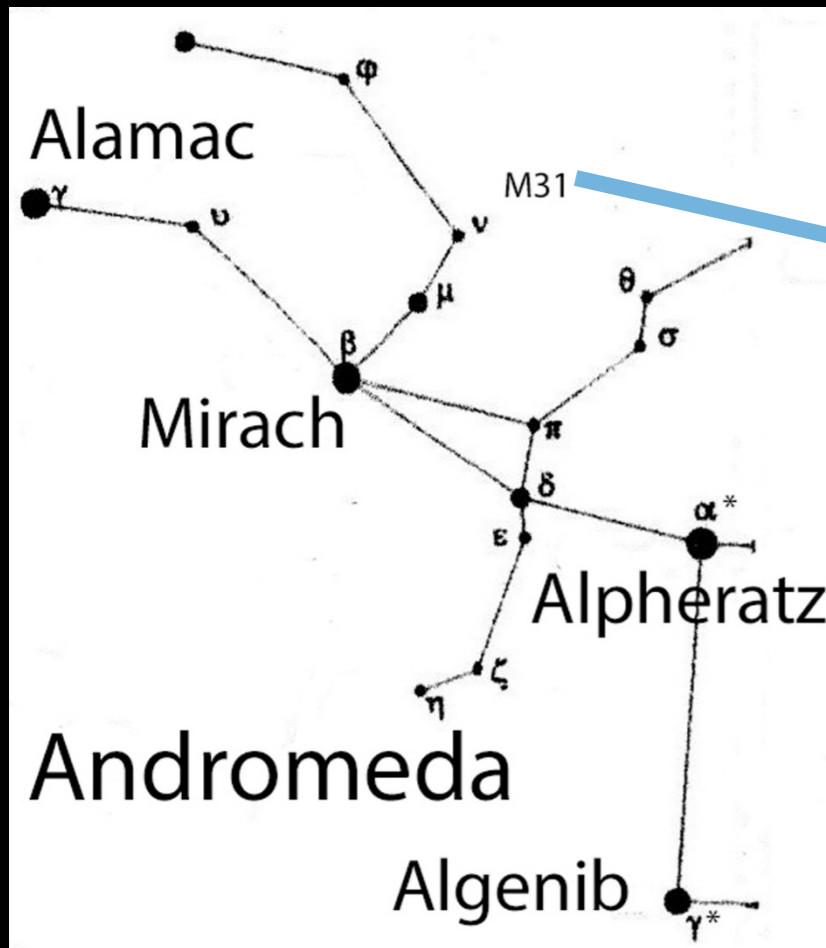
“Catalogue” of non-cometary space objects:
Nebulae_Galaxies, Star Clusters, Planetary nebulae, etc
Originally contained 45 objects

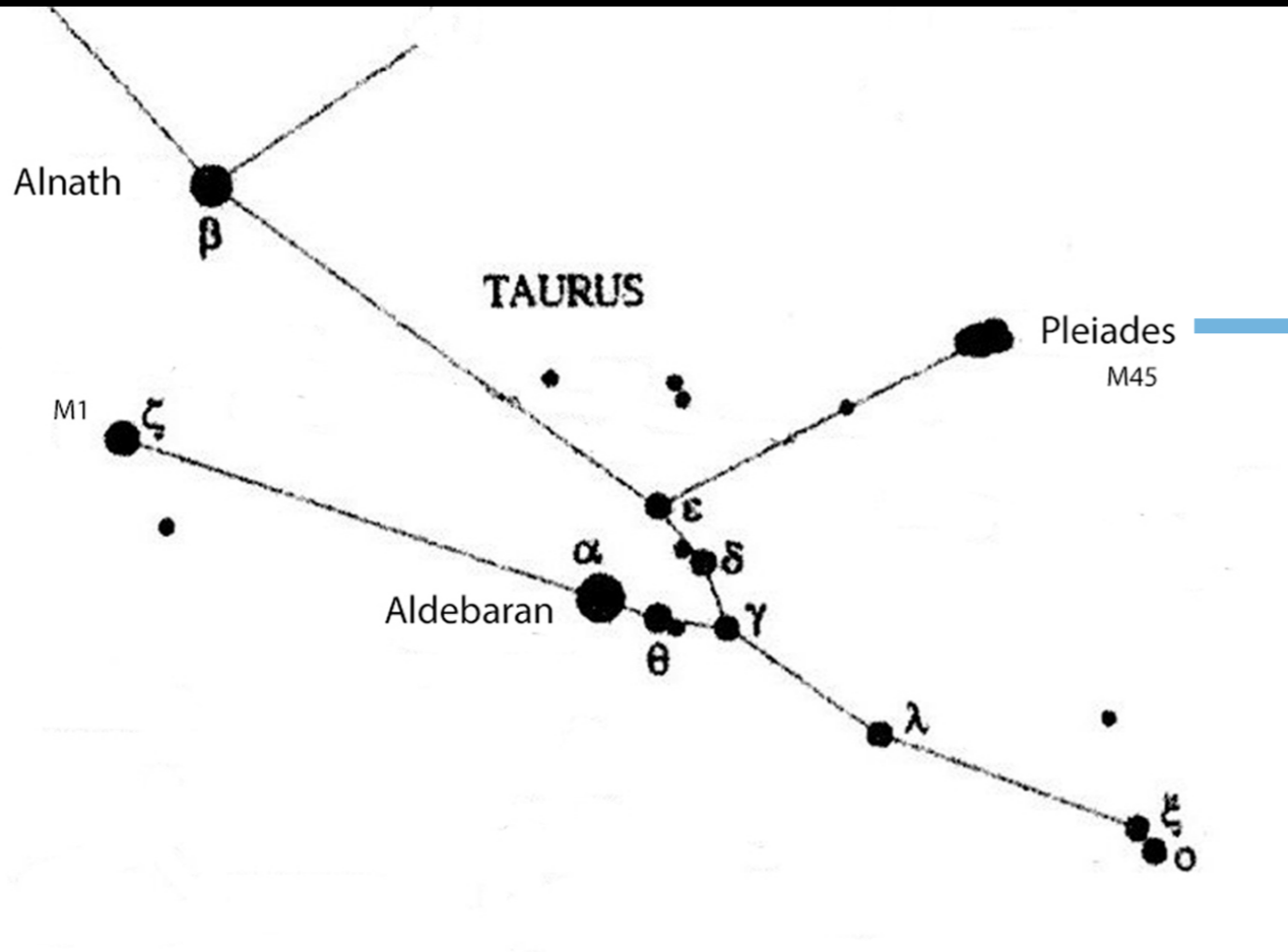
Expanded to 110 objects

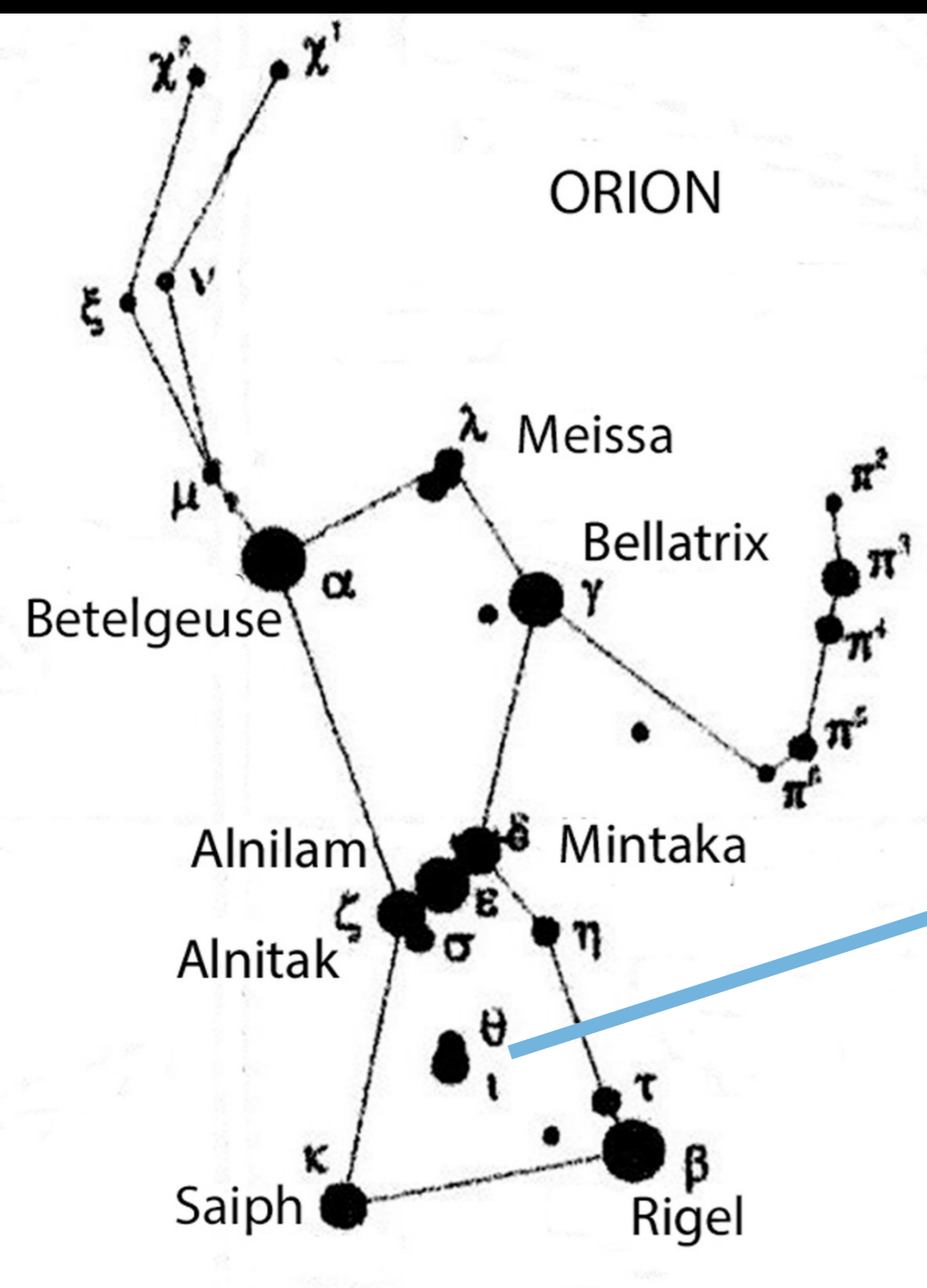
39 Galaxies, 4 planetary nebulae, 7 other nebulae, 55 star clusters

m-1	SN 1054	Crab Nebula
m-31	Galaxy	Andromeda Galaxy
m-45	Open Star Cluster	Pleiædis
m-42	Nebula	Great Orion Nebula







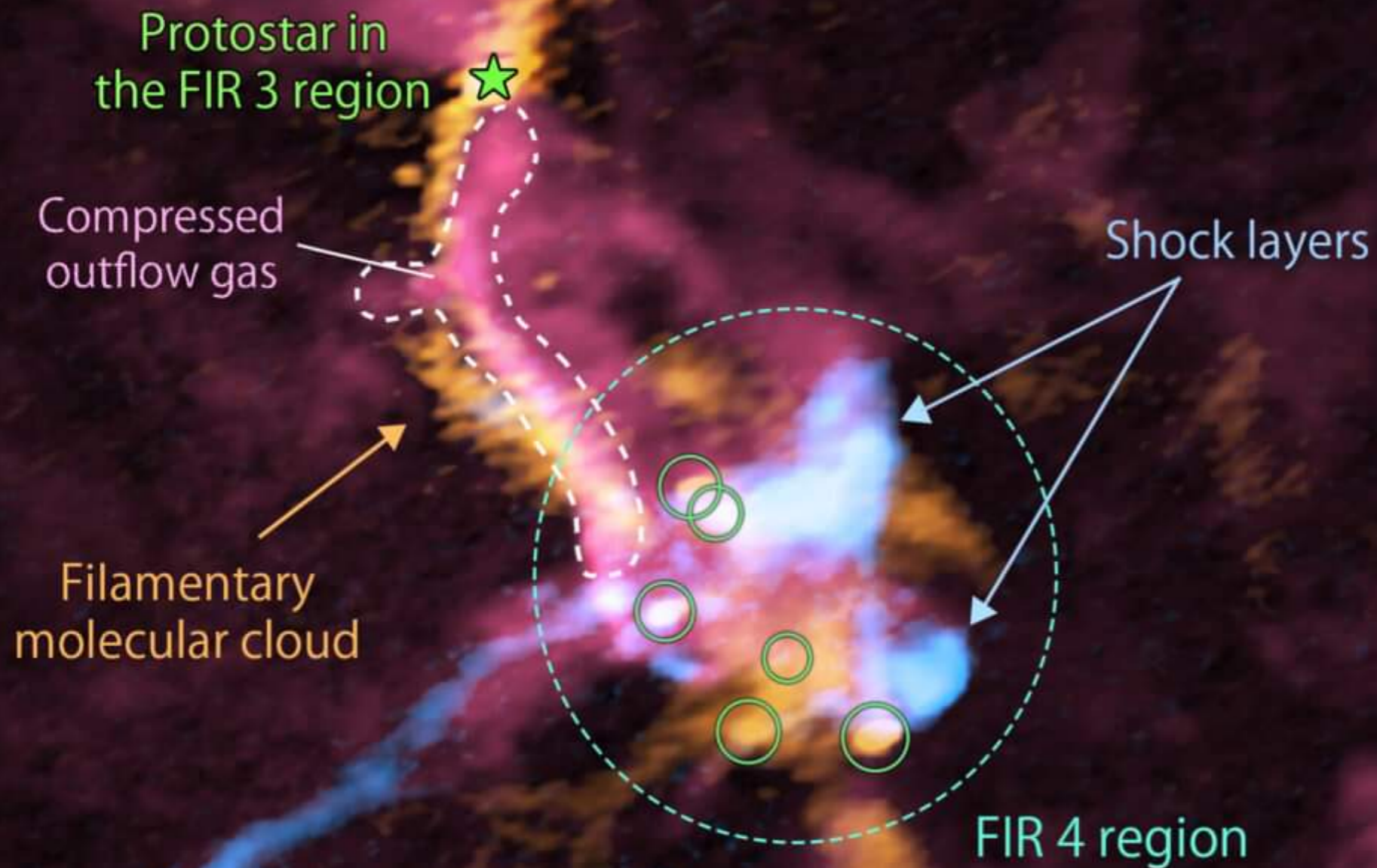


JUST

PUBLISHED

THIS WEEK

Star forming cluster OMC-2



New image
from ALMA
Radio
Observatory
in Chile
of Protostars
in Orion
Molecular
Cloud