

SPRING NOTES (March)

1. EQUINOX: Intersection of Ecliptic and Equator; “equal” day/night;

26,000yrs “precession” ; 1degree in 79yrs

In Pisces = Vernal or Spring; beginning of the “celestial year”

in Virgo = Autumnal or Fall; in 700BCE in Libra, newly formed constellation

RC Easter: 1st Sunday following 1st Full Moon after the Vernal Equinox 2000 epoch

2. Gemini, Canis Major, Canis Minor already discussed in Winter

3. CANCER:

a. dim, early part of other constellations; Site of open star cluster (next month M44)

b. Alpha: Acubens = *Al Zubanāh* claws; 4th brightest in constellation; complex star system; Optically a double White A star

c. Gamma: Aselli Borealis, Orange K giant; Delta: Aeselli Australis White A subgiant = Donkeys (asses)

d. Beta: Alterf ≅ “tail” (misspelling) Al Tarf= eye of the earlier Arabic Lion constellation; brightest star Orange K giant star

4. HYDRA:

a. dim, below horizon of Greeks; longest constellation; Water snake of the Void; part of older constellation, usually known as Snake

b. Alpha: Alphard=from *Al Fard al Shujā'* = neck, backbone of the snake or “bright one or solitary one”

c. also known earlier as *Min al Az'al* = of the void or uninhabited spot; Orange K giant, actually a triple star system

5. LEO:

a. one of the oldest and largest constellations; Lion in most cultures

b. Alpha: Regulus = regal, Arabic *Malikiyy*= King; heart of Lion; on the ecliptic; possible part of Star of Bethlehem; Double double star system, mostly observed as Blue-White B star; bottom of the asterism “The Sickle”; site of five Messier objects

c. Beta: Denebola = end or tail; from Arabic *dhanab al asad* ; 62nd brightest star in sky; White A main sequence dwarf

d. Gamma: Algieba = mane or forehead; part of “The Sickle” asterism; Orange-Yellow K-G double giant; confirmed planet in orbit

e. other stars: conflicting names due to antiquity and various configurations; usually referred to with Greek letters

6. VIRGO:

- a. usually a Maiden; 2nd largest constellation
- b. Alpha: Spica = wheat; Blue-White B double star; 15th brightest in the sky
- c. Beta: Zavijava = Arabic *Al Zāwiah* bend or angle; White-Yellow F star; only 5th brightest in constellation
- d. Gamma: Porrima = ancient *Kakkab Dan-nu* heart of the Hero (?); White-Yellow F Binary
- e. Vindemiatrix= Greek grapes; ancient *Almuredin* = outreached ones, harvester; 3rd brightest in constellation

7. Boötes:

- a. one of the most ancient (48) constellations; Herdsman, Oxen driver, Plowman, Bear watcher, Spear bearer
- b. Alpha: Arcturus=artic bear (*Ursa* and *Arktos*) watcher; Orange K giant; 3rd brightest in the night sky
- c. Beta: Nekkar=Ox Driver, ancient Arabic name for whole constellation; Yellow G giant
- d. Gamma: Seginus= translation error; 4th brightest star in constellation; variable White A giant
- e. Epsilon: Izar (Pulcherrima = most beautiful)= Veil, belt, girdle, (); Binary K-G system; 2nd brightest star
- f. Eta: Mulphrid = Lance; 3rd brightest star; Yellow G subgiant