

Winter Notes

1. ORION:

- a. originally a middle eastern female warrior
- b. Beta=Rigel=*Rig el Jauzah* knee or leg; brightest, Blue-White O-B star
- c. Alpha=*Bet el Jauzah*= Shoulder (underarm) variable Red M supergiant
- d. Gamma=Bellatrix (Amazon Star or Female Warrior); Blue-White B giant
- d. Delta(O-B Double), Epsilon (B supergiant), Zeta (O supergiant); mostly associated with “belt/girdle” terms
- e. Kappa=Saiph; much confusion; early references to “right leg or thigh”, from *Rakbah al Jauza al Yemeniet* = right knee; modern recognition as The Saiph, sword; 6th brightest; Blue-White B supergiant (hypergiant)
- f. Iota= *Na’ir al Saif*; actually refers to a Star Cluster; usually associated with sword; Blue O supergiant
- g. modern *Qar’an* rules
- h. Theta = M42, early sometimes associated with Saif = sword; actually the Trapezium star asterism
- i. Meissa (ancient reference White Spot) = mistake=*Rās al Jauzah* (head); O-B double

2. LEPUS:

- a. Hare; early Throne of Jauzah
- b. Alpha=Arneb (refers to whole constellation); Yellow-White F supergiant
- c. Beta=Nihal (drinking camels?); Yellow G star
- d. “ears” (Lambda, Kappa,Iota, etc) are double double stars, nose (epsilon) is variable K Red giant

3. TAURUS:

- a. associated with the Pleiædes M45 and Hyades (rain bringers)
- b. early 6500bce+) reference to the “beast” of Crete =>bull; 5000bce Early Babylonian tablet
- c. Alpha=Aldebaran (*Ras al Dabarān*) head or bright one of the followers (Hyades (half-sisters) => Pleiædes (seven sister, daughters of Atlas)
- d. Beta=Alnath (El Nath); shared with Auriga as Gamma star; Blue-White B star
- e. Zeta=Al Hecka (southern star (Horn) of the bull); tip of Crab Nebula M1 (SN1054)

4. CANIS MINOR:

- a. Alpha=Procyon (Before the Dog); companion star before being recognized as an unique constellation; Double White F stars
- b. Beta=Gomeisa from *Al Gamus* (blind one??); Yellow G dwarf like the sun

5. CANIS MAJOR:

- a. Al Kalb=Dog
- b. Alpha= Sirius (Dog Star), as the brightest star in the night sky recognized long before seen as a part of an unique constellation; Binary White, Yellow stars;
- c. Beta=Murzim (before the Dog)
- d. Delta=Wezen (Heavy? origin unknown); 3rd brightest; White-Yellow F star
- e. Epsilon=Adhara, 4th brightest ; White-Blue B giant
- f. Zeta=Furud (*Al Furud* or *Al Kurūd*) Bright Single One or The Apes??; White-Blue B dwarf
- g. Eta=Aludra (from an older Arabic constellation); White-Blue B star

6. AURIGA:

- a. Charioteer, Driver or Rein-holder, with Goats
- b. Alpha=Capella (She Goat nurse of Jupiter, added later); White A star
- c. other stars associated with Driver or Goats

7. GEMINI:

- a. usually associated with twins or two; some early references to “legs” as mouth
- b. Alpha=Castor (one of the twins); double White A stars, then classed as binary
- c. Beta=Pollux; earlier Arabic references to Head or Forearm; Orange K star
- d. Gamma Almaisán probably from *Al Han'an* (ankle band)
- e. Delta=Wasat from *Al Wasat*; middle, on the ecliptic
- f. Epsilon=Mesbata; extended paw of early Lion
- g. Eta=Propus; foot; binary; William Herschel “found” Uranus nearby
- h. Calx (Tejat Prior and Posterior); heel, foot; Red M supergiant

8. ANDROMEDA:

- a. from Arabic *Almac* (*Al Mar'ah*)= lady in chains; earlier references as an agricultural scene, combined with other constellations
- b. Alpha= Alpheratz (belly of horse) Shared with Pegasus, as is Algenib (side) (used for many stars, confusing)
- c. Beta=Mirach; earlier reference to a Lion; complex system, main star= Red M giant
- d. Gamma =Almach (woman's foot, various small animals?); complex star system of various classes and sizes, K,B,A
- e. M31 Andromeda galaxy

9. PERSEUS:

- a. (*Hámil Rā's al Ghūl*,) Champion with Demon's head
- b. Alpha (Mirfax or Mirphak)=name from ancient Arabic constellation; Blue-White B star
- c. Algol (Beta)=Monster *Al Ghūl*; eclipsing double Red-Blue/White K-B star 60 hr period
- d. Gamma (Algenib)=name from ancient Arabic constellation, meaning side

