### **Constellation Asterisms**

Information given below can be used to plot the asterisms (lines joining stars to create the familiar outlines). Polyline coordinates are given as a list of stars to join separated by dashes. Where known the right ascension and declination of the stars is given. **This document is not complete.** 

### **Zodiac Constellations**

### Aries (the ram) - ARI

### Taurus (the bull) - TAU

### Gemini (the twins) GEM

$\xi - \dot{\gamma} - \zeta - \delta - \beta -$	$\alpha - \epsilon - \mu - \eta$	
$\xi$ - 6h 45.3m	12.53d	Alzirr
γ –		
ζ –		
$\delta$ – 7h 20.1m	21.59d	Wasat
$\beta$ – 7h 45.4	28.02d	Pollux
$\alpha$ – 7h 34.6m	31.54d	Castor
$\epsilon$ – 6h 44.0m	25.08d	Mebsuta
$\mu$ – 6h 22.9m	22.31d	
η – 6h 14.8m	22.31d	Propus

### Cancer (the crab) CNC

$$\begin{array}{ccc}
\iota - \gamma - \delta - \alpha \\
\iota - \\
\gamma - \\
\delta - \\
\alpha
\end{array}$$

$$\delta - \beta \\
\delta -$$

β –

### Leo (the lion) LEO

### Virgo (the virgin) VIR

30 (the virgin) vita  
109 - τ - ζ - α (Spica) - κ - ι - μ  
109 - τ - ζ - 13h 34.8m -0.36d Heze  
α - 13h 25.2m -11.09d Spica  
κ - ι - μ - 
$$μ$$
 -  $ξ$  -  $δ$  -  $ε$ 

$$\zeta - \delta - \varepsilon$$
  
 $\zeta - 13h 34.8m$  -0.36d Heze  
 $\delta -$   
 $\varepsilon - 13h 02.3m$  10.58d

$$\begin{array}{cccc} \gamma - \eta - \beta & & & \\ \gamma - & 12h & 41.6m & & -1.27d & & Parrima \\ \eta - & & \beta - & & \end{array}$$

### Libra (the scales) LIB

$$\theta - \eta - \gamma - \beta - \alpha - \sigma - \upsilon - \tau$$
 $\theta - \eta - \gamma - \beta - \alpha - \sigma - \upsilon - \tau$ 
 $\theta - \eta - \gamma - \beta - 15h 17.0m$  -9.23d
 $\alpha - 14h 50.9m$  -16.02d Zuben Elgenubi
 $\sigma - 15h 3.9m$  -25.16d Brachium
 $\upsilon - \tau$ 

$$\beta - \sigma$$
 $\beta - 15h 17.0m$  -9.23d
 $\sigma - 15h 3.9m$  -25.16d Brachium

### Scorpius (the scorpion) SCO

### Sagittarius (the archer)) SGR

### Capricornus (the sea goat) CAP

### Aquarius (the water bearer) AQR

$$\varepsilon - \mu - \beta - \alpha - \theta - \iota$$

ε –

μ –

 $\beta-~21h~31.6$ 

-5.35d

Sadalsuud

 $\alpha$  – 22h 5.8m

-0.20d

Sadalmelik

θ –

ι –

$$\alpha-\gamma-\xi-\eta-\phi-\lambda-\tau-\delta$$

$$\alpha$$
 – 22h 5.8m

-0.20d

Sadalmelik

γ –

ζ-

η –

φ –

λ –

τ –

 $\delta$  –

### Pices (the fish) PSC

$$\tau - \upsilon - \phi - \eta - o - \alpha - \nu - \mu - \epsilon - \delta - \omega \\ - \iota - \theta - \gamma - \kappa - \lambda - \iota$$

 $\tau$  –

υ-

φ-

η –

0 -

α –

 $\nu$  –  $\mu$  –

ε –

δ-

ω -

ι –

θ –

γ –

κ –

 $\lambda$  –  $\iota$  –

### **Circumpolar Constellations**

### Ursa Minor (the little dipper or little bear) UMi

### Ursa Major (the big dipper or big bear) UMa

### Draco (the dragon) DRA

# Cepheus (a king of Ethiopia) CEP $\begin{array}{c} \alpha-\beta-\gamma-\iota-\zeta-\alpha \\ \alpha- \end{array}$

$$\alpha - \beta - \gamma - \iota - \zeta - \alpha$$

β –

γ –

α –

## Cassiopeia CAS $\beta-\alpha-\gamma-\delta-\epsilon$

$$3 - \alpha - \gamma - \delta - \epsilon$$

 $\epsilon$  – 1h 54.4m

$\alpha - \gamma - 0 - \varepsilon$		
$\beta$ – 0h 9.2m	59.09d	Caph
$\alpha$ – 0h 40.5m	56.32d	Schedar
$\gamma$ – 0h 56.7m	60.43d	
$\delta$ – 1h 25.8m	60.14d	Ruchbah

63.40d

Segin

### **Other Popular Constellations**

### Andromeda AND

### Auriga (the charioteer) AUR

### Bootes (the herdsman) BOO

$$\begin{array}{c} \upsilon-\tau-\eta-\alpha-\rho-\gamma-\beta-\delta-\epsilon-\alpha\\ \upsilon-\\ \tau-\\ \eta-\\ \alpha\\ \rho-\\ \gamma-\\ \beta-\\ \delta-\\ \epsilon-\\ \alpha \end{array} \qquad \begin{array}{c} \textbf{Arcturus}\\ \\ \textbf{Arcturus}\\ \\ \end{array}$$

### Centaurus (the centaur) CEN

$$\alpha - \varepsilon - \dot{\beta}$$

$$\epsilon-\zeta-\mu-\nu-\eta-\kappa$$

$$\nu - \theta$$

$$\theta$$
 –

$$\nu-d-\iota$$

$$\epsilon - \gamma - \sigma - \delta - \rho - \pi - 3766$$

3766 -

### Cygnus (the swam or northern cross) CYG

### $\alpha$ (Deneb) – $\gamma$ – $\eta$ – $\beta$

Deneb

α

$$\epsilon - \gamma - \delta$$

### **Hercules HER**

$$\alpha - \beta - \gamma$$
 $\alpha -$ 

$$\begin{array}{c} \beta-\zeta-\epsilon-\delta-\lambda-\mu-\xi-o\\ \beta-\\ \zeta- \end{array}$$

$$\epsilon-\pi-\rho-\theta-\iota$$

$$\pi$$
 –

$$\pi-\eta-\sigma-\tau-\phi$$

$$\tau$$
 –

$$\begin{array}{c} \eta - \zeta \\ \eta - \\ \zeta - \end{array}$$

Hydra (the water snake) HYA (not hyi)  $\pi-\gamma-\beta-\xi-\nu-\mu-\lambda-\upsilon 1-\alpha-\iota-\theta-\zeta-\epsilon-\delta-\sigma-\eta-\zeta$ 

γ –

β –

ξ – ν –

μ –

υ1 **-**

α –

ι –

θ –

ε –

δ-

σ-

η –

ζ-

Lyra (the lyre) LYR  $\alpha-\zeta-\delta-\gamma-\beta-\zeta$ 

α

 $\begin{array}{c} \zeta - \\ \delta - \end{array}$ 

 $\begin{array}{l} \gamma - \\ \beta - \\ \zeta - \end{array}$ 

Vega

### Orion (the hunter) ORI

$$\chi \stackrel{?}{2} - \xi - \mu - \alpha \stackrel{'}{-} \lambda - \gamma - \delta - \beta - \kappa - \xi - \alpha$$

$$\chi \stackrel{?}{2} - \xi -$$

$$\xi -$$

$$\mu -$$

$$\alpha$$

λ –

 $\begin{array}{c} \gamma - \\ \delta - \end{array}$ 

β κ –

α

٠..

 $\gamma - \pi 3$   $\gamma - \pi 3$   $\pi 3$ 

$$\pi 1 - \pi 2 - \pi 3 - \pi 4 - \pi 5 - \pi 6$$

 $\pi 1$  –

 $\pi 2$  –

 $\pi3$  –

 $\pi 4$  –

π5 –

 $\pi 6$ 

### Pegasus (the winged horse) PEG

Andromeda  $\alpha - \beta - \alpha - \gamma$  – Andromeda  $\alpha$ 

 $Andromeda~\alpha -~0h~8.4m~~29.05d$ 

β –

 $\alpha$  –

 $\gamma$  - 0h 13.3m 15.11d Andromeda  $\alpha$  - 0h 8.4m 29.05d

Algenib

Betelgeuse

**Betelgeuse** 

Rigel

### **Perseus PER**

### Triangulum TRI

$$\alpha - \beta - \gamma$$
 $\alpha - 1h 53.1m$ 
 $\beta - 2h 9.5m$ 
 $\gamma - 29.35d$ 
 $\gamma - 34.59d$ 

## The Greek Alphabet

$\alpha$ = alpha (a)	$\iota = iota(i)$	$\rho = \text{rho}(r)$
$\beta$ = beta (b)	$\kappa = \text{kappa}(k)$	$\sigma = \text{sigma}(s)$
$\gamma = \text{gamma}(g)$	$\lambda = \text{lambda (l)}$	$\tau = tau(t)$
$\delta = \text{delta}(d)$	$\mu = mu(m)$	v = upsilon(u)
$\varepsilon = epsilon(e)$	v = nu(n)	$\varphi = \text{phi } (j) \text{ or } \varphi = \text{phi } (f)$
$\eta = \text{eta}(h)$	$\xi = xi(x)$	$\chi = \text{chi}(c)$
$\xi = zeta(z)$	o = omicron (o)	$\psi = psi(y)$
$\theta = \text{theta}(q)$	$\pi = pi(p)$	$\omega = \text{omega}(w)$