

## NOTES ON USING THE ALCYONE EPHEMERIS

It is assumed you have downloaded either a freebie or a bought copy onto your PC.

Call up the Ephemeris. Initially you should see something like the picture on P03 on your screen.

From the menu on the top-most tool bar select “Ephemeris” and from the drop down menu select “Observer”. A new window will appear called “Location Database”. At the bottom of this is a + sign. Click on this and a form will appear allowing you to create your own custom observer position. Fill in the boxes as follows

Location : Point Balloon  
Region : UK  
Latitude : 61°N Time Zone 0  
Longitude : 0°

Click OK

From the menu on the top-most tool bar select “Ephemeris Data”. A new window will appear. In the top box select “topospheric horizontal”. Second box select Azimuth and altitude. In “Bodies” box select Su and Fx.

Click the button called “Fix Star Selection”

A new window will appear called “Bright Star Catalogue”

In the top left hand corner select the constellation in which the star of your choice lies. For example select Orion in the box. Then a list of stars in the constellation Orion will appear. Select Rigel. Click OK.

Next fill in the boxes for time and date. Use 21 March 2008 at 21:00 for now. For time interval select 1 minute.

From the second from top tool bar click on the right pointing blue arrow ►

What you will then see is a table of Orion's Altitude as a function of time. A plus sign means it is above the horizon and a negative sign means it is below the horizon. Thus you can get the setting time.

Be careful about the time zone, it can be misleading. If you call up Anchorage, with the time zone set to -10 hours and then find sunrise on 15<sup>th</sup> August 2006 , it gives a time of about 06:00 and the time column is headed UT. This is clearly an oversight. You need to set the time zone to zero when the time column will really show UT=GMT. Use your common sense here.

Azimuth is measured westwards from south.

**Alcyone Ephemeris 2.4**

File Edit View Ephemeris Plot Script Help

Starting date and time  ET Time shift Interval Bodies Num. of values

Year Month Day Hour Min Hour Min Sec Days Hours Min. Sec. Ahead Back

2007 9 25 5 0 0 0 0 0 0 0 0 0 300 0

	Sun		Betelgeuse	
UT	azimuth	altitude	azimuth	altitude
2007-09-25 05:00:00	264.6732	-11.4082	334.0673	67.3633
2007-09-25 05:01:00	264.7952	-11.1895	334.6644	67.4589
2007-09-25 05:02:00	264.9170	-10.9708	335.2662	67.5525
2007-09-25 05:03:00	265.0387	-10.7521	335.8726	67.6440
2007-09-25 05:04:00	265.1601	-10.5333	336.4835	67.7333
2007-09-25 05:05:00	265.2815	-10.3144	337.0988	67.8204
2007-09-25 05:06:00	265.4026	-10.0955	337.7186	67.9053
2007-09-25 05:07:00	265.5236	-9.8765	338.3428	67.9880
2007-09-25 05:08:00	265.6445	-9.6574	338.9712	68.0685
2007-09-25 05:09:00	265.7652	-9.4382	339.6039	68.1467
2007-09-25 05:10:00	265.8858	-9.2189	340.2407	68.2226
2007-09-25 05:11:00	266.0062	-8.9995	340.8815	68.2962
2007-09-25 05:12:00	266.1265	-8.7799	341.5264	68.3674
2007-09-25 05:13:00	266.2467	-8.5602	342.1751	68.4363
2007-09-25 05:14:00	266.3667	-8.3402	342.8276	68.5028
2007-09-25 05:15:00	266.4867	-8.1199	343.4838	68.5668
2007-09-25 05:16:00	266.6065	-7.8994	344.1435	68.6285
2007-09-25 05:17:00	266.7262	-7.6784	344.8067	68.6877

1  
0.8  
0.6  
0.4  
0.2  
0

0 0.2 0.4 0.6 0.8 1

hor. topocentric normal mode 1m 0s (0.0007 d) Position A (Africa) 0h 0m 0s S true equinox of date refraction

start My Documents Alcyone Ephemeris 10:26

