

# Noise Source Planner

When the program is first run the top of the screen appears as follows.

Help About Exit VK3UM Ver 1.0.7																		
Time	Aquarius		Leo		Centaurus-A		Cygnus-A		Taurus-A		Virgo-A		Sagittarius-A		Moon		Sun	
UTC	Local	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	

Whilst the bottom appears as this.

Home Data Az El Display REAL TIME DISPLAY

U.T.C. Date Start Date: 05/07/2012 End Date: 05/07/2012

Calculation Interval: 60 Minutes

U.T.C. ... Thu 5 July 2012 ... 0944:37 Local .. Thu 5 July 2012 ... 1944:37

Time	Aquarius		Leo		Centaurus-A		Cygnus-A		Taurus-A		Virgo-A		Sagittarius-A		Moon		Sun		
UTC	Local	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation	Azimuth	Elevation		
0944:37	1944:37	110.45	-24.55	308.47	-1.60	237.93	77.89	53.17	-19.37	263.04	-46.52	326.24	33.27	94.29	47.05	102.36	6.78	277.32	-29.41

The above display provides at the **current time of your computer**, the position of all the selected sources. Should they be below the horizon at that time they will be showed 'greyed out'.

- Initial set up

- Click on the **Home data** which will reveal the following panel.

**Home Station Data**

Latitude: 37 22 53 S 37.381389

Longitude: 145 29 51 E 145.49750

Call Sign: VK3UM Location: Tikaluna

Grid: QF22ro

UTC Off set: 10.0 Height ASL (m): 325

Get Home Data Save Home Data Close

**User Defined Noise Source**

Object Name: W38 .. M17

R.A. Hrs min sec Decimal Hours: 18 17 8 18.285556

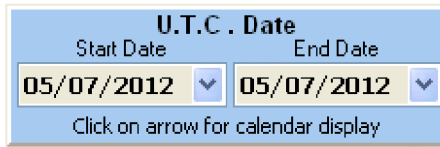
Declination Deg min sec Decimal Dec.: + 16 60 0 -16.15000

On Screen Hints: 8 seconds 4 seconds 2 seconds  Disable

- You may enter your Home data in 3 ways
  - Over type the grid square with your own grid.
  - Enter each latitude and longitude value and set N/S and E/W
  - Over type you latitude and longitude decimal degree.
- Enter your Call Sign, Location, UTC off set, and Height above sea level.
- Choose the onscreen hint message delay.
- Finally click on Save home Data and all your information will be saved  
Note the **Calculation Interval** will be saved as well.

At this stage you do not need to change the **user defined noise source** as this is an option which you may utilise to add a noise source other than those provided in the program  
The **Get home data** button recalls your stored home data should you desire.

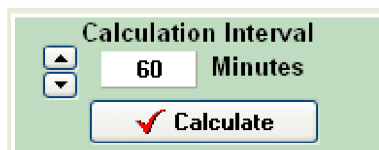
- **Time and Date**



U.T.C. Date  
Start Date      End Date  
05/07/2012    05/07/2012  
Click on arrow for calendar display

- On program start the displayed date is the current date.
- You may use the down arrows to reveal the calendar and set the start and end days of your required calculation period

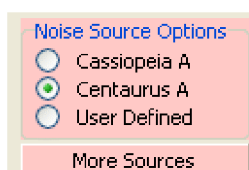
- **Calculation Interval**



Calculation Interval  
60 Minutes  
Calculate

- With the **up/down arrows** chose the calculation period required. The default 60 minute selection will provide a full page display.
- Note this setting will be stored as you **default Home data** if required.
- Click **Calculate** to display all values of sources.

- **Noise Source Options**



Noise Source Options  
 Cassiopeia A  
 Centaurus A  
 User Defined  
More Sources

- In the data display the **first column after the Quiet sources** (Aquarius and Leo) is used as a **selectable noise source choice**. You may select Cassiopeia A, Centaurus A or the user defined option as you may program in the Home Data set up option.
- Additionally you may select from 3 panels of options by clicking on **More Sources** and the following panel will be revealed

Name	RA h:m	Dec °:m	Jy	Comments
3C10	00:22.6	+63:52	44	
3C144	05:31.5	+21:59	875	Taurus A
3C157	06:14.3	+22:36	190	
W41	18:31.6	-08:57	75	
3C392	18:53.6	+01:15	171	W44
W78	20:48.2	+29:30	90	Cygnus loop
3C461	23:21.1	+58:33	2480	Cassiopeia A

Name	RA h:m	Dec °:m	Jy	Comments
3C123	04:33.9	+29:34	47	
3C218	09:17.5	-11:53	43	D Galaxy
M87	12:26.3	+12:40	198	Virgo A
3C295	14:09.6	+52:26	23	D Galaxy
3C348	16:48.7	+05:05	45	Hercules A
3C353	17:17.9	-00:56	57	D Galaxy
3C405	19:57.7	+40:36	1495	Cygnus A

Name	RA h:m	Dec °:m	Jy	Comments
W3	02:22.7	+61:51	170	IC1795
3C145	05:32.8	-05:27	520	Orion A
3C147	05:38.4	-01:54	95	Orion B
W28	17:58.2	-23:22	360	M20
W29	18:01.0	-24:22	260	
W33	18:10.4	-18:00	190	
W37	18:16.3	-13:45	260	M16
W38	18:17.8	-16:09	1060	M17
3C400	19:20.8	+14:08	710	W51

Supernova remnants (SNR)	Radio Galaxies	Nebulas

Any of the above sources may be selected and its calculation will be displayed under its heading in column 3. **To exit this option click on any yellow Radio Source title panels.**

- **Az El Display / Polar display**



- Clicking on **Az El Display** will change the calculation to a **Polar Display** for those that use a Polar mount. The change will show calculations as displayed below.

Taurus-A	
Azimuth	Elevation
13.85	29.39
5.89	30.41
357.80	30.60
349.76	29.96
341.95	28.49

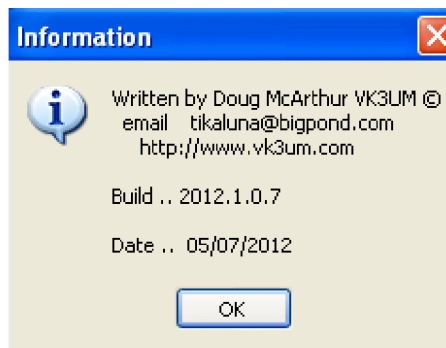
Az El Display

Taurus-A	
GHA	Dec
201.50	21.98
209.02	21.98
216.54	21.98
224.06	21.98
231.58	21.98

Polar Display

- **Other options**

- **Print.** This option allows for selection and set up of your printer and to print the computed data.
- **Reset screen size.** You may by clicking the open square icon on the top right of the screen fully display the program as the full capability of your screen resolution. You also may drag and resize the program display as required. The reset screen size may be used if, in the latter case you wish to restore to the normal display size.
- **Help.** This will display this help file.
- **About.** This will provide information as to the Author, software build date and version number.



- **Exit.** Provides '**soft exit**' (confirmation you wish to exit) of the program.