

### **NAS Australia UEC VAST Satellite Dish Pointing Guide**



### **Handy Hint 1**

The Optus C1 Satellite is positioned above PNG. As pictured, the satellite is always located East of True North

### Step 1.

Assemble the satellite dish and mount on the pole. Ensure the pole is vertical

#### Step 2.

Connect the UEC VAST IRD or PVR to your TV

See the 'connect the decoder' section of the UEC viewer's guide

#### Step 3.

Connect the cable from the LNB to the UEC VAST IRD, PVR or VAST TV

It is recommended that quality RG6 quad shield coaxial cable is used

#### Step 4.

Configure the signal detection menu on the UEC VAST IRD, PVR or VAST TV

Accessed through the Advanced Options Menu of your UEC VAST IRD, PVR or VAST TV

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### Step 5.

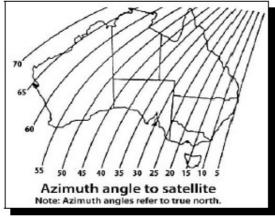
Point the satellite dish to access the VAST Service off Optus C1

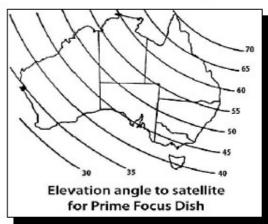
Refer to table and maps for guidance (page 2)

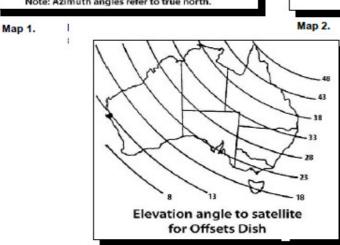


### Offset and Prime Focus satellite Dish Examples - Optus C1

Example 1.	Example 2.
Location: Broken Hill	Location: Longreach
Dish Type: Offset	Dish Type: Prime Focus (Old AUSTAR/BMAC dish)
Elevation Angle: 28° up from horizon (refer to map 3)*	Elevation Angle: 60° up from horizontal (refer to map 2)
Azimuth Angle: 26 ° East of True North (refer to map 1)	Azimuth Angle: 30° East of True North (refer to map 2)
If using a magnetic compass then minus the magnetic correction (refer to map 4) of approximately 8 °	If using a magnetic compass then minus the magnetic correction (refer to map 4) of approximately 8 °
26° – 8° = 18° East of Magnetic North	30° – 8° = 22° East of Magnetic North







- \* Offset dishes are offset by approximately 20° ~ 28° Map 3 shows the relative dish angles for a common dish with 22° offset.
- If angles are marked on the mounting bracket refer to map2.

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Map 3.

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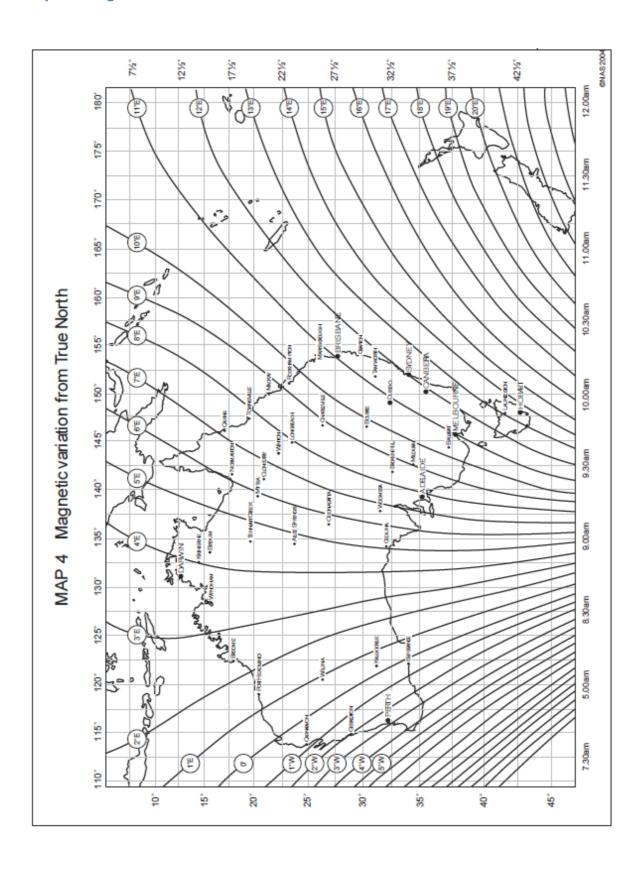
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### **Handy Hint 2**

There are three measurements that you will need to get right. Azimuth (East/West), Elevation (Up and Down) and Polarisation (also known as Skew). As demonstrated on the first page of this guide, the Optus C1 satellite is located above PNG. As a result, there is a definitive relationship between what needs to be done to locate the satellite from different locations within Australia. The further North you travel, the greater the dish elevation will be. The further West you travel the further East you will need to point the satellite dish.



Map 4 - Magnetic Variation from True North



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### For those who have internet access and mobile phone coverage

For those who have internet access, you can find the Azimuth, Elevation and Polarisation (Skew) details for a given location on numerous free dish pointing sites. We find <a href="http://www.dishpointer.com/">http://www.dishpointer.com/</a> reliable and user friendly. Once you access the site you will need to enter your location (i.e. Yaraka, QLD). Then select the All Satellites tab then 156E OPTUS C1 I OPTUS D3 from the drop down tab. Once done, the relevant dish setup data will be provided at the bottom of the page.



Should you have mobile phone coverage you can download dish pointing apps. One such app is the http://www.wikicamps.com.au/satfinder.php

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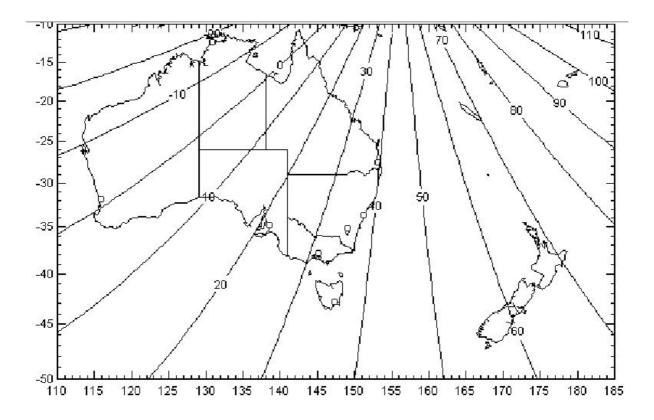
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### Map 5 – Polarisation/Skew



Polarisation or Skew varies depending on location. If you cannot access a dish pointing guide online, it is possible to work out your skew by plotting your location on map 5. If you are located in Brisbane, your LNB Skew would be a little less than 40 degrees. The further West you travel, the less the skew becomes. Some areas of the Northern territory and Western Australia have a Negative Skew.

Should the LNB connection and the cable point directly down, there will be 0 Skew. Standing in front of the dish and turning the LNB in a clockwise direction from 0 skew is a positive Skew. Standing in front of the dish and turning the LNB in an anti-clockwise direction from 0 skew is a negative skew. The photo below shows a 4 output LNB on our dish in Brisbane with a positive Skew a little less than 40 degrees.

Photo 1 – LNB Skew Brisbane of a little less than 40 degrees



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