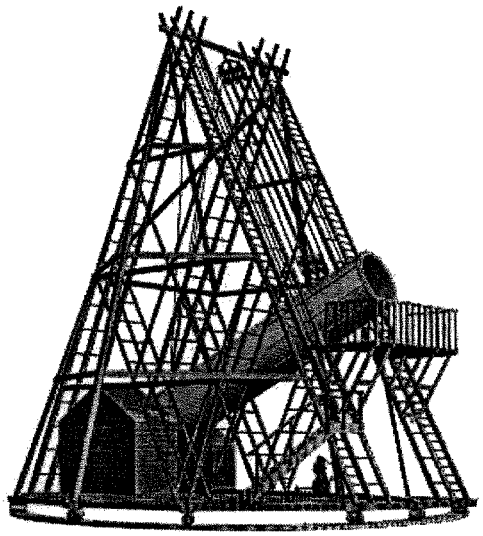
Site for 16" Telescope Enclosure

As announced last month, site preparation for a new telescope enclosure to accommodate the 16" has been completed. Located in the area between the VOF and the Astrograph dome, provision has been made on the cleared site for two enclosures - the second of which has not yet progressed beyond the "good idea" stage.

Good ideas are also being sought for how best to utilize the area surrounding the planned 16" telescope enclosure. If you have any suggestions how this area can be best developed to promote astronomy, preferably with a practical perspective, Jamie Biggs would welcome your input.



Note that there are several restrictions to what can be accommodated at the site. These are:

- It must be low cost (preferably REALLY LOW COST).
- It must be of the highest value for money.
- It must have an astronomy theme.
- It must not require large amounts of water.
- It must be low maintenance.
- It must not obstruct the view from the VOF and other current or planned telescope enclosures (a structure such as the one illustrated would likely not pass the test).

If you would like to contribute, would you please put your ideas in writing and forward them to the Government Astronomer, Jamie Biggs by September 1, 1998.

1998 Night Tour Volunteer Intake

Due to current staff shortages, any intake of new volunteers to the Night Tour program will most probably be delayed until November.

In the Eyepiece - Butterfly Cluster

As one of the largest and brightest galactic star clusters, **M6** (also known as the Butterfly Cluster) appears to the naked eye as a 6th magnitude glow near the tail of Scorpius.

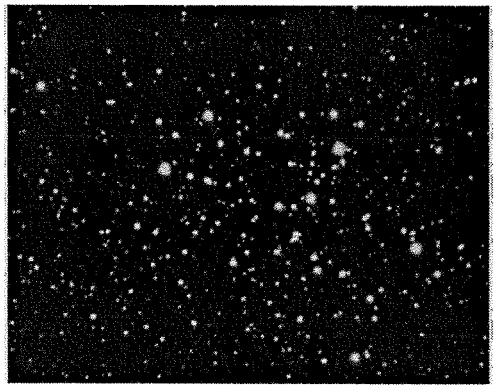
Despite its definite naked eye visibility and apparent references to its existence as far back as Ptolemy, the discovery of M6 is generally credited to P.L. de Cheseaux in 1746. Together with the neighbouring M7, it is described in Ulug Beg's catalog as *Stella nebulosa quae sequitir aculeum Scorpionis* or "The Cloudy Ones which follow the Sting."

Occupying nearly the same area of sky as the full Moon, M6 is easily visible in binoculars and is particularly well suited to viewing with a small telescope, comfortably filling a 25' view.

Some uncertainty exists concerning the distance to M6, but this is a common circumstance for objects located in heavily obscured regions. Generally held to be about 50% more distant than M7, the most reliable modern estimates place M6 about at a distance of about 1300Ly. This translates to a diameter for the main "Butterfly" figure of approximately 9Ly, with the width for the entire cluster being close to 20Ly.

With a computed age of 100 million years, M6 is somewhat older than the Pleaides, but is less than half that of its near neighbour, M7.

The cluster comprises a scattering of about 80 stars between 7th and 10th magnitudes which are arranged in radiating chains. These are mainly B-type main sequence stars, with the brightest member, which highlights the NE wing tip, being a K-type giant. This star is the semi-regular



FACT *file*

Name :	M6
Type of object :	Open Cluster
Other names :	NGC 6405
Constellation :	Scorpius
RA :	17h 40m 01s
Dec :	-32° 12' 49"
Magnitude :	4.2
Distance :	1300Ly
Size :	15.