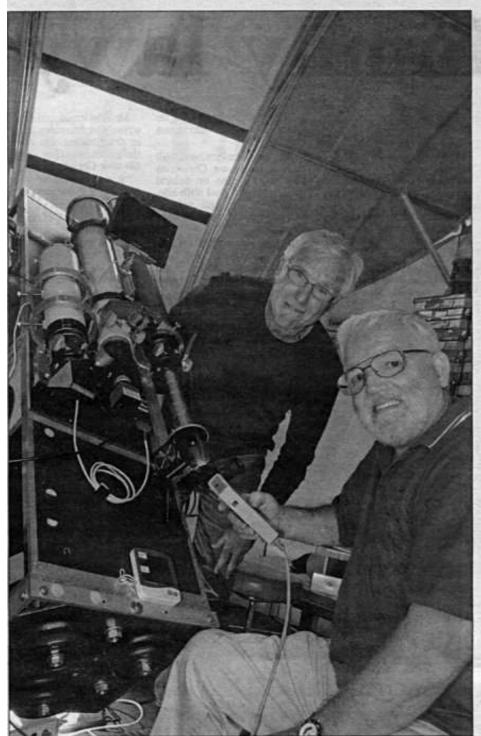
Jupiter photo opportunity



BY JUPITER: Robert Lucas, left, and Shevill Mathers are planning to point Mr Mathers' solar coronagraph at Jupiter tomorrow.

Picture: ROGER LOVELL

LUKE SAYER

A TASMANIAN astronomer could be on the brink of uncovering some of the secrets of the giant planet Jupiter.

Shevill Mathers is deep in preparations to catch the moments before Jupiter passes behind the sun tomorrow.

He has been joined by University of Sydney academic Robert Lucas in an attempt to capture world-first images of the gas giant.

Astronomers call the time a planet disappears behind the sun an occultation, and the last time Jupiter passed this way was 1995.

"To date, this occultation has not been successfully observed or photographed by any professional observatory," Mr Mathers said. "If we can pull this off it will be a remarkable achievement."

Mr Lucas contacted Mr Mathers because his Southern Cross Observatory contains a very special instrument.

"Some time ago I purchased a Baader Planetarium Mark IV Solar H-alpha coronagraph," Mr Mathers said.

It was to help further his interest in photographing solar activity. When it is attached to a telescope it can produce an artificial solar eclipse.

Makers Baader say it is the only such instrument in Australasia.

Mr Mathers said by blocking the sun, it should be possible to see and photograph Jupiter as it approaches the sun, and is eventually occulted by it.

The pair are hard at work preparing for the event, and testing their theories on how best to capture the moment.

And their fingers are crossed for clear weather at the time of the event.

"If we get a clear sky, it will allow us to see Jupiter as it heads toward the sun and disappears behind it."