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## MEDIA RELEASE

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**Date:** 26 May 2012. For immediate release

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**Subject:** Australian Students observe Venus phenomenon

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Students from over 300 schools across the country will get to view the Transit of Venus first hand, when it crosses the path of the Sun on Wednesday, 6 June 2012.

Using a “SolarScope”, students will get to see the planet slowly make its way across the Sun, and take observations to record the time and position of Venus as was performed historically.

The Transit of Venus occurs when the planet Venus passes directly in front of the Sun. This is extremely rare, with the next transit not due to occur for another 106 years. Eastern and central Australia will be one of the few places in the world to see the whole six-hour journey across the sun between 8:30am and 2:30pm.

The Transit of Venus was first recorded in 1639 with early Astronomers sailing the globe to make observations, including Lieutenant James Cook, an accomplished Surveyor and Navigator who was sent to Tahiti on HMS Endeavour to observe and record the Transit of Venus in 1769.

Using Navigation, Astronomy and Surveying principles, measurements were taken and analysed to help calculate the size of the solar system using Kepler’s 3<sup>rd</sup> law of planetary motion.

After the 1769 Transit, James Cook explored and charted the east coast of Australia making his voyage both scientifically important and historically monumental for us today.

“Venus will look like a black dot as it moves across the lower half of the sun, but no one should look directly at it,” Craig Roberts, from the UNSW School of Surveying & Spatial Information Systems said.

“Just as the Transit of Venus was a major scientific event in the 18<sup>th</sup> century, we’re still conducting large scale scientific observations using cutting edge surveying technology to exactly measure sea level rises, tectonic plate shifts and maybe one day earthquake prediction,” Roberts said.

Modern Surveyors benefit from this high-end science in their day to day work using survey accurate GPS, lasers and satellite imagery, to provide reliable solutions to real issues faced across the community, be it in relation to property boundaries, infrastructure management or environmental decision making.

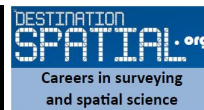
“We are excited that schools are taking an interest in the Transit of Venus as it touches on so many subjects like space, maths, science, geography, engineering, history and of course surveying.”

“We have a looming skills shortage in the surveying profession and wider geospatial industries, and want students who like science or maths to consider studying its practical applications at university or TAFE.”

SolarScopes have been donated to schools across Australia by the Surveying and Spatial Science Industry as part of an awareness campaign to increase the profile and Surveying and Spatial Science in the community.

Media are invited to report on the observance of the Transit at participating schools on 6 June. Licensed Surveyors will be also in attendance at most schools to answer student questions about Surveying and how it was used historically to measure the Transit of Venus in Cook’s time.

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# MEDIA RELEASE

## Core statements for editorial use

- Transits of Venus occur in a pattern that repeats every 243 years. Recorded observations have been in 1639, 1761, 1769, 1874, 1882 and 2004. The next one after 2012 is due in 2117. Venus actually passes between the Earth and the Sun about every 19 months, but we don't see it "transit" across the Sun as its orbital path is above or below it.
- The 2012 Transit will be best seen from eastern and central Australia.
- SolarScopes have been sponsored and distributed throughout Australia by the Surveying and Spatial Science Industry, the Transit of Venus Committee and the Astronomical Association of Queensland to increase the awareness of Surveying and engage students in a historically rare event.
- Over 300 schools are participating in the mass observation nationally as part of the Transit of Venus project with 95 in QLD, 120 in NSW, 70 in VIC, and 15 across TAS, SA and WA.
- The project provides students with the opportunity to make their own observations and use the web site tools to calculate the Astronomical Unit (AU) at their school.
- The Transit of Venus Schools project is designed to engage students in concepts relating to maths, science, geography, engineering, and history subjects.
- Never look directly at the Sun during the Transit as you may cause serious and permanent damage to your eyesight. Safe viewing options include using a SolarScope, Binocular or telescope projection (using appropriate safety precautions), or via webcast.
- Surveying is the measurement, mapping and analysis of the environment using specialised tools and technology.
- Over the years, the work of Surveyors using Astronomy has been greatly simplified by technological improvements and techniques. The need for the practical application of field Astronomy in Surveying has now shifted emphasis to Spatial Science tools, as earth satellites (Global Positioning System or GPS) are now generally used for determining location.



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**Media enquiries:** **NSW**  
Craig Roberts  
Senior Lecturer  
School of Surveying and Spatial Information Systems  
University of New South Wales  
02 9385 4464  
c.roberts@unsw.edu.au

**QLD**  
Tim Pumpa  
Member, Transit of Venus Committee  
State Manager/Cadastral Surveyor, Bosco Jonson Pty Ltd  
0457 729 690  
tpumpa@bosjon.com.au

Chris Swane  
Member, Transit of Venus Committee  
Director/Cadastral Surveyor, Bennett & Bennett Pty Ltd  
0408 156 880  
cswane@bennettandbennett.com.au

Bill Kitson  
Author in Astronomy and Surveying, Curator Surveying Museum Brisbane  
(Retired), Surveyor (Retired)  
(07) 5435 8851  
william.kitson@bigpond.com

**VIC**  
Michelle Brooks  
BlueFrog Marketing  
0404 047 433  
www.bluefrogmarketing.com.au

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**General enquiries:** For information about Surveying and Spatial Science visit:  
[www.alifewithoutlimits.com.au](http://www.alifewithoutlimits.com.au)  
[www.destinationspatial.com.au](http://www.destinationspatial.com.au)

For enquiries about Surveying and Spatial Science Industry contact:

**NSW**  
Michael Lockley  
Member, ISNSW  
0412 581 661  
michaell@lockley.com.au

**QLD**  
Phil Pozzi  
Chair SSSIQ LSC  
Director Bennett & Francis  
(07) 3239 5407  
p.pozzi@bfsurveys.com.au

**VIC**  
Patrick Meehan  
Chair, Surveying Task Force Victoria  
0425771390  
patrick.meehan@vekta.net.au



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Surveying  
allfeewithoutlimits.com.au



## MEDIA RELEASE

For academic enquiries about Surveying and Spatial Science contact:

### **NSW**

Craig Roberts  
Senior Lecturer  
School of Surveying and Spatial Information Systems  
University of New South Wales  
02 9385 4464  
c.roberts@unsw.edu.au

### **QLD**

Dr John Hayes  
Senior Lecturer  
QUT Science and Engineering Faculty  
Queensland University of Technology  
07 3138 1541  
jf.hayes@qut.edu.au

Kevin McDougall  
Senior Lecturer  
Surveying and Land Information  
University of Southern Queensland  
07 4631 2545  
mcdougak@usq.edu.au

### **VIC**

Professor J W Hearne  
Head: School of Mathematical and Geospatial Sciences  
RMIT University  
03 99252283  
john.hearne@rmit.edu.au

### **Mathematics & Science in Surveying Committee**

Ian Iredale Ph. 0418 488 342 - [ian@mapsoft.com.au](mailto:ian@mapsoft.com.au)  
Mary Barnes - [marysb@iprimus.com.au](mailto:marysb@iprimus.com.au)

### **For general enquiries about the Transit of Venus School's project contact:**

Graeme Rush  
Chair, Transit of Venus Committee  
[graemerush@bigpond.com](mailto:graemerush@bigpond.com)  
[www.transitofvenus.com.au](http://www.transitofvenus.com.au)

For information about Astronomical events and principles contact:

### **NSW**

To be supplied

### **QLD**

Astronomical Association of Queensland  
Jonathan Bradshaw  
[info@aaq.org.au](mailto:info@aaq.org.au)  
[www.aaq.org.au](http://www.aaq.org.au)

### **VIC**

Perry Vlahos  
Current Phenomena & Media Liaison  
Astronomical Society of Victoria  
[perry@asv.org.au](mailto:perry@asv.org.au)  
[www.asv.org.au](http://www.asv.org.au)