Press release

from Jay M. Pasachoff Chair, International Astronomical Union Working Group on Eclipses Williams College Williamstown, MA 01267

A partial eclipse will be visible across Australia on Monday afternoon, April 29. It will be highest in the sky in Western Australia, including Perth and Albany, and it will be visible low in the sky near sunset in Melbourne and Sydney.

A small bit of Antarctica, an inaccessible part, will have an annular eclipse, that is an eclipse in which the Moon is a little farther than average from the Sun so that it doesn't entirely cover the sun to make a total eclipse. At an annular or a partial eclipse, the sky never gets dark, and to view it you need a special, safe solar filter or to project the image onto a wall or screen and then look away from the eclipse at the screen.

Even one per cent of the Sun is 10,000 times brighter than the moon, so during the annular eclipse, the sun is too bright to look at directly. If you have a special solar filter (or very dense welder's glass), or project the image onto another surface, you can detect that the sun is being covered by the moon.

On the average, there is one annular eclipse somewhere in the world about every 18 months and one total eclipse somewhere in the world at the same interval.

It is interesting to know that the sun is being eclipsed, and to realize that astronomers can predict the heavens, but it isn't spectacular to watch. It's especially good for students to watch (through filters or with projection) so that they can see that science keeps advancing and that we understand the universe--and that if they study math and science they, too, can understand the universe.

Jay Pasachoff, Chair of the International Astronomical Union's Working Group on Eclipses and a veteran of 58 solar eclipses, will be in Australia to see the sun 65% covered, a partial phase of this eclipse. At Perth and Albany in Western Australia, where the sun's diameter will be 60%-65% covered by the Moon, the eclipse will start at 1:15 pm and end at 3:59 pm, with maximum coverage at 2:41 pm. The sun will start at 38° high in the sky, about the width of four hands at the end of an outstretched arm, and end at one and a half hands high.

In Melbourne, the eclipse will occur from 3:58 to sunset before its actual end at 6:08 pm, starting 16° ($1^{1}/_{2}$ hands) above the horizon with the sun setting during the second half of the partial eclipse. In Sydney, the eclipse will occur from 4:13 pm to sunset, before its actual end at 6:10 pm, starting at 11° (about 1 hand) above the horizon with the sun setting during the second half of the partial eclipse.

The French amateur astronomer Xavier Jubier, of Paris, has put a map online; it is a Google map that can be zoomed into, and you can click where you are and find out what you would see there:

http://xjubier.free.fr/en/site_pages/solar_eclipses/xSE_GoogleMap3.php?Ecl=+201 40429&Acc=2&Umb=0&Lmt=1&Mag=1&Max=1

Pasachoff has shortened the link to:

http://tinyurl.com/lnklbq8

Anyone can link to all sorts of eclipse information at Pasachoff's website for the International Astronomical Union at www.eclipses.info

Pasachoff's annular and partial eclipse images are available at http://www.totalsolareclipse.org

for the 2013 eclipse from Tennant Creek, Australia (annular and partial phase images):

http://web.williams.edu/Astronomy/eclipse/eclipse2013/2013annular/index.html http://web.williams.edu/Astronomy/eclipse/eclipse2013/2013annular/images/index.html

contact: Jay Pasachoff eclipse@williams.edu

traveling in Western Australia with Robert Lucas, cell: +61 4 0124 9487

Prof. Pasachoff's schedule is:

April 27, Parmelia Hilton Perth, 14 Mill St, +61 8 9215 2000
April 28, Albany View Street Lodge, 5 View Street, Albany, Western Australia 6330, www.albanyviewstbb.com.au, +61 9 9842 8820, stay@albanyviewstbb.com.au
April 29, Parmelia Hilton Perth, 14 Mill St, +61 8 9215 2000
April 30 Hilton on the Park Melbourne, 192 Wellington Parade, +61 3 9419 2000
May 1 and 2 Hilton Melbourne South Wharf, 2 Convention Ctr Plce, +61 3 9027 2000

eclipse information, c/o Pasachoff's IAU site at http://www.eclipses.info http://xjubier.free.fr/en/site_pages/solar_eclipses/xSE_GoogleMap3.php?Ecl=+201 40429&Acc=2&Umb=1&Lmt=1&Mag=1&Max=1 partial eclipse begins: 05:15:39 UT, maximum 06:41:31, ends 07:58:48 Perth/Albany time is UTC+8 hours, so local times are: 1:15:39/2:41:31/3:58.48 altitudes: 38°/28°/15°; azimuths: 338°/316°/301°=NNW/NW/SNW [New York is UTC - 4 hours, so the eclipse begins 01:15:39 New York time]