**Press release**

*International Astronomical Union Working Group on Solar Eclipses*

from Jay M. Pasachoff, Chair website: http://eclipses.info

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**Partial eclipse to cross southern Africa on September 13**

A partial solar eclipse will be visible from the southern part of Africa at sunrise on September 13. The maximum coverage of the sun's diameter by the moon will be 43% at L'Agulhas south of Cape Town. The percentage covered will diminish farther to the north, with the limit crossing mid Angola to mid Zambia to mid Mozambique to northern Madagascar. People throughout South Africa, Namibia, Botswana, and Zimbabwe will be in the zone with a partial eclipse.

At Cape Town, sunrise and the start of the partial eclipse: 6:45 am with the sun at the horizon; maximum coverage at: 7:47, 43%; partial eclipse ends at 8:56, with the sun about 25° above the eastern horizon.

At no time is it safe to look directly at the sun, even during a partial eclipse—except for the unusual circumstance the same as on an ordinary day when the appropriate level of dense haze is present. At no time should anyone stare at the sun, even when partially eclipsed. Unless you have a suitable, dense welding filter or one of the special plastic filters made for solar observing—these filters pass only about 1 millionth of the sunlight that hits them, so are about a half million times denser than ordinary sunglasses—do not look up at the sun during the eclipse, as you wouldn't during an ordinary day. No additional rays come out of the sun during the eclipse, so it isn't more hazardous to be outside than on an ordinary day, though it is tempting during a solar eclipse to gaze at the sun, a temptation that should be resisted.

To follow the progress of the eclipse, which will take place in the early morning when the sun is low in the eastern sky, you can look under a tree or make your own "pinhole camera" by punching a hole a few millimeters across in a piece of paper and using it to project the sun's image on a wall or on the ground. Then you are looking at the image with the sun behind you, and the image is safe to look at.

Only knowledgeable people should use binoculars to project an image; again, such images are viewed with the sun behind you. Looking at the sun—whether partly eclipsed or not eclipsed at all—through binoculars or a telescope could instantly injure your eyes.

Prof. Jay Pasachoff from the United States, the Chair of the International Astronomical Union's Working Group on Solar Eclipses, will be in Cape Agulhas to view the eclipse, accompanied by colleagues from South Africa, Tanzania, the United States, France, and Australia. It will be the 62nd solar eclipse that he has viewed. After the eclipse, he will lecture about solar eclipses in general to the amateur-astronomy group at Hermanus on Sunday at noon and at the South African Astronomical Observatory in Cape Town on Monday afternoon. "It's always fun to be outdoors at a solar eclipse," Pasachoff said, though eclipse enthusiasts usually specialize in total solar eclipses, such as the ones that will occur on March 9, 2016, in Indonesia, and on August 21, 2017, in the United States. An annular solar eclipse, when the silhouette of the moon is a few percent too small to entirely cover the everyday sun, will cross mid-Africa on 1 September 2016, with partial eclipse visible from locations north and south of the zone of annularity: 35% coverage at Johannesburg and 25% coverage at Cape Town. The path of annularity will cross Gabon, DR Congo, southern Tanzania, northeastern Mozambique, northern Madagascar, and Réunion island. Partial phases will be visible from all of Africa except its northernmost, Mediterranean fringe, as well as from southwestern Saudi Arabia, from Yemen, and from southwestern Oman.

REFERENCE: A map from Xavier Jubier (Paris), on which you can zoom in and click to get local circumstances, is at:

http://xjubier.free.fr/en/site\_pages/solar\_eclipses/xSE\_GoogleMap3.php?Ecl=+20150913&Acc=2&Umb=1&Lmt=1&Mag=1&Max=1

For the 1 September 2016 annular eclipse:

http://xjubier.free.fr/en/site\_pages/solar\_eclipses/xSE\_GoogleMap3.php?Ecl=+20160901&Acc=2&Umb=1&Lmt=1&Mag=1&Max=1

Prof. Pasachoff arrives at noon in Cape Town on Saturday, September 12

*contacts:*

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Liesa Schwarzenbek, Cape Agulhas, liesa.s@deunet.co.za, 082 847 1873

Jarita Holbrook, astroholbrook@gmail.com, 061 367 1023

Sunday noon talk: Cape Centre of the Astronomical Society of Southern Africa, Wendy Vermeulen, Sec. (wendyvermeulen@afrihost.co.za) or Pierre de Villiers, pierredev@hermanus.co.za

SAAO colloquium on Monday at 3 pm: Ros Skelton, saao-colloquium-organiser@saao.ac.za

*Eclipse team:*

Jay Pasachoff, Williams College, Williamstown, MA USA

Michael Kentrianakis and Lesley Campbell, New York, NY USA

Rob Lucas, Sydney, Australia

Noorali Jiwaji, Dar es Salaam, Tanzania

Xavier Jubier, Paris, France

joining: Liesa Schwarzenbek, l'Agulhas, South Africa

Jarita Holbrook, University of the Western Cape, Cape Town