



Solar Eclipse Pinhole Viewer

Solar Eclipse 14 November 2012

Instructions

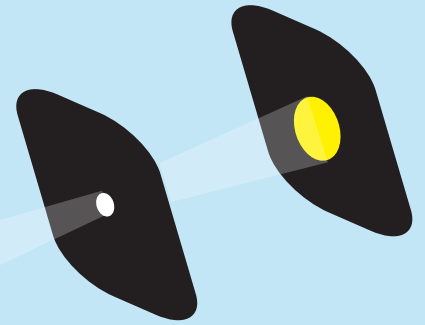
1. Cut the viewer in half (on the dashed line).
2. Make a pinhole at the location marked.
3. Position the pinhole so the Sun's image falls onto the blank side of the second page as shown (at right).
4. The larger the gap between the two pieces of paper the bigger the Sun's image will be.

Note: Eclipse event times are listed on the other half of this viewer.



Paul Floyd's
**Astronomy
& Space
Website**

www.nightsonline.info



Safety Warning!

Looking directly at the Sun without using solar filters designed to filter 100% of the Sun's ultraviolet radiation may result in permanent blindness.

Website and outreach activities sponsored by

www.EXTRAVISION.com.au
'Specialising in products that help you see better'

For all your solar glasses and specialist solar filter needs:
<http://www.extravision.com.au/catalog/index.php?cPath=102>

©Paul Floyd www.nightsonline.info October 2012. You are free to reproduce and distribute this resource for non-commercial purposes but not to modify it in any way without permission from the author. Full licence conditions at <http://creativecommons.org/licenses/by-nc-nd/3.0/>.

Note: All eclipse times given in local time zones (including DST if applicable).



Australian Curriculum links for school teachers

Arranging for your students to indirectly observe this eclipse provides the student with a real life example of '... how the relative positions of the Earth, sun and moon affect phenomena on Earth' (Year 7 Achievement Strand Australian Curriculum (Science) Earth and space sciences content strand reference ACSSU115).

Brisbane

Eclipse begins: 5:56:22 am
Mid-Eclipse: 6:54:24 am
Eclipse ends: 7:58:54 am
Sun covered by Moon: 80%

Adelaide

Eclipse begins: 6:42:54 am
Mid-Eclipse: 7:30:49 am
Eclipse ends: 8:22:27 am
Sun covered by Moon: 42%

Sydney

Eclipse begins: 7:07:13 am
Mid-Eclipse: 8:02:44 am
Eclipse ends: 9:03:39 am
Sun covered by Moon: 59.4%

Cairns

Eclipse begins: 5:44:46 am
Mid-Eclipse: 6:39:35 am
Eclipse ends: 7:40:22 am
Sun covered by Moon: 100%

Rockhampton

Eclipse begins: 5:50:57 am
Mid-Eclipse: 6:48:01 am
Eclipse ends: 7:51:32 am
Sun covered by Moon: 88.8%

Melbourne

Eclipse begins: 7:16:09 am
Mid-Eclipse: 8:06:17 am
Eclipse ends: 9:00:29 am
Sun covered by Moon: 42.3%

Canberra

Eclipse begins: 7:10:10 am
Mid-Eclipse: 8:03:56 am
Eclipse ends: 9:02:36 am
Sun covered by Moon: 53.1%

Hobart

Eclipse begins: 7:26:10 am
Mid-Eclipse: 8:14:54 am
Eclipse ends: 9:07:08 am
Sun covered by Moon: 34.1%

Darwin

Eclipse begins: 6:13:04 am
Mid-Eclipse: 6:13:04 am
Eclipse ends: 7:01:04 am
Sun covered by Moon: 87.5%

Townsville

Eclipse begins: 5:46:50 am
Mid-Eclipse: 6:42:14 am
Eclipse ends: 7:43:42 am
Sun covered by Moon: 96.3%

©Paul Floyd www.nightsonline.info October 2012. You are free to reproduce and distribute this resource for non-commercial purposes but not to modify it in any way without permission from the author. Full licence conditions at <http://creativecommons.org/licenses/by-nc-nd/3.0/>.