

<http://analyzer.depaul.edu/paperplate/transit.htm>

The *Transit of Venus* program features a combined DVD and data CD set, an audio CD, a slide set of 200+ images, and supporting web pages. The DVD can be used as a stand-alone show or as part of a planetarium package. The data CD contains 200+ images, mpeg-1 movie clips, and supporting documents. See <http://analyzer.depaul.edu/paperplate/transit.htm> for more information, including thumbnails of all images and an ordering form.



http://sunearth.gsfc.nasa.gov/sunearthday/2004/index_vthome.htm

Don't miss this extensive collection of Sun-Earth Day resources from the fun folks at the Sun-Earth Connection Education Forum.

http://ds9.ssl.berkeley.edu/vteval/web_survey.aspx

Post-transit survey seeks information to help NASA serve your needs better in the future. Respondents to the survey receive free Sun-Earth Connection posters.

- Find out "[What's Happening in Your Area?](#)"
- http://sunearth.gsfc.nasa.gov/sunearthday/2004/vt_edu2004_kit.htm
Register and get a **free** Sun-Earth Day kit--a packet of transit of Venus resources from NASA.
- http://sunearth.gsfc.nasa.gov/sunearthday/2004/vt_kinder_ownstar.htm
Our Very Own Star: The Sun, an animated story for children, accompanied by coloring sheets; in English and Spanish.
- http://sunearth.gsfc.nasa.gov/sunearthday/2004/vt_edu2004_ten.htm
Ten Things You Thought You Knew About Sun-Earth Science. A list of common and uncommon, famous and infamous misconceptions about solar-terrestrial physics.
- http://svs-f.gsfc.nasa.gov/~wfeimer/SEC/Gen_SEC/IP/Transit.mpg
Venus Transit Animation, from the NASA Goddard Space Flight Center Scientific Visualization Studio. [2004-02-22]

Featured activities:

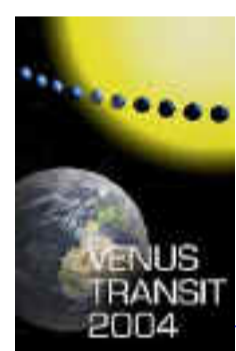
- **Magnetic Reversals** <http://image.gsfc.nasa.gov/poetry/venus/Reversal.html>
Fact and Fiction-Students compare two science fiction stories and a scientific appraisal about what might happen when the next magnetic reversal happens. They critically evaluate fictional claims to identify factual errors.
- **Magnetic Variations** <http://image.gsfc.nasa.gov/poetry/venus/MagRev.html>
Students use tabulated data to create a graph of Earth's magnetic intensity. They forecast when, or if, our current field will actually fall to zero-strength in the future.
- **Timing the Transit of Venus** <http://image.gsfc.nasa.gov/poetry/venus/Vtime.html>
Students perform basic time calculation exercises based on actual historic transit timing data. Topics covered include elapsed time.

time differences and time conversion.

- **When Do Transits of Venus Happen?** <http://image.gsfc.nasa.gov/poetry/venus/Vyears.html>
Students complete a table of values and predict the dates for a transit of Venus visible from the Earth based on rates and patterns.
- **Timeline** http://sunearth.gsfc.nasa.gov/sunearthday/2004/vt_edu2004_venus_68.htm
Use the resources on the Timeline to discover the story of why the transit of Venus was an important astronomical event.
- **Calculate AU to Kilometers** http://sunearth.gsfc.nasa.gov/sunearthday/2004/2004images/VT_Activity3.pdf
Before the critical measurements of the Transit of Venus in the late 1800s, distances in the solar system were expressed in Astronomical Units (AU). But nobody knew what an AU equaled in miles or kilometers. The AU was simply the distance from Earth to the Sun. So astronomers needed to calculate the AU in kilometers! To do this calculation for yourself follow the activity provided.
- **Detecting Planet Transits** [http://sunearth.gsfc.nasa.gov/sunearthday/2004/2004images/HabitablePlanets.pdf \(24K\)](http://sunearth.gsfc.nasa.gov/sunearthday/2004/2004images/HabitablePlanets.pdf(24K))
Students model NASA's Kepler mission observations of planetary transits (a planet moving in front of a star) by standing in a circle with model star (light bulb) in the center, and observing, through rolled up paper viewing tubes, a marble planet orbiting the star.
- **Habitable Planets**
This activity encourages a discussion about what makes a planet habitable. Students learn that for a planet to support life like we find on Earth, it must have: (a) the right *temperature* range for there to be liquid water, and (b) the right *size* range to be able to have suitable atmosphere.
- **Finding the Distance to the Sun** <http://image.gsfc.nasa.gov/poetry/venus/Vdistance.html>
The students will apply the concepts of vertical angles and ratios to calculate lengths and angles. Can they determine the distance to the Sun?

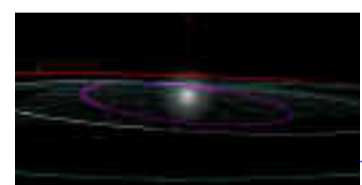
http://ds9.ssl.berkeley.edu/vteval/web_survey.aspx

The Sun-Earth Connection solicits feedback on NASA's services provided for the 2004 transit of Venus.



<http://www.vt-2004.org>

The European Southern Observatory is leading an extensive program that is loaded with information, and its website is continuously growing. This is a thorough website for transit of Venus observers, educators, and enthusiasts.



<http://analyzer.depaul.edu/paperplate/Transit%20of%20Venus/Introduction.htm>

Introduction to Transit of Venus at *Paper Plate Education*.



<http://www.sil.si.edu/Exhibitions/upcoming.htm>

Planned exhibit (March 24, 2004-April 3, 2005) at Smithsonian Institution Libraries entitled *Chasing Venus: Observing the Transits of Venus, 1631-2004* will tell the story of the transits of Venus using the marvelous illustrations in the rich collection of rare books from the Smithsonian Libraries, supplemented by appropriate artifacts from the National Museum of American History and the United States Naval Observatory. The full exhibition will be available on this site in March 2004." Curated by Ronald S. Brashear, Head of Special Collections.





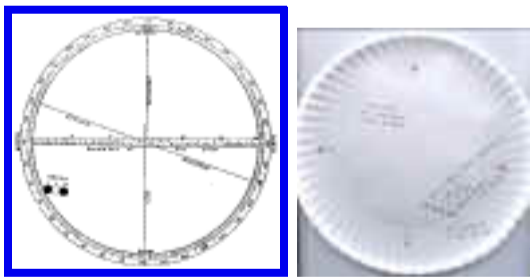
<http://www.sil.si.edu/exhibitions/chasing-venus/teachers/>

Chasing Venus Teacher Resources from Smithsonian Institution Libraries includes "exercises and lesson plans designed to accompany and enrich the study and discussion of the June 2004 Transit of Venus." Eighteen activities engage grades K-12 in multiple subject areas:

- [Two Views of the Universe](#) (K-6; Science and Geography) Students build two views (Aristotle's and Copernicus') of the universe and describe the differences.
- [Collage of Geometric Shapes](#) (K-5; Mathematics, Art) Students identify different geometric shapes and use the differences in the building of collages.
- [Shadow Games](#) (K-5; Science, Measurement) Students discover how light source, object, and distance affect the shadow's shape.
- [Silhouette Outlines](#) (4-6; Science, Measurement, Art) Students document how light source, object, and distance affect the shadow's shape by making silhouettes.
- [Paper Plate Observation](#) (4-6; Science, Measurement) Students simulate the documentation of the Transit using paper plates and marking the path of the transit.
- [Expedition Stories from the Transit of Venus](#) (6-12; Science, Creative Writing, History, Geography) Students write and role play stories based on the Transit of Venus expeditions.
- [Collecting and Using Data on the Common Events](#) (4-12; Science, Mathematics) Students create data tables, collect the data and observe patterns.
- [Investigating Longitude and Latitude](#) (4-6; Science, Measurement, Geography) Students use longitude and latitude to determine locations of expedition sites and viewing sites for the 2004 Transit.
- [Cardboard Tube Telescope](#) (4-6; Science, Astronomy) Students build telescopes from cardboard tubes that can be used to safely watch the Transit.
- [Vocabulary Enrichment](#) (7-9; English, Spelling) Students learn the meaning and spelling of various terms associated with the Transit and use the terms in sentences.
- [Using Means, Medians and Modes](#) (4-9; Mathematics, Statistics) Students calculate means, medians and modes for a series of observations and report conclusions.
- [Using Triangulation](#) (6-12; Mathematics, measurement) Students use triangulation techniques to determine measurements.
- [Measurement Conversion](#) (3-8; Measurement) Students identify common and uncommon measurements and build conversion tables.
- [Expedition Diaries](#) (7-9; History, Creative writing) Students choose an expedition to research, form expedition teams, keep individual diaries and compare diaries at the end of simulated expedition.
- [On the Shoulders of Giants](#) (10-12; Science, history) Students research the important astronomers and scientists and make presentations on their achievements.
- [Putting the Transits in Context](#) (10-12; Science, history) Students research the important events that were taking place during the major expeditions and make presentations on how they may have influenced the expeditionary teams.
- [The Transit in Pictures](#) (10-12; Science, art and media) Students write screenplay and produce movie or animation of a transit including narration.
- [And now a word from our sponsor...](#) (10-12; Science, art and media) Students write and produce public service commercials promoting the Transit of Venus and providing information about its safe viewing.

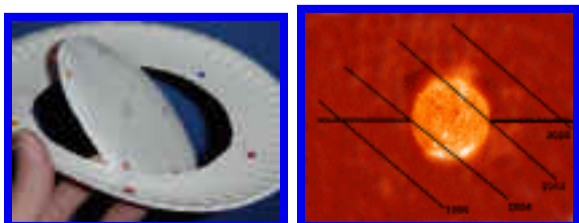
<http://www.sil.si.edu/Exhibitions/chasing-venus/education.htm>

The National Museum of American History features a *Chasing Venus* lecture series.



<http://analyzer.depaul.edu/paperplate/Transit%20of%20Venus/activity.htm>

Hands-on activity to record 2004 transit of Venus on a paper plate akin to the first record of Jeremiah Horrocks in 1639.



http://analyzer.depaul.edu/paperplate/Transit%20of%20Venus/transit_frequency.htm

Hands-on activity that illustrates and explains the irregular frequency of transits of Venus.



<http://video.google.com/videoplay?docid=-760141133217062403&q=transit+venus>

NASA Connect offers lessons and exercises on scaling the solar system.



http://home.hetnet.nl/~smvanroode/venustransit/eng/eng_parallax.html

Measure the distance to the sun by knowing only your location (lat/long) and the time(s) of internal contact. That is, "compute the mean equatorial solar parallax online from your own and others' observations of the 2004 transit of Venus, employing *either* Halley's or Delisle's method." This is the easiest method for casual observers to quantify the distance to the sun from their own data.



<http://www.exploratorium.com/venus/index.html>

"Live Webcast: The Transit of Venus! Tuesday, June 8, 2004. Travel [to Greece] for a clear and unobstructed view of this amazing and rare event. Explore the role of past transits in the history of astronomy and how the Venus Transit was used to calculate the distance from the Earth to the Sun, called the Astronomical Unit. The program will present cutting edge research on Sun-Venus and Sun-Earth interactions, and how NASA plans to use similar transits to detect extrasolar planets." Four telescopes with white light and H-alpha filters will capture the transit as narrators guide viewers through the event. [Exploratorium webcast info was formerly at [http://www.exploratorium.edu/webcasts/.](http://www.exploratorium.edu/webcasts/)]



<http://planetquest.jpl.nasa.gov/>

- http://planetquest.jpl.nasa.gov/venus_transit.html

Live Broadcast / Webcast: *Venus and the Search for Habitable Planets*; originally broadcast March 19, 2004, to be archived and rebroadcast. This interactive discussion will focus on what the Venus Transit can teach us about the search for planets beyond our solar system (more than 100 have been discovered so far).



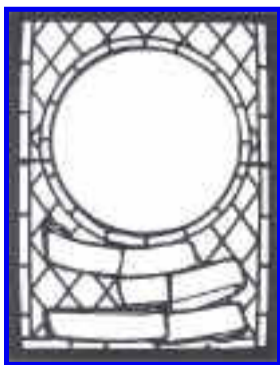
<http://www.astronomy.no/venus080604/webcast.html>

A live webcast from several sites in Norway will include images with H-alpha filters. The webcast will start before first contact, probably just before 05 UTC, and will last until about half an hour after last contact (around 12 am UTC).



<http://www.pcs.cnu.edu/%7Eercaton/extrasolar/index.html>

Web-based activity features Squeak...



[kids.htm](#)

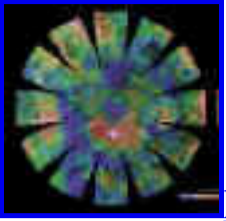
The transit of Venus is for kids, too! Enjoy these simple yet fun activities for younger audiences.





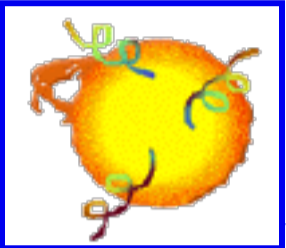
www.sunderstanding.net

Measure the universe with a string and a stone. A series of activities allow students to measure the distance to the sun simply, with the lone assumption that Venus is the size of the Earth; from Vivek Monteiro.



<http://photojournal.jpl.nasa.gov/catalog/PIA03151>

Venus Hemispherical Globes; several mosaics in a projection portray the entire surface of Venus (and other celestial bodies) that fold into a 12-inch globe; from the U.S. Geological Survey.

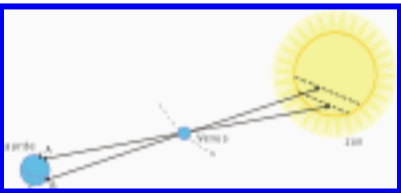


<http://solar-center.stanford.edu/activities.html>

Stanford Solar Center offers "exciting activities, images, interactive tools, text, and other resources to let you research our special star -- the Sun."

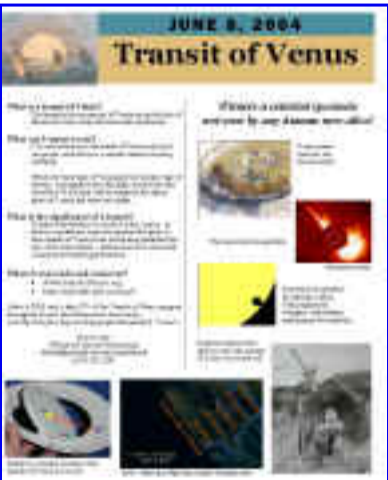
<http://skolor.nacka.se/samskolan/eaee/summerschools/TOV0.html>

"How to measure the Earth-Sun distance by studying the transit of Venus;" from the European Association for Astronomy Education (EAAE).



http://home.hetnet.nl/~smvanroode/venustransit/eng/eng_parallax.html

Compute the mean equatorial solar parallax online from your own and others' observations of the 2004 transit of Venus, employing Halley's method; courtesy of Steven M. van Roode.



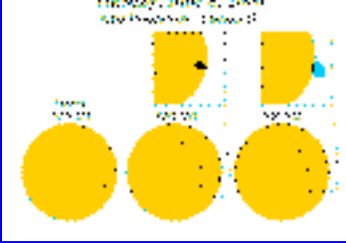
[Flyer7- Transit of Venus](#)

One-page flyer (*similar* to the thumbnail image) lists transit of Venus Q&A, shows duration of transit across North America, recalls global expeditions, illustrates black drop effect, shows sample hands-on activity relating to transit; shows "eclipse shades" in use; and links to transitofvenus.org and NASA Sun-Earth Connection. The flyer is biased toward U.S. observers, but the Microsoft Publisher file is editable so you can tailor the flyer to your locale (high resolution 2.2 Mb, MSPublisher). Also available as a MSWord document ([flyer7.doc](#)).



[SAFETY!](#)

Overview of techniques for viewing the transit of Venus safely; describes use of #14 shade welding glass, telescopes with solar filters, and magnified projections. The [SAFETY!](#) page is recommended for all transit of Venus observers.



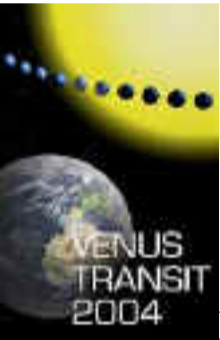
<http://www.astro.psu.edu/users/maw/transit.ppt>

Mike Weinstein provides an MSPowerPoint presentation on the transit of Venus, with a particular slant for Chicago observers. Presentation includes helpful animations and cites all references for images.



<http://www.astronomy.no/venus080604.html>

Teacher activities address the circumference of earth, parallax, distance to the sun, and Kepler's Laws. Site also lists historic background, visibility times, current research, and more. The organizers in Norway seek other observers for global project.



<http://www.eso.org/outreach/eduoff/vt-2004/index.html>

A global observing program in which participants contribute data to determine the distance from the sun to earth; from the European Southern Observatory (ESO) and the European Association for Astronomy Education (EAAE).

- http://www.imcce.fr/vt2004/en/fiches_eng.html
Education sheets for teachers.
- http://www.imcce.fr/vt2004/en/cdrom_eng.html
CD ROM of historical documents.



<http://www.venus2004.org>

"To calculate the astronomical unit, two distant people are needed. These people can exchange their data coming from their observations. Register and contact other passionate people to work together."



<http://www.transitofvenus.co.za/>

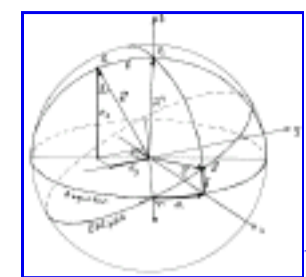
Flying With Pride is establishing dissemination points across Africa for resources related to the transit of Venus; is coordinating direct observing sites; is planning remote web and television broadcasts; and is planning a Cape-to-Cairo initiative in which observers along the 28th degree of longitude in Africa contribute data to determine the distance from the sun to earth.



<http://didaktik.physik.uni-essen.de/~backhaus/VenusProject.htm>

"Observing, Photographing and Evaluating the Transit of Venus," a global observing program in which participants contribute data to determine the distance from the sun to earth

data to determine the distance from the sun to earth.



<http://eclipse.astroinfo.org/transit/venus/project2004/index.html>

Project Venus 2004 is "an observational project of amateur astronomers to determine the scale of the solar system with the aid of the Venus transit in 2004. Groups investigate the historical calculations and observations, set up new procedures, prepare the observation and carry out the evaluation."

http://www.aqua.co.za/assa_jhb/Canopus/Can2000/c00bVnus.htm

Observers in Switzerland seek observers in South Africa for international project.

http://www.gujaratplus.com/mypage/Welcome_to_the_Board_of_%22_Kutch_Science_Foundation_%22.html

Science Group of India suggests it will broadcast on the Internet live images of transit of Venus on 2004 June 8. Site also lists planetary data for that day.

<http://groups.yahoo.com/group/VenusTransit>

The Nehru Planetarium, New Delhi, India, has "started a discussion group to plan for exchanges of information and observations of the upcoming Transit of Venus. The group has been formed to make it possible to have an easy way of having exchanges with students from all over India and also interact with observers from all over the world."

<http://vamana.space-india.org/>

Vamana Project is a 3-phase activity in which students in India measure the radius of the earth using a gnomon; determine the maximum angular separation between the Sun and Venus; and determine the path that Venus takes across the solar disc on June 8th.

<http://www.rsnz.govt.nz/news/venus/>

"The Royal Society of New Zealand...will send a party of nine students and three teachers to observe the 2004 transit of Venus. To win places on the expedition to Britain, teams...will be asked to produce a video and supporting material which may be viewed on the web."



[fingers.jpg](#)

To simulate the "black drop" effect, almost pinch your thumb and forefinger together against a bright background. Near contact the meniscus between them appears.



<http://www.spaceweather.com>

Space Weather. Current solar weather with "science news and information about the Sun-Earth environment."



<http://www.venus-transit.de/>

User-adjustable Applets about the transit of Venus; by Jürgen Giesen; (available in English and German)..

- [Transit Observer](#)
- [The Phases of Mercury and Venus](#)
- [Planetary Motion of Mercury, Venus and Mars](#)
- [Geocentric Motion](#)
- [Transit Motion](#)

<http://planetquest.jpl.nasa.gov/>

Planet Quest offers much material about the search for extra-solar planets. Click "Four Ways to Find a Planet" on the scrolling filmstrip to view a narrated animation that shows planet detection methods, including the use of transits.



<http://www.bridgewater.edu/departments/physics/ISAW/Transit-1.html>

With this simulation you try to detect exoplanets using observations of transits. After you select a star from a simulated field of view, the simulation develops photometric graphs and other data, from which you calculate the orbital information.

<http://sunearth.gsfc.nasa.gov/>

NASA Sun-Earth Connection



<http://www.genesismission.org/index.html>

A collection of educational materials relating to the sun, its effects, and the *Genesis* mission. The *Genesis* spacecraft, sent "a million miles sunward to collect pieces of the sun, called solar wind, ... unfolded its collectors and began a two-year 'sunbath.' Upon its return to Earth in 2004, scientists will study the solar wind samples."



<http://ds9.ssl.berkeley.edu/viewer/flash/index.html>

Media Viewer launches you to Sun-Earth illustrations, live solar and aurora images, and scientist interviews.



<http://www.astrocappella.com/activities/>

"Meet the Neighbors: Planets Around Nearby Stars" is an *AstroCappella* lesson plan to accompany their song "Dance of the Planets." High school students investigate the dimming caused by a transit; determine a planet's radius and orbital distance from transit data; and compare results of the extrasolar planetary system with our solar system; (PDF file).

<http://lyra.colorado.edu/sbo/manuals/apsmanuals/planetdistances.pdf>

Lesson plan describes how to measure the Astronomical Unit using the *Voyager II* software; (PDF file).

http://www.noao.edu/education/ighelio/solar_music.html

Lesson plan on *Solar Music- Helioseismology* encourages students to listen to the Sun's heartbeat to learn about the inside of the Sun.

<http://solar-center.stanford.edu/singing/singing.html>

The Singing Sun is a recording of acoustical pressure waves in the Sun made by carefully tracking movements on the Sun's surface with the [SOHO](#) spacecraft.



<http://analyzer.depaul.edu/paperplate/transit.htm>

A Toyota TAPESTRY grant has created a clearinghouse for transit of Venus resources. A DVD, data CD, audio CD, and slide set are available at cost for multiple users, including teachers, planetarians, librarians, and other educators.

<http://spot.colorado.edu/~underwod/ast/para.html>

Animation demonstrates parallax of stars with extended thumb example; from Dave Underwood at University of Colorado.

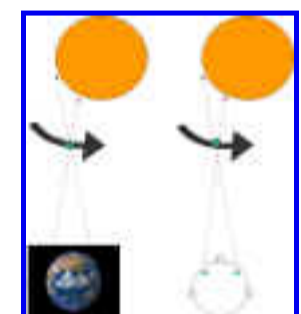


<http://www.nmm.ac.uk/site/request/setTemplate:singlecontent/contentTypeA/conMuseumEvent/contentId/657/navId/00500200b>

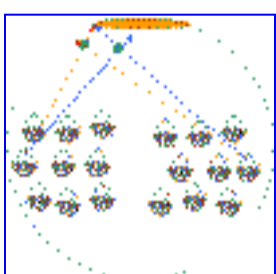
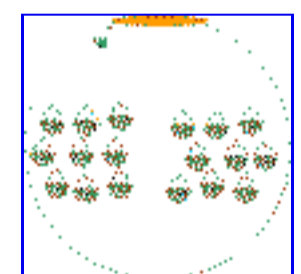
National Maritime Museum seminar entitled "Venus Observed: the Transit of Venus in History" will examine the historical and scientific significance of the transit of Venus and ask how it has contributed to our understanding of science since it was first observed in 1631.



Parallax analogy. [No accompanying text.]



Parallax analogy. [No accompanying text.]



Parallax [demo in planetarium](#). [No accompanying text.]



<http://analyzer.depaul.edu/paperplate/Transit%20of%20Venus/GLPA%202002%20poster.jpg>

At the 2002 Great Lakes Planetarium Association (GLPA) Annual Conference in Menasha, Wisconsin, Chuck Bueter displayed a [poster](#) about transits of Venus. The poster's [text](#) will appear in the 2002 GLPA *Proceedings*. References and other images on the 2002 GLPA poster were used with permission of Fred Espenak, Richard Pogge, and Greg Smye-Rumsby.



<http://analyzer.depaul.edu/paperplate/activities.htm>

The "Activities" page at *Paper Plate Education* contains dozens of hands-on activities that complement transit of Venus lesson plans.

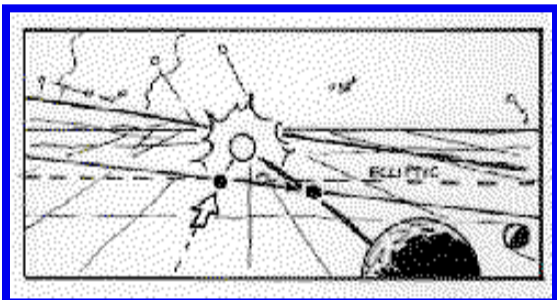


<http://www.transitofvenus.org/sarah.htm>

A brief introduction to the transit of Venus, illustrated and written by a six year old student.



<http://www.mapmaker.com/sunclock.asp>



<http://analyzer.depaul.edu/paperplate/Transit%20of%20Venus/JayRyan.htm>

In the current epoch, transits of Venus generally occur in pairs--eight years apart--that are separated by over a century. Astronomy author and illustrator [Jay Ryan](#) described the [circumstances that create periodic transits](#), reprinted here with his permission.



<http://www.heavens-above.com>

Heavens-Above, for so many reasons.



<http://www.uq.net.au/~zzpeande/powerpnt.htm>

PowerPoint presentation shows simulated transit sequence from perspective of South East Queensland, Australia; from Peter Anderson.

<http://home.att.net/~o.caimi/Venus.html>

"The Transit of Venus" by David Murray; from December 8, 1874, *Scribner's*.

"Astronomy, The Transit of Venus" by Gillet and Rolfe, 1882.



<http://www.amazon.co.uk/exec/obidos/ASIN/0954101308/davesmiscella-21/202-5164481-7718239>

Book: *The Transit of Venus: The Quest to Find the True Distance of the Sun*, by David Sellers; ISBN: 0954101308. Excerpts are available online at http://www.dsellers.demon.co.uk/venus/ven_ch1.htm



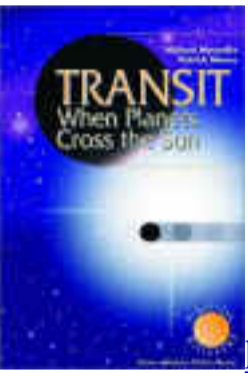
[ottewell.jpg](#)

Cover art for the [2004 Astronomical Calendar](#) depicts James Cook observing the transit of Venus. Author/artist [Guy Ottewell](#) openly notes artistic license in the inside cover. Pages 46-48 address the transit of Venus.



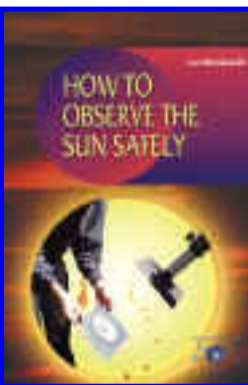
<http://pup.princeton.edu/titles/6795.html>

Book: *June 8, 2004--Venus in Transit*, by Eli Maor; ISBN: 0-691-04874-6.



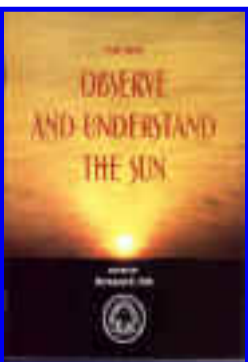
<http://www.amazon.co.uk/exec/obidos/ASIN/1852336218/orreryinaction/202-5164481-7718239>

Book: *Transit, When Planets Cross the Sun*, by Patrick Moore; ISBN: 1852336218.



<http://SkyandTelescope.com/campaigns.asp?id=344>

Book: *How to Observe the Sun Safely* by Lee Macdonald; published by Sky & Telescope.



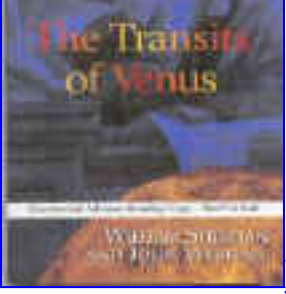
<http://astronomicalleague.com/sunf.htm>

Book: *Observe and Understand the Sun*, edited by Richard E. Hill; published by the Astronomical League.

<http://www.amazon.com/exec/obidos/tg/detail/-/1863683941/104-4875580-8768764>

Book: *Venus in Transit: Australia's Women Travellers 1788-1930* by Douglas R. Sellick.





http://www.amazon.com/exec/obidos/tg/detail/-/1591021758/qid=1074270116/sr=1-7/ref=sr_1_7/104-4875580-8768764?v=glance&s=books

Book: *The Transits of Venus*; by William Sheehan and John Edward Westfall. ISBN: 1-59102-175-8.



<http://www.amazon.com/exec/obidos/tg/detail/-/1581780230/qid%3D1077148792//ref/104-4875580-8768764>

Book: *Hokuloa: The British 1874 Transit of Venus Expedition to Hawai'i*, by Michael Chauvin; ISBN: 1581780230.



www.awapress.com

Book: *The Transit of Venus, How a Rare Astronomical Alignment Changed the World*, a compilation by scientists and historians, adapted from Royal Society lecture series. ISBN: 978-0-9582629-7-2.



<http://skyandtelescope.com>

Sky & Telescope magazine features the transit of Venus in a series of articles in the February, April, and June 2004 issues.

Science News magazine (Vol. 165, No. 16, 17 April 2004) features the transit of Venus; submitted by Wolfgang Porod.



<http://www.sciam.com/issue.cfm>

Scientific American magazine (May 2004) features the transit of Venus in an article by Steven J. Dick.

<http://www.iop.org/EJ/toc/0031-9120/39/3>

Physics Education (Volume 39, Number 3, May 2004) has several articles about the transit of Venus, including a teacher's guide by Robin Catchpole, senior astronomer at the Royal Observatory Greenwich and a paper plate explanation of the frequency of transits. All papers published in the journal are made freely available for 30 days from the date of online publication. See [This Month's Papers](#). [April 28, 2004]



<http://www.aas.org/publications/baas/v34n3/dps2002/295.htm>

Poster abstract at American Astronomical Society's DPS 34th Meeting, October 2002, anticipates "...plans for an international education program centered around the June 8, 2004 Venus transit."

<http://www.aas.org/publications/baas/v34n2/aas200/488.htm>

Paper abstract from AAS 200th meeting, Albuquerque, NM, June 2002 by K.E. Kissel and R.M. Genet intends to "stimulate action to prepare for likely extra-solar transit observations by taking advantage of this only-twice-per-century opportunity."



<http://www.lpl.arizona.edu/~rhill/alpo/transit.html>

Association of Lunar & Planetary Observers (ALPO) Venus Section, with links to Solar Section and others.



[research.htm](#)

We encourage educators, researchers, and students to apply for a paid fellowship program to research the transit of Venus.



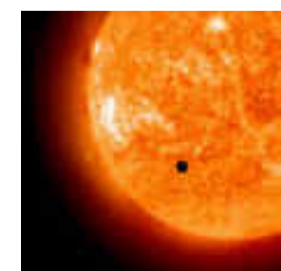
<http://analyzer.depaul.edu/NASABroker/GLPA/PLATO%20Grants%202002.htm>

A PLATO grant is available to members of the Great Lakes Planetary Association, for which we encourage GLPA members apply to advocate transit of Venus educational opportunities.



<http://www.astro.uni-bonn.de/~pbrosche/iaucomm41/wg/transits.html>

International Astronomical Union Commission 41 recommends "sites of previous transit of Venus expeditions be inventoried, marked and preserved..."



<http://www.transit-of-venus.org.uk/conference/index.html>

International Astronomical Union announces IAU Colloquium 196, *Transits of Venus: New Views of the Solar System and Galaxy*, 7-11 June 2004, University of Central Lancashire, UK.



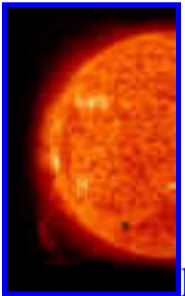
<http://www.transit-of-venus.org.uk/conference/index.html>

IAU Colloquium 196 entitled *Transits of Venus: New Views of the Solar System and Galaxy* will be held in Preston, Lancashire, UK, 7-11 June 2004.



<http://www.jas.org.jo/venust.html>

Venus Transit Workshop, Amman, Jordan; June 6th - 9th, 2004; sponsored by Arab Union of Astronomy and Space Sciences (AUASS) and the Jordanian Astronomical Society (JAS).



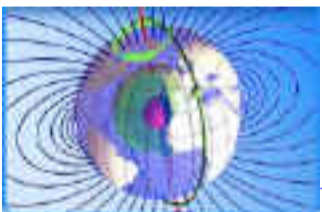
<http://www.nojum.net/transit2004/topics.asp>

Workshop in Iran on amateur astronomy and astronomy education, with emphasis on the transit of Venus.



<http://www.astroleague.org/al/astroday/astroday.html>

The Astronomical League celebrates the transit of Venus as its theme for Astronomy Day on April 24, 2004. Hundreds of sites "host special events and activities to acquaint their population with local astronomical resources and facilities."



<http://son.nasa.gov>

The Student Observation Network tracks solar storms and predicts the impact of solar activity, such as aurorae.



<http://analyzer.depaul.edu/paperplate/Transit%20of%20Venus/Internet%20caveat.htm>

Caveat about believing everything you see on the Internet (including here).

<http://www.phys.uu.nl/~vgent/venus/venustransitbib.htm>

Extensive bibliography of original sources relating to transits of Venus, with links to many of the original publications; from R.H. van Gent.

www.transitofvenus.org