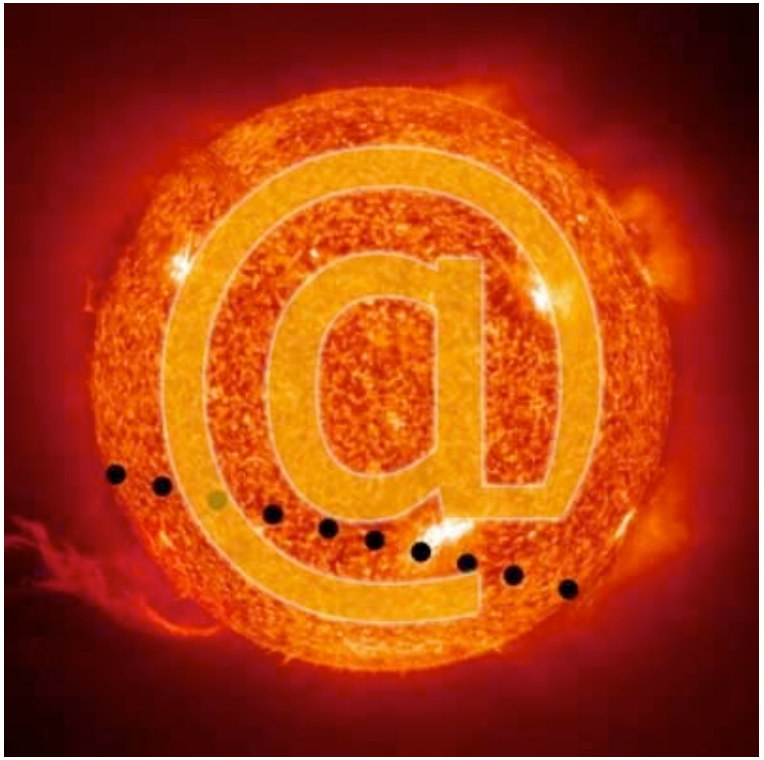
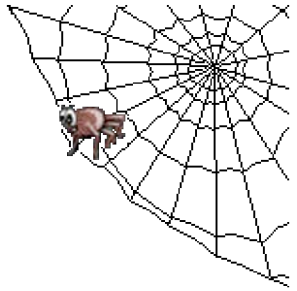


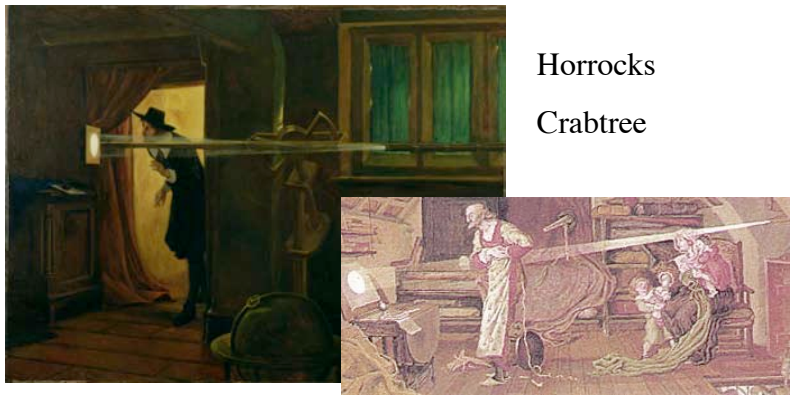
The Venus Transit and the Web

Henri Boffin & Michael Naumann

European Southern Observatory



Venus' transits



Horrocks

Crabtree

17th Century: Pioneers!

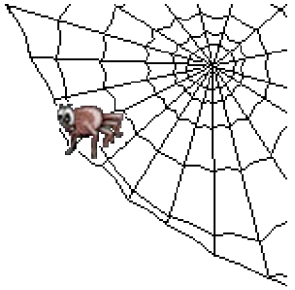
Handful of people have seen it…

Captain Cook

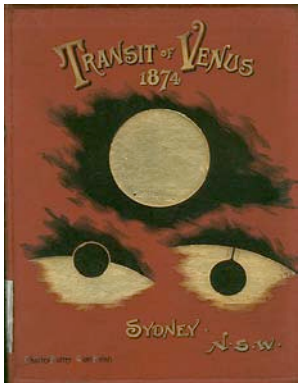
18th Century: Adventurers!

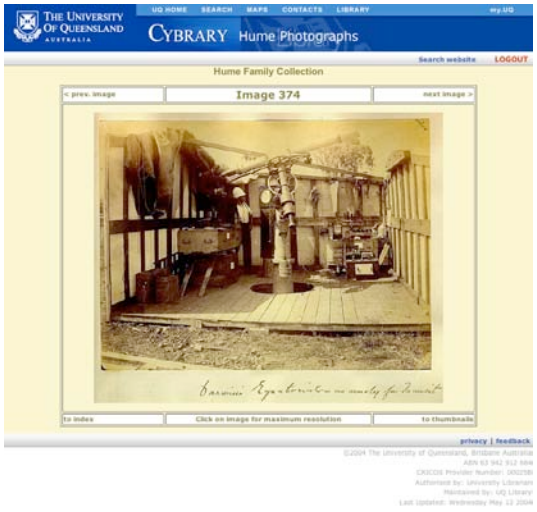
Astronomers made big and sometimes dangerous travels at time of wars

First International Cooperation



Venus' transits



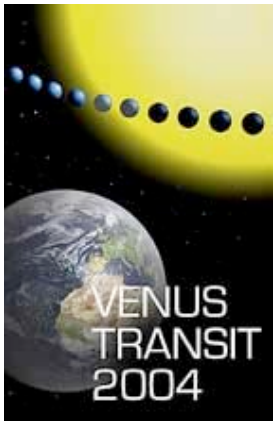


19th Century: Modern times.

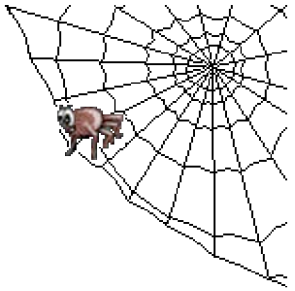
Becomes more popular: books are written

Use of photography

Telegraph



21th Century: Radio, TV and the Web make it a universal topic!



Web and Transit

The Web has allowed millions of people to participate - actively or passively - in the Venus Transit.

People could learn about the transits, about the history, the science, etc. They could read the stories, share the enthusiasm.

They could share with others people, photos, drawings, videos, thoughts, excitement, etc.

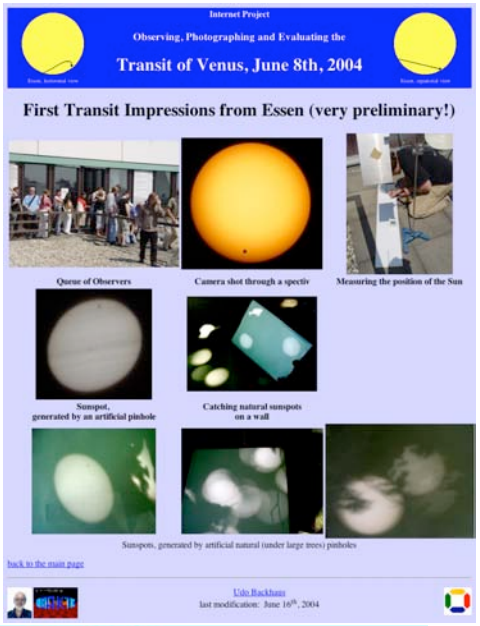
They could see - in real time - the event, even if it was clouded or not visible in their place, or they had to stay in office, or at home…

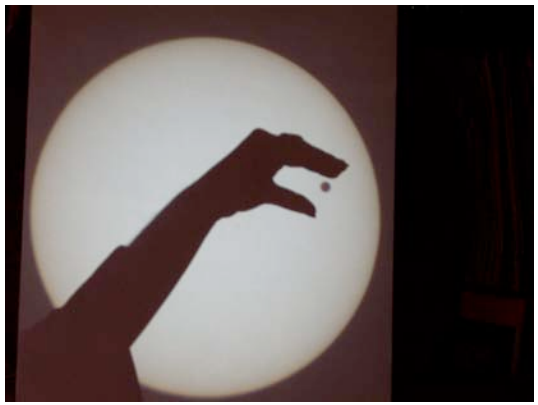
They could calculate - by a simple click - in real-time the value of the AU from their measurement.

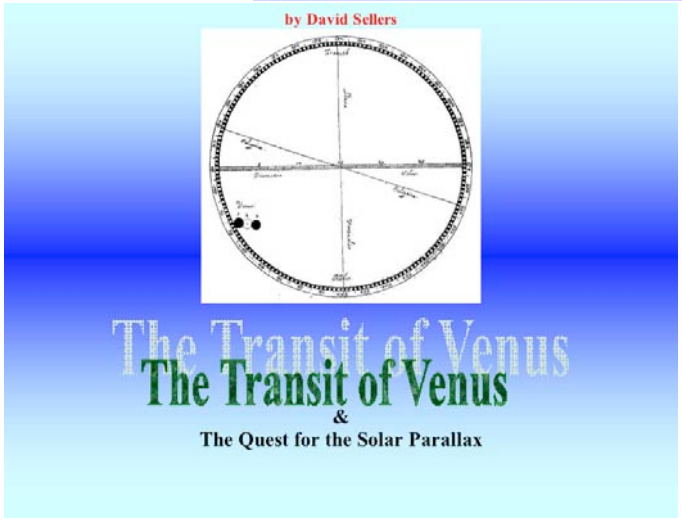
Searching the web

Typing “Venus Transit” in the Google search engine returns 316 000 entries and 2470 photos. The Web is now full of items on Venus Transits.

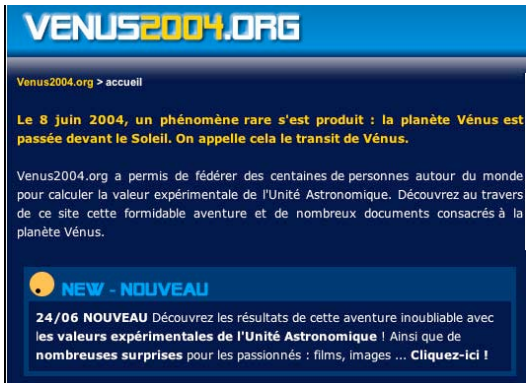
A goldmine for educators, students, enthusiasts, or just the curious…

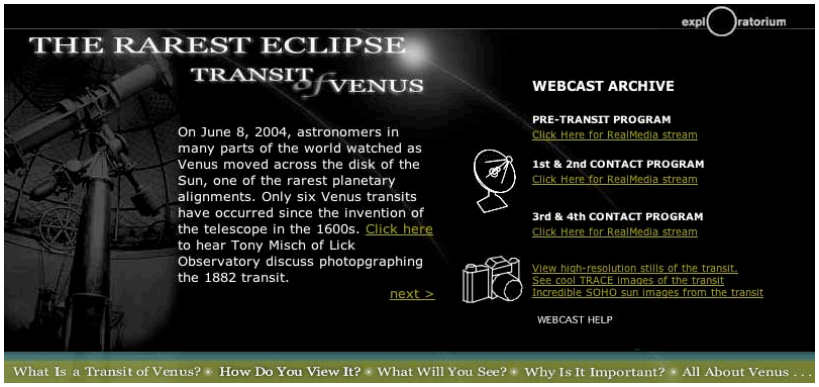


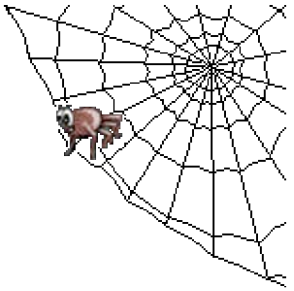




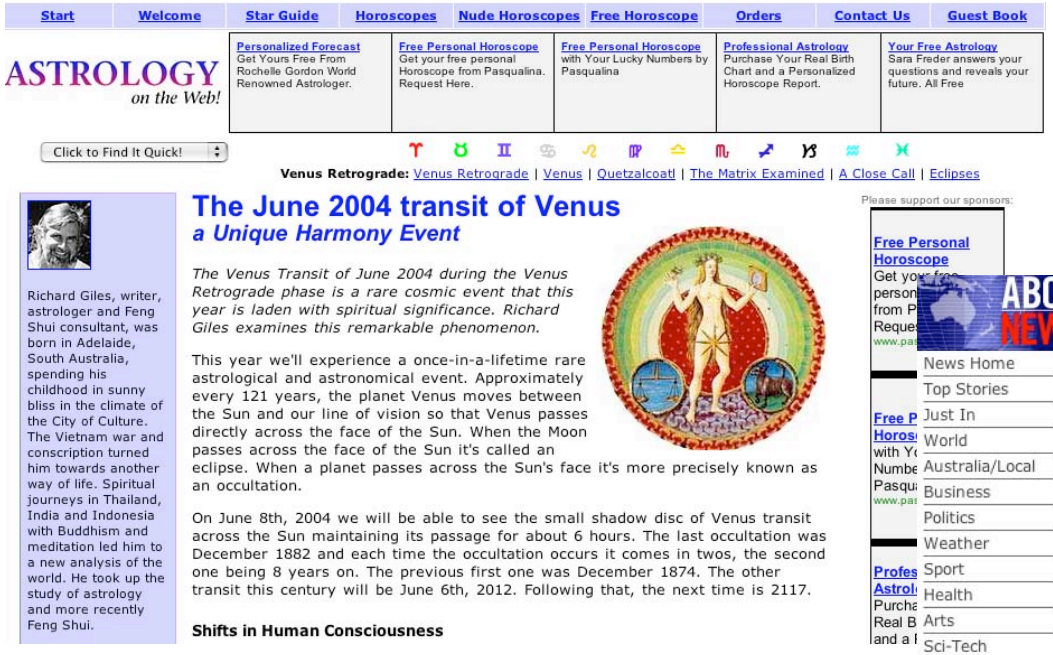
Searching the Web





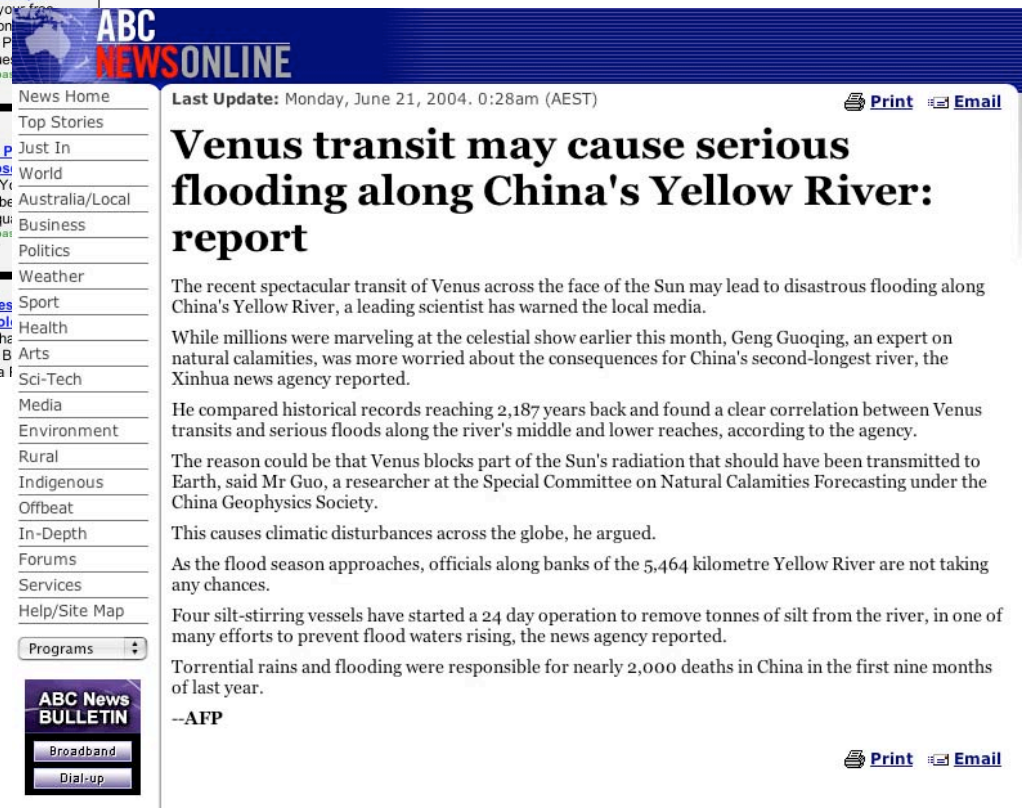


Other things to be found…



AlternativeApproaches.com

The Return of the Energy of Christ and of Quetzalcoatl



http://www.experiencefestival.com/venus_transit

The Wisdom Archives for the Venus Transit

Venus Transit of June 8, 2004 – A Breakthrough of Intuitive Awareness

Venus' stuff…

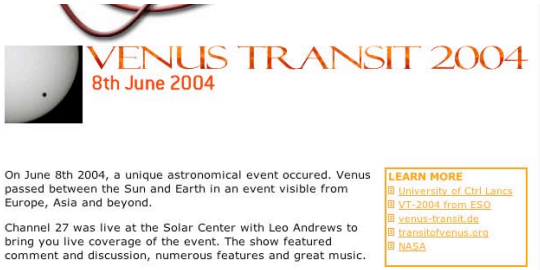
Music?

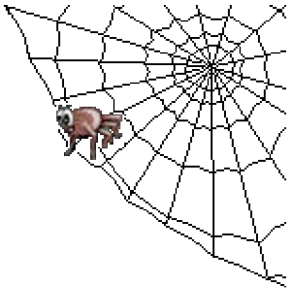
Horrock's church
Venus Transit
calendar

Transit of Venus Sunrise Ale

Venus transit beer!

Web coverage





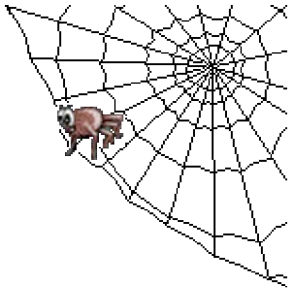
EC Application Abstract

Science and Society

European Science Week 2004

On June 8, 2004, planet Venus will pass in front of the Sun. This event, a "transit", is extremely rare - the last one occurred 121 years ago. Easily observable in Europe, it will most certainly generate unprecedented attention from the media and the public. This project aims at transforming curiosity into knowledge and interest in European science through large-scale pedagogic action, specially geared towards the importance of uncertainty in scientific observations, the leading European role in the discovery of extra-solar planets and the measure of the Universe. This project will set up a large international network of individuals (teachers, students, amateur astronomers, etc.), and institutions (planetariums, science centres, etc.). It will encourage them to participate in real-time measurements of one of the most fundamental astronomical parameters, the distance from the Earth to the Sun. It will explain the relation of this event to a current front-line research area, the search for extra-solar planets by the transit method; the only one, which, in the near future, will enable the discovery of Earth-size planets and thus possibly, alien habitable worlds. The project will promote international collaboration throughout Europe, and also in Africa and Asia, by observing the same rare celestial event, debating it via web and adding local observational contributions to a large, common database.

The project is centred on the delivery of the detailed explanation in all European languages of all aspects (scientific, technical, historical etc.) of the event itself and its implication in the search for life, and on the involvement of media, teachers and amateur astronomers to ensure the highest return. **The Internet will be the main vector of interaction**. To emphasize the sociological importance of this event, a video contest will be launched. The project will be thoroughly evaluated in terms of impact and management in a Final Event during the Science Week.



VT-2004 Web site

The VT-2004 website was first set up in June 2002 and was expanded as more features were added. This development resulted in loss of navigability. A major upgrade of the top-level pages was therefore performed in early April 2004.

VT-2004 Web Site

Loaded with information!

~ 2 GB of data

> 36,000 files!

- Background Information (two levels)
- Educational material
- Registration of Observers

- Photo Archive
- Art Gallery - Poetry
- Video and animations
- Info for amateur astronomers
- Links to the VT-Network
- Kids' corner
- Quiz

VT-2004 Web site

Photo archive (> 600 photos) with Photo of the day until August 8

Theme of the Week from August 9

Drawings

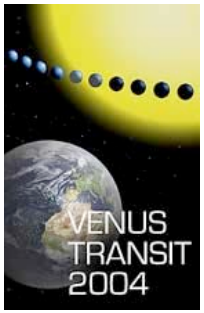
410 drawings in the Gallery

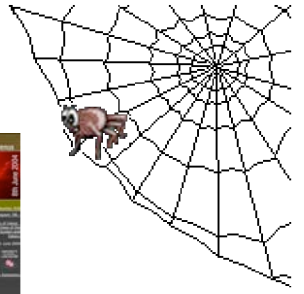
50 won a T-shirt

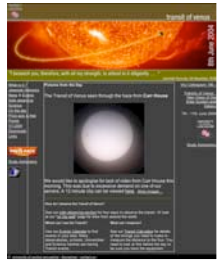
17 classes received set of posters

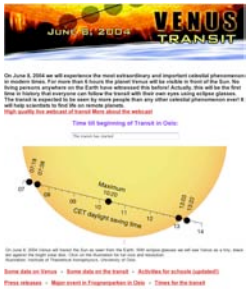
different aspect!

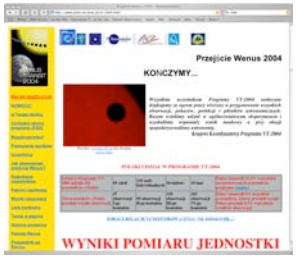
VT-2004 Nodes

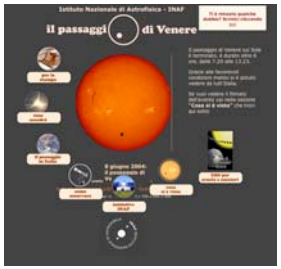


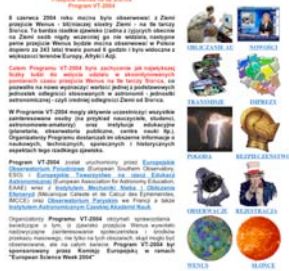


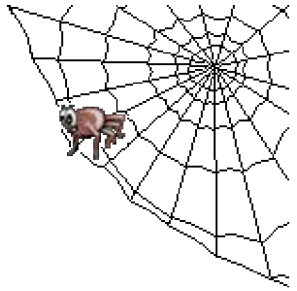




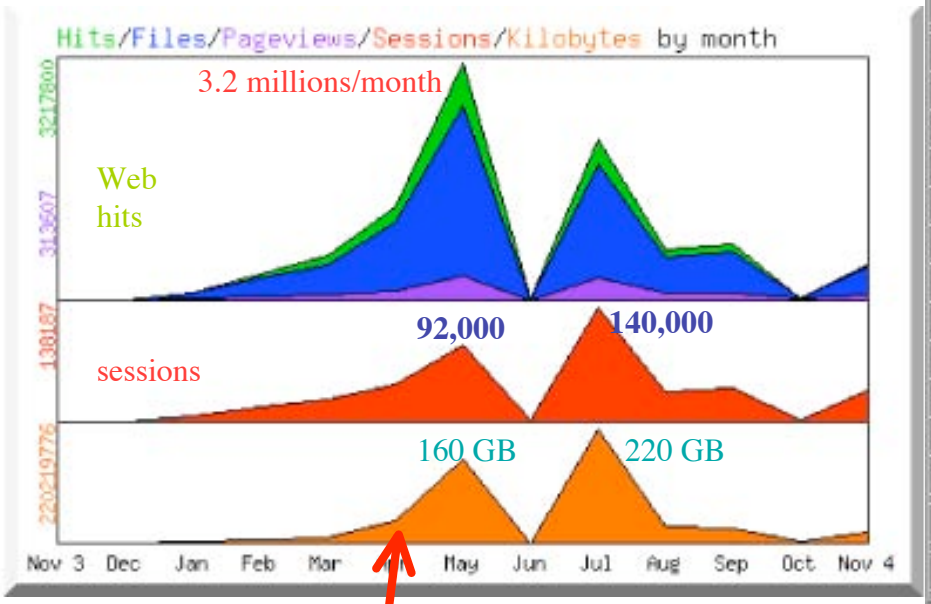








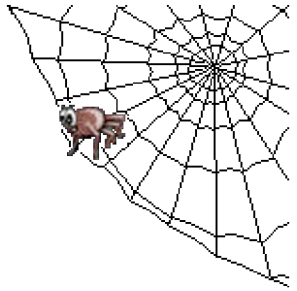
Statistics



New web site!

Month	Hits	Files	Cached	Pageviews	Sessions	KB sent
September 2004	759017	655043	83202	86910	40343	28067780
August 2004	675412	580123	78647	85960	35281	29419660
July 2004	2176214	1842432	243372	292872	138187	220219776
June 2004						
May 2004	3217800	2631118	520991	313607	91923	159669136
April 2004	1267093	1052134	193225	119985	44368	42685940
March 2004	596165	482188	102447	61970	25877	9391360
February 2004	349444	284271	57880	35887	16806	5152100
January 2004	95213	78864	10079	8823	5404	1152202
Total	9168509	7635270	1292323	1009452	400639	497177888
Average	764042	636272	107693	84121	33386	41431492

Total: 400 000 sessions and
500 GB downloaded…
(if except June)



Statistics

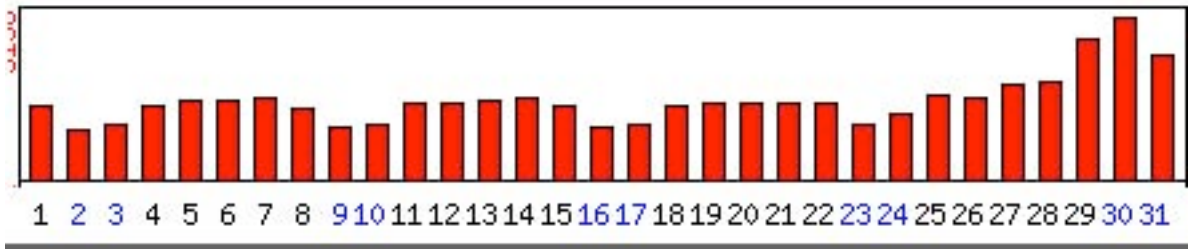
In May 2004, Top URLs:

- Media page cf vt-comm-02, 03, 04
- Background Info on Venus' orbit, observing transits, significance of transits, predictions

October:
50 000 sessions
32 GB

Distance in the Universe, Observing VT, The Sun

End October: Number of visitors rises again!



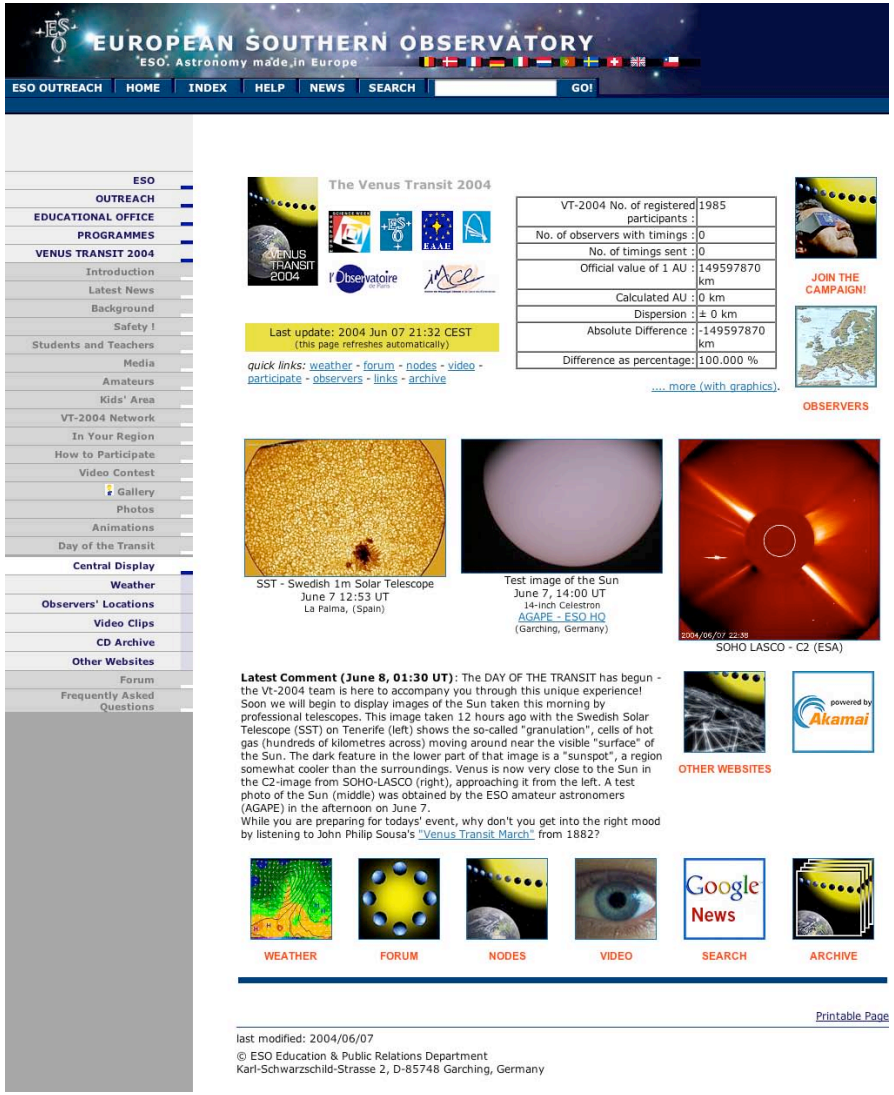
The V-Day

ESO HQ – Garching (Germany)

- starting at 02:30 in the morning
- 5 specialists (astronomers + IT)
- 2 students from European School
- AGAPE observing team outside
- technical service team on call
- end of hot phase at ~15:00

VT-2004 Control Room

V-Day: Central display



Best Photos from Primary Partners

On-line AU Calculation

Webcam -- ESO amateurs

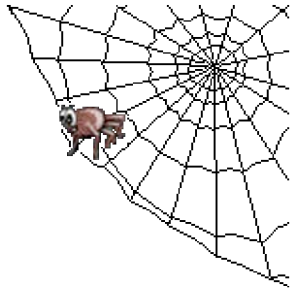
Live commentary

Web surfing

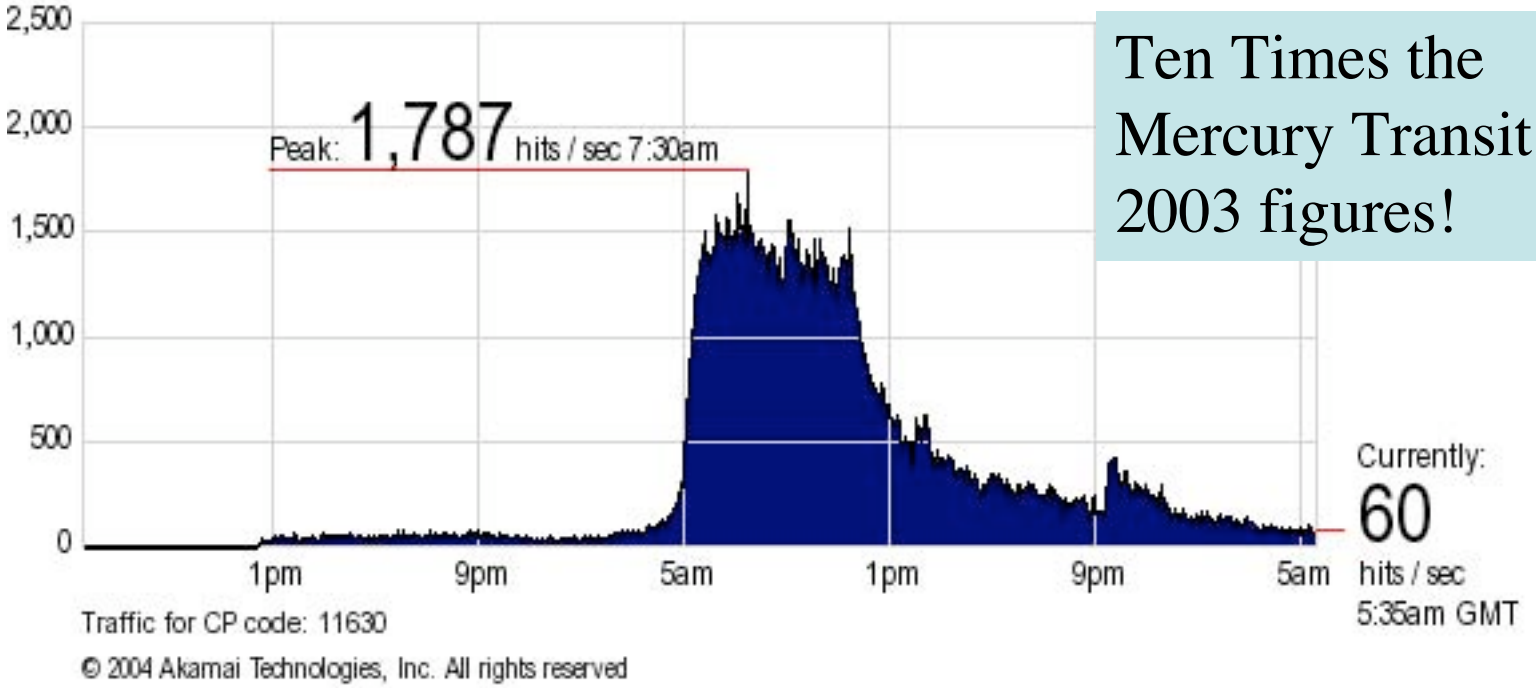
Forum and email answers

TV interviews…

Hundreds of mirror sites



V-day

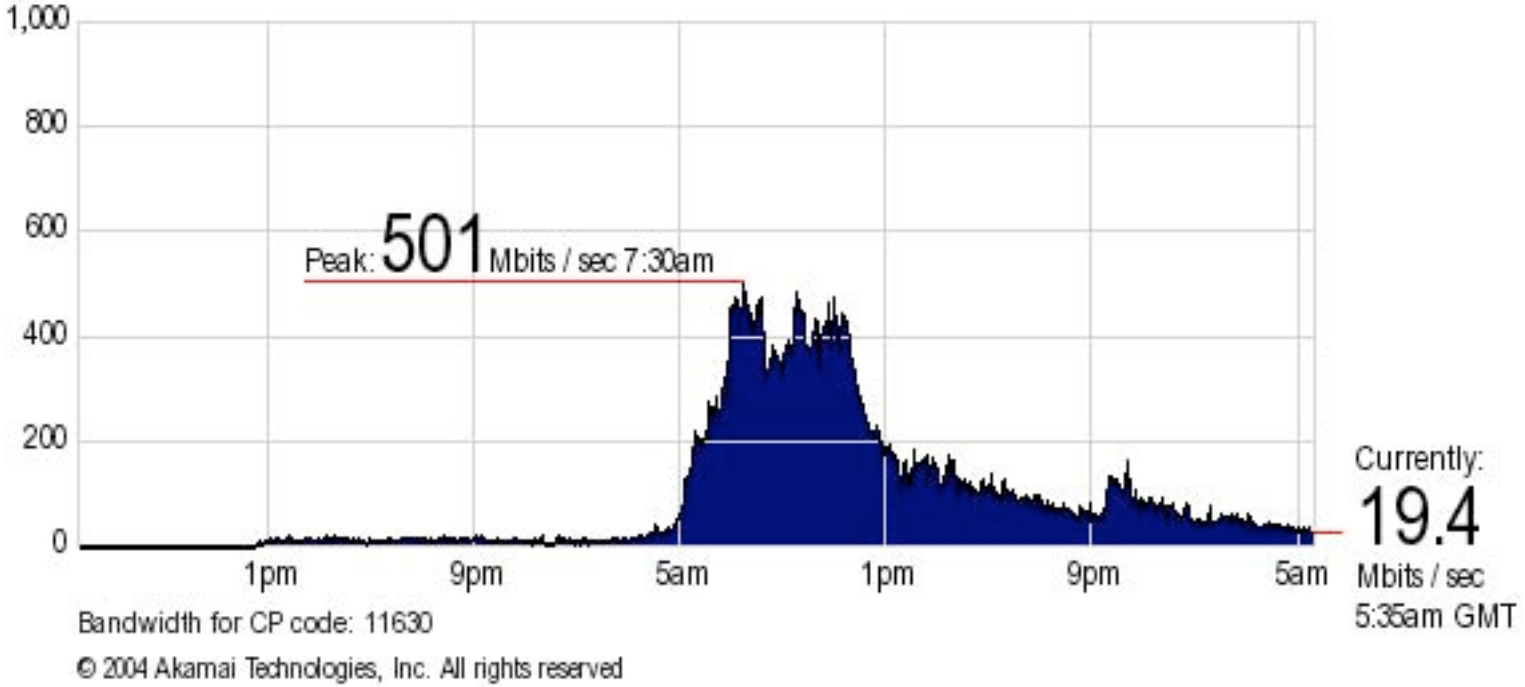


Ten Times the Mercury Transit 2003 figures!

At peak time, 100 000 hits/min!

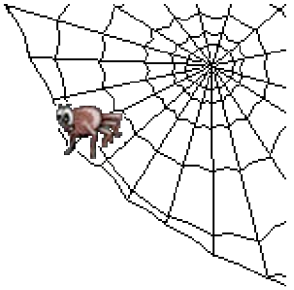
55 Million Web hits/8 hrs

V-day



In total:

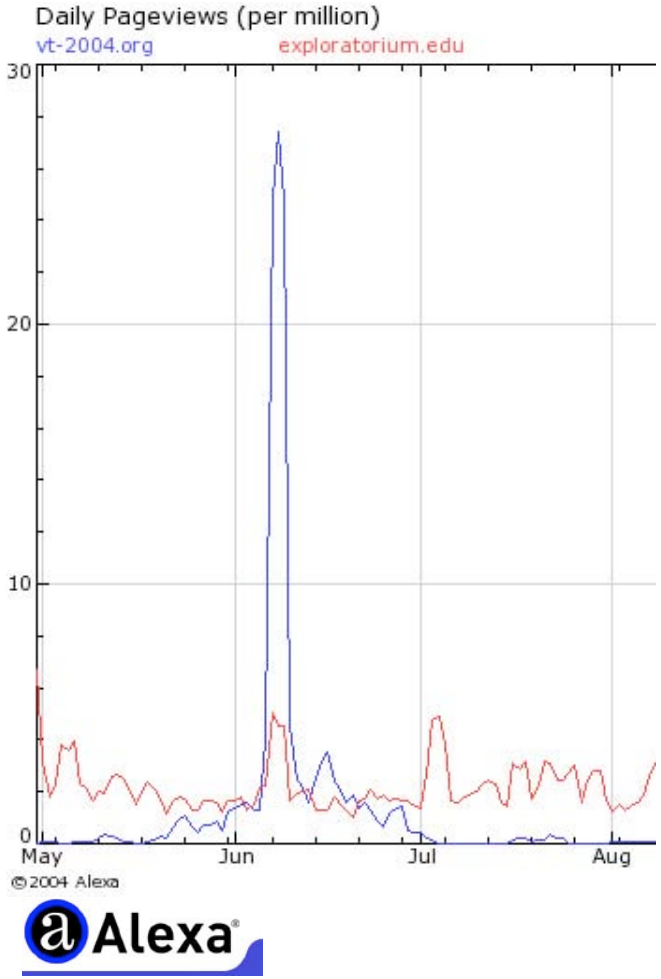
1.75 Terabytes delivered!

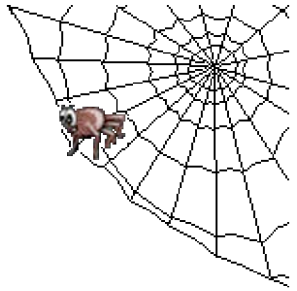


VT-2004 - June 8

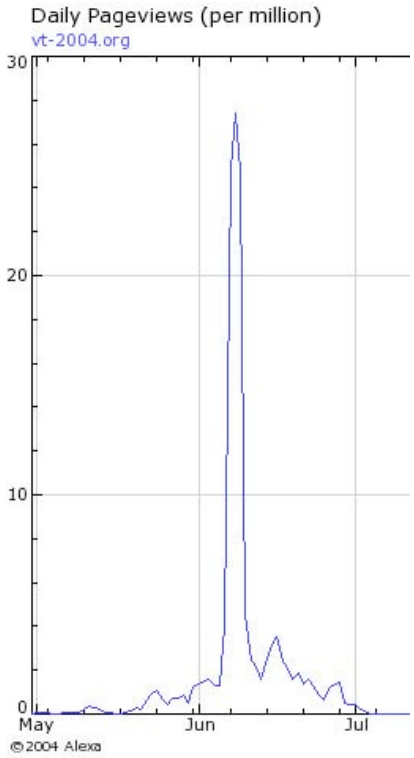
www.VT-2004.org was the most successful web site for the transit

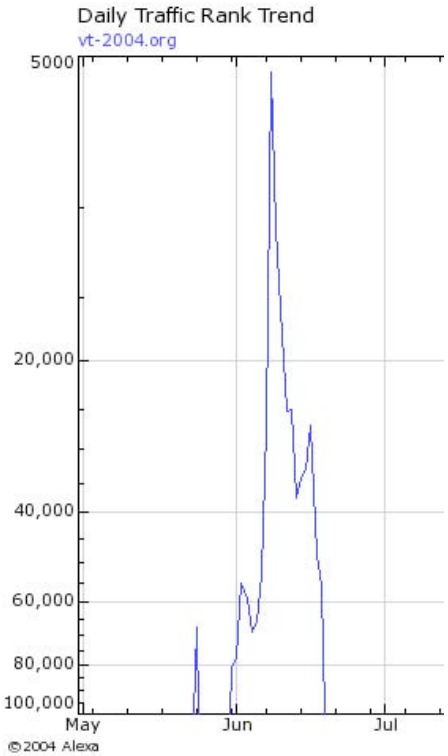
- Always on-line
- Very complete
- Many viewers

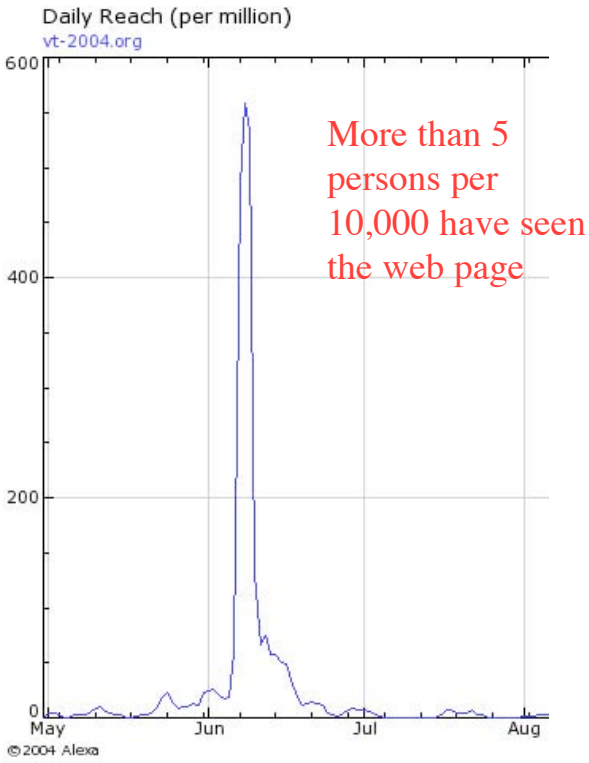




V-Day Statistics





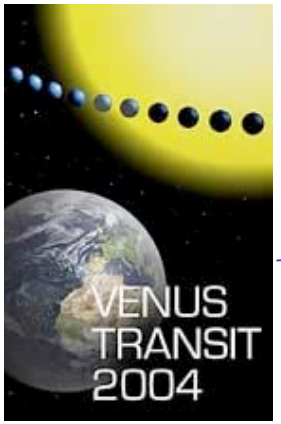


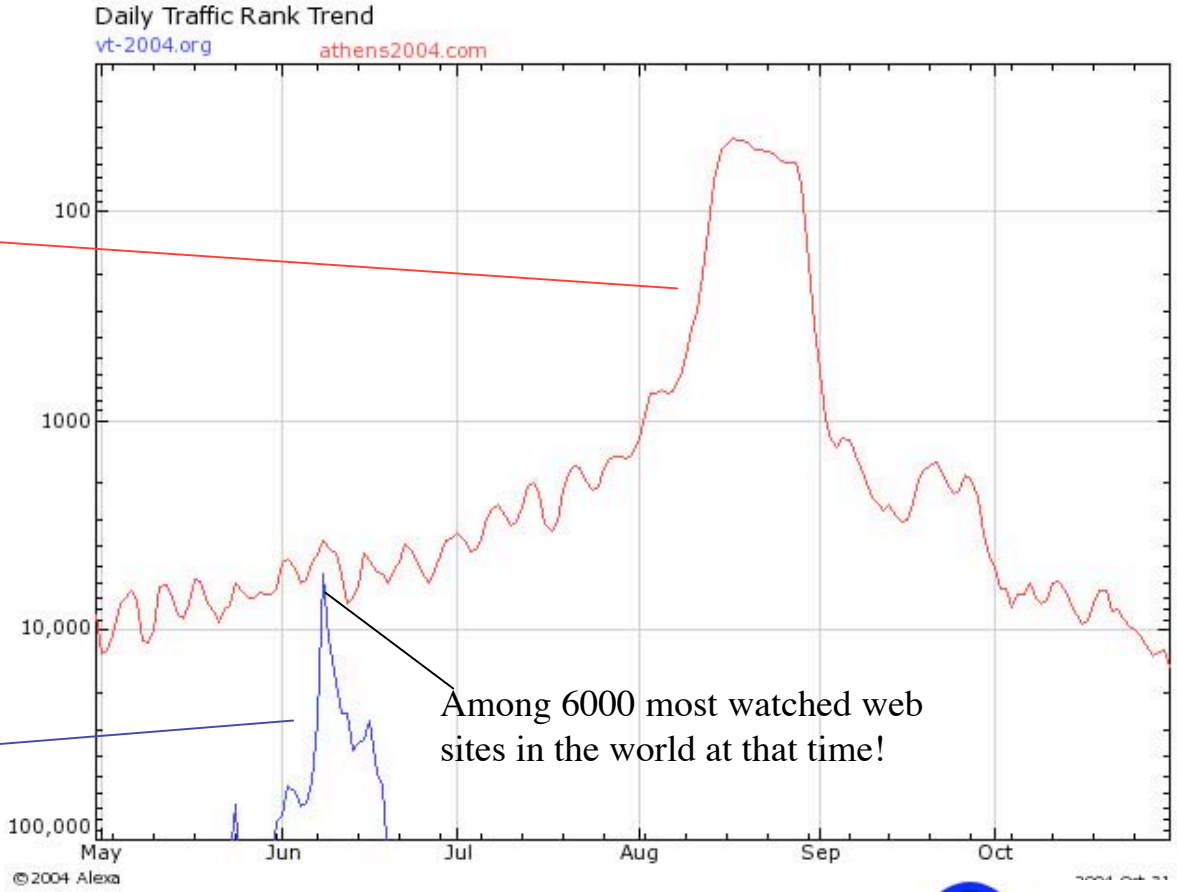
More than 5 persons per 10,000 have seen the web page

World rank:

< 6,000

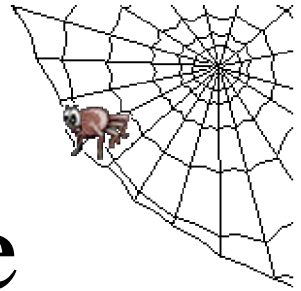
Rank





Among 6000 most watched web sites in the world at that time!

Alexa



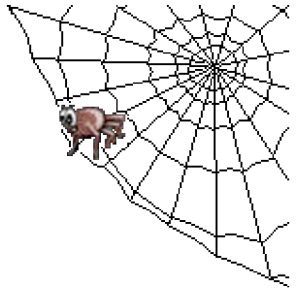
A great success! Some praise

•*Thanks to the team for the excellent work on this website which I have enjoyed viewing today - glad you and all your correspondents were able to get such superb images for us to enjoy.*

•*Thanks for the movies! It was cloudy at my location); but at least I was able to watch the transit online. (:*

•*Beautiful images; wonderful information; clear, concise commentary...this site has it all.*

• *Great job done by all at the ESO. Hope your team will be together again for the next Venus Transit!*



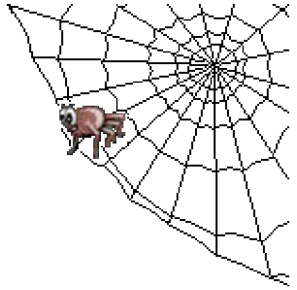
A great success…(II)

- *Very well done indeed. A really well organised online event. I felt part of something much bigger. The constant updates of picture and video were fantastic!!*

- *MERCI ! Très sympa, warm feeling yesterday, only too rare on this tiny planet of ours!*

- *I feel a bit sad and lonely now this project is over.*

- *In Dallas, Texas we had no chance to observe the transit - but thanks to all of you we could easily share in the excitement and be a part of the occasion. What a wonderful connected world we live in!*

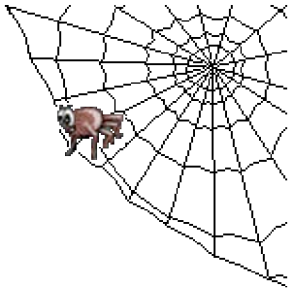


So…

The VT-2004 Web site proved very popular during the Transit itself but thanks to a perfect preparation, it all went very well…

It is a gold mine which will prove useful for the years to come.

For example, you can compute yourself the AU using the unique VT-2004 measurement database, or download photos for making your own measurements, etc.



Be prepared for 2012…

Details and prospects for the transit of Venus, 2012 June 5-6

As transits of Venus are among the rarest of planetary alignments, the next transit of Venus across the face of the sun, which will take place on 2012 June 5 and 6, is a very special astronomical event. This will be the very last transit of Venus of this century! If you are determined to witness this spectacle from start to end, therefore, it is essential to know where to watch. This page offers all the information you need, ranging from the computation of your local circumstances and a map showing the global visibility, to the weather prospects. Also, you will find the extreme values for the transit, so you'll know for instance where the transit will start first and where it will last longest.

- Your local circumstances
- General circumstances
- Extreme values
- Zenith-relative movement of Venus
- Weather prospects

The transit of Venus in progress, 2004 June 8. (Photograph by Cees Bassa, Utrecht, The Netherlands)

The Web will help you!