

# TOTALITY!

2006 JUNE

THE JOURNAL FOR ECLIPSE CHASERS

ISSUE 1

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Ya'lla Tours in Turkey

Photo by Larry A. Stevens

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- Eclipse Chaser Profile - Larry Stevens

# INTRO TO THE PREMIER ISSUE OF . . . TOTALITY!

What's this all about then? I started putting together a document with some pictures of our eclipse trip through Turkey for the group I traveled with, and I thought I would format it to look like a magazine. I thought I would include info on the upcoming 2008 and 2009 total eclipses in hopes of encouraging everyone to start making long range plans. Then I found photos on the web of the eclipse from tours to Libya and Egypt that I wanted to include. It soon became obvious that the document would be huge, and nobody would want to spend that much time all at once to look at it because of its size, let alone download times.

So, for those interested in this eclipse, and hopefully for those that may be interested in more, here it is, the first of a new newsletter/magazine (I guess I can call it a "newzine") for eclipse chasers. I hope to get people excited about traveling to eclipses and seeing the world, perhaps to somewhere you have been wanting to visit, or perhaps to places that you had not even considered. Thousands and thousands of people sign up for each eclipse trip from all around the world, seeking new experiences in places near and far, to position themselves in the slender path of the Moon's shadow. I hope you will use this as a guide to help you determine where you want to go, which eclipse you want to go to, and perhaps even who to go with.

In this premier issue, I am using my trip to Turkey as the primary focus with Ya'lla Tours, especially since more than half of the individuals receiving this were on that trip. In the next issue I will highlight photos of the eclipse and the trip to Libya from other tour groups that I found on the web, because I found when I was formatting this issue. There was so much I wanted to talk about that it was taking a lot of time to put it together and give it a good look, and be short enough for you to care about in the short term. Because of this I have scaled back and decided to create several issues to highlight tours which went to Libya and Egypt, along with their experiences and photos. You can

see that I have several additional issues in development, a list of which can be found on the last page of this and every issue.

Issues will NOT be planned to come out on a set schedule, rather as I receive or format appropriate information, an issue will be sent out. Up front I could be producing an issue every month or two **To receive more issues however, you will need to sign up! Please see the last page for information on how to do this.**

I will be including lots of information, charts and diagrams from eclipse icons Fred Espenak and Jay Anderson for predicting the eclipse path and the weather prospects. Their information is the standard model which most expeditions are based upon. These selections can be found from their web sites, I am simply compiling the info here to be presented to you.

I hope to also give you some tips on what TO do and what NOT to do for making the eclipse portion of your trip successful, and also tips on photo processing.

This newsletter will be made available to you absolutely free, and at this time by e-mail only, this is why I will compile a list of e-mail addresses to send it to. Rest assured that I will NOT be selling or giving the list of e-mail addresses to any solicitors.

If you have great photos of your eclipse trip, or have an account of your trip, please send me that specific information after an initial contact. Please see the last page of any issue for details on submissions or communications. If you know a fellow eclipse chaser or wanna be eclipse chaser, feel free to forward this to them and they too can send an e-mail to sign up to receive future issues.

Thanks for going along for the ride!

- Larry A. Stevens

# 2006 Eclipse Highlights and Photos from Turkey with Ya'lla Tours



The total area of Turkey is approximately 2.8x the size of Texas. The magenta line marks the route our tour took

Our trip to Turkey took us to many ancient sites. I found that Turkey is a combination of very old, and very new. I only wish we had more time at some of the sites to leisurely explore these areas, and to look for better vantages for my pictures. We visited the Suliman, Hagia Sophia and Blue Mosques, and Topkapi Palace and the Spice and Grand Bazaars in Istanbul, visited Gallipoli, ancient Troy, Pergamum, Ephesus, Hierapolis, Aphrodisias, Aspendos, and Goreme Valley to name some of the highlights. We spent nearly 2 weeks in traveling about western Turkey, traveling 3150 kilometers (1900 miles) by tour bus. We saw the land, the farms, the Shepard's the snow in the mountains and topping all of this majesty off, a beautiful clear day on the beach of the Mediterranean at Side on eclipse day.

Aaron Martin supplied me with the following GPS readings at our eclipse site on the beach of the Terrace Hotel in Side, Turkey;

Latitude	=	36 degrees 47.836 minutes north	(+36d 47m 50.2s)
Longitude	=	31 degrees 21.774 minutes east	(+31d 21m 46.4s)
Altitude	=	1 foot	

I had a couple of major problems with my equipment, one was a broken solder joint on the circuit board of my motor drive. Thanks to Craig Miller for his help resolving this problem. Then, as the brightness of the Sun was starting to diminish, it became time to change from a short roll of film shooting partial phases, and to exchange it with my programmable 100-exposure back. It quickly became obvious that the short roll did not want to rewind. I had no choice, and I quickly opened up the back of the camera, and literally ripped it out of the camera, and fumbled nervously putting the EB-90 back on the Minolta Maxxim 9000. I got the back on, but it did not want to load and start taking pictures. I was almost ready to just give up and just watch the eclipse when I thought I would try turning off the power to the camera, and then back on and push the remote shutter button. It loaded! The first frame was shot immediately after that at 10.54.04. My first frame of prominences with a sliver of Sunlight left came at 10.54.48, only 44 seconds to spare, and less that 1 minute before totality. Whew!

But that was not all. Because of these last minute problems, I lost track of my duties, and did not bother to refocus after removing the solar filter. I was sure all the pictures would be worthless. The answer to this question I would not know until after I got home and had the film processed. Did they turn out all right? You be the judge!

I hope by the time I travel to my next eclipse, I will have a good digital SLR in order to capture my eclipse shots, and see the results immediately, and I also won't have to worry about changing the film back. The motor drive, well, I will leave behind the C-8 mount, and use the one I got with the C90. Hopefully this will be a little less fragile. Obviously I am still refining my eclipse equipment.

I had set the time on my programmable camera about a month before the eclipse, Its time is not super accurate, and certainly is not to a fraction of a second, but does appear to agree with the predicted times of 2<sup>nd</sup> & 3<sup>rd</sup> contact.

**2<sup>nd</sup> contact = 10:54:59\***  
**3<sup>rd</sup> contact = 10:58:43\***

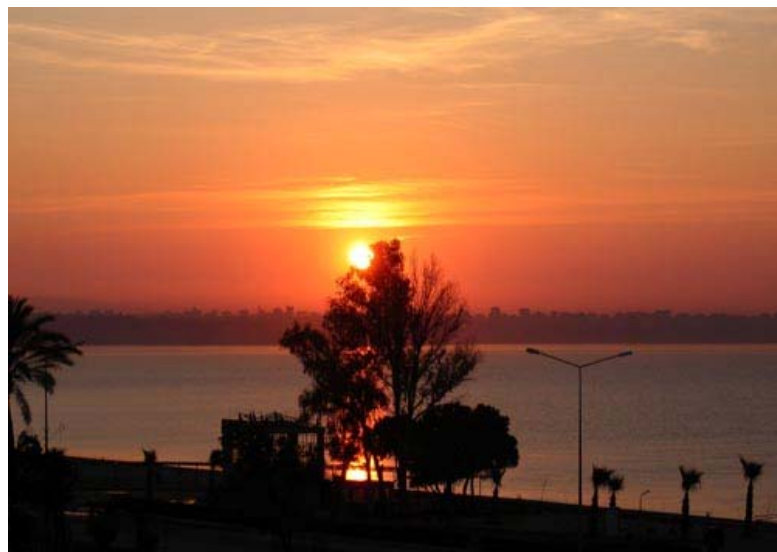
**Total time = 3 minutes 44 seconds**  
**\* = absolutely no bailey's beads were visible**

With my camera bracketing 9 frames, each exposure one full stop different, and based on the averaging meter in the camera every time I took a series of photos, it took approximately 2.5 seconds to snap all 9 of the series using a C90, equivalent to a 1000mm lens. You can see some of the following exposures the time indexes.

Michelle Bales made a few observations of the temperature throughout the eclipse, the probe was in shadow for her readings which showed a 11 degree Fahrenheit drop from before the eclipse until a little after totality, then recovering afterward.

If you want to see the photos larger, for those that opened this document in Word, just use the enlarging selection at the top of the page, or if that is not displayed, select the View menu, and then select Zoom. Since we are using 128 dpi, it will take the magnification.

And without further delay, we begin with sunrise on eclipse day in Antayla, always a good sign seeing the Sun in the morning on eclipse day . . .

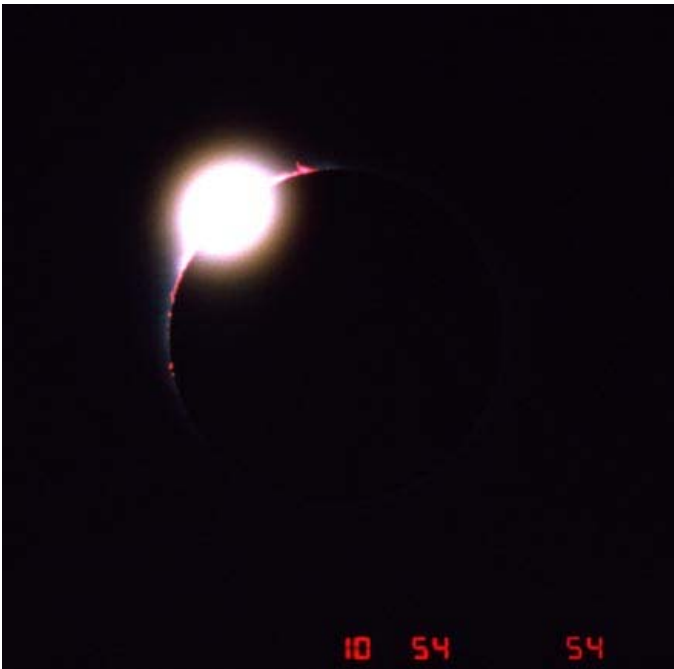


Eclipse day on the beach in Side (pronounce it like Sea.Day), Turkey. Part of the Ya'lla tour set up on the beach and the rest were at the pool area. Several individuals came by for a brief visit.



Photo by Michelle Bales





**The diamond on the ring preceding 2nd contact**



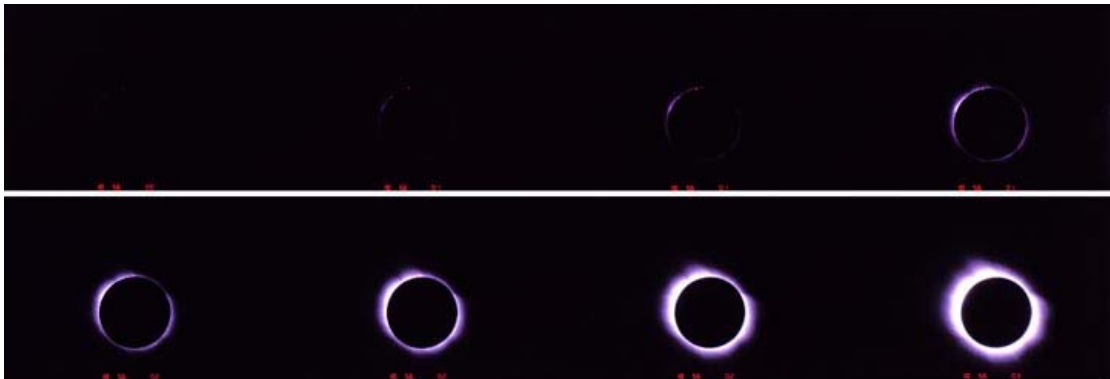
**Here two images have been combined, just after 2<sup>nd</sup> contact and preceding 3<sup>rd</sup> contact, showing the lowest detail of the chromosphere.**



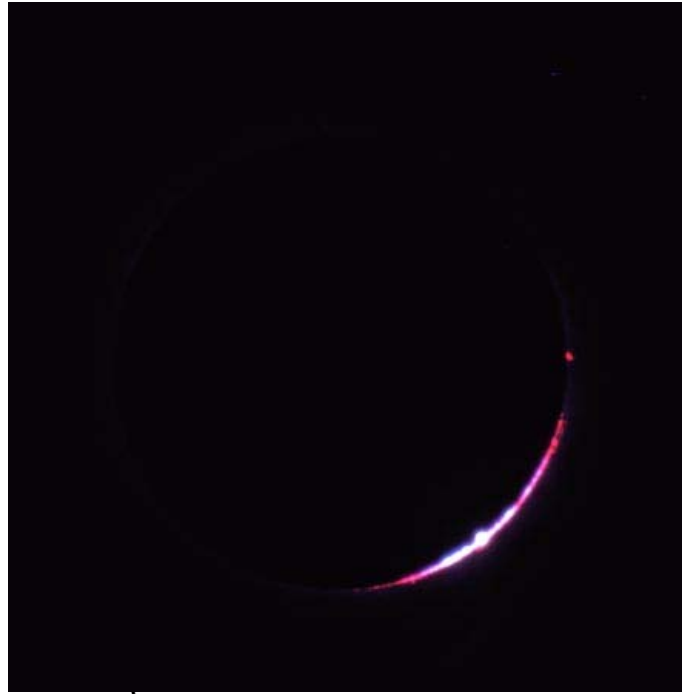
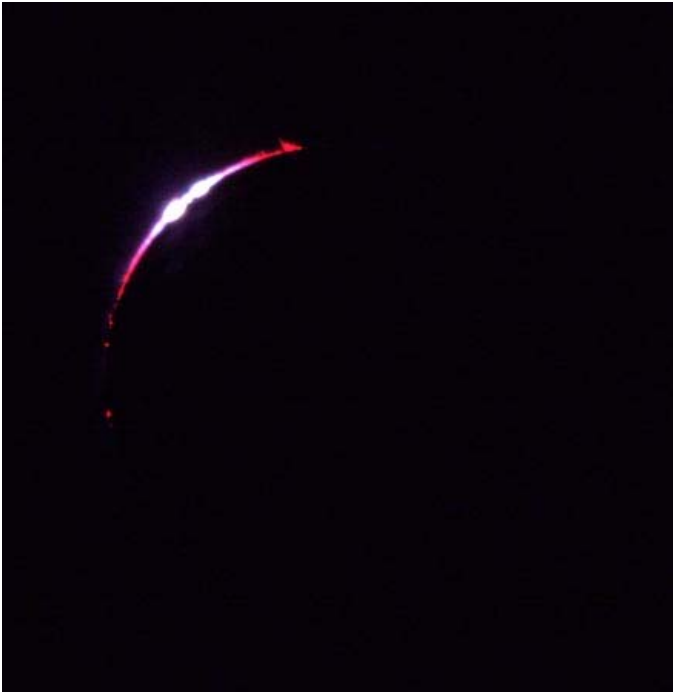
**The solar corona – enhanced only slightly toward a Sepia tone**



The diamond ring following 3<sup>rd</sup> contact



Pictured here is a section of my bracketed photos from Turkey, the fastest exposure is seen top left, and the longest is bottom right, each is a 1 stop adjustment that the camera did by it's programming. All 8 were taken within a time span of just over 2 seconds.

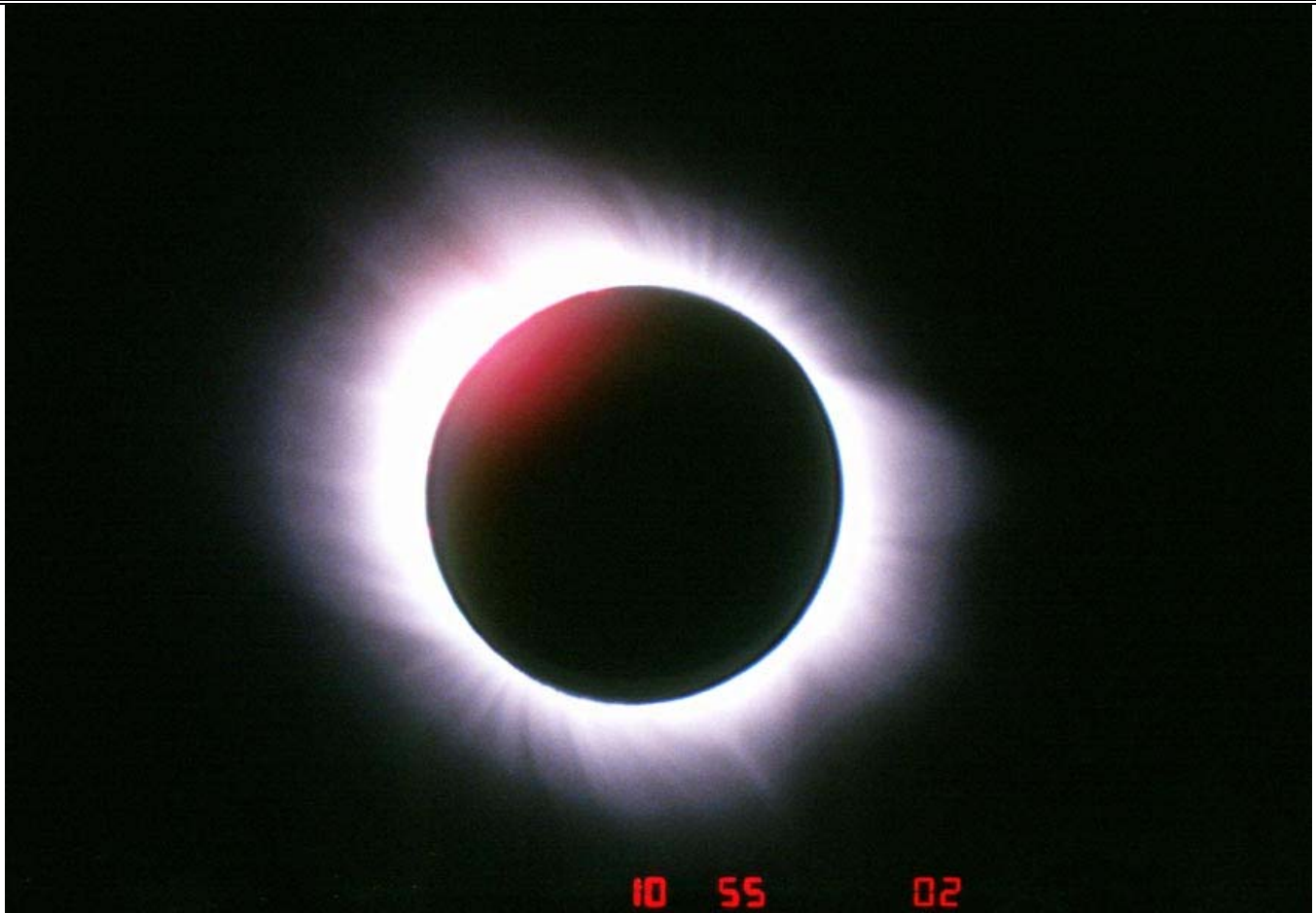


**Baily's Beads at 2nd contact (left) at 10:54:57 UT, and 3<sup>rd</sup> contact (right) at 10:58:43 UT**  
**The large prominence at the top of the picture on the left extends about 45,000 kilometers (27,000 miles)**  
**above the Sun's surface, nearly 3x the diameter of the Earth**

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*Unless otherwise noted, all photos in this article are by Larry A. Stevens*

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Aphrodisias



More of Aphrodisias (above and below)

Camel Photo taken at Gnome by Michelle Bales





Uchisar



Inside the Aya Sofia Mosque (above)





**The Blue Mosque**



**Pergamum**



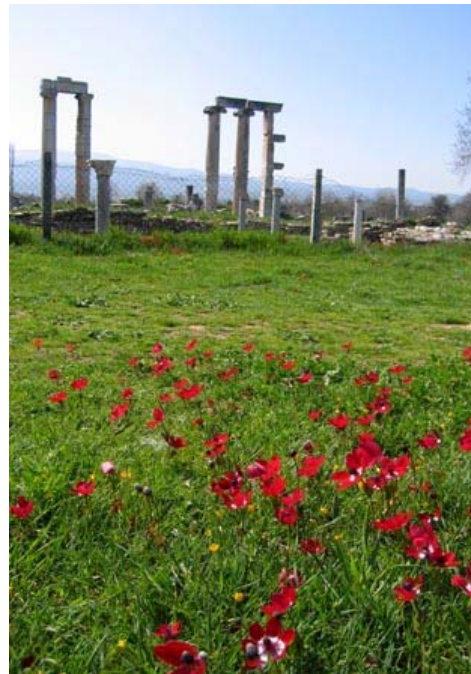
**An Istanbul Restaurant**



**Bridge over the Bosphorus, connecting Europe to Asia**



Taken by a street photographer, the Ya'lla Tours group poses in front of the library of Celsus in Ephesus



Land of handmade rugs and Poppies among the Ruins

I found this report on the web, of an observer that was at the temple of Apollo, a few miles further SE from our location in Side. I have altered the content only slightly from the original . . .

From: Jorge Almeida

**I**'m a Portuguese amateur astronomer. I went to Side to observe my first Total Solar Eclipse (TSE).

**T**he 29th March 2006, between 13 h 54 min and 13 h 58 min, those almost 4 minutes touched me in such a way that it looked like a dream, or, maybe, as someone said, the dream was exceeded. I grabbed the chance to attend something that is reported as absolutely insoluble, and that everybody should watch at least one. As the only delegate of my group Proxima Centauri, from Coimbra, I went to the historical site of SIDE, in Turkey, situated 6 km (3,75 miles) east of the central line. It was past 8 o'clock, when I got ready to climb one of the marble columns which in times of yore, supported the now partially ruined temple of Apollo and Athena.

**T**his was a privileged location, with a view of more than 180° to the Mediterranean and the huge temple of Apollo to the right. Gradually thousands of people gathered near Side, be it near the temple, the roman theatre, along the roads pinpointed by old columns or near the sea. Everything was prepared in frenzy for the coming event. The bright temple of Phoebus (another name for Apollo) with its imposing columns and frontispiece, contrasted with the blue hue of the Mediterranean sea and of the sky, the stage where the glorious event would take place when Selene would hide all the power of Helios. The sentence "Tempus fugit" is perfect to define this kind of event. How fast the time elapsed! It was not possible to stop it (I wish I could...).

**A**nd it was time. . . .

**I** noticed, near the southeast horizon, a very slow darkening. It was the sign that thousands of people were close to testify one of the more spectacular natural events, resulting, in this case, from the fortunate coincidence of the three celestial bodies [Sun/Moon/Earth – editor] more important to us being almost perfectly aligned.

**F**rom this moment on I enter in a completely new and ephemeral world... yes, I entered a magic world during 4 brief minutes. Along with the darkening to Southeast (both sides of that direction the sky was brighter) I noticed the sea becoming dark like if it was under a process of chemical transformation. An elongated cloud, in the southeast horizon became black. In the meanwhile the luminosity was changing phantasmagorically. The hue was ethereal. I looked at the peoples faces and [they] looked like stones. This hue produced such a dramatic effect that all seemed to be immobilized and their faces vanishing. Colours in hue violet and gray, indescribable, engulfed us. Shortly before totality, there was a light wind – a breeze.

**E**motions were at the highest as we saw a very thin crescent of the Sun. Everyone clapping by the second contact, crying with joy or waiting silently...and I saw something calling our attention, a brilliant Venus shining like a sudden Iridium.

**I**t looked like an exploding supernova. The fall in luminosity with the eclipsing of those 1% of the Sun was so impressive that I shuddered. This strange and fast darkening was much unreal. Then I looked again at the Sun (I missed the diamond ring while watching Venus) and saw something that deranged me even more. It was a tremendous impact to stare at a black disc, darker than coal, embedded in the most glamorous colour that any artist might mimic.

**I**t was like [as] if a thousand thunders had hit the temple of Apollo without any damage whatsoever, but leaving an indelible mark in our memories. The resplendent corona ...the beautiful white colour at millions of degrees Celsius – more sublime than snow – and six beautiful streamers. The inner corona rounded the entire disc of the Moon and, from there, grew the streamers in such a way that I was able to determine the solar equator quite accurately.

**H**aving conscience that the temple close to me had an history of 21 centuries, that it was my first total solar eclipse and that I was listening to a Mozart symphony - the play was marvelous – I could not stop some tears for such a spectacle.

**B**eing impossible to resist, I felt like floating, apart from the cheering of the crowd.

**I**t was unreal, yes an unreal experience. My brain searched for an explanation, going to the deepest places, confused with the sightings. We all became a whole momentarily integrated in the nature. This solar corona was so charming that I stared at it for two long minutes. I felt stunned, astonished, immobilized. Reality looked like a dream, objectiveness ceased to exist to allow for the emotions to excavate.

**T**rying to remember these moments I clearly recall the Baily beads, visible at the second contact. Five wonderful pearls of light – the rays of light before totality – that showed the diffraction patterns, being visible a cross in each pearl, and showing only tree arms in some of them.

**I** am not sure but I think to remember a slightly pink colour close to them.

**A**nd, during totality I spotted very clearly Mercury. Remarkable because never had I seen Mercury so high in the sky or at such a time. I did not see any star, but I didn't look for them, my glued to the corona.

**A**nd, at the same time, a strange sky which gained new colours, a reddish hue near the horizon, becoming whiter as we drove away from it, then darkening to the zenith.

**C**oncerning the meteorological parameters, the relative humidity doubled during the 30 minutes preceding the totality, the temperature lowered to 15° C (59° F), this fall being less important than in the last annular eclipse. Curiously the atmospheric pressure remained almost constant.

**T**he profusion of events in an eclipse happens almost simultaneously and it is difficult to pay the due attention to all of them. But it is exalting for any human being to witness a celestial show like a total solar eclipse.

**I** understand now why so much is said about it. All I saw before, in celestial events, is relegated to a secondary plan, in favor of this one.

**F**or me, the highlights were the immediate shining of Venus, the stunning solar corona, the Baily beads in the 2nd contact and the ethereal colour, even alien, we might say.

**I** was not expecting such magnificence, based on my readings. It is something odd for the human experience, like to unfold a new dimension.

**A**nimal behaviour - Impressive absence of activity, exception for the thousands of humans who shouted, or clapped their hands or embraced one another. To remember.

**L**ocation: Side, Antalya, Turkey, Temple of Apollo 36° 45.845' N ; 31° 23.189' E - 6 km (3,75 miles) to the East of the eclipse central line. 2 m altitude.

<b>Time</b>	<b>Temperature (°C)</b>	<b>Humidity (%)</b>	<b>Pressure (kPa)</b>
08:30	23.7	34	1019
11:22	31.5	20	1027
11:25	30.6	20	1021
11:35	29.6	20	1027
11:39	29.5	20	1027
12:00	34.4	20	1027
12:38	37.6	20	1027
13:13	35.5	20	1027
13:17	33.2	20	1027
13:27	28.8	20	1029
13:35	26.7	25	1029
13:43	24.8	33	1029
13:52	21.6	45	1029
13:59	20.1	54	1029
14:00	19.7	56	1029

**In the Next Issue . . .**

**Eclipse Expeditions to Libya**



## Eclipse Chaser Profile – Larry Stevens (Me)

Well since this is the premier issue, I can start off by introducing myself, and in future issues I will focus on individuals that have made a real impact on eclipse chasing.

I am Larry Stevens, 51 years of age. Today I am a computer programmer, and have been an amateur astronomer since 1968. I have served in several positions in the local astronomy club, the culmination being involved in the construction of the club observatory and serving as its director for a decade. I am a volunteer instructor at a local fencing club which I helped establish in 1997, and which I have served on the board. One of my greatest joys is to travel around the U.S. and Canada to the national parks and take photographs of the spectacular scenery.

My first total eclipse was 1972 at Stanhope Beach, Prince Edward Island in Canada. I was 15 at the time, and a friend and myself drove 1800 miles to see and photograph the eclipse. With relatively no funds to travel, my next eclipse came with a shorter drive with a group from the local astronomy club to Brandon, Manitoba, once more in Canada in 1979.

In 1984, another road trip took me to one of the best eclipses I have ever been fortunate to witness. A longtime friend and I drove to Virginia, and after checking at the Richmond airport on the weather conditions, headed southwest. We ended up in Greer, near Greenville, South Carolina. Although it was an annular eclipse, the annular phase would last a total of only 8.2 seconds for our location, (we were hoping for the 6.6 seconds around the Chesapeake Bay area). Although the brightness of the remaining 0.3% of the Sun was still too bright to observe directly, I did manage to view and photograph a wealth of features that are usually reserved only for a total eclipse, such as the

chromosphere and prominences, along with an outstanding 100-plus Baily's beads. Although technically an annular eclipse, at mid eclipse the annulus had breaks in it from the highlands along the lunar limb, so I like to refer to it as a "Broken Ring" eclipse. I hope to do a retrospect on this eclipse in a future issue of Totality! It is also why I will be heavily promoting viewing the 2013 eclipse from a cruise ship south of Bermuda, instead of viewing 1m 40s of totality off the coast of Africa.

In 1988 I got my job programming which I still have today, and at last I could afford to start to travel to a few eclipses. In 1991 I observed the "Great Eclipse" from San Jose del Cabo, Baja California Sur, in Mexico. Indeed it turned out to be quite spectacular. I took a C-8 tripod and mount, and attached two Baush & Lomb 1200mm cats and shot slide film with a Nikon F and 250-exposure back on one, and a Minolta Maxxum 9000 with the EB-90, programmable 100-exposure back loaded with color negative film. My friend Jim Leasure brought a small CCD video camera and telephoto lens and a camcorder and monitor to tape the eclipse, while I set up a video camera which recorded what we did during totality. The results were outstanding all around, and the eclipse coincided with solar maximum, and we had two extraordinary and towering solar prominences, one on each side of the Sun. Although it was not the longest eclipse of the 20<sup>th</sup> century, it was a classic example of an excellent eclipse.

In May 1994 I was able to photograph an annular eclipse with a short 170 mile drive from home, and then in November I traveled to Foz do Iguacu, along the Brazil/Argentina border for a total eclipse, two eclipses in one year!

1998 took us to Aruba, and gave Michelle her first chance to see a total solar eclipse, along with my mother and father. Then in 1999 I traveled with friends taking a three week tour through 6 countries in Europe, and viewing the eclipse from Hungary



where we borrowed a russian built car to try and get to a clear section of sky to view totality halfway between Koszeg and Szombathly. Truly a chase to see the eclipse, stopping only as 2<sup>nd</sup> contact was seconds away!

**I** then started making plans in 2000 for the 2001 eclipse to be an eclipse guide to a safari tour group in Zambia, Africa. That was the same time when civil unrest began and I lost all contact with the travel group. This totally scrapped my plans for making the eclipse in 2001.

**L**ate in 2001, I was diagnosed with colon cancer, and my outlook was very poor. With little effort on my part, and much to the amazement of my doctors, I am still alive and planning for more eclipses. In 2006 we traveled to Turkey for the eclipse at Side. It's nice to be back!

**T**otaled together, that's 7 total, 2 annular, and some unknown number of partial eclipses that I have witnessed, and more than 24 minutes directly in the Moon's shadow. I am now making plans to travel to 3 total eclipses in 3 consecutive years, 2008, 2009 and 2010.



This is my present car, if you do not recognize the model, it is a Mitsubishi **ECLIPSE**. Note the personalized license plate. The blue color signifies the pretty blue skies I like to see during eclipses!

## Eclipse Specialty Tour Group Web Sites . . .

### **Astronomical Tours**

<http://astronomicaltours.net/index.html>

### **Astro World Travel**

<http://www.homestead.com/AstroWorld/travel.html>

### **Far Horizons**

<http://www.farhorizon.com/2006-solar-eclipse.htm>

### **Ring of Fire Expeditions**

<http://www.eclipsetours.com>

### **Sirius Travel**

<http://www.siriustravel.com/>

### **Sita Solar Eclipse Tours**

<http://www.eclipsetours.net/>

### **TravelQuest International**

<http://www.tq-international.com/index.htm>

### **Travel Wizard**

<http://www.travelwizardtravel.com/astro.htm>

### **Winco Eclipse Tours, Inc.**

<http://www.wincoeclipsetours.com>

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## Other Useful Eclipse Web Sites . . .

### **NASA Eclipse Home Page**

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

### **Fred Espenak's Web Site**

<http://www.mreclipse.com/>

### **Jay Anderson – Eclipse Weather Predictions**

<http://home.cc.umanitoba.ca/~jander/>

### **IAU Solar Eclipse Working Group**

<http://www.williams.edu/Astronomy/eclipses/>

### **Xaviar Jubier's Google Earth Eclipse Maps**

[http://xjubier.free.fr/en/site\\_pages/SolarEclipsesGoogleMaps.html](http://xjubier.free.fr/en/site_pages/SolarEclipsesGoogleMaps.html)

Please note; If you have trouble seeing the complete and detailed eclipse paths on the charts, Google Maps supporting browsers are: IE 6.0+, Firefox 0.8+, Safari 1.2.4+, Netscape 7.1+, Mozilla 1.4+ and Opera 8.02+

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Jay Anderson

And from . . .

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Some future issues will occasionally use photos that have been posted to web sites that are saved at 72 dpi, and likely will not be as sharp as others posted at 128 dpi.

Please send any correspondence, suggestions or submissions to [TOTALITYnewzine@aol.com](mailto:TOTALITYnewzine@aol.com).

Photo submissions can also be sent to the [TOTALITYnewzine@aol.com](mailto:TOTALITYnewzine@aol.com), please format @128dpi.

### **In the Next Issue;**

- **2006 Eclipse Highlights and Photos from Libya**
- **Eclipse Chaser Profile - Paul D. Maley**

### **In Future Issues;**

- **2006 Eclipse Highlights and Photos from Egypt**
- **Eclipse Timeline: 2008-2017**
- **2008 Total Solar Eclipse - The Hermit Eclipse**
- **2009 Total Solar Eclipse - Longest Eclipse of the 21<sup>st</sup> Century**
- **Total & Annular Solar Eclipse Maps 2001 to 2050**
- **Will Your Next Eclipse Trip Weather It?**
- **Eclipses of the Past >**  
**1984 - The "Broken Ring" Eclipse / 1991 - The Great Eclipse**

