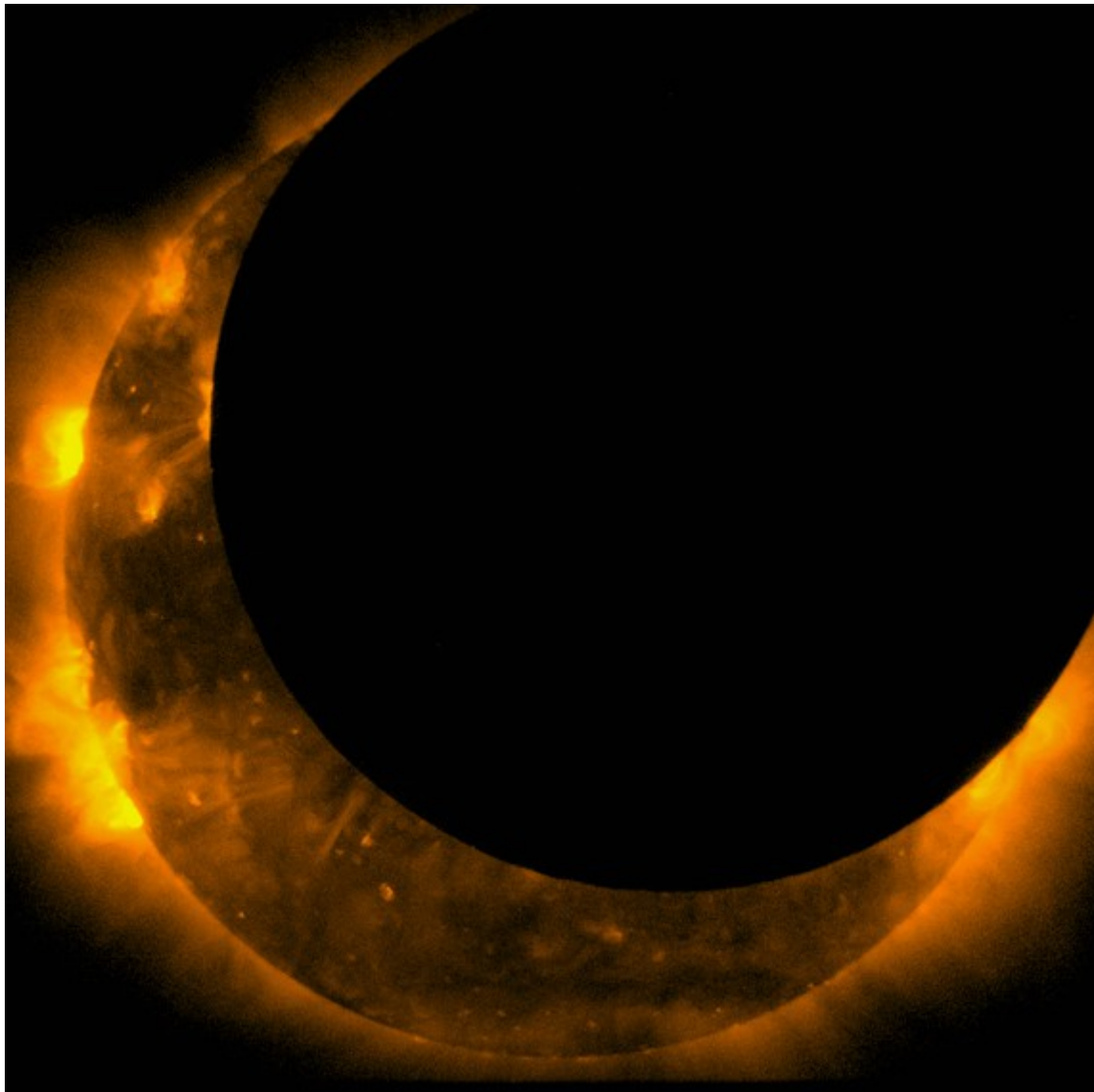


# Thanet Astronomy Group

Astronomy for Everyone in Plain English

## NEWSLETTER

March 2015

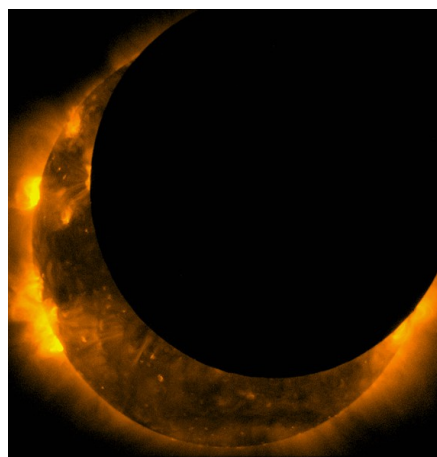


This space is reserved for promoting member's businesses.  
You can place an advert here for a donation to the group.

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## About the Cover Picture



### Partial Solar Eclipse March 20

On Friday March 20<sup>th</sup> 2015 there will be a Partial Solar Eclipse over the United Kingdom.

The full Eclipse will only be visible in the North Atlantic, the Norwegian Sea and some parts of Svalbard Norway. (See the map on page 9 for more detail)

The word Eclipse is defined as follows.

“An obscuring of the light from one celestial body by the passage of another between it and the observer or between it and its source of illumination.

In the case of a Solar Eclipse this means that our Moon will pass directly between the Earth and the Sun, blocking out the light from the Sun.

It is a fact that the Moon is just the correct size and distance from Earth, compared to the size and distance of the Sun from Earth, that it can (Just) totally cover the Sun.

This is such a close thing that even the Moons elliptical orbit is enough to alter the ability of the Moon to completely cover the Sun. If there is an eclipse when the Moon is at its furthest point from Earth in its orbit (Apogee) then because it is further from Earth it appears smaller and therefore is unable to completely cover the Sun. This leaves a ring of sunlight around the Moon, this type of Solar Eclipse is called an Annular Eclipse.

Some times the distances are so critical that the curvature of the Earth's surface decrease and increases the distance, such that a single eclipse can change from an Annular Eclipse to a Total Eclipse and then back to an Annular Eclipse.

For more information see pages 8 & 9.

Danny Day.

## Thanet Astronomy Group Contact Details

### Executive Committee

Chairman	Daniel Day	01843 228 904
Treasurer	George Ward	01843 292 640
Secretary	Gill Palmer	07543 942 245

### Committee

Volunteers	George Cozens	07970 181 395
Members	Sheila Bull	07791 892 057
Newsletter	Janet McBride	01227 364 092
Library	Janet McBride	01227 364 092
Web Site	Danny Day	01843 228 904
JAC & Gill	Gill Palmer	01843 848 064



## **Member's Meeting Dates and Times**

### **Thanet Astronomy Group** **Member's Meetings** **Dates and Times**

4<sup>th</sup> March 2015 at 7.30pm  
1<sup>st</sup> April 2015 at 7.30pm  
6<sup>th</sup> May 2015 at 7.30pm  
3<sup>rd</sup> June 2015 at 8pm  
1<sup>st</sup> July 2015 at 8pm  
5<sup>th</sup> August 2015 at 8pm  
2<sup>nd</sup> September 2015 at 8pm  
7<sup>th</sup> October 2015 at 7.30pm  
4<sup>th</sup> November 2015 at 7.30pm  
2<sup>nd</sup> December 2015 at 7:30pm  
6<sup>th</sup> January 2016 at 7:30pm  
3<sup>rd</sup> February 2016 at 7:30pm

All Member's meetings will be held at the :-

West Bay Cafe,  
Sea Road,  
Westgate-on-Sea,  
Kent.  
CT8 8QZ

## What we did last month

February 2015

**Tuesday 3<sup>rd</sup>** This was our 4<sup>th</sup> visit to Laleham school and the project is going to plan. The response from the children is still overwhelming.

**Wednesday 4<sup>th</sup>** Members Meeting, for all those that missed it, the agenda is as usual on the diary page of the web site. We started with the usual notices, then we looked at the web site "The Scale of the Universe 2" <http://htwins.net/scale2> This site prompted a lot of questions, some of which were beyond me, so I passed to our Expert Thomas to answer them.



**Friday 6<sup>th</sup>** We gave an after dinner talk to the Broadstairs Men's Diners Club. The subject was the History of Astronomy. The talk was followed by many questions and answers.

**Saturday the 7<sup>th</sup>** Public Outreach Meeting.

**Monday 9<sup>th</sup>** This was our second visit to the Holy Trinity Beavers to complete their astronomy badge. All went to plan, the children did very well and everyone got their badges.

**Tuesday 10<sup>th</sup>** Back to school for our last visit of this term. Everyone is pleased with the progress and we plan to continue next term. The children are looking forward to the next part of the presentation.

**Saturday 14<sup>th</sup>** Public Outreach Meeting.

Today was a really nice day. The Sun was shining and there were loads of people about. Many of them interested in what we were doing. There were also repeat visits from several of the people that came to the Kids in Space Show on Saturday 31<sup>st</sup> Jan. We spent some time looking at Sun spots but attention soon moved to the Border Force ship in the bay.



Picture by Andy Fearn. Taken through one of our telescopes

**Tuesday 17<sup>th</sup>** No school today is half term.

**Saturday 21<sup>th</sup>** Public Outreach Meeting.

The weather was nice again today and loads of people turned up. The Sun came out several times during the afternoon but despite several attempts we could not see any sun spots. Gill spent most of the afternoon teaching the children again we had quite a few. Later on it turned cold so we moved into the cafe and talked astronomy over tea, coffee, chips and cake :-)

**Tuesday 24<sup>th</sup>** School Day

Back to school today to pick up where we left off before half term. We Covered Stars, Constellations, Nebulae and Galaxies and many questions. Next week we will complete Intermediate Stargazing and move on to the more detailed advanced section.

**Saturday 28<sup>th</sup>** Public Outreach Meeting.

Well we come to the last outreach of the month. The weather is not so good today so we decided to meet in the cafe, it's cold windy and there is a salty misty rain in the air.

It was a busy afternoon with most of the people in the cafe being from the group.

We had a few more people wanting to join so the numbers are still going up slowly. There will be several more new members after we run the Stargazing course.

The meeting broke into several smaller groups each discussing different aspects of astronomy, with people moving from table to table.

All in just another month at Thanet Astronomy Group.

***Our thanks go out to all that helped to make all this possible !***

Danny Day.

## Junior Members Page

### Half Term Holiday

During the half term holiday, the Junior members had the chance to make their own model planets and aliens with Gill at the Saturday Public Outreach meeting.

If you want to make your own planet or alien, then follow these 10 easy instructions!

1. Choose 2 coloured balloons.
2. Cut off the ends where you blow into the balloon.
3. Fill a small plastic bag with a tablespoon of rice.
4. Seal the bag securely with selotape so the rice does not come out.
5. Decide which colours will be on the inside and outside.
6. Stretch the first balloon over the bag of rice.
7. There should be a small gap of rice showing.
8. Take the second balloon and stretch it over the gap.
9. The bag of rice should be completely covered now.
10. Decorate the outside with felt tips or sticky googly eyes!

These are some the ideas the children came up with...

Charlotte (aged 5) Jupiter in orange & the Sun in yellow

Juliana (aged 5) Betelgeuse in pink

Wilson (aged 7) An alien with 3 eyes

Raphael (aged 9) A white planet and a blue alien



Some grown ups from Herne Bay,

who were just passing by, even joined in and made their own planets to take to their grandchildren!

When we had finished, we all got together and made our own newly created Solar System, which we bombarded with asteroids and comets, although they were really only the left over grains of rice due to Health and Safety reasons!!!

**Later in the week, the Juniors had the opportunity to see their planets and the stars for real when we met at Minnis Bay for a Stargazing Party.**

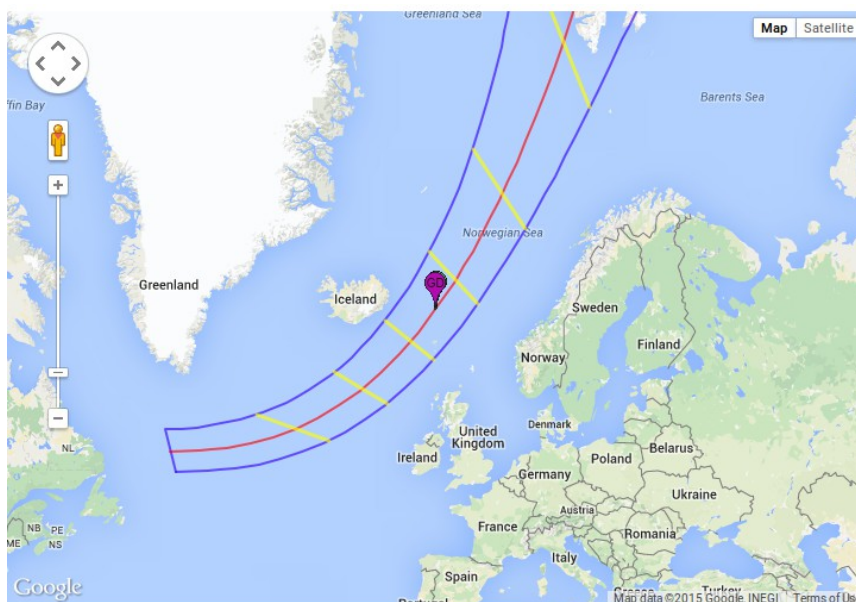
**Venus and Mars were clearly visible in the West, while Jupiter was by far the brightest in the East. Orion the Hunter was out looking for The Great Bear and Leo the Lion.**

**We even had a fly past by the ISS, twice!**

Gill P.



## Solar Eclipse



Map of the path of total Eclipse (Credit NASA)

The map above shows the path of the March 20<sup>th</sup> 2015 Total Eclipse. The Total Eclipse will only occur within the area within the blue lines. The red line marks the centre track of the total Eclipse. The yellow lines mark the time and position of the Total Eclipse every 10 minutes. If you want to see the Total Eclipse you will have to charter a boat to the north Atlantic or go to the Faeroe Is or Svalbard.

However a partial Solar Eclipse will be visible from the United Kingdom, Iceland, Europe, North Africa and North Asia.

The further north you can view the eclipse from the closer to totality you will see. The light blue lines in the diagram below shows the percentage of the Sun that is eclipsed by the Moon. The 80% line is marked "0.80". Ireland Northern England and Scotland are all above the 90% point and North Scotland is at about the 95% point.

The first and most important point to bear in mind when attempting to observe a Solar Eclipse is :-

**SAFETY - NEVER LOOK DIRECTLY AT THE SUN - SAFETY**

Having said that the second most important point is to actually see the eclipse and this is where the ever present bane of astronomy rears its ugly head CLOUDS! It is better to see a more partial eclipse than to travel to a total eclipse site where the weather is bad and have a bad day looking at clouds. Check the weather and chose a site that is likely to have the best chance of no clouds.

Here in Thanet we are at around the 85% point so it will still be a spectacular eclipse if it is not cloudy.

Danny Day.



# Solar Eclipse

## Total Solar Eclipse of 2015 Mar 20

Ecliptic Conjunction = 09:37:18.2 TD (= 09:36:10.6 UT)

Greatest Eclipse = 09:46:46.8 TD (= 09:45:39.2 UT)

Eclipse Magnitude = 1.0446      Gamma = 0.9454

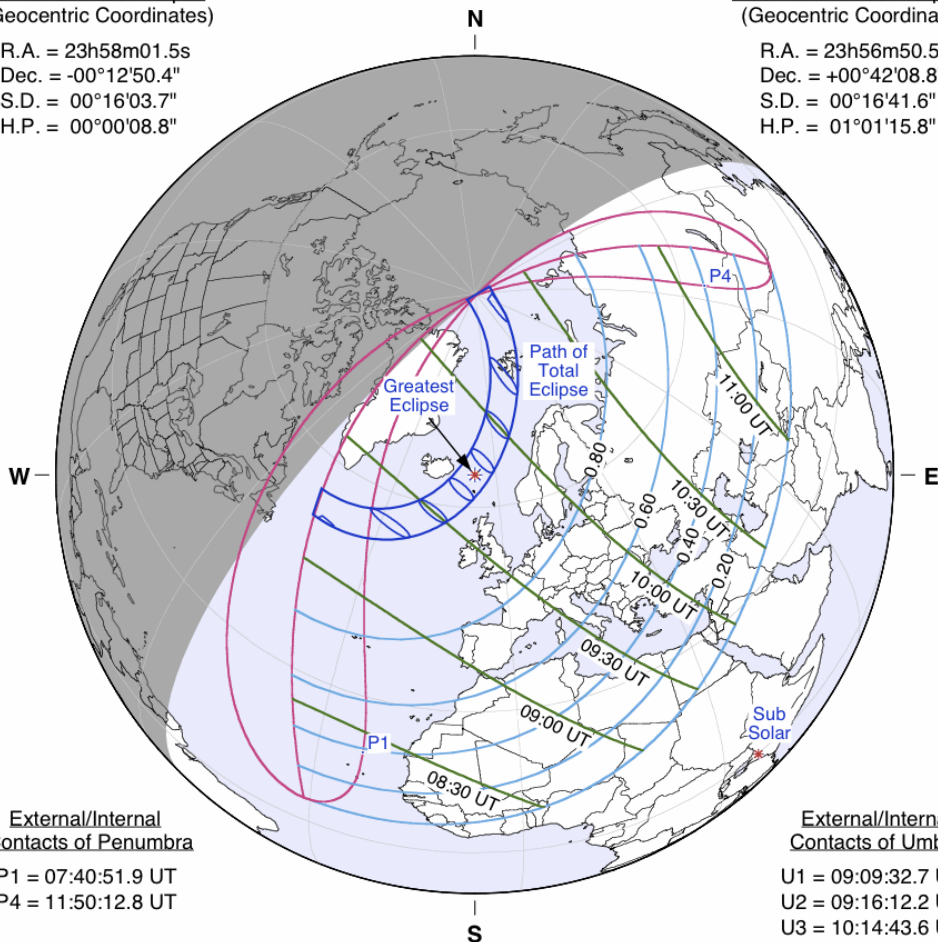
Saros Series = 120      Member = 61 of 71

### Sun at Greatest Eclipse (Geocentric Coordinates)

R.A. = 23h58m01.5s  
Dec. = -00°12'50.4"  
S.D. = 00°16'03.7"  
H.P. = 00°00'08.8"

### Moon at Greatest Eclipse (Geocentric Coordinates)

R.A. = 23h56m50.5s  
Dec. = +00°42'08.8"  
S.D. = 00°16'41.6"  
H.P. = 01°01'15.8"



### External/Internal Contacts of Penumbra

P1 = 07:40:51.9 UT  
P4 = 11:50:12.8 UT

### External/Internal Contacts of Umbra

U1 = 09:09:32.7 UT  
U2 = 09:16:12.2 UT  
U3 = 10:14:43.6 UT  
U4 = 10:21:22.3 UT

### Constants & Ephemeris

$\Delta T = 67.6$  s  
 $k1 = 0.2725076$   
 $k2 = 0.2722810$   
 $\Delta b = 0.0''$     $\Delta l = 0.0''$   
Eph. = JPL DE405

### Circumstances at Greatest Eclipse: 09:45:39.2 UT

Lat. = 64°25.9'N      Sun Alt. = 18.5°  
Long. = 006°38.8'W      Sun Azm. = 135.0°  
Path Width = 462.6 km      Duration = 02m46.9s

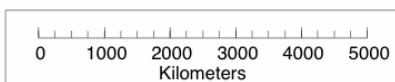
### Geocentric Libration (Optical + Physical)

$l = 1.22^\circ$   
 $b = -1.22^\circ$   
 $c = -24.92^\circ$

### Circumstances at Greatest Duration: 09:45:16.6 UT

Lat. = 64°17'N      Sun Alt. = 18.5°  
Long. = 006°54'W      Duration = 02m46.9s

Brown Lun. No. = 1141



F. Espenak, NASA's GSFC  
eclipse.gsfc.nasa.gov  
2014 Feb 22

## Book review

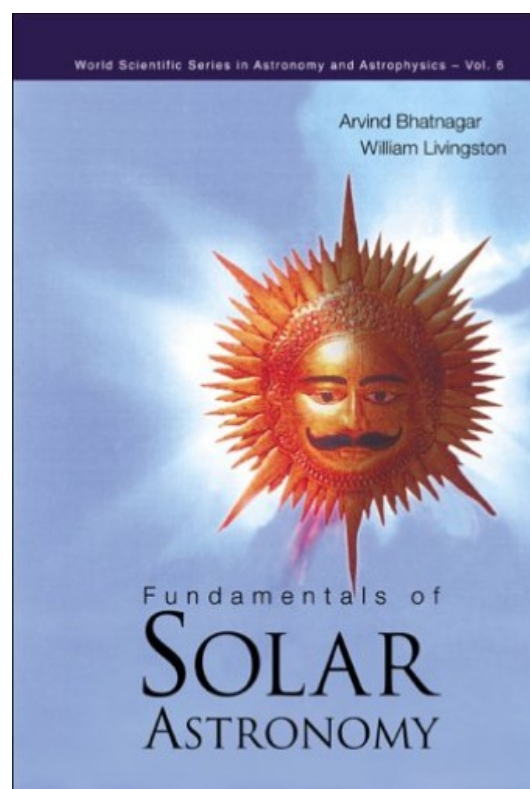
# Fundamentals of Solar Astronomy

By Arvind Bhatnagar and William Livingston

There are books out there that are very advanced and full of anything but plain English. There are also books that are in plain English. This book lays somewhere in the middle, it will stretch the reader and you will need to ask other club members to help explain some of the aspects.

Like our group this book aims to stimulate the readers interest in Solar Astronomy. All the Basics of how and when are covered along with the latest exciting discoveries in solar physics.

Astronomy is becoming ever more popular and so is Solar Astronomy. One of the nice things about Solar Astronomy is that its done in the day and when the Sun is shining, rather than at night in the freezing cold.



Don't think that this book is all easy on the brain, or that it will let you off lightly. It will not ! It's also not cheap at over £80. It can be found cheaper if you look hard enough.

This book will stretch your knowledge. You will need 'some' :- ) help from the group, but if you are willing to put in the effort then the rewards of the knowledge gained will be well worth it. It is used as an undergraduate text for students starting out on solar physics degrees.

Danny Day.

## What's in the sky this month

### What to see March 7<sup>th</sup>

**Planets** (Venus, Mars and Saturn.)

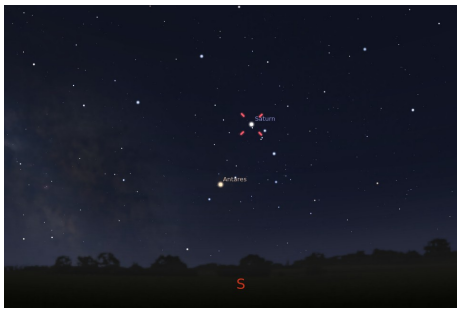
### This Morning at 5:15am

Look South at  $181^\circ$  and up at  $19^\circ$  you will see The Planet **Saturn** it is an early morning object at this time of year.

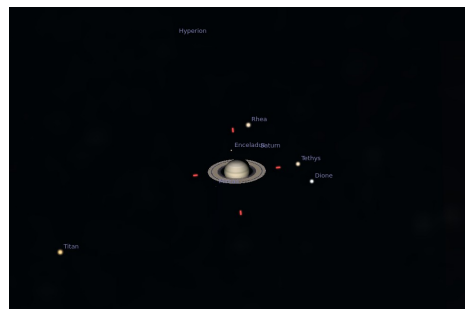
It sits very low to the south and therefore has a lot of our atmosphere to contend with. It's still well worth the effort as it's rings are very open at the moment.

Saturn has many Moons, some of which are best seen when it is higher in the night sky which reduces the amount of atmosphere we have to look through.

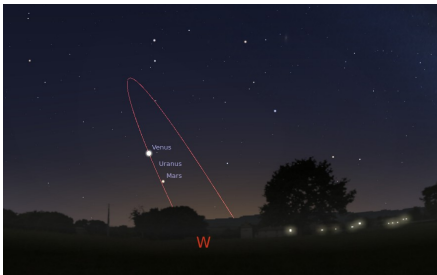
Saturn is 10 AU's from Earth. 1 Astronomical Unit = 150 million kms, the distance between the Sun and Earth.



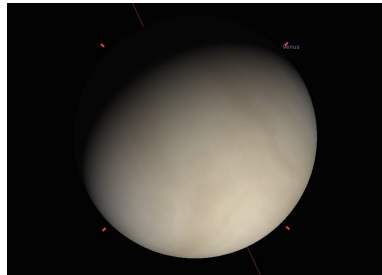
**Saturn in the Southern Sky**



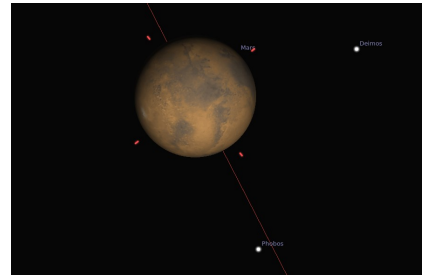
**Close up of Saturn and some of its moons**



**Venus and Mars in the Western Sky**



**Close up on Venus – It has No Moons**



**Close up on Mars and its 2 Moons**

### This Evening at 6:45pm

Look West at  $259^\circ$  and up at  $17^\circ$  you will see both Venus and Mars. They are at the moment early evening objects and very close together in the sky. Venus is the brightest of the two planets. Mars is slightly lower and to the right of Venus.

Venus is the 3<sup>rd</sup> brightest object, after the Sun and Moon, in the sky and can usually be seen in a clear sky soon after Sunset or just before dawn.

Mars appears a little dimmer than Venus and will be seen more clearly as twilight approaches, Mars appears quite small because it's currently at its furthest point from Earth on the far side of the Sun at 2.3 AU.

#### **Key:**

Az = Azimuth

This is the compass bearing from north in degrees.  
(use your compass)

Alt = Altitude

This is the angle above the horizon in degrees.  
(use your protractor)

George Ward.

## Member's Page

### Our experience of Thanet Astronomy Group

About 2 years ago I bought Tony a telescope as a surprise present for Christmas. We knew nothing about telescopes but we had always thought about getting one as we have an interest in planets and stars etc.

Tony was over the moon (excuse the pun) with it. We spent a while trying to focus it, not having any success we gave up and put the telescope away.

After about a year we were thinking of selling it. But then we saw that Thanet Astronomy Group had an advert inviting anyone along to an open meeting, and we decided that is just what we were looking for. We went along with our telescope to the Saturday afternoon meeting at The Westbay Cafe, where we meet each week.

Everyone was very friendly and helpful.

Danny took the time to help us set the telescope up, and align it correctly and how to actually use it. Something we would never have done on our own. If you don't have your own telescope there are always telescopes there, as well as someone to explain the workings of them and give you the right info on which one to buy for your needs.

We got many tips from George on filters etc. George even made us a sun filter. So all in all it is a really friendly and sociable club to belong to and any questions you have someone will always explain in easy details. Nothing is any trouble, and even the silliest question we have asked Danny always explains very patiently.

#### **SKYWATCHER SKYHAWK-114 TELESCOPE**

*114mm (4.5") f/1000 Catadioptric Newtonian Reflector*

- Magnifications (with optics supplied): x40, x80, x100, x200
- Highest Practical Power (Potential): x228
- Diameter of Primary Mirror: 114mm
- Telescope Focal Length: 1000mm (f/8.77)
- Eyepieces Supplied (1.25"): 10mm & 25mm
- X2 Barlow Lens
- Red Dot Finder
- EQ1 Equatorial Mount
- Aluminium Tripod with Accessory Tray
- 125% more Light Gathering than 76mm
- Tube Dimension(dia. x length) 15cm x 41cm
- Tripod Height 67cm-119cm
- Shipping Weight 11.5Kgs
- Shipping Carton Dimensions 76cm x 28cm x 23cm
- SRP £139.00 £105.00 Promo Price
- At [http://www.sherwoods-photo.com/sky\\_watcher/skywatcher\\_newtonian\\_reflectors.htm](http://www.sherwoods-photo.com/sky_watcher/skywatcher_newtonian_reflectors.htm)

Shirley and Tony Palmer





## Did You Know

### Axial Precession

This Page comes with a **Health and Safety Warning !**

If Things Technical make you feel unwell look away and under no circumstances read this page.

“**Axial Precession**” is another one of those pesky technical terms,

In plain English, this means :-

#### **The Earth Wobbles.**

Imagine a spinning top, as it rotates very fast it remains upright but as it slows it begins to wobble, that's what is happening to Earth.

The Earth spins round once a day and that is what causes Day and Night. It's Daytime on the side of the Earth facing the Sun and Night time on the side that Faces away from the Sun.

Also imagine a long stick passing through Earth at the north pole and sticking out the bottom at the south pole, at the moment the top of this stick is pointing at the Star Polaris, the Pole Star, but in time the wobble of the stick will point in a slightly different direction, just like the spinning top.

When a spinning top starts to slow down the wobble is quite quick, maybe once a second but the Earth's wobble takes a lot longer 25,800 years to complete one wobble circuit !

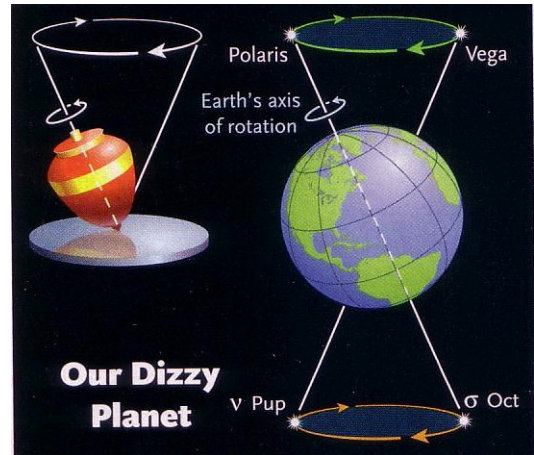
In the year 8000 AD the wobble would have moved the angle of the Earth so that the star Alderamin will be the Pole Star, and about 11,500 AD Deneb (the tail of Cygnus), and then Vega in 15,000 AD.

The southern pole will experience the same movement but opposite to that of the north pole.

The cause of our wobble is due to the gravity of both the Sun and Moon.

Over a period of time this wobble will affect the coordinates of stars galaxies and other fixed objects, adjustments are made , if necessary, about every 50 years, it was last checked 1<sup>st</sup> January 2000.

George Ward.



## Junior Astronomers Club (JAC & Gill)

It only seems a few weeks ago that we were celebrating the New Year holiday and already a whole school term has shot by. (“Thank goodness...a break at last!” I hear the Teachers say!)

But for Thanet Astronomy Group, teaching every session seems like a break! Particularly at our Laleham Gap Senior School Astronomy Club, which they decided to call the “Astronomy Space Raiders”... due to the bags of aptly named Space Raider snacks and assorted Space themed sweets which the students thoughtfully provide at our Tuesday sessions!



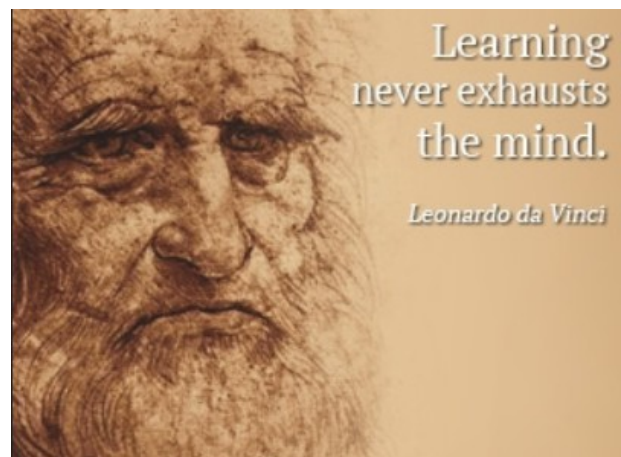
We were a little apprehensive at the beginning...Danny because he wasn't sure he had enough presentations to keep a bunch of teenagers interested...and me because I wasn't sure I could answer any of their questions.

But here we are, five weeks into the term and we have just finished the Beginner's Guide to Stargazing Presentation. The reason being that we have developed such a good rapport with the students and the staff that they feel they can ask questions and discuss facts openly as each session progresses. Unlike most adults, they are not so shy and inhibited with their own learning process and are more than willing to debate a theory or two :-)) to further their quest for knowledge and answers to their elaborate questions.

As we always say, “No question is too silly!” and some of their thoughts have been very profound but based on seemingly simple questions of their observations of the world around them. By observing, discussing and theorising together about the wonders of the Universe, these young teenagers are developing the building blocks for every subject within their curriculum.

They have encountered Mathematical calculations, Scientific equations, Technological terminology, Literary phrases, Historical facts, Geographical expressions and even created their own imaginative expressions related to the Arts as they try to visualise and describe the amazing Constellations and Galaxies they have been learning about.

**Leonardo Da Vinci “Learning Never Exhausts the Mind”**



We have just started the Intermediate part of our Stargazing Presentation but have already diverted off to the edge of our Observable Universe! So, hopefully after their Half Term break, we will get to the Advanced Stargazing Presentation to teach them how to use Stellarium for themselves. Then, the future of the Universe is in their hands!!!

**Reach for the Stars Junior Astronomers!!!**

Gill Palmer.

## **Executive Committee Messages**

### **Spreading the word about our group**

If you know anyone that is interested in astronomy please let them know about our group.

### **The Beginners Guide to Stargazing**

We are planning to re-run this early this year. There are many members that have not yet had a chance to do the course even though we ran it twice in 2014. Also several members have requested to take it again !

### **Thanks**

We would like to thank everyone for achieving the goals we had in mind at the very beginning.

That is...

- To support members with developing their understanding of Astronomy
- To advise members on using and developing key skills
- To share members' knowledge, experience and interests

You are doing all these things for yourselves now and passing on your knowledge and expertise... and we are still learning along with you!

Astronomy for Everyone in Plain English is definitely achievable!!!

(-: Wishing you all Clear Skies :-)

Danny, George, Gill.

## Adult Word Search

ANDROMEDA GALAXY  
 APOGEE  
 ASTEROID  
 ASTRONOMER  
 ATMOSPHERE  
 AURORA  
 BINARY STAR  
 BLACK HOLE  
 CONSTELLATION  
 CORONA  
 CRATER  
 DEEP SPACE  
 ECLIPSE  
 EQUINOX  
 GALAXIES

GALILEO  
 GRAVITY  
 HUBBLE  
 KEPLER  
 LIGHT YEAR  
 METEOR  
 MILKY WAY  
 MOON  
 NEBULA  
 PARSEC  
 PERIGEE  
 POLARIS  
 PROXIMA CENTAURI  
 PULSARS

QUASARS  
 RED GIANT  
 SATELLITE  
 SOLAR SYSTEM  
 SOLAR WIND  
 SPACE SHUTTLE  
 SPACECRAFT  
 STARS  
 SUN  
 SUPERNOVA  
 TELESCOPE  
 TIDES  
 UNIVERSE  
 WHITE DWARF

T	H	T	F	A	R	C	E	C	A	P	S	P	E	L	F	A	I	R	S
O	R	B	I	T	S	R	T	S	P	M	E	M	I	E	V	R	E	S	O
N	T	O	D	S	P	S	A	E	A	R	I	G	O	O	T	I	Q	H	R
S	S	F	I	R	A	U	O	T	I	T	H	L	N	O	R	O	U	E	E
R	O	T	O	E	C	N	E	G	S	T	E	R	K	U	N	B	I	C	D
A	L	E	R	M	E	O	E	P	Y	Y	E	L	A	Y	B	O	N	A	G
S	A	C	E	O	S	E	N	E	O	P	R	T	L	L	W	N	O	P	I
L	R	L	T	N	H	T	A	S	U	C	N	A	E	I	S	A	X	S	A
U	W	I	S	O	U	R	R	S	T	E	S	F	N	O	T	M	Y	P	N
P	I	P	A	R	T	A	H	E	C	E	R	E	L	I	M	E	A	E	T
O	N	S	P	T	T	O	N	A	G	A	L	A	L	W	B	T	U	E	G
A	D	E	O	S	L	A	M	A	W	S	R	L	Y	E	S	E	R	D	A
L	R	D	G	A	E	I	L	D	R	S	A	E	A	T	T	O	O	N	L
U	E	I	E	E	X	A	E	A	Y	I	L	N	L	T	I	R	R	C	I
B	T	T	E	O	X	T	S	S	I	R	A	L	O	P	I	V	A	E	L
E	A	A	R	I	I	A	T	M	O	S	P	H	E	R	E	O	A	S	E
N	R	P	E	H	U	E	L	O	H	K	C	A	L	B	O	K	N	R	O
R	C	S	W	Q	M	M	U	N	I	V	E	R	S	E	S	C	T	A	G
A	N	D	R	O	M	E	D	A	G	A	L	A	X	Y	R	O	N	P	G

**There is a word in this word search that is not in the list above.**

**Can you find it ?**

**This time we have made it easy, next time the hidden word will be much harder to find !**

## Junior Word Search

ANDROMEDA	MILKY WAY
BLACK HOLE	MOON
CRATER	POLARIS
ECLIPSE	RED GIANT
GRAVITY	SATELLITE
JUPITER	STARS
LIGHT YEAR	SUN
MARS	

K	S	T	A	R	S	M	I	L	K	Y	W	A	Y	K
X	T	Z	U	L	O	I	B	G	R	A	V	I	T	Y
B	N	C	Y	Q	F	A	I	S	E	X	M	E	H	Q
E	A	N	D	R	O	M	E	D	A	A	C	L	L	T
X	I	E	Q	S	O	C	C	C	R	L	Q	O	W	S
R	G	J	B	A	G	R	O	S	I	U	P	H	I	O
A	D	X	T	T	T	G	Y	P	Z	G	R	K	R	N
E	E	N	M	E	E	E	S	N	O	Y	X	C	E	Z
Y	R	J	P	L	E	E	S	U	N	G	D	A	T	M
T	X	W	O	L	P	M	H	S	C	X	Q	L	I	T
H	Q	I	L	I	G	Y	O	A	R	Z	T	B	P	W
G	O	D	A	T	F	A	X	H	G	O	A	X	U	N
I	Q	C	R	E	V	M	V	I	M	O	O	N	J	I
L	V	T	I	P	P	C	R	A	T	E	R	D	Z	X
N	W	Q	S	R	E	O	X	I	I	Z	I	R	L	D

**We hope that you find the Adult and Junior word searches interesting and that they inspire you to look up any of the words you don't know *Absolutely Everything About :-)***

**If you like these please let us know and we will continue to produce them.**

**If you really like the idea we are thinking of adding a crossword as well**

**Comments Please : You all know the email address !**

## **Member's For Sale and Wanted**

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Or call Danny 01843 228904 or George 01843 292640