WEYMOUTH ASTRONOMY

Trips / Events

Ideas for trips and events always welcome!

events@weymouthastronomy.co.uk

- 18 June CADAS—Constellation Myths by Ron Westmaas
- 3 July WAS—Discs around stars & in galaxies by James Fradgley
- 7 Aug WAS—Gravitational waves by Mark Gibbons
- 15 Aug CADAS—Gadgets and Gizmos evening.
- 4 Sept WAS—Lunar geology from the safety of your own home by Barry Fitzgerald
- 19 Sept CADAS— – Orbital oddities by James Fradgley
- 22 Sept WAS—Astro Open Day — with Space Detectives Astronomy Workshop

Programmes for many local Societies will be available in the near future. Check their websites for more details.

If you are interested in giving a talk or workshop, let the organisers know. They like to offer new titles in their programme line-up.

WAC Upcoming Events:

13 July—Geoff Kirby - Quirky Astronomy

10 Aug—Summer Social

14 Sept—Open Evening / Viewing Evening

12 Oct—Barry FitzGerald - Lunar Geology from the safety of your own home

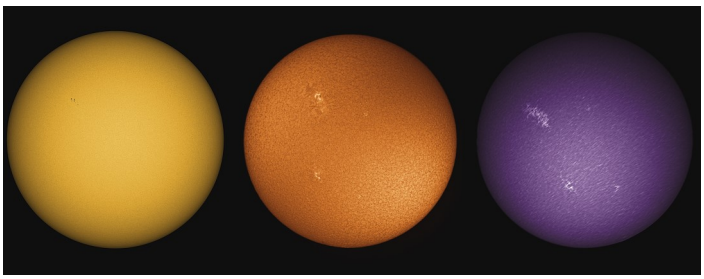
9 Nov—Sheri Karl - Gravity Waves

More to come!!

Sky Watcher

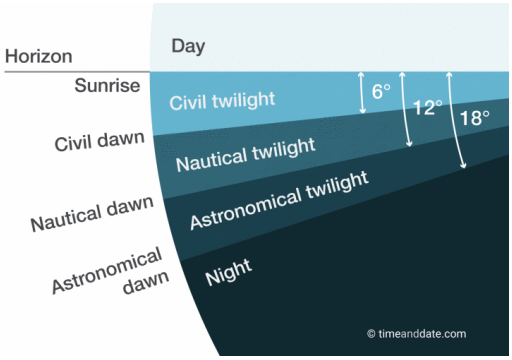
Volume 13, Issue 1
8 June 2018

WAC News—



To coincide with the recent lovely weather, the Sun has finally shown some increased activity. The 28 May was the most active I have managed to capture in months. The Calcium K (393.4 nm violet) wavelength especially showed some strong magnetic field activity. The Sun is still showing, or not showing, sunspot activity about 50% of the year. Looking back over the previous years from SolarMax, this trend is likely to continue and still indicating an exceptionally low sunspot count at the current Solar minimum. Hopefully across the other wavelengths we'll see more activity however as mentioned in previous articles, this has been strangely low as well.

Hope you are able to enjoy the start of summer and the evenings of Astronomical Twilight Until next month! ~SK



Spotless Days
Current Stretch: 0 days
2018 total: 80 days (51%)
2017 total: 104 days (28%)
2016 total: 32 days (9%)
2015 total: 0 days (0%)
2014 total: 1 day (<1%)
2013 total: 0 days (0%)
2012 total: 0 days (0%)
2011 total: 2 days (<1%)
2010 total: 51 days (14%)
2009 total: 260 days (71%)
Updated 05 Jun 2018

What is the Asteroid Belt? by Linda Hermans-Killiam

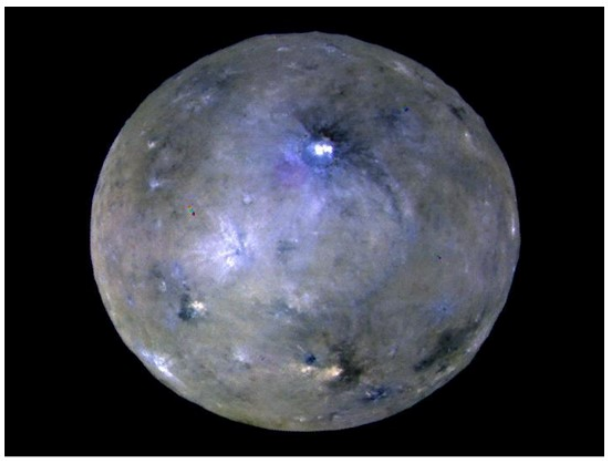
There are millions of pieces of rocky material left over from the formation of our solar system. These rocky chunks are called asteroids, and they can be found orbiting our Sun. Most asteroids are found between the orbits of Mars and Jupiter. They orbit the Sun in a doughnut-shaped region of space called the asteroid belt.

Asteroids come in many different sizes—from tiny rocks to giant boulders. Some can even be hundreds of miles across! Asteroids are mostly rocky, but some also have metals inside, such as iron and nickel. Almost all asteroids have irregular shapes. However, very large asteroids can have a rounder shape.

The asteroid belt is about as wide as the distance between Earth and the Sun. It's a big space, so the objects in the asteroid belt aren't very close together. That means there is plenty of room for spacecraft to safely pass through the belt. In fact, NASA has already sent several spacecraft through the asteroid belt!

The total mass of objects in the asteroid belt is only about 4 percent the mass of our Moon. Half of this mass is from the four largest objects in the belt. These objects are named Ceres, Vesta, Pallas and Hygiea.

The dwarf planet Ceres is the largest object in the asteroid belt. However, Ceres is still pretty small. It is only about 587 miles across—only a quarter the diameter of Earth's moon. In 2015,



Caption: This image captured by the Dawn spacecraft is an enhanced color view of Ceres, the largest object in the asteroid belt. Credit: NASA/JPL-Caltech/UCLA/MPS/DLR/IDA

Asteroid Belt (more!)

NASA's Dawn mission mapped the surface of Ceres. From Dawn, we learned that the outermost layer of Ceres—called the crust—is made up of a mixture of rock and ice.
The Dawn spacecraft also visited the asteroid Vesta. Vesta is the second largest object in the asteroid belt. It is 329 miles across, and it is the brightest asteroid in the sky. Vesta is covered with light and dark patches, and lava once flowed on its surface.

The asteroid belt is filled with objects from the dawn of our solar system. Asteroids represent the building blocks of planets and moons, and studying them helps us learn about the early solar system.

Kincardine Castle Planetary Garden by S L Karl

View of the Planetary Garden with the inner planets laid out in a curve as shrubs. Jupiter and Saturn indicated by the grass and ring of mini-hedge.

Mars depicted in the scaled Solar System.

Earth and the Moon depicted in the Solar System.

Curve of Jupiter and the ring of Saturn.

Last weekend I was able to visit a blooming garden at Kincardine Castle. The current Laird was kind enough to show my husband and I the Planetary Garden which indeed caught our attention in the Gardens and Grounds leaflet.

The Laird explained that the garden was the result of a discussion of contemplating the cosmos inspired by the majestic view from the castle grounds. The garden is laid out as a scaled Solar System. Even the pebbles have significance, representing the stars and multitude of galaxies in the Universe.

The simplicity of the garden truly allows our human minds to at once see and make sense of the enormity and complexity of our place in the Solar System. As the Laird explained, the point of the garden is to think how fragile planet Earth is in its context. Remember, there are no lifeboats. Care for her.

The garden and grounds are part of Scotland's Gardens Scheme which are open for Charity on specific dates during the year. If you get a chance to visit this and other gardens it is well worth it to discover these little gems.

The curve of the yellow flowers in the grounds represent the Sun scaled.