

## The Autumn Night Sky October, November and December 2017

### **All data sourced from Cybersky 5**

The coming of the Autumn months of September, October and November encourages us to dust off our binoculars and telescopes and give them a thorough check-out in readiness for darkening skies, arriving earlier in the evening and staying later into the morning

### September – all times in BST

#### The Moon

Full moon	Wed 06/09/2017 08:02
Last quarter	Wed 13/09/2017 07:24
New moon	Wed 20/09/2017 06:29
First quarter	Thu 28/09/2017 03:53

### **The Planets on 15 September 2017**

	Sun	Mercury	Venus	Moon	Mars	Jupiter	Saturn	Uranus
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Rise:	0641	0456	0352	0043	0503	0946	1500	2012
Transit:	1302	1159	1117	0854	1203	1502	1851	0314
Set:	1923	1901	1840	1700	1903	2018	2243	1013

#### In summary

Mercury will be a very difficult morning object rising less than 2 hours before the Sun. Venus will be similarly challenging though it will be considerably brighter and can be used as a guide to locate Mercury as they are quite close at this time.

Mars will be close to Mercury and equally challenging to locate.

Jupiter is too close to the Sun to locate this month.

Saturn will be difficult to locate low in the western twilight after sunset. Uranus will be visible from around 10pm until 4.30am BST.

#### The Stars at 9pm BST

North – Cepheus is prominent – looks like an upside down house. Draco and the two Bears are nicely placed for viewing. Auriga is low down in the north-east.

East – Cassiopeia and Andromeda are nicely placed for viewing as is Perseus. October is a good month to searching for Messier 31 in Andromeda and the Double Cluster in Perseus.

South – Cygnus is high overhead. Delphinus and Sagitta are nicely placed. Capricornus and Sagittarius are low down.

West – Cygnus and Lyra are high up, with Hercules [the 'Keystone'] and Corona Borealis nicely placed.

Ophiuchus and Bootes are low down. Looking at Lyra - just below Vega its brightest star- is a lozenge shaped group of four stars. About half way between the two lower pair of stars is Messier 57 – which looks like a 'smoke ring' in a medium sized telescope

#### Meteor Showers

There are no major meteor showers in September

#### Comets

There are no bright comets in the September night sky

Other events - Noctilucent Clouds may still be visible in the late evening and early morning skies

## October – all times in BST

### The Moon

#### Lunar Phases

Full moon	Thu 05/10/2017 19:40
Last quarter	Thu 12/10/2017 13:25
New moon	Thu 19/10/2017 20:11
First quarter	Fri 27/10/2017 23:22

### The Planets on 15 October 2017

	Sun	Mercury	Venus	Moon	Mars	Jupiter	Saturn	Uranus
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Rise:	0734	0801	0528	0203	0456	0824	1310	1812
Transit:	1253	1311	1138	0934	1115	1327	1700	0112
Set:	1811	1819	1746	1651	1734	1831	2051	0809

#### In summary

Mercury is in conjunction with the Sun and not visible this month. Venus will be visible low in the east at dawn. Mars will be visible low in the east at dawn – again not too far away from Venus as with last month. Jupiter is in conjunction with the Sun this month. Saturn will be a difficult evening object low in the west after sunset. Uranus is close to opposition and will be visible during the whole of astronomical twilight hours from around 2200 to 0530.

#### The Stars at 9pm BST

North – Cepheus is prominent – looks like an upside down house. Draco and the two Bears are nicely placed for viewing. Auriga is low down in the north-east.

East – Cassiopeia and Andromeda are nicely placed for viewing as is Perseus. October is a good month to searching for Messier 31 in Andromeda and the Double Cluster in Perseus.

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#### Meteor Showers

The minor shower of the month are the Draconids of the 9<sup>th</sup> October. With a waning gibbous Moon it will be difficult to see this shower in 2017.

The major meteor shower of this month are the Orionids, which peak on the 20<sup>th</sup>/21<sup>st</sup> October. Expect around 20-30 shooting stars every hour – the best time to see them is at around 0300 on the 21<sup>st</sup> of October.

In 2017 there will be a nearly New Moon during this week of October so this will be an excellent opportunity to see this shower.

#### Comets

There will be no bright comets in October

## November 2017 – all times now in GMT

### The Moon

#### Lunar Phases

Full moon	Sat 04/11/2017 05:22
Last quarter	Fri 10/11/2017 20:36
New moon	Sat 18/11/2017 11:42
First quarter	Sun 26/11/2017 17:02

### The Planets on 15<sup>th</sup> November 2017

	Sun	Mercury	Venus	Moon	Mars	Jupiter	Saturn	Uranus
Rise:	0733	0945	0612	0344	0348	0601	1022	1508
Transit:	1152	1316	1100	0942	0925	1051	1411	2202
Set:	1610	1646	1547	1529	1502	1541	1800	0500

### In Summary

Mercury is not visible this month as is Venus. Mars is a morning object visible low in the east before twilight. Jupiter is a daylight object this month as is Saturn. Uranus will be visible from around 8pm until 3am.

### The Stars at 8pm GMT on 1<sup>st</sup> November 2017

North – Cepheus is high overhead, with Draco and the two bears nicely placed.

East – Cassiopeia and Andromeda are high up with Perseus nicely placed. Taurus is near the horizon and to its top RHS is Aries containing Jupiter.

South – Pegasus is nicely placed with Pisces. Aquarius is low down and you can find Formalhaut in Pisces

Austrinus – a bright star that is the most southerly placed bright star we can see from the UK.

West – Cygnus dominates this view along with Sagitta, Vulpecula and Lyra. Low down you can find Hercules.

### Meteors

November hosts two meteor showers:

- 1) Taurids – around the 1<sup>st</sup> of November – this is a short shower but the particles are quite 'large' and hence the meteors from this stream can, sometimes outshine Jupiter or even the Moon. The Taurids tend to be few in number but they make up for this by being bright slow moving and often quite colourful. The Full Moon will interfere with this shower in 2017.
- 2) Leonids – on the 16<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> November – another annual shower that usually puts on a good show of 50 to 100 meteors every hour. These particles are fast moving and 'small' and so the meteors are quite faint. With a new Moon this year it could be good opportunity to see the Leonids but still not at a major peak of activity which won't come for another 15 to 16 years.

### Comets

There are no bright comets visible in November

### A Look ahead to the Winter Night Sky

December 2017 A good opportunity to see the Gemind Meteor Shower on the 13<sup>th</sup> before midnight – when the Moon rises

January 2018 there will be a period when none of the major planets are on view in the night sky

February 2018 there will be a period when none of the major planets are on view in the night sky