Earth's moon

Ceres

Pallas
1802

Vesta

Juno

1
00:00:00,000 --> 00:00:04,000
Music.

2
00:00:04,000 --> 00:00:10,000
Jane Houston Jones: What's Up for June. Planets, dwarf planets, asteroids, and the Milky Way.

3
00:00:10,000 --> 00:00:17,000
Hello and welcome. I'm Jane Houston Jones from NASA's Jet Propulsion Laboratory in Pasadena, California.

4
00:00:17,000 --> 00:00:22,000
The month starts off with a beautiful close pairing of the moon and Saturn.

5
00:00:22,000 --> 00:00:26,000
They rise together in the eastern sky an hour after sunset on the first of June.

6
00:00:26,000 --> 00:00:28,000
Sound: Whoosh.

7
00:00:28,000 --> 00:00:35,000
Jones: The dwarf planet Pluto, largest of the Kuiper Belt objects, will be near the moon on Friday, June 5.

8
00:00:35,000 --> 00:00:39,000
But the moon will be 3 days past full and very bright.

9
00:00:39,000 --> 00:00:46,000
The moonlight will make seeing Pluto practically impossible. But it's still nice to know where it is.

10
00:00:46,000 --> 00:00:54,000
NASA's New Horizons will become Earth's first spacecraft to reach Pluto and its system of moons on July 14

11
00:00:54,000 --> 00:00:57,000
after a 9-year journey spanning 3 billion miles.

12
00:00:57,000 --> 00:00:59,000
Sound: Whoosh.

13
00:00:59,000 --> 00:01:05,000

Jones: On June 11 asteroid hunters should be able to spot Pallas, the second asteroid to be discovered.

14
00:01:05,000 --> 00:01:12,000
When Pallas was discovered in 1802, it was classified as a planet, as were several other asteroids.

15
00:01:12,000 --> 00:01:16,000
The discovery of many more asteroids in the mid-1800s

16
00:01:16,000 --> 00:01:21,000
eventually led to their reclassification from planets to asteroids.

17
00:01:21,000 --> 00:01:31,000
Ceres, the first asteroid discovered, is now classified as a dwarf planet instead of an asteroid.

18
00:01:31,000 --> 00:01:35,000
Ceres meets 2 of the 3 requirements of planethood.

19
00:01:35,000 --> 00:01:38,000
It orbits the sun and it's round.

20
00:01:38,000 --> 00:01:39,000
But other bodies share its orbit.

21
00:01:39,000 --> 00:01:42,000
For Ceres, other asteroids share its orbit.

22
00:01:42,000 --> 00:01:46,000
For Pluto, it's other Kuiper Belt objects.

23
00:01:46,000 --> 00:01:48,000
Ceres reaches opposition at the end of the month

24
00:01:48,000 --> 00:01:52,000
when it appears opposite the sun in the sky.

25
00:01:52,000 --> 00:01:57,000
When the sun sets in the west Ceres rises in the East and is visible all night long.

26
00:01:57,000 --> 00:02:01,000
To see Ceres, which shines at a brightness of magnitude 7,

27
00:02:01,000 --> 00:02:05,000
you'll have to use binoculars or telescopes.

28
00:02:05,000 --> 00:02:12,000
Speaking of dawn, NASA's Dawn spacecraft reached its first science orbit around Ceres last month.

29
00:02:12,000 --> 00:02:17,000
It will map the surface from now through June 2016

30
00:02:17,000 --> 00:02:20,000
and attempt to determine what the dwarf planet is made of.

31
00:02:20,000 --> 00:02:21,000
Sound: Whoosh.

32
00:02:21,000 --> 00:02:24,000
Jones: Here's what else is visible this month.

33
00:02:24,000 --> 00:02:27,000
Jupiter and Venus start the month about 20 degrees from each other.

34
00:02:27,000 --> 00:02:31,000
But by the end of June they're only 2 degrees apart.

35
00:02:31,000 --> 00:02:40,000
Watch Venus pass the bright Beehive star cluster M44 from a moderately dark sky on June 13 and 14.

36
00:02:40,000 --> 00:02:45,000
Binoculars will help to see the dazzling stars in the cluster.

37
00:02:45,000 --> 00:02:47,000
Saturn is visible all night long.

38
00:02:47,000 --> 00:02:53,000

It's definitely worth attending a local star party to see the ringed planet through a telescope

39
00:02:53,000 --> 00:02:55,000
if you haven't done it already.

40
00:02:55,000 --> 00:02:58,000
Catch all 3 bright planets in the evening.

41
00:02:58,000 --> 00:03:03,000
Saturn in the southern sky as Jupiter and Venus set in the northwest.

42
00:03:03,000 --> 00:03:08,000
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43
00:03:08,000 --> 00:03:11,000
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44
00:03:11,000 --> 00:03:17,000
And you can learn about the New Horizons and Dawn missions and all of NASA's other missions at:

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