WHAT'S UP

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

2
00:00:04,000 --> 00:00:09,000
Jane Houston Jones: What's Up for July. Spot Pluto and see the Milky Way and planets all month long.

3
00:00:09,000 --> 00:00:16,000
Hello and welcome. I'm Jane Houston Jones from NASA's Jet Propulsion Laboratory in Pasadena, California.

4
00:00:16,000 --> 00:00:21,000
July showcases our solar system against a backdrop of Milky Way wonders.

5
00:00:21,000 --> 00:00:28,000
Saturn and Mars grace the summer sky just after sunset, getting lower in the western sky this month.

6
00:00:28,000 --> 00:00:35,000
Early risers will easily see our two innermost planets--Mercury and Venus--30 minutes before dawn midmonth

7
00:00:35,000 --> 00:00:40,000
and you might be able to see some shooting stars in the southern sky before dawn, too!

8
00:00:40,000 --> 00:00:46,000
And, you can still catch a historic meetup between dwarf planet Ceres and asteroid Vesta.

9
00:00:46,000 --> 00:00:49,000
They're super-close to one another all month long.

10
00:00:49,000 --> 00:00:50,000
Sound: Whoosh.

11
00:00:50,000 --> 00:00:55,000
Jones: Pluto reaches opposition on July 4th, when it's faintly visible all night long.

12
00:00:55,000 --> 00:00:58,000
But Pluto isn't easy for amateur astronomers to spot.

13
00:00:58,000 --> 00:01:02,000

You'll need a medium-sized telescope and very dark skies.

14
00:01:02,000 --> 00:01:06,000
It's a thrill to see! And you can, too--with good star charts.

15
00:01:06,000 --> 00:01:12,000
Binocular viewers will just need to look towards the handle of the teapot-shaped constellation Sagittarius

16
00:01:12,000 --> 00:01:14,000
to find the general area.

17
00:01:14,000 --> 00:01:17,000
Pluto will be one of the many objects in your field of view,

18
00:01:17,000 --> 00:01:20,000
but you won't be able to actually see Pluto in your binoculars.

19
00:01:20,000 --> 00:01:22,000
Sound: Whoosh.

20
00:01:22,000 --> 00:01:26,000
Jones: Summer nights reveal Milky Way wonders to National Park visitors

21
00:01:26,000 --> 00:01:29,000
and others who are away from urban light pollution.

22
00:01:29,000 --> 00:01:33,000
And you won't need a telescope to enjoy the view!

23
00:01:33,000 --> 00:01:38,000
Look for the Milky Way rising in the eastern sky a few hours after sunset.

24
00:01:38,000 --> 00:01:43,000
From a dark location, it will span the sky from north to south by midnight.

25
00:01:43,000 --> 00:01:47,000
Just sit back and surf the Milky Way with binoculars.

26
00:01:47,000 --> 00:01:55,000
Start your tour near Scorpius's bright red star Antares, and soon you'll be viewing the center of our galaxy.

27
00:01:55,000 --> 00:02:03,000
A nudge of your binoculars will reveal star clusters like M22--and M11, the Wild Duck Cluster,

28
00:02:03,000 --> 00:02:09,000
and nebulae like M8, the Lagoon Nebula, and M20, the Trifid Nebula.

29
00:02:09,000 --> 00:02:15,000
You can also see a dark lane that divides the bright band of the Milky Way lengthwise.

30
00:02:15,000 --> 00:02:20,000
That's the Great Rift, star-forming molecular dust that blots out the light.

31
00:02:20,000 --> 00:02:26,000
You can learn about how NASA studies stars and star forming regions in many wavelengths

32
00:02:26,000 --> 00:02:31,000
and all of NASA's missions at w w w dot nasa dot gov.