



Perseus

☾ Pleiades

Looking Northeast  
August 12  
2 - 4 a.m.

1  
00:00:06,710 --> 00:00:04,730  
what's up for August meteors hello and

2  
00:00:08,390 --> 00:00:06,720  
welcome I'm Jane Houston Jones at NASA's

3  
00:00:12,350 --> 00:00:08,400  
Jet Propulsion Laboratory in Pasadena

4  
00:00:14,870 --> 00:00:12,360  
California 2009 is international year of

5  
00:00:17,330 --> 00:00:14,880  
astronomy and each month this year were

6  
00:00:20,269 --> 00:00:17,340  
showcasing a great celestial object or

7  
00:00:23,000 --> 00:00:20,279  
event this month it's the perseid meteor

8  
00:00:26,150 --> 00:00:23,010  
shower have you ever wondered what makes

9  
00:00:28,339 --> 00:00:26,160  
these cosmic fireworks meteor showers

10  
00:00:30,380 --> 00:00:28,349  
are just the debris of a passing comet

11  
00:00:33,740 --> 00:00:30,390  
or sometimes the debris from a

12  
00:00:36,920 --> 00:00:33,750  
fragmented asteroid when the comet nears

13  
00:00:40,310 --> 00:00:36,930

the Sun it's icy surface heats up this

14

00:00:42,500 --> 00:00:40,320

causes clouds of gas dirt and dust to be

15

00:00:44,799 --> 00:00:42,510

released forming a tale of debris that

16

00:00:48,350 --> 00:00:44,809

can stretch for millions of miles as

17

00:00:49,990 --> 00:00:48,360

Earth passes near the dusty tail some of

18

00:00:52,639 --> 00:00:50,000

the dust particles hit our atmosphere

19

00:00:56,119 --> 00:00:52,649

they burn up and create the great

20

00:00:58,610 --> 00:00:56,129

celestial fireworks we see NASA

21

00:01:00,950 --> 00:00:58,620

generates meteor shower forecasts to

22

00:01:02,810 --> 00:01:00,960

prevent potential hazards to spacecraft

23

00:01:05,780 --> 00:01:02,820

that are launching or orbiting Earth

24

00:01:09,690 --> 00:01:05,790

NASA also monitors these showers to

25

00:01:12,640 --> 00:01:09,700

check the accuracy of the forecasts

26  
00:01:15,850 --> 00:01:12,650  
NASA's Deep Impact mission is now on an

27  
00:01:21,070 --> 00:01:15,860  
extended mission called epoxy it will

28  
00:01:23,770 --> 00:01:21,080  
visit comet Hartley 2 in 2010 and the

29  
00:01:26,560 --> 00:01:23,780  
dawn mission to Vesta and Ceres flies by

30  
00:01:30,779 --> 00:01:26,570  
Vesta for the first time in 2011 and

31  
00:01:33,010 --> 00:01:30,789  
flies by the dwarf planet Ceres in 2015

32  
00:01:36,039 --> 00:01:33,020  
you don't need a telescope or binoculars

33  
00:01:37,359 --> 00:01:36,049  
to view a meteor shower in fact meteor

34  
00:01:40,960 --> 00:01:37,369  
showers are best seen with the unaided

35  
00:01:43,870 --> 00:01:40,970  
eye you'll see some Perseids all month

36  
00:01:45,790 --> 00:01:43,880  
long before and after midnight but the

37  
00:01:49,210 --> 00:01:45,800  
real fireworks will appear in the wee

38  
00:01:52,180 --> 00:01:49,220

hours of Wednesday August 12 between two

39

00:01:55,840 --> 00:01:52,190

and four a.m. local time look for up to

40

00:01:57,999 --> 00:01:55,850

100 meteors per hour meteor showers are

41

00:02:00,070 --> 00:01:58,009

best seen in the hours after midnight

42

00:02:01,960 --> 00:02:00,080

that's when the earth is facing the

43

00:02:04,970 --> 00:02:01,970

direction in which the dust particles

44

00:02:07,790 --> 00:02:04,980

are colliding with our atmosphere

45

00:02:09,710 --> 00:02:07,800

and as a bonus for staying up late two

46

00:02:13,310 --> 00:02:09,720

planets are visible in the eastern sky

47

00:02:15,920 --> 00:02:13,320

one bright and the other faint venus is

48

00:02:19,190 --> 00:02:15,930

just rising low on the horizon and is

49

00:02:21,110 --> 00:02:19,200

much brighter Mars despite that email

50

00:02:23,420 --> 00:02:21,120

hooks about it being big and bright this

51  
00:02:27,310 --> 00:02:23,430  
month appears as a reddish faint

52  
00:02:30,220 --> 00:02:27,320  
star-like object above venus and jupiter

53  
00:02:32,600 --> 00:02:30,230  
shines as a brilliant beacon in the west

54  
00:02:35,750 --> 00:02:32,610  
through a telescope you might even be

55  
00:02:40,610 --> 00:02:35,760  
able to see nearby Neptune you can learn

56  
00:02:43,100 --> 00:02:40,620  
all about NASA's missions at WWDC gov