
Herschel Space Observatory

1
00:00:06,499 --> 00:00:04,519
what's up for July hello and welcome I'm

2
00:00:07,849 --> 00:00:06,509
Jane Houston Jones at NASA's Jet

3
00:00:12,020 --> 00:00:07,859
Propulsion Laboratory in Pasadena

4
00:00:14,509 --> 00:00:12,030
California 2009 is international year of

5
00:00:17,540 --> 00:00:14,519
astronomy and each month this year were

6
00:00:21,439 --> 00:00:17,550
showcasing a great celestial object this

7
00:00:23,359 --> 00:00:21,449
month it's our Milky Way galaxy Galileo

8
00:00:25,310 --> 00:00:23,369
aimed his telescope towards some of the

9
00:00:28,519 --> 00:00:25,320
fuzzy patches of our galaxy and

10
00:00:30,980 --> 00:00:28,529
discovered they were made of stars using

11
00:00:33,500 --> 00:00:30,990
ptolemies 2nd century catalog of stars

12
00:00:35,630 --> 00:00:33,510
as a starting point he observed several

13
00:00:41,119 --> 00:00:35,640

well-known star clusters like the

14
00:00:42,979 --> 00:00:41,129
beehive cluster and the Pleiades Ptolemy

15
00:00:46,069 --> 00:00:42,989
had identified the six brightest stars

16
00:00:48,590 --> 00:00:46,079
in the Pleiades but Galileo saw 36 stars

17
00:00:50,630 --> 00:00:48,600
through his telescope he drew the Stars

18
00:00:52,520 --> 00:00:50,640
using four different sizes to

19
00:00:56,830 --> 00:00:52,530
distinguish their different brightnesses

20
00:00:58,810 --> 00:00:56,840
and he published his findings in 1610

21
00:01:00,799 --> 00:00:58,820
through the next two centuries

22
00:01:03,049 --> 00:01:00,809
astronomers used bigger and bigger

23
00:01:06,649 --> 00:01:03,059
telescopes to study and map the Milky

24
00:01:08,960 --> 00:01:06,659
Way galaxy they observed nebula clusters

25
00:01:11,840 --> 00:01:08,970
and even areas where no stars could be

26
00:01:14,030 --> 00:01:11,850
seen today spacecraft and orbiting

27
00:01:17,539 --> 00:01:14,040
telescopes joined ground-based observers

28
00:01:19,370 --> 00:01:17,549
to learn more about our galaxy ESA's

29
00:01:21,830 --> 00:01:19,380
recently launched Herschel mission will

30
00:01:24,109 --> 00:01:21,840
explore the earliest stages of star and

31
00:01:26,450 --> 00:01:24,119
galaxy birth in the universe and will

32
00:01:30,020 --> 00:01:26,460
help answer questions about how our own

33
00:01:32,330 --> 00:01:30,030
Sun and milky way galaxy came to be the

34
00:01:34,490 --> 00:01:32,340
Spitzer Space Telescope created the most

35
00:01:37,789 --> 00:01:34,500
detailed infrared picture of our galaxy

36
00:01:40,370 --> 00:01:37,799
ever made and chandras images of the

37
00:01:43,310 --> 00:01:40,380
central region reveal white dwarf and

38
00:01:47,300 --> 00:01:43,320

neutron stars and black holes in a fog

39
00:01:49,370 --> 00:01:47,310
of hot gas from a dark sky you'll see

40
00:01:51,200 --> 00:01:49,380
the Milky Way rising in the East and

41
00:01:53,810 --> 00:01:51,210
spanning the sky from north to south

42
00:01:56,420 --> 00:01:53,820
after 10 p.m. local time

43
00:01:59,090 --> 00:01:56,430
back in our own solar system look for

44
00:02:01,700 --> 00:01:59,100
Saturn near the western horizon and look

45
00:02:04,280 --> 00:02:01,710
for Jupiter rising in the East about ten

46
00:02:07,520 --> 00:02:04,290
o'clock as the Milky Way spans the sky

47
00:02:12,320 --> 00:02:07,530
you can learn all about NASA's missions