
Hubble Space Telescope
Wide Field and Planetary Camera

1
00:00:06,150 --> 00:00:04,390
what's up for june hello and welcome i'm

2
00:00:08,070 --> 00:00:06,160
jane houston jones at nasa's jet

3
00:00:11,270 --> 00:00:08,080
propulsion laboratory in pasadena

4
00:00:13,669 --> 00:00:11,280
california 2009 is international year of

5
00:00:16,710 --> 00:00:13,679
astronomy and each month this year we're

6
00:00:18,710 --> 00:00:16,720
showcasing a great celestial object

7
00:00:21,750 --> 00:00:18,720
this month it's the hercules globular

8
00:00:24,390 --> 00:00:21,760
cluster which is also called m13

9
00:00:27,509 --> 00:00:24,400
it's called m13 because this object is

10
00:00:30,790 --> 00:00:27,519
the 13th of charles messier's 1764

11
00:00:32,709 --> 00:00:30,800
catalog of celestial objects but charles

12
00:00:33,990 --> 00:00:32,719
messier wasn't the discoverer of this

13
00:00:36,069 --> 00:00:34,000

cluster

14
00:00:38,630 --> 00:00:36,079
m13 was discovered half a century

15
00:00:40,869 --> 00:00:38,640
earlier by edmund halley

16
00:00:43,110 --> 00:00:40,879
a globular cluster is a collection of

17
00:00:45,190 --> 00:00:43,120
hundreds of thousands of ancient stars

18
00:00:47,910 --> 00:00:45,200
held together by gravity

19
00:00:49,990 --> 00:00:47,920
you can easily find m13 in the keystone

20
00:00:52,069 --> 00:00:50,000
of the constellation hercules about a

21
00:00:55,590 --> 00:00:52,079
third of the way along a line drawn

22
00:00:58,069 --> 00:00:55,600
between ada and zeta herculis

23
00:01:00,470 --> 00:00:58,079
m13 will look like a round hazy glow in

24
00:01:02,709 --> 00:01:00,480
binoculars through a telescope you'll

25
00:01:05,270 --> 00:01:02,719
see individual stars at the edge of the

26
00:01:07,109 --> 00:01:05,280
cluster and a dense core of stars closer

27
00:01:09,270 --> 00:01:07,119
to the center

28
00:01:11,990 --> 00:01:09,280
the hubble space telescope's wide field

29
00:01:14,230 --> 00:01:12,000
and planetary camera 2 or with pic 2 for

30
00:01:17,469 --> 00:01:14,240
short and the advanced camera for

31
00:01:20,310 --> 00:01:17,479
surveys combined data from 1999 through

32
00:01:23,429 --> 00:01:20,320
2006 to create a glittering image of

33
00:01:25,830 --> 00:01:23,439
this herculean star city

34
00:01:28,149 --> 00:01:25,840
a spiral galaxy like our milky way is

35
00:01:31,590 --> 00:01:28,159
made up of three visible parts the

36
00:01:34,069 --> 00:01:31,600
nucleus the disc and the halo

37
00:01:36,310 --> 00:01:34,079
the nucleus contains the highest density

38
00:01:38,469 --> 00:01:36,320

of stars in the galaxy

39
00:01:39,749 --> 00:01:38,479
most of the gas and dust is contained in

40
00:01:42,469 --> 00:01:39,759
the disk

41
00:01:44,950 --> 00:01:42,479
the halo or outer shell is spherical and

42
00:01:46,550 --> 00:01:44,960
contains little gas dust or star

43
00:01:48,789 --> 00:01:46,560
formation

44
00:01:52,069 --> 00:01:48,799
the globular clusters found in the halo

45
00:01:55,670 --> 00:01:52,079
are the oldest parts of the galaxy

46
00:01:59,910 --> 00:01:55,680
m13 is one of 150 globular clusters in

47
00:02:03,670 --> 00:02:01,510
this is the last month to get a good

48
00:02:05,190 --> 00:02:03,680
look at saturn in the evening sky so

49
00:02:07,350 --> 00:02:05,200
don't miss it

50
00:02:09,270 --> 00:02:07,360
the rings are narrowing to nearly edge

51
00:02:10,389 --> 00:02:09,280
on and look dimmer than they did last

52
00:02:12,470 --> 00:02:10,399
month

53
00:02:14,550 --> 00:02:12,480
you can read about the hercules globular

54
00:02:19,990 --> 00:02:14,560
cluster on nasa's international year of

55
00:02:25,830 --> 00:02:21,830
and you can learn all about nasa's