

Rosette Nebula

Composite



1
00:00:06,070 --> 00:00:03,270
this spectacular image shows the rosette

2
00:00:08,950 --> 00:00:06,080
star formation region which is located

3
00:00:10,790 --> 00:00:08,960
about 5 000 light years from earth

4
00:00:13,190 --> 00:00:10,800
x-rays from the chandra x-ray

5
00:00:15,270 --> 00:00:13,200
observatory reveal hundreds of young

6
00:00:17,830 --> 00:00:15,280
stars clustered in the center of the

7
00:00:19,269 --> 00:00:17,840
image and additional fainter clusters on

8
00:00:21,670 --> 00:00:19,279
either side

9
00:00:23,830 --> 00:00:21,680
optical data from the digitized sky

10
00:00:27,109 --> 00:00:23,840
survey and the kit peak national

11
00:00:30,150 --> 00:00:27,119
observatory show large areas of gas and

12
00:00:32,630 --> 00:00:30,160
dust including giant pillars that remain

13
00:00:35,110 --> 00:00:32,640

behind after intense radiation from

14

00:00:37,030 --> 00:00:35,120

massive stars has eroded the more

15

00:00:39,510 --> 00:00:37,040

diffuse gas

16

00:00:41,750 --> 00:00:39,520

the combination of the x-ray and optical

17

00:00:44,150 --> 00:00:41,760

data lead astronomers to believe that

18

00:00:47,750 --> 00:00:44,160

stars are still forming in the central

19

00:00:49,750 --> 00:00:47,760

cluster of the rosette known as ngc

20

00:00:52,310 --> 00:00:49,760

2237

21

00:00:53,990 --> 00:00:52,320

astronomers are also using these data to

22

00:00:56,709 --> 00:00:54,000

piece together the history of this

23

00:00:58,950 --> 00:00:56,719

gorgeous region the rosette nebula has

24

00:01:01,110 --> 00:00:58,960

long been a favorite target of amateur

25

00:01:03,590 --> 00:01:01,120

astronomers in the constellation

26

00:01:05,830 --> 00:01:03,600

monoceros the unicorn

27

00:01:08,230 --> 00:01:05,840

the wispy colorful structures in the

28

00:01:10,710 --> 00:01:08,240

optical data can sometimes be seen by