
Zlatan Tsvetanov

1
00:00:29,630 --> 00:00:27,050
in the early 1900s Edwin Hubble made the

2
00:00:32,720 --> 00:00:29,640
startling discovery that our Milky Way

3
00:00:36,470 --> 00:00:32,730
galaxy is not alone but one of many

4
00:00:42,439 --> 00:00:36,480
galaxies or Island universes swimming in

5
00:00:45,680 --> 00:00:42,449
the sea of space how are galaxies born

6
00:00:49,180 --> 00:00:45,690
and how do they grow since its launch in

7
00:00:51,739 --> 00:00:49,190
April 2003 NASA's Galaxy Evolution

8
00:00:54,590 --> 00:00:51,749
Explorer has photographed and

9
00:00:57,290 --> 00:00:54,600
ultraviolet light hundreds of millions

10
00:01:00,259 --> 00:00:57,300
of these Island universes across nine

11
00:01:02,959 --> 00:01:00,269
billion years of time helping piece

12
00:01:08,480 --> 00:01:02,969
together the evolution of these cosmic

13
00:01:11,930 --> 00:01:08,490

species the fact that is extremely

14
00:01:17,170 --> 00:01:11,940
sensitive in the region where young

15
00:01:20,810 --> 00:01:17,180
forming stars are the most easy to see

16
00:01:23,320 --> 00:01:20,820
makes it extremely powerful machine for

17
00:01:27,290 --> 00:01:23,330
studying the evolution of galaxies

18
00:01:33,730 --> 00:01:27,300
star-formation rate and also discovering

19
00:01:38,450 --> 00:01:36,320
scientists have only begun to pore

20
00:01:41,420 --> 00:01:38,460
through the data Gale access collected

21
00:01:44,920 --> 00:01:41,430
over the last five years ultraviolet

22
00:01:48,680 --> 00:01:44,930
images of half a billion objects over

23
00:01:52,190 --> 00:01:48,690
27,000 square degrees of sky that's an

24
00:01:56,300 --> 00:01:52,200
area that would need 138,000 full earth

25
00:02:03,530 --> 00:01:59,350
galux has already demonstrated that

26
00:02:06,980 --> 00:02:03,540
there are things that we did not know if

27
00:02:10,219 --> 00:02:06,990
we do not expect and they come about

28
00:02:14,180 --> 00:02:10,229
very obviously when you have the right

29
00:02:20,180 --> 00:02:14,190
tools one of the most stunning example

30
00:02:23,930 --> 00:02:20,190
is the tale of very well known variable

31
00:02:27,620 --> 00:02:23,940
star called Myra which was observed for

32
00:02:31,900 --> 00:02:27,630
400 years but nobody suspected it had a

33
00:02:37,130 --> 00:02:31,910
tale of several degrees on the sky and

34
00:02:39,500 --> 00:02:37,140
it's a pretty stunning discovery to

35
00:02:41,990 --> 00:02:39,510
learn more about the gale xmission see a

36
00:02:44,330 --> 00:02:42,000
portrait of a galaxy's life and have a

37
00:02:47,600 --> 00:02:44,340
closer look at some of galaxy's stunning

38
00:02:51,039 --> 00:02:47,610

imagery like this picture galaxy m106