

Kepler's First Five Exoplanets



1
00:00:03,710 --> 00:00:01,969
NASA's Kepler spacecraft has

2
00:00:05,150 --> 00:00:03,720
successfully completed the first year of

3
00:00:10,370 --> 00:00:05,160
its mission to search for earth-like

4
00:00:12,709 --> 00:00:10,380
planets in our galaxy to celebrate the

5
00:00:15,379 --> 00:00:12,719
occasion Kepler team members gathered it

6
00:00:17,090 --> 00:00:15,389
aims as exploration center here they

7
00:00:19,269 --> 00:00:17,100
spent the evening sharing memories the

8
00:00:21,620 --> 00:00:19,279
first years milestones and discoveries

9
00:00:24,170 --> 00:00:21,630
it's been the greatest year of my life

10
00:00:27,200 --> 00:00:24,180
we have produced so much new science we

11
00:00:29,029 --> 00:00:27,210
have found so many candidate planets so

12
00:00:31,070 --> 00:00:29,039
it's just been wonderful to see all that

13
00:00:34,190 --> 00:00:31,080

results come out of out of this mission

14

00:00:36,770 --> 00:00:34,200

zero and liftoff of the Delta two rocket

15

00:00:39,080 --> 00:00:36,780

with Kepler Kepler was launched march

16

00:00:40,940 --> 00:00:39,090

six thousand nine from Florida's

17

00:00:44,030 --> 00:00:40,950

cape canaveral air force station with a

18

00:00:46,459 --> 00:00:44,040

dramatic night time display just a few

19

00:00:48,319 --> 00:00:46,469

weeks later on April sixteenth the first

20

00:00:50,540 --> 00:00:48,329

set of images taken by the spacecraft

21

00:00:52,670 --> 00:00:50,550

were released they showed its complete

22

00:00:55,310 --> 00:00:52,680

search area near the constellation Lyra

23

00:00:58,729 --> 00:00:55,320

the composite image of unprecedented

24

00:01:01,689 --> 00:00:58,739

detail demonstrated that all 42 CCD

25

00:01:05,539 --> 00:01:01,699

photo sensors were working as designed

26
00:01:08,179 --> 00:01:05,549
by August of 2009 Kepler's first science

27
00:01:10,219 --> 00:01:08,189
results were announced the telescope

28
00:01:11,870 --> 00:01:10,229
sensors had detected properties of the

29
00:01:16,789 --> 00:01:11,880
atmosphere around a distant planet

30
00:01:18,830 --> 00:01:16,799
called hat p7b in January of 2010

31
00:01:21,020 --> 00:01:18,840
principal investigator Bill berukhi

32
00:01:23,929 --> 00:01:21,030
revealed that Kepler had discovered five

33
00:01:25,640 --> 00:01:23,939
previously unknown planets what we're

34
00:01:28,070 --> 00:01:25,650
looking for is even more exciting

35
00:01:30,050 --> 00:01:28,080
discoveries we're now beginning to find

36
00:01:31,819 --> 00:01:30,060
the small planets the planets they're

37
00:01:33,469 --> 00:01:31,829
like Earth we still haven't gone in

38
00:01:34,999 --> 00:01:33,479

habitable zone but these are the

39

00:01:37,730 --> 00:01:35,009

discoveries that are coming in the next

40

00:01:40,010 --> 00:01:37,740

couple of years because Kepler team

41

00:01:41,870 --> 00:01:40,020

members are spread around the world the

42

00:01:43,730 --> 00:01:41,880

event was a rare opportunity to renew

43

00:01:46,039 --> 00:01:43,740

friendships and celebrate the year's

44

00:01:48,980 --> 00:01:46,049

events but they are just as excited

45

00:01:50,530 --> 00:01:48,990

about discoveries yet to come in this

46

00:01:54,130 --> 00:01:50,540

first year we've really only

47

00:01:56,410 --> 00:01:54,140

skimmed the cream Rowley just beginning

48

00:01:58,720 --> 00:01:56,420

we have so many exciting things to the

49

00:02:00,850 --> 00:01:58,730

overtone so I really am starting to get

50

00:02:02,770 --> 00:02:00,860

into that mode of keno really exploring

51

00:02:05,140 --> 00:02:02,780

and discovering new worlds that were