1
00:00:08,070 --> 00:00:04,870
after completing its primary mission to

2
00:00:11,030 --> 00:00:08,080
map the infrared sky nasa's wide field

3
00:00:12,950 --> 00:00:11,040
infrared survey explorer or wise has

4
00:00:15,030 --> 00:00:12,960
reached the expected end of its onboard

5
00:00:17,430 --> 00:00:15,040
supply of frozen coolant

6
00:00:20,150 --> 00:00:17,440
although wise has warmed up nasa has

7
00:00:22,070 --> 00:00:20,160
decided the mission will still continue

8
00:00:24,150 --> 00:00:22,080
wise will now focus on our nearest

9
00:00:25,750 --> 00:00:24,160
neighbors the asteroids and comets

10
00:00:28,070 --> 00:00:25,760
traveling together with our solar

11
00:00:30,790 --> 00:00:28,080
system's planets around the sun

12
00:00:32,549 --> 00:00:30,800
the neowized post-cryogenic mission is

13
00:00:34,470 --> 00:00:32,559

designed to complete the survey of the

14
00:00:36,630 --> 00:00:34,480
solar system and finish the second

15
00:00:39,670 --> 00:00:36,640
survey of the rest of the sky at its new

16
00:00:41,590 --> 00:00:39,680
warmer temperature of about minus 334

17
00:00:44,310 --> 00:00:41,600
degrees fahrenheit using its two

18
00:00:46,069 --> 00:00:44,320
shortest wavelength detectors the survey

19
00:00:48,150 --> 00:00:46,079
extension will last one to four months

20
00:00:51,189 --> 00:00:48,160
depending on early results

21
00:00:52,790 --> 00:00:51,199
wise launched december 14 2009 from

22
00:00:54,869 --> 00:00:52,800
vandenberg air force station in

23
00:00:57,750 --> 00:00:54,879
california aboard a delta ii launch

24
00:00:59,750 --> 00:00:57,760
vehicle its 16-inch infrared telescope

25
00:01:02,150 --> 00:00:59,760
scans the skies from an earth-circling

26
00:01:04,789 --> 00:01:02,160
orbit crossing the poles it has already

27
00:01:07,270 --> 00:01:04,799
snapped more than 1.8 million pictures

28
00:01:09,429 --> 00:01:07,280
at four infrared wavelengths

29
00:01:11,750 --> 00:01:09,439
currently the survey has covered the sky

30
00:01:13,990 --> 00:01:11,760
about one and a half times producing a

31
00:01:16,070 --> 00:01:14,000
vast catalog containing hundreds of

32
00:01:18,230 --> 00:01:16,080
millions of objects from near-earth

33
00:01:21,429 --> 00:01:18,240
asteroids to cool stars called brown

34
00:01:24,310 --> 00:01:21,439
dwarfs to distant luminous galaxies

35
00:01:27,270 --> 00:01:24,320
to date wise has discovered 19 comets

36
00:01:30,390 --> 00:01:27,280
and more than 33 000 asteroids including

37
00:01:32,710 --> 00:01:30,400
120 near-earth objects which are those

38
00:01:35,350 --> 00:01:32,720

bodies with orbits that pass relatively

39
00:01:37,190 --> 00:01:35,360
close to the earth's path around the sun

40
00:01:39,510 --> 00:01:37,200
more discoveries regarding objects

41
00:01:41,910 --> 00:01:39,520
outside our solar system such as the

42
00:01:54,630 --> 00:01:41,920
brown dwarfs and luminous galaxies are

43
00:01:59,190 --> 00:01:56,230
the mission was designed for a

44
00:02:01,910 --> 00:01:59,200
nine-month all-sky survey and we have

45
00:02:04,469 --> 00:02:01,920
met all our mission objectives and

46
00:02:07,270 --> 00:02:04,479
this whole sky has been surveyed in the

47
00:02:09,589 --> 00:02:07,280
infrared the mission actually has four

48
00:02:11,990 --> 00:02:09,599
detectors two in a slightly shorter

49
00:02:14,470 --> 00:02:12,000
wavelength and two longer wavelengths

50
00:02:16,390 --> 00:02:14,480
when the

51
00:02:18,630 --> 00:02:16,400
instrument heats up the two longer

52
00:02:20,710 --> 00:02:18,640
wavelength detector can no more be used

53
00:02:22,710 --> 00:02:20,720
because of the background but the two

54
00:02:24,710 --> 00:02:22,720
shorter wavelengths can still do a

55
00:02:26,869 --> 00:02:24,720
limited amount of science

56
00:02:29,510 --> 00:02:26,879
and the science that we hope to achieve

57
00:02:31,750 --> 00:02:29,520
is to look at asteroids and near-earth

58
00:02:34,150 --> 00:02:31,760
objects and so we plan to run the

59
00:02:35,190 --> 00:02:34,160
instrument the mission for another month

60
00:02:37,750 --> 00:02:35,200
to see

61
00:02:39,990 --> 00:02:37,760
how much of the in of the new earth

62
00:02:41,509 --> 00:02:40,000
objects we can actually see and if it

63
00:02:43,830 --> 00:02:41,519

turns out that

64
00:02:45,670 --> 00:02:43,840
we can see a significant number of them

65
00:02:48,309 --> 00:02:45,680
that we may extend the emission a little

66
00:02:52,390 --> 00:02:48,319
longer the all-sky survey is

67
00:02:55,030 --> 00:02:52,400
going to produce an atlas of all the uh

68
00:02:56,309 --> 00:02:55,040
objects in the sky plus we are going to

69
00:02:58,949 --> 00:02:56,319
also

70
00:03:01,030 --> 00:02:58,959
take out some not only all the images

71
00:03:02,070 --> 00:03:01,040
but actually identify some of the

72
00:03:05,670 --> 00:03:02,080
objects

73
00:03:08,390 --> 00:03:05,680
and this will then give an astronomers a

74
00:03:10,630 --> 00:03:08,400
chance to study uh all that there is in

75
00:03:13,430 --> 00:03:10,640
the infrared sky all the scientific

76
00:03:15,190 --> 00:03:13,440
objectives have been met and we are on

77
00:03:18,309 --> 00:03:15,200
track to get uh

78
00:03:21,270 --> 00:03:18,319
the data all archived and to release the

79
00:03:24,229 --> 00:03:21,280
first set of images to the scientific

80
00:03:27,910 --> 00:03:24,239
community about 55 of the sky should be

81
00:03:29,350 --> 00:03:27,920
released in mid-april and

82
00:03:31,830 --> 00:03:29,360
this will then be available to the

83
00:03:35,350 --> 00:03:31,840
entire scientific community to analyze

84
00:03:36,789 --> 00:03:35,360
and get new science and we hope to

85
00:03:38,710 --> 00:03:36,799
release the less