
For more information:
www.nasa.gov/GOES-O

1
00:00:06,630 --> 00:00:04,309
in the case of katrina i remember

2
00:00:07,269 --> 00:00:06,640
watching on tv looking at the satellite

3
00:00:11,270 --> 00:00:07,279
and

4
00:00:13,350 --> 00:00:11,280
predictions were pretty much right on

5
00:00:15,990 --> 00:00:13,360
if you go back and look at the national

6
00:00:18,550 --> 00:00:16,000
hurricane center out of miami six days

7
00:00:21,910 --> 00:00:18,560
out they gave very accurate forecasts in

8
00:00:23,590 --> 00:00:21,920
where hurricane katrina was going to go

9
00:00:25,830 --> 00:00:23,600
all those images that you saw were

10
00:00:27,269 --> 00:00:25,840
coming from the goes satellite

11
00:00:29,029 --> 00:00:27,279
the luxury we have with these new

12
00:00:31,349 --> 00:00:29,039
satellites and their new capabilities

13
00:00:32,790 --> 00:00:31,359

and their accuracy is that to get people

14
00:00:33,670 --> 00:00:32,800
out of the way when we know it's going

15
00:00:36,150 --> 00:00:33,680
to hit

16
00:00:38,069 --> 00:00:36,160
is is a serious advantage that these

17
00:00:39,990 --> 00:00:38,079
satellites are providing us every time

18
00:00:47,510 --> 00:00:40,000
there's a hurricane i know that goes is

19
00:00:52,229 --> 00:00:50,150
the next go satellite to be launched is

20
00:00:57,110 --> 00:00:52,239
goes o which we've made some

21
00:01:01,510 --> 00:00:59,189
we have two satellites that are

22
00:01:03,750 --> 00:01:01,520
operational but where philosophy also is

23
00:01:05,910 --> 00:01:03,760
to launch spares so goes-o is actually

24
00:01:08,789 --> 00:01:05,920
going into a spare slide so if one of

25
00:01:09,670 --> 00:01:08,799
them were to fail you know abruptly

26
00:01:12,469 --> 00:01:09,680
we would

27
00:01:14,950 --> 00:01:12,479
activate the one that's in storage goes

28
00:01:18,149 --> 00:01:14,960
the g stands for geosynchronous and it's

29
00:01:21,030 --> 00:01:18,159
out about 36 000 kilometers and it sits

30
00:01:22,870 --> 00:01:21,040
on the equator goes is looking at the

31
00:01:25,830 --> 00:01:22,880
continental us and the earth all the

32
00:01:28,230 --> 00:01:25,840
time so we can really dwell on storms

33
00:01:29,510 --> 00:01:28,240
that's why goes is more critical for the

34
00:01:31,350 --> 00:01:29,520
daily

35
00:01:37,990 --> 00:01:31,360
weather monitoring and goes is what you

36
00:01:40,550 --> 00:01:39,510
some of the main improvements we have on

37
00:01:43,270 --> 00:01:40,560
goes-o

38
00:01:45,270 --> 00:01:43,280

are in the stability and the reliability

39
00:01:47,590 --> 00:01:45,280
of the pointing of the image data that

40
00:01:49,990 --> 00:01:47,600
we get from our primary instruments that

41
00:01:51,910 --> 00:01:50,000
look at the earth

42
00:01:53,749 --> 00:01:51,920
the new ones have higher resolution so

43
00:01:55,590 --> 00:01:53,759
they take better pictures when they

44
00:01:57,510 --> 00:01:55,600
photograph from space then you could see

45
00:01:58,789 --> 00:01:57,520
actually what's going on inside the

46
00:02:00,709 --> 00:01:58,799
hurricane

47
00:02:03,190 --> 00:02:00,719
these instruments on the go spacecraft

48
00:02:05,830 --> 00:02:03,200
are also very powerful okay they can

49
00:02:08,150 --> 00:02:05,840
penetrate down into the atmosphere and

50
00:02:10,630 --> 00:02:08,160
focus right in on those hurricanes that

51
00:02:12,550 --> 00:02:10,640
you may see coming across the atlantic

52
00:02:15,830 --> 00:02:12,560
we also monitor the space weather and

53
00:02:17,990 --> 00:02:15,840
have the ability to forecast additional

54
00:02:19,910 --> 00:02:18,000
high levels of radiation for the

55
00:02:21,910 --> 00:02:19,920
astronauts on the space station as well

56
00:02:24,150 --> 00:02:21,920
as some interruptions in terrestrial

57
00:02:25,670 --> 00:02:24,160
communications

58
00:02:27,270 --> 00:02:25,680
the data that comes from the goes

59
00:02:29,589 --> 00:02:27,280
satellite is

60
00:02:31,110 --> 00:02:29,599
almost instantaneous we call it real

61
00:02:34,070 --> 00:02:31,120
time

62
00:02:35,110 --> 00:02:34,080
this is the goes operations room this is

63
00:02:37,270 --> 00:02:35,120

where

64
00:02:38,869 --> 00:02:37,280
uh we operate all the goes satellite

65
00:02:40,869 --> 00:02:38,879
okay so what we have right here is our

66
00:02:42,710 --> 00:02:40,879
uh product monitor display

67
00:02:44,470 --> 00:02:42,720
this data is coming in in real time from

68
00:02:45,910 --> 00:02:44,480
the satellite and that's important

69
00:02:47,270 --> 00:02:45,920
because we want to make sure that the

70
00:02:49,750 --> 00:02:47,280
weather patterns we're seeing are

71
00:02:51,990 --> 00:02:49,760
actually over the correct areas

72
00:02:53,990 --> 00:02:52,000
whenever severe storms occur on the

73
00:02:55,350 --> 00:02:54,000
continental united states or out in the

74
00:02:57,910 --> 00:02:55,360
atlantic ocean that are forming

75
00:03:00,550 --> 00:02:57,920
hurricanes the gozo satellite has the

76
00:03:03,509 --> 00:03:00,560
ability to focus in and track those

77
00:03:05,750 --> 00:03:03,519
severe storms so that meteorologists can

78
00:03:10,790 --> 00:03:05,760
provide better forecasting and warning

79
00:03:15,430 --> 00:03:12,869
if you did not have these satellites it

80
00:03:17,190 --> 00:03:15,440
probably would end up costing you more

81
00:03:19,430 --> 00:03:17,200
in people's lives and property and it

82
00:03:21,589 --> 00:03:19,440
would be for the cost of the satellite

83
00:03:22,949 --> 00:03:21,599
itself and the whole operation

84
00:03:25,750 --> 00:03:22,959
and i don't know that we can put a