



1
00:00:14,070 --> 00:00:04,170
parachute deploy

2
00:00:17,349 --> 00:00:15,589
thrusters have been re-enabled uh we

3
00:00:19,510 --> 00:00:17,359
will control our attitude on shoot we

4
00:00:22,710 --> 00:00:19,520
are decelerating

5
00:00:26,310 --> 00:00:22,720
wrist mode under our technology

6
00:00:31,189 --> 00:00:29,029
dynamics phase come back again with uh

7
00:00:36,069 --> 00:00:31,199
wrist mode dynamics

8
00:00:39,670 --> 00:00:37,910
valid range

9
00:00:41,830 --> 00:00:39,680
net filter converge with a velocity

10
00:00:43,910 --> 00:00:41,840
correction of 0.7 meters a second we've

11
00:00:46,150 --> 00:00:43,920
acquired the ground with the radar now

12
00:00:47,910 --> 00:00:46,160
two of eight kilometers

13
00:00:49,350 --> 00:00:47,920

speed has separated where we found the

14

00:00:51,270 --> 00:00:49,360

ground expand tones due to earth

15

00:00:53,510 --> 00:00:51,280

occultation as expected

16

00:00:57,110 --> 00:00:53,520

we're getting rid of the emily engines

17

00:01:07,590 --> 00:00:58,790

we're down to 90 meters per second at an

18

00:01:07,600 --> 00:01:22,390

flight edl we got some tweeta warnings

19

00:01:25,109 --> 00:01:24,149

we're down to 86 meters per second at an

20

00:01:29,670 --> 00:01:25,119

altitude of four kilometers in

21

00:01:33,109 --> 00:01:31,190

we have lost ac we've lost tones from

22

00:01:38,710 --> 00:01:33,119

earth at this time this is expected

23

00:01:43,350 --> 00:01:41,350

ground solution equals minus ten point

24

00:01:45,190 --> 00:01:43,360

eight meters vertical velocity of minus

25

00:01:46,389 --> 00:01:45,200

eighty point eight meters electric

26
00:01:49,590 --> 00:01:46,399
enabled standing by for back shell

27
00:01:49,600 --> 00:01:56,230
signals odyssey is still strong

28
00:01:56,240 --> 00:02:03,429
we are in powered flight

29
00:02:05,749 --> 00:02:04,630
for an altitude of one kilometer

30
00:02:20,630 --> 00:02:05,759
descending

31
00:02:25,830 --> 00:02:23,030
constant velocity accordion nominal

32
00:02:27,589 --> 00:02:25,840
altitude error 5.9 meters

33
00:02:32,070 --> 00:02:27,599
we found a nice flat place we're coming

34
00:02:38,550 --> 00:02:33,910
down to 10 meters per second 40 meters

35
00:02:38,560 --> 00:02:42,630
sky crane has started

36
00:02:46,229 --> 00:02:44,630
descending at about 0.75 meters per

37
00:03:02,630 --> 00:02:46,239
second as expected

38
00:03:02,640 --> 00:03:11,589

telemetry

39

00:03:23,350 --> 00:03:13,790

touchdown confirmed we're safe

40

00:03:32,990 --> 00:03:24,789

time to see where our curiosity will

41

00:03:47,350 --> 00:03:35,430

[Applause]

42

00:03:57,100 --> 00:03:48,670

yes

43

00:04:01,110 --> 00:04:00,060

[Music]

44

00:04:04,949 --> 00:04:01,120

[Applause]

45

00:04:09,850 --> 00:04:06,550

we are continuing to receive telemetry

46

00:04:15,190 --> 00:04:12,830

[Music]

47

00:04:16,069 --> 00:04:15,200

curiosity sequence is kicked off waiting

48

00:04:19,590 --> 00:04:16,079

for

49

00:04:19,600 --> 00:04:23,550

heads up folks

50

00:04:23,560 --> 00:04:36,460

[Applause]

51

00:04:36,470 --> 00:04:40,150

[Music]

52

00:04:44,550 --> 00:04:42,550

remain strong

53

00:04:45,830 --> 00:04:44,560

played all images are starting to come

54

00:04:53,990 --> 00:04:45,840

down

55

00:05:01,350 --> 00:04:57,430

odyssey data is still strong

56

00:05:01,360 --> 00:05:10,800

obviously he's nice behind this guy

57

00:05:10,810 --> 00:05:18,150

[Music]

58

00:05:47,430 --> 00:05:21,990

thumbnails are complete got thumbnails

59

00:05:57,990 --> 00:05:50,010

it's the wheel it's the wheel

60

00:06:03,189 --> 00:05:58,000

[Applause]

61

00:06:03,199 --> 00:06:07,590

oh my god

62

00:06:07,600 --> 00:06:17,300

we'll do a proper hug on the other side

63

00:06:17,310 --> 00:06:22,710

[Applause]

64

00:06:26,629 --> 00:06:24,309

keep watching guys keep watching the

65

00:06:28,950 --> 00:06:26,639

screen there's more stuff

66

00:06:31,350 --> 00:06:28,960

any minute now

67

00:06:34,070 --> 00:06:31,360

no 256. okay

68

00:06:35,749 --> 00:06:34,080

okay

69

00:06:38,950 --> 00:06:35,759

here we are

70

00:06:41,510 --> 00:06:38,960

we're going to start go ahead so we have

71

00:06:44,390 --> 00:06:41,520

landed landed out at the time we thought

72

00:06:46,550 --> 00:06:44,400

we would and we now have our first image

73

00:06:49,589 --> 00:06:46,560

we have our first image um this we've

74

00:06:51,749 --> 00:06:49,599

got us a 64 by 64 thumbnail the front a

75

00:06:54,070 --> 00:06:51,759

rear has cam image you can see the

76

00:06:56,150 --> 00:06:54,080

shadow there um i'm i'm not sure exactly

77

00:06:57,830 --> 00:06:56,160

which our orientation is of the vehicle

78

00:06:59,749 --> 00:06:57,840

but uh we're looking through it now if

79

00:07:01,029 --> 00:06:59,759

you i think in just a few minutes we

80

00:07:05,350 --> 00:07:01,039

might get even

81

00:07:06,629 --> 00:07:05,360

a larger 250 256 frame

82

00:07:08,870 --> 00:07:06,639

pixel image

83

00:07:10,150 --> 00:07:08,880

of that same same end so we're looking

84

00:07:11,830 --> 00:07:10,160

at the shadows see the horizon is

85

00:07:13,110 --> 00:07:11,840

actually the distance you can't really

86

00:07:17,110 --> 00:07:13,120

tell that because we're looking actually

87

00:07:19,510 --> 00:07:17,120

the shadow of this late afternoon sun uh

88

00:07:21,270 --> 00:07:19,520

and uh

89

00:07:23,430 --> 00:07:21,280

so these are the rear house cams that's

90

00:07:25,189 --> 00:07:23,440

the rear harris cams and it does have a

91

00:07:26,710 --> 00:07:25,199

dust cover on it it does have a dust

92

00:07:28,710 --> 00:07:26,720

cover but the dust the cover is a

93

00:07:32,150 --> 00:07:28,720

problem is the fact there's dust in the

94

00:07:36,550 --> 00:07:32,160

air because we've just blown dust all

95

00:07:36,560 --> 00:07:44,710

fantastic

96

00:07:47,909 --> 00:07:46,309

so there could be more there could be

97

00:07:49,990 --> 00:07:47,919

more

98

00:07:52,070 --> 00:07:50,000

if we get if we wait we might get oh

99

00:07:55,909 --> 00:07:52,080

yeah this is the high risk that's the

100

00:07:57,990 --> 00:07:55,919

256 by 2 56 image this is the higher

101
00:08:00,070 --> 00:07:58,000
resolution you've seen dug particles on

102
00:08:01,430 --> 00:08:00,080
the window

103
00:08:03,830 --> 00:08:01,440
you can see the horizon there in the

104
00:08:06,309 --> 00:08:03,840
background and there's there is the

105
00:08:09,110 --> 00:08:06,319
wheel of the rover safely on the surface

106
00:08:12,629 --> 00:08:09,120
of mars i can't believe this is

107
00:08:16,710 --> 00:08:14,390
we might get another one of these and if

108
00:08:18,230 --> 00:08:16,720
we're lucky before odyssey goes away

109
00:08:19,670 --> 00:08:18,240
we'll get two more of these same

110
00:08:20,710 --> 00:08:19,680
injuries going the other side of the

111
00:08:23,430 --> 00:08:20,720
vehicle

112
00:08:35,750 --> 00:08:23,440
and also probably dusty

113
00:08:46,150 --> 00:08:39,029

so that is one of curiosity's rover

114

00:08:49,430 --> 00:08:47,190

now we have another there's another

115

00:08:50,630 --> 00:08:49,440

image coming down this is a view looking

116

00:08:52,710 --> 00:08:50,640

the other direction there's still it's

117

00:08:55,670 --> 00:08:52,720

still being processed you'll see in just

118

00:08:57,829 --> 00:08:55,680

a second here

119

00:09:00,790 --> 00:08:57,839

this another this is a another thumbnail

120

00:09:04,910 --> 00:09:00,800

image is that a shadow that's the shadow

121

00:09:08,790 --> 00:09:04,920

of the curiosity rover on the surface of

122

00:09:11,269 --> 00:09:08,800

mars thank you guys thank you thank you

123

00:09:14,949 --> 00:09:13,030

the odyssey transition is about to end

124

00:09:17,509 --> 00:09:14,959

uh it's about to set below the peak of

125

00:09:19,590 --> 00:09:17,519

mount sharp very shortly uh so this is

