



1
00:00:07,909 --> 00:00:05,430
this again was footage just captured

2
00:00:09,830 --> 00:00:07,919
about an hour ago as the international

3
00:00:13,030 --> 00:00:09,840
space station was traveling overhead

4
00:00:14,950 --> 00:00:13,040
about 230 miles above the ocean

5
00:00:16,630 --> 00:00:14,960
and

6
00:00:18,550 --> 00:00:16,640
the cameras mounted on the exterior were

7
00:04:27,749 --> 00:00:18,560
able to capture these views of the

8
00:04:38,469 --> 00:04:32,390
i'm still stationed on two for merlin

9
00:04:43,670 --> 00:04:39,749
yeah i'm uh

10
00:04:45,749 --> 00:04:43,680
in the apm look in 0.5 c tv i'm in the

11
00:04:49,350 --> 00:04:45,759
gather section yet

12
00:04:51,749 --> 00:04:49,360
looking for in a 12 16 for a glacier

13
00:04:53,350 --> 00:04:51,759

tray there's nothing in here of that

14

00:04:55,189 --> 00:04:53,360

description

15

00:04:57,670 --> 00:04:55,199

i've looked throughout the volume this

16

00:05:00,070 --> 00:04:57,680

entire rack volume and it's done in this

17

00:05:02,469 --> 00:05:00,080

location a description of what we're

18

00:05:05,510 --> 00:05:02,479

looking for and other ideas would be

19

00:05:05,520 --> 00:06:20,070

we copied standby

20

00:06:26,150 --> 00:06:21,830

in this view you can see we're just

21

00:06:30,790 --> 00:06:28,390

baja peninsula just going out of view on

22

00:06:32,710 --> 00:06:30,800

the left-hand side and the ground track

23

00:06:36,469 --> 00:06:32,720

will be taking us just over guadalajara

24

00:06:42,790 --> 00:06:39,590

continuing northeasterly

25

00:06:44,950 --> 00:06:42,800

and to the lower right is acapulco

26

00:06:47,670 --> 00:06:44,960

joining us here on the console again is

27

00:06:49,110 --> 00:06:47,680

dr justin wilkinson who is part of the

28

00:06:50,790 --> 00:06:49,120

jsc

29

00:06:52,790 --> 00:06:50,800

earth observations team he is the

30

00:06:56,070 --> 00:06:52,800

principal geoscientist

31

00:06:59,909 --> 00:06:56,080

thank you so much for joining us again

32

00:07:01,990 --> 00:06:59,919

you're welcome thank you for having me

33

00:07:03,749 --> 00:07:02,000

it's great to have your expertise uh you

34

00:07:05,670 --> 00:07:03,759

of course are part of a small team that

35

00:07:07,430 --> 00:07:05,680

specializes in

36

00:07:09,589 --> 00:07:07,440

not only how to view the earth from

37

00:07:11,670 --> 00:07:09,599

space uh but also how to train the

38

00:07:13,589 --> 00:07:11,680

astronauts on how to view and make

39

00:07:15,350 --> 00:07:13,599

certain distinctions we talked

40

00:07:17,189 --> 00:07:15,360

previously about how to even distinguish

41

00:07:18,790 --> 00:07:17,199

smoke from clouds maybe you can talk to

42

00:07:20,469 --> 00:07:18,800

us a little bit about those types of

43

00:07:23,189 --> 00:07:20,479

things and the practical matters that

44

00:07:25,909 --> 00:07:23,199

you instruct astronauts on

45

00:07:27,510 --> 00:07:25,919

sure we we handle uh geography and

46

00:07:29,110 --> 00:07:27,520

geology but we also think about the

47

00:07:33,430 --> 00:07:29,120

atmosphere quite a bit

48

00:07:38,230 --> 00:07:35,350

dust are the things that we think about

49

00:07:39,510 --> 00:07:38,240

in particular for the atmosphere

50

00:07:40,469 --> 00:07:39,520

clouds

51
00:07:42,550 --> 00:07:40,479
are

52
00:07:44,950 --> 00:07:42,560
easy to spot once you get used to it

53
00:07:47,110 --> 00:07:44,960
because they have a sharp edge to them

54
00:07:49,350 --> 00:07:47,120
mostly and they're usually bright white

55
00:07:52,469 --> 00:07:49,360
everything else kind of

56
00:07:54,309 --> 00:07:52,479
is is duller and and has a much

57
00:07:55,909 --> 00:07:54,319
fuzzier aspect to it and so you can

58
00:07:58,150 --> 00:07:55,919
actually see smoke coming into the view

59
00:08:00,469 --> 00:07:58,160
right now clouds top left but smoke

60
00:08:02,070 --> 00:08:00,479
coming into the view on the right of the

61
00:08:04,230 --> 00:08:02,080
picture where you're kind of losing a

62
00:08:06,710 --> 00:08:04,240
lot of the sense of focus

63
00:08:08,309 --> 00:08:06,720

a lot of the detail on the ground

64

00:08:10,230 --> 00:08:08,319

on the right side of the view in the

65

00:08:12,950 --> 00:08:10,240

foreground there are dry

66

00:08:15,909 --> 00:08:12,960

salty valleys where you can see sharp

67

00:08:17,350 --> 00:08:15,919

definition but top right coming in there

68

00:08:19,670 --> 00:08:17,360

is that loss of definition that we

69

00:08:21,270 --> 00:08:19,680

associate with big smoke poles you often

70

00:08:23,589 --> 00:08:21,280

can't see where the smoke is coming from

71

00:08:24,550 --> 00:08:23,599

but almost for sure that is

72

00:08:26,309 --> 00:08:24,560

smoke

73

00:08:28,390 --> 00:08:26,319

from texas and probably from fires in

74

00:08:29,909 --> 00:08:28,400

northern mexico as well

75

00:08:31,990 --> 00:08:29,919

yeah we've heard about the smoke

76

00:08:33,430 --> 00:08:32,000

becoming a growing concern in fact i

77

00:08:35,269 --> 00:08:33,440

heard today some of the schools that are

78

00:08:36,469 --> 00:08:35,279

closed just due to the smoke coverage in

79

00:08:38,709 --> 00:08:36,479

the area

80

00:08:40,230 --> 00:08:38,719

i hadn't heard about school closings but

81

00:08:42,949 --> 00:08:40,240

i looked at a map this morning that

82

00:08:45,590 --> 00:08:42,959

showed that rather than than individual

83

00:08:47,350 --> 00:08:45,600

fires you see huge amounts of smoke so i

84

00:08:48,870 --> 00:08:47,360

mean the the smoke effect hundreds of

85

00:08:51,269 --> 00:08:48,880

miles from the source

86

00:08:53,430 --> 00:08:51,279

is starting to be really felt um

87

00:08:54,870 --> 00:08:53,440

especially around big cities where

88

00:08:57,110 --> 00:08:54,880

people who are

89

00:09:01,990 --> 00:08:57,120

who have lung complaints are being

90

00:09:05,990 --> 00:09:04,070

the vehicle is still traveling over

91

00:09:09,670 --> 00:09:06,000

mexico but i believe parts of texas are

92

00:09:11,030 --> 00:09:09,680

coming into view i was a

93

00:09:12,389 --> 00:09:11,040

kind of stunned the other day to hear

94

00:09:14,150 --> 00:09:12,399

mike mention that they were flying over

95

00:09:19,990 --> 00:09:14,160

chicago but they could still look back

96

00:09:23,350 --> 00:09:21,750

in the middle of the view is the city of

97

00:09:25,910 --> 00:09:23,360

austin you can't quite see it it's on

98

00:09:28,470 --> 00:09:25,920

the edge of the the dark line there

99

00:09:30,230 --> 00:09:28,480

and the bastrop fire is right next to it

100

00:09:32,150 --> 00:09:30,240

which is apparently 90 percent

101
00:09:34,550 --> 00:09:32,160
controlled so that you can't really see

102
00:09:36,949 --> 00:09:34,560
very much of the fire itself anymore but

103
00:09:39,590 --> 00:09:36,959
a bit to the right of that is a big

104
00:09:43,110 --> 00:09:39,600
diffuse mass which is uh where the fires

105
00:09:45,190 --> 00:09:43,120
are north of houston and in east texas

106
00:09:47,509 --> 00:09:45,200
um

107
00:09:49,670 --> 00:09:47,519
that smoke is is proceeding out to the

108
00:09:51,269 --> 00:09:49,680
south and you can see smoke going across

109
00:10:02,790 --> 00:09:51,279
the coastline at the bottom of the

110
00:10:07,190 --> 00:10:04,230
coming into the middle of the picture

111
00:10:09,350 --> 00:10:07,200
right now is another uh patch of white

112
00:10:13,190 --> 00:10:09,360
and uh that i believe is the biggest

113
00:10:14,949 --> 00:10:13,200

fire up in northeast texas and houston

114

00:10:16,710 --> 00:10:14,959

stationed mike and oran from the cupola

115

00:10:19,910 --> 00:10:16,720

as you can see the uh the fires are

116

00:10:24,470 --> 00:10:22,230

we are watching mike thanks

117

00:10:26,790 --> 00:10:24,480

once again

118

00:10:29,509 --> 00:10:26,800

unfortunately it doesn't look like uh

119

00:10:31,030 --> 00:10:29,519

no rain clouds near in this entire state

120

00:10:32,389 --> 00:10:31,040

and all the clouds we have looked like

121

00:10:36,870 --> 00:10:32,399

they're a smoke

122

00:10:41,430 --> 00:10:38,710

the line crossing the center of the view

123

00:10:44,230 --> 00:10:41,440

is the red river and the patch of white

124

00:10:46,150 --> 00:10:44,240

just below that in the picture is

125

00:10:47,269 --> 00:10:46,160

that combination of fires in northeast

126
00:10:48,949 --> 00:10:47,279
texas

127
00:10:51,990 --> 00:10:48,959
coming in the top of the view is is

128
00:10:53,750 --> 00:10:52,000
cloud and the uh the wide

129
00:10:55,590 --> 00:10:53,760
valley of the mississippi

130
00:11:09,990 --> 00:10:55,600
um kind of stretched diagonally across

131
00:11:13,990 --> 00:11:12,230
yeah we could see the the area actually

132
00:11:27,030 --> 00:11:14,000
you could see the burned area around the

133
00:11:30,230 --> 00:11:28,710
uh this is an oblique view that we're

134
00:11:32,069 --> 00:11:30,240
looking at at the moment on the screen

135
00:11:34,230 --> 00:11:32,079
but uh the astronaut is obviously

136
00:11:36,550 --> 00:11:34,240
looking straight beneath him because the

137
00:11:38,870 --> 00:11:36,560
pass is taking them right just east of

138
00:11:41,030 --> 00:11:38,880

texas

139

00:11:44,870 --> 00:11:41,040

for training purposes starting to moving

140

00:11:44,880 --> 00:11:58,870

gabby satoshi and we're watching thanks

141

00:12:02,629 --> 00:12:00,710

dr wilkinson i'm curious

142

00:12:04,470 --> 00:12:02,639

of this imagery is this being used by

143

00:12:05,190 --> 00:12:04,480

researchers as well we know that we've

144

00:12:06,550 --> 00:12:05,200

been

145

00:12:08,550 --> 00:12:06,560

making it available to the public and

146

00:12:11,269 --> 00:12:08,560

media and certainly mike's been watching

147

00:12:14,949 --> 00:12:11,279

but is this type of uh imagery also

148

00:12:17,350 --> 00:12:14,959

being re used by researchers or

149

00:12:19,990 --> 00:12:17,360

state workers it could certainly be we

150

00:12:23,430 --> 00:12:20,000

have actually used uh fire pictures of

151
00:12:24,949 --> 00:12:23,440
the earth to count fires globally so

152
00:12:26,550 --> 00:12:24,959
views like this

153
00:12:27,750 --> 00:12:26,560
are certainly useful scientifically i

154
00:12:29,829 --> 00:12:27,760
don't know whether these will be in

155
00:12:32,150 --> 00:12:29,839
particular but they certainly could be

156
00:12:33,670 --> 00:12:32,160
there are lots of sources of information

157
00:12:38,470 --> 00:12:33,680
on fires but these could certainly be

158
00:12:43,110 --> 00:12:40,790
in observations like uh mike reporting

159
00:13:14,629 --> 00:12:43,120
that he could even see the detail of

160
00:13:19,430 --> 00:13:16,949
and the space station continuing on a

161
00:13:22,389 --> 00:13:19,440
northeasterly track it's now just passed

162
00:13:24,150 --> 00:13:22,399
over arkansas and continuing on a track

163
00:13:26,069 --> 00:13:24,160

that will take it over

164

00:13:27,670 --> 00:13:26,079

it's approaching uh louisville and

165

00:13:29,829 --> 00:13:27,680

cincinnati

166

00:13:32,949 --> 00:13:29,839

so portions of texas out of view as far

167

00:13:35,430 --> 00:13:32,959

as this camera view but again another

168

00:13:38,389 --> 00:13:35,440

pass right over the state of texas and

169

00:13:40,790 --> 00:13:38,399

in this case directly above some of the

170

00:13:43,430 --> 00:13:40,800

bastrop area which has been one of the

171

00:13:44,230 --> 00:13:43,440

most highlighted areas an extensive site

172

00:13:47,590 --> 00:13:44,240

for

173

00:13:49,509 --> 00:13:47,600

the wildfires occurring in texas

174

00:13:50,870 --> 00:13:49,519

again thank you for joining us dr

175

00:13:53,590 --> 00:13:50,880

wilkinson we really appreciate your

176

00:13:55,910 --> 00:13:53,600

expertise and we'll continue to monitor

177

00:13:57,990 --> 00:13:55,920

these passes we know that your team is

178

00:13:59,590 --> 00:13:58,000

helping to identify these in advance for

179

00:14:01,509 --> 00:13:59,600

the crew and for researchers thank you