



1  
00:00:03,750 --> 00:00:02,310  
hi everybody josh barley here inside

2  
00:00:05,269 --> 00:00:03,760  
mission control houston i'm sitting next

3  
00:00:06,789 --> 00:00:05,279  
to you astronaut ron garan we're going

4  
00:00:08,310 --> 00:00:06,799  
to be talking about uh one of the i

5  
00:00:09,270 --> 00:00:08,320  
think one of the cooler aspects of space

6  
00:00:10,549 --> 00:00:09,280  
flight is something that's very

7  
00:00:11,669 --> 00:00:10,559  
interesting you know over the past 50

8  
00:00:13,110 --> 00:00:11,679  
years while

9  
00:00:15,749 --> 00:00:13,120  
astronauts have been flying i think one

10  
00:00:17,510 --> 00:00:15,759  
of the more remarkable things is that

11  
00:00:18,950 --> 00:00:17,520  
pictures of our own planet have been so

12  
00:00:20,310 --> 00:00:18,960  
powerful and i'm not sure that was

13  
00:00:22,470 --> 00:00:20,320

expected but you think back to some of

14

00:00:24,310 --> 00:00:22,480

the more iconic imagery of apollo the uh

15

00:00:26,790 --> 00:00:24,320

you know the earthrise and the the blue

16

00:00:28,790 --> 00:00:26,800

marble that apollo 17 took and it's been

17

00:00:30,470 --> 00:00:28,800

our own planet which is really sort of

18

00:00:32,069 --> 00:00:30,480

taking people's breath away hasn't it

19

00:00:33,430 --> 00:00:32,079

and i think that was a big surprise i

20

00:00:34,950 --> 00:00:33,440

think you know we went to the moon to

21

00:00:36,630 --> 00:00:34,960

discover the moon and i think we

22

00:00:37,750 --> 00:00:36,640

discovered ourselves and the process and

23

00:00:39,830 --> 00:00:37,760

i think it's a

24

00:00:41,270 --> 00:00:39,840

it's a really um

25

00:00:42,950 --> 00:00:41,280

really important part of space

26

00:00:44,549 --> 00:00:42,960

exploration is to be able to not only

27

00:00:46,310 --> 00:00:44,559

capture what we're doing

28

00:00:47,990 --> 00:00:46,320

in space but also to capture what's

29

00:00:49,670 --> 00:00:48,000

happening on the ground what's happening

30

00:00:51,670 --> 00:00:49,680

here on earth and it really gives us a

31

00:00:52,549 --> 00:00:51,680

unique perspective to do that yeah we're

32

00:00:54,310 --> 00:00:52,559

going to start taking a look at some of

33

00:00:56,310 --> 00:00:54,320

the pictures that ron and his crew gap

34

00:00:57,910 --> 00:00:56,320

capture back there in expeditions 27 and

35

00:00:59,029 --> 00:00:57,920

28 correct twenty seven twenty dollars

36

00:01:00,549 --> 00:00:59,039

i'll make sure i have my numbers right

37

00:01:01,670 --> 00:01:00,559

so let's take a look at them real quick

38

00:01:04,469 --> 00:01:01,680

on the screen and we'll talk about some

39

00:01:06,310 --> 00:01:04,479

of these uh so that is this is uh the

40

00:01:08,550 --> 00:01:06,320

north island of new zealand and actually

41

00:01:10,550 --> 00:01:08,560

um the significant significance of this

42

00:01:13,109 --> 00:01:10,560

to me is that that this was the first

43

00:01:16,230 --> 00:01:13,119

picture that i tweeted from space oh wow

44

00:01:18,710 --> 00:01:16,240

and um that is a really you know a very

45

00:01:20,710 --> 00:01:18,720

very powerful um tool that we have to

46

00:01:23,030 --> 00:01:20,720

interact with with people on the ground

47

00:01:25,190 --> 00:01:23,040

and this uh this particular picture i

48

00:01:27,749 --> 00:01:25,200

think got about 120 000 views in the

49

00:01:29,109 --> 00:01:27,759

first 24 hours it was retweeted by the

50

00:01:30,630 --> 00:01:29,119

white house and it was

51  
00:01:32,630 --> 00:01:30,640  
it generated a lot of buzz and it's a

52  
00:01:34,550 --> 00:01:32,640  
it's a way for us to to really bring

53  
00:01:35,990 --> 00:01:34,560  
people along on our mission not just as

54  
00:01:38,149 --> 00:01:36,000  
spectators but as fellow crewmates

55  
00:01:40,870 --> 00:01:38,159  
because we can interact with uh people

56  
00:01:42,789 --> 00:01:40,880  
on the ground and and it really um opens

57  
00:01:43,910 --> 00:01:42,799  
up a whole new way of interaction for us

58  
00:01:46,389 --> 00:01:43,920  
yeah let's take a look at the next one

59  
00:01:47,990 --> 00:01:46,399  
this is i think this is botswana

60  
00:01:51,109 --> 00:01:48,000  
this is uh this is botswana that's right

61  
00:01:53,590 --> 00:01:51,119  
that's the uh acavango uh delta

62  
00:01:56,389 --> 00:01:53,600  
and you know this is this is one of the

63  
00:01:57,590 --> 00:01:56,399

the most recognizable um

64

00:01:58,709 --> 00:01:57,600

features on the ground when you look

65

00:02:00,950 --> 00:01:58,719

back at earth there's there's a number

66

00:02:02,709 --> 00:02:00,960

of places around the world that when you

67

00:02:04,789 --> 00:02:02,719

look at it you know instantly where you

68

00:02:07,109 --> 00:02:04,799

are and this is botswana and it's um you

69

00:02:08,710 --> 00:02:07,119

know it's a beautiful beautiful scene

70

00:02:10,389 --> 00:02:08,720

it's in the middle you know if we panned

71

00:02:12,150 --> 00:02:10,399

back you'd see nothing but desert for

72

00:02:14,790 --> 00:02:12,160

you know hundreds and hundreds of miles

73

00:02:16,710 --> 00:02:14,800

and so this is a gigantic oasis you know

74

00:02:19,110 --> 00:02:16,720

that skinny part on the left is is about

75

00:02:21,910 --> 00:02:19,120

six miles wide the whole thing is about

76

00:02:24,070 --> 00:02:21,920

a hundred miles long uh and it is it

77

00:02:25,990 --> 00:02:24,080

contains incredible biodiversity this

78

00:02:27,990 --> 00:02:26,000

you know this is a perfect example that

79

00:02:30,150 --> 00:02:28,000

water is life and and this water right

80

00:02:33,110 --> 00:02:30,160

here in the middle of the otherwise uh

81

00:02:35,350 --> 00:02:33,120

desert uh is home to you know enormous

82

00:02:38,229 --> 00:02:35,360

amount of species of animals and

83

00:02:40,470 --> 00:02:38,239

um you know it really is is striking

84

00:02:41,830 --> 00:02:40,480

from from uh from space and to me i'm

85

00:02:43,430 --> 00:02:41,840

from space it looks like this giant

86

00:02:44,550 --> 00:02:43,440

paintbrush on the ground so it's such a

87

00:02:45,670 --> 00:02:44,560

contrast between everything that was

88

00:02:46,869 --> 00:02:45,680

around it it looks like nothing and then

89

00:02:48,550 --> 00:02:46,879

there's there's this live everything in

90

00:02:50,550 --> 00:02:48,560

the middle let's talk about something

91

00:02:51,750 --> 00:02:50,560

that you guys call earth glow right yeah

92

00:02:53,110 --> 00:02:51,760

next which i think is australia that

93

00:02:55,110 --> 00:02:53,120

we've got on here

94

00:02:56,949 --> 00:02:55,120

um yeah that's right yeah so that's a

95

00:02:59,509 --> 00:02:56,959

picture i i believe mike fossum took

96

00:03:01,430 --> 00:02:59,519

this picture of me in the cupola there

97

00:03:02,309 --> 00:03:01,440

on the right you can see the cupola and

98

00:03:03,350 --> 00:03:02,319

um

99

00:03:04,790 --> 00:03:03,360

a lot of people when they see these

100

00:03:07,030 --> 00:03:04,800

pictures a lot of the time lapse has

101  
00:03:08,470 --> 00:03:07,040  
this air glow effect in it and uh people

102  
00:03:09,509 --> 00:03:08,480  
mistake that for the atmosphere the

103  
00:03:12,229 --> 00:03:09,519  
limits of the atmosphere and the

104  
00:03:13,830 --> 00:03:12,239  
atmosphere is is significantly thinner

105  
00:03:16,390 --> 00:03:13,840  
than that so if you look at that air

106  
00:03:18,790 --> 00:03:16,400  
glow and you look to the left uh the

107  
00:03:21,030 --> 00:03:18,800  
dark part between the green and the

108  
00:03:22,790 --> 00:03:21,040  
earth is the atmosphere wow so that's

109  
00:03:24,390 --> 00:03:22,800  
how paper thin it is and it really is

110  
00:03:26,630 --> 00:03:24,400  
sobering to think that that paper thin

111  
00:03:28,470 --> 00:03:26,640  
layer is all that protects every living

112  
00:03:30,229 --> 00:03:28,480  
thing on on earth and

113  
00:03:32,070 --> 00:03:30,239

this is over coastal australia i believe

114

00:03:34,550 --> 00:03:32,080

that city down there is sydney i'm not

115

00:03:37,030 --> 00:03:34,560

exactly positive about that but this is

116

00:03:38,869 --> 00:03:37,040

a good um shot that shows how we get

117

00:03:41,430 --> 00:03:38,879

these how we get these pictures i mean

118

00:03:42,470 --> 00:03:41,440

this is this is basically the the

119

00:03:44,149 --> 00:03:42,480

spot

120

00:03:45,509 --> 00:03:44,159

of choice on the space station to take

121

00:03:47,190 --> 00:03:45,519

pictures because it has such a great

122

00:03:48,869 --> 00:03:47,200

view and you could see out on the

123

00:03:51,190 --> 00:03:48,879

horizon and you know you know we're not

124

00:03:53,110 --> 00:03:51,200

taking shots just straight down yeah at

125

00:03:54,229 --> 00:03:53,120

the end of your side yeah and it's it's

126

00:03:55,910 --> 00:03:54,239

important i think for a number of

127

00:03:58,070 --> 00:03:55,920

reasons and and one

128

00:03:59,589 --> 00:03:58,080

is that it it helps us to capture some

129

00:04:00,550 --> 00:03:59,599

some of the emotion that you have when

130

00:04:02,309 --> 00:04:00,560

you're up there now we take all these

131

00:04:05,270 --> 00:04:02,319

pictures in our free time we're not

132

00:04:07,429 --> 00:04:05,280

scheduled um normally to take pictures

133

00:04:08,470 --> 00:04:07,439

of the earth and so it's um something

134

00:04:10,630 --> 00:04:08,480

that we like to do you know there's

135

00:04:12,470 --> 00:04:10,640

scientific reasons uh for for taking

136

00:04:14,149 --> 00:04:12,480

these pictures we like to document the

137

00:04:17,430 --> 00:04:14,159

effects of human impact on the

138

00:04:19,349 --> 00:04:17,440

environment of natural disasters and um

139

00:04:20,550 --> 00:04:19,359

but also we want to capture the human

140

00:04:22,550 --> 00:04:20,560

experience of being in space and

141

00:04:24,469 --> 00:04:22,560

sometimes uh you know a place like the

142

00:04:25,749 --> 00:04:24,479

cupola allows us to do that i think

143

00:04:27,030 --> 00:04:25,759

that's why it gets the attention that it

144

00:04:29,350 --> 00:04:27,040

does yeah you know so let's take a look

145

00:04:30,950 --> 00:04:29,360

you did a spacewalker a few actually

146

00:04:32,870 --> 00:04:30,960

this is you

147

00:04:34,629 --> 00:04:32,880

um again mike fossum took this picture

148

00:04:36,230 --> 00:04:34,639

um and this is this is not intended to

149

00:04:38,230 --> 00:04:36,240

be an earth ops picture but but it

150

00:04:40,310 --> 00:04:38,240

actually is so you could see a qatar and

151

00:04:42,150 --> 00:04:40,320

i'm actually standing right over saudi

152

00:04:45,909 --> 00:04:42,160

arabia and you can see bahrain and and

153

00:04:47,270 --> 00:04:45,919

um iran off to to the right um beautiful

154

00:04:48,150 --> 00:04:47,280

shot of

155

00:04:51,990 --> 00:04:48,160

of

156

00:04:55,110 --> 00:04:52,000

you know

157

00:04:57,590 --> 00:04:55,120

impression that we're standing on top of

158

00:04:59,510 --> 00:04:57,600

the world do you get a sense of how high

159

00:05:01,590 --> 00:04:59,520

up you are when you do this i mean do

160

00:05:03,270 --> 00:05:01,600

you look down and go uh i hope i don't

161

00:05:04,469 --> 00:05:03,280

fall i mean i know obviously you can't

162

00:05:06,310 --> 00:05:04,479

we are falling

163

00:05:07,749 --> 00:05:06,320

that's true

164

00:05:10,870 --> 00:05:07,759

but we're also traveling five miles a

165

00:05:13,270 --> 00:05:10,880

second so we're okay so but um

166

00:05:15,029 --> 00:05:13,280

no i think you know for for me you you

167

00:05:16,629 --> 00:05:15,039

understand how high above the the world

168

00:05:18,230 --> 00:05:16,639

you are and um it just gives you this

169

00:05:20,390 --> 00:05:18,240

tremendous view and

170

00:05:21,909 --> 00:05:20,400

um you're not worried about falling down

171

00:05:23,110 --> 00:05:21,919

to the earth because like i said we are

172

00:05:25,029 --> 00:05:23,120

falling down the earth

173

00:05:27,270 --> 00:05:25,039

you are concerned and your concentration

174

00:05:28,950 --> 00:05:27,280

is on floating away from the station

175

00:05:30,710 --> 00:05:28,960

yeah and making sure that that doesn't

176

00:05:31,830 --> 00:05:30,720

happen so that's that's the big concern

177

00:05:33,909 --> 00:05:31,840

let's take a look at this next picture

178

00:05:35,430 --> 00:05:33,919

this is uh i think 135 that we've got on

179

00:05:36,710 --> 00:05:35,440

here now the question i've got about

180

00:05:37,990 --> 00:05:36,720

this is that you know you guys took

181

00:05:39,990 --> 00:05:38,000

these photos both because they're

182

00:05:41,029 --> 00:05:40,000

spectacular but there was also a an

183

00:05:42,710 --> 00:05:41,039

engineering reason that you took

184

00:05:44,390 --> 00:05:42,720

pictures of themselves right heat shield

185

00:05:45,590 --> 00:05:44,400

but you know people don't realize that

186

00:05:47,189 --> 00:05:45,600

you know you guys don't use just

187

00:05:48,950 --> 00:05:47,199

point-and-shoot cameras onboard the

188

00:05:50,390 --> 00:05:48,960

space these are actually high-end

189

00:05:51,830 --> 00:05:50,400

professional level cameras you have to

190

00:05:54,070 --> 00:05:51,840

get trained on you have to become almost

191

00:05:55,909 --> 00:05:54,080

a professional level photographer

192

00:05:57,830 --> 00:05:55,919

yeah i mean we do get a lot of training

193

00:06:00,390 --> 00:05:57,840

and this is a shot right before we did

194

00:06:02,790 --> 00:06:00,400

the rpm so this rotation maneuver that

195

00:06:04,550 --> 00:06:02,800

allows us to take very detailed um

196

00:06:06,629 --> 00:06:04,560

technical pictures of the the heat

197

00:06:08,790 --> 00:06:06,639

shield underneath the shuttle and this

198

00:06:10,550 --> 00:06:08,800

is atlantis on its on its last mission

199

00:06:12,710 --> 00:06:10,560

the last mission of the

200

00:06:14,710 --> 00:06:12,720

of the space shuttle program and we were

201  
00:06:16,390 --> 00:06:14,720  
getting set up for the rpm and and we

202  
00:06:19,029 --> 00:06:16,400  
flew right over the bahamas and that's

203  
00:06:20,230 --> 00:06:19,039  
long island to the right um and exuma

204  
00:06:22,230 --> 00:06:20,240  
island to the left you can see the

205  
00:06:24,230 --> 00:06:22,240  
progress uh in the view and i actually i

206  
00:06:25,830 --> 00:06:24,240  
purposely framed that so you can get a

207  
00:06:28,390 --> 00:06:25,840  
sensation that we're taking that from

208  
00:06:30,230 --> 00:06:28,400  
the from the uh space station and you

209  
00:06:31,590 --> 00:06:30,240  
know i just look down as we're getting

210  
00:06:34,950 --> 00:06:31,600  
set up we're you know getting ready it's

211  
00:06:36,309 --> 00:06:34,960  
a very uh uh choreographed type of event

212  
00:06:37,670 --> 00:06:36,319  
trying to get these pictures and as

213  
00:06:39,590 --> 00:06:37,680

we're getting set up i saw that that

214

00:06:40,950 --> 00:06:39,600

view and just said oh we hold up there

215

00:06:42,950 --> 00:06:40,960

you gotta take that picture right there

216

00:06:44,390 --> 00:06:42,960

so that was that was really uh that's

217

00:06:45,909 --> 00:06:44,400

one of my favorite shuttle pictures now

218

00:06:47,510 --> 00:06:45,919

you've been very active on twitter uh

219

00:06:48,469 --> 00:06:47,520

you tweeted out quite a bit of pictures

220

00:06:49,350 --> 00:06:48,479

while you were up there let's take a

221

00:06:51,110 --> 00:06:49,360

look at some of these i think these are

222

00:06:53,589 --> 00:06:51,120

some fires over uh south africa if i'm

223

00:06:55,350 --> 00:06:53,599

not mistaken um actually the whole not

224

00:06:57,830 --> 00:06:55,360

not just south africa the whole southern

225

00:06:59,189 --> 00:06:57,840

continent of africa and this is um these

226

00:07:01,749 --> 00:06:59,199

are i don't believe these are wildfires

227

00:07:04,469 --> 00:07:01,759

these are i think just periodic seasonal

228

00:07:07,670 --> 00:07:04,479

crop burning but what really struck me

229

00:07:09,110 --> 00:07:07,680

of this picture was that the smoke

230

00:07:11,510 --> 00:07:09,120

engulfed the entire atmosphere all the

231

00:07:13,270 --> 00:07:11,520

way up to the limits of space and

232

00:07:14,950 --> 00:07:13,280

this is not um

233

00:07:16,070 --> 00:07:14,960

you know only in africa i mean all

234

00:07:17,909 --> 00:07:16,080

around the world you see this at

235

00:07:20,150 --> 00:07:17,919

different different seasons uh you'll

236

00:07:21,670 --> 00:07:20,160

see that the crops starting to be burned

237

00:07:23,350 --> 00:07:21,680

and it really has has a tremendous

238

00:07:25,430 --> 00:07:23,360

effect it basically like i said fills up

239

00:07:28,230 --> 00:07:25,440

the entire atmosphere oh and in this

240

00:07:30,070 --> 00:07:28,240

case you know a whole part of a very

241

00:07:32,469 --> 00:07:30,080

large continent was completely engulfed

242

00:07:33,510 --> 00:07:32,479

in smoke as far as you could see and you

243

00:07:34,870 --> 00:07:33,520

only get that perspective whenever you

244

00:07:36,629 --> 00:07:34,880

get actually off the planet and take a

245

00:07:38,710 --> 00:07:36,639

look down below and see exactly how

246

00:07:40,309 --> 00:07:38,720

these things are you know

247

00:07:41,749 --> 00:07:40,319

affecting a continent right at that

248

00:07:43,029 --> 00:07:41,759

point you know right so all right

249

00:07:44,550 --> 00:07:43,039

hurricanes are always popular i think

250

00:07:45,909 --> 00:07:44,560

we've got a shot of hurricane irene if

251

00:07:47,909 --> 00:07:45,919

i'm not there it is

252

00:07:49,670 --> 00:07:47,919

yeah this is a hurricane irene we took

253

00:07:51,270 --> 00:07:49,680

this picture you can see cuba there in

254

00:07:53,670 --> 00:07:51,280

the in the foreground

255

00:07:56,070 --> 00:07:53,680

and um you know hurricanes are scary

256

00:07:57,670 --> 00:07:56,080

even from space and this is right before

257

00:07:59,270 --> 00:07:57,680

it made landfall

258

00:08:01,430 --> 00:07:59,280

i think i think it was about 120 mile

259

00:08:03,350 --> 00:08:01,440

our wings winds it was a cat 3 hurricane

260

00:08:05,029 --> 00:08:03,360

at the time it

261

00:08:06,869 --> 00:08:05,039

went up the whole east coast of the us

262

00:08:07,990 --> 00:08:06,879

and i've got a whole series of of these

263

00:08:09,670 --> 00:08:08,000

pictures

264

00:08:11,589 --> 00:08:09,680

as it was coming um

265

00:08:12,390 --> 00:08:11,599

making landfall i made several landfalls

266

00:08:14,150 --> 00:08:12,400

actually

267

00:08:15,749 --> 00:08:14,160

and what's interesting about this is you

268

00:08:17,749 --> 00:08:15,759

could see the calm before the storm i

269

00:08:19,589 --> 00:08:17,759

mean i have a picture of new york uh

270

00:08:21,110 --> 00:08:19,599

right before it it got there you could

271

00:08:23,270 --> 00:08:21,120

you know you could see it's a crystal

272

00:08:24,950 --> 00:08:23,280

clear day in new york city and then

273

00:08:27,430 --> 00:08:24,960

right offshore you could see irene

274

00:08:28,710 --> 00:08:27,440

barreling down and it's and it really is

275

00:08:30,710 --> 00:08:28,720

in that particular picture you don't

276

00:08:32,550 --> 00:08:30,720

really get a good sense of the eye of

277

00:08:36,149 --> 00:08:32,560

the hurricane but a lot of times we do

278

00:08:37,990 --> 00:08:36,159

capture uh the eye and and it really um

279

00:08:39,589 --> 00:08:38,000

looks pretty scary from space we had

280

00:08:41,110 --> 00:08:39,599

three hurricanes while we're up there

281

00:08:42,870 --> 00:08:41,120

wow and one of the things that we really

282

00:08:45,030 --> 00:08:42,880

tried to do is it was kept capture

283

00:08:46,230 --> 00:08:45,040

time-lapse photography of the hurricane

284

00:08:48,630 --> 00:08:46,240

so you could see some of the movement of

285

00:08:51,030 --> 00:08:48,640

it and i think that was really a good

286

00:08:54,150 --> 00:08:51,040

tool to show um you know help with the

287

00:08:55,829 --> 00:08:54,160

projections and also uh you know have

288

00:08:56,870 --> 00:08:55,839

people on the ground take the cirrus hey

289

00:08:58,150 --> 00:08:56,880

you know yeah if you're getting an

290

00:09:00,389 --> 00:08:58,160

evacuation order you might want to take

291

00:09:01,590 --> 00:09:00,399

this seriously this is a pretty big one

292

00:09:02,630 --> 00:09:01,600

well and you know one thing about the

293

00:09:03,829 --> 00:09:02,640

hurricane pictures you know we've got

294

00:09:05,350 --> 00:09:03,839

satellites to take pictures of these i

295

00:09:07,509 --> 00:09:05,360

think there's something

296

00:09:09,350 --> 00:09:07,519

that captures people's uh attention

297

00:09:10,310 --> 00:09:09,360

whenever a human takes the picture it's

298

00:09:11,670 --> 00:09:10,320

a little bit different because it's like

299

00:09:13,030 --> 00:09:11,680

they're experiencing it with you you

300

00:09:14,470 --> 00:09:13,040

know from your advantage right right

301

00:09:16,550 --> 00:09:14,480

exactly and it's interesting you know

302

00:09:17,829 --> 00:09:16,560

you feel uh at the same time you feel

303

00:09:19,750 --> 00:09:17,839

detached when you're living for months

304

00:09:21,509 --> 00:09:19,760

and months in space but at the same time

305

00:09:22,949 --> 00:09:21,519

you feel more connected because we could

306

00:09:24,790 --> 00:09:22,959

you know watch on the news you know we

307

00:09:27,030 --> 00:09:24,800

do get the news up there watch about a

308

00:09:29,030 --> 00:09:27,040

wildfire or a hurricane or or some type

309

00:09:30,150 --> 00:09:29,040

of conflict around the world and go oh

310

00:09:31,509 --> 00:09:30,160

we're going to fly over that in five

311

00:09:32,949 --> 00:09:31,519

minutes let's go take a look and so you

312

00:09:35,110 --> 00:09:32,959

feel more connected because you can see

313

00:09:37,670 --> 00:09:35,120

it with your own eyes um even though

314

00:09:39,269 --> 00:09:37,680

you're in this disconnected world of of

315

00:09:40,389 --> 00:09:39,279

the of the international space station

316

00:09:41,750 --> 00:09:40,399

yeah let's take a look at our home state

317

00:09:43,430 --> 00:09:41,760

we've got one from texas i think there's

318

00:09:45,190 --> 00:09:43,440

some fires burning

319

00:09:47,110 --> 00:09:45,200

uh yeah we've got some we've got a lot

320

00:09:49,430 --> 00:09:47,120

of fire wildfires burning now right as

321

00:09:51,670 --> 00:09:49,440

we speak uh around the world and

322

00:09:54,710 --> 00:09:51,680

certainly in our own country and this

323

00:09:57,190 --> 00:09:54,720

was um during a period of where in texas

324

00:09:59,269 --> 00:09:57,200

we had a lot of wildfires and uh did a

325

00:10:01,430 --> 00:09:59,279

tremendous amount of damage and again

326

00:10:03,509 --> 00:10:01,440

you know natural disasters from space

327

00:10:06,230 --> 00:10:03,519

since you get to see such a wide you

328

00:10:07,910 --> 00:10:06,240

know area and see see the the um the

329

00:10:10,710 --> 00:10:07,920

effect of that those area you know the

330

00:10:12,710 --> 00:10:10,720

wide um part of the part of the view

331

00:10:14,470 --> 00:10:12,720

there it's it really is is very

332

00:10:16,389 --> 00:10:14,480

impressive and very um

333

00:10:18,710 --> 00:10:16,399

concerning which part of texas is this

334

00:10:21,430 --> 00:10:18,720

we're looking at so i i this is uh east

335

00:10:23,990 --> 00:10:21,440

texas actually um it's uh not far from

336

00:10:25,670 --> 00:10:24,000

shreveport i believe um so i'm i'm

337

00:10:27,829 --> 00:10:25,680

actually not even convinced that's one

338

00:10:30,069 --> 00:10:27,839

of the wildflower pictures but um maybe

339

00:10:31,670 --> 00:10:30,079

a random fire i think it is a random

340

00:10:33,509 --> 00:10:31,680

fire but it's at the same on the same

341

00:10:35,030 --> 00:10:33,519

day that there was some significant

342

00:10:36,949 --> 00:10:35,040

fires i think in the boston

343

00:10:38,630 --> 00:10:36,959

bastrop area of texas well i'm from east

344

00:10:39,350 --> 00:10:38,640

texas we tend to build big fires and he

345

00:10:40,710 --> 00:10:39,360

says

346

00:10:42,710 --> 00:10:40,720

part of the world all right last picture

347

00:10:44,069 --> 00:10:42,720

let's take a look at libya uh real quick

348

00:10:45,829 --> 00:10:44,079

this is this is striking to me just

349

00:10:47,350 --> 00:10:45,839

because of the color it is it is

350

00:10:49,350 --> 00:10:47,360

striking for the color and the beauty

351  
00:10:50,790 --> 00:10:49,360  
and but what what you don't realize out

352  
00:10:52,550 --> 00:10:50,800  
of this picture is this is the day that

353  
00:10:53,990 --> 00:10:52,560  
tripoli fell wow and so this is an

354  
00:10:56,389 --> 00:10:54,000  
example of one of those times where

355  
00:10:57,670 --> 00:10:56,399  
you're watching the news um usually we'd

356  
00:10:59,030 --> 00:10:57,680  
watch the news during lunch as we're

357  
00:11:00,710 --> 00:10:59,040  
eating our lunch and

358  
00:11:01,829 --> 00:11:00,720  
and realize that tripoli just fell and

359  
00:11:03,269 --> 00:11:01,839  
hey we're going to fly over that in a

360  
00:11:04,550 --> 00:11:03,279  
few minutes let's take some pictures and

361  
00:11:06,630 --> 00:11:04,560  
you can see i mean it looks very

362  
00:11:08,550 --> 00:11:06,640  
beautiful and peaceful and tranquil and

363  
00:11:11,110 --> 00:11:08,560

you don't realize what's raging below in

364

00:11:12,630 --> 00:11:11,120

that in that picture it's really uh

365

00:11:14,310 --> 00:11:12,640

quite a contradiction sobering

366

00:11:15,829 --> 00:11:14,320

contradiction you know the question i've

367

00:11:17,829 --> 00:11:15,839

got is the the colors that you see here

368

00:11:19,190 --> 00:11:17,839

i mean do these cameras actually capture

369

00:11:21,030 --> 00:11:19,200

what you're seeing with your own eyes i

370

00:11:22,710 --> 00:11:21,040

i think they do i think they do there's

371

00:11:24,550 --> 00:11:22,720

there's um

372

00:11:25,910 --> 00:11:24,560

parts of the world that are just very

373

00:11:28,389 --> 00:11:25,920

very unique in the colors that you see

374

00:11:31,110 --> 00:11:28,399

the bahamas um you know jump out

375

00:11:33,509 --> 00:11:31,120

the almost like this neon glowing jewel

376

00:11:36,949 --> 00:11:33,519

out in the middle of the ocean um the

377

00:11:39,269 --> 00:11:36,959

himalayas are the same way um and so it

378

00:11:40,630 --> 00:11:39,279

really really is striking um the

379

00:11:42,470 --> 00:11:40,640

difference in colors and watching the

380

00:11:44,389 --> 00:11:42,480

colors change too they don't they mean

381

00:11:46,310 --> 00:11:44,399

they change as you're watching them but

382

00:11:49,190 --> 00:11:46,320

there's also also seasonal changes as

383

00:11:51,269 --> 00:11:49,200

well and we can watch that line of of

384

00:11:52,949 --> 00:11:51,279

the the colors of the leaves changing

385

00:11:54,230 --> 00:11:52,959

you know go from south to north or north

386

00:11:56,230 --> 00:11:54,240

to south depending on which hemisphere

387

00:11:57,670 --> 00:11:56,240

you're in and just watch that uh happen

388

00:11:58,870 --> 00:11:57,680

over the weeks and months is really

389

00:12:00,230 --> 00:11:58,880

really interesting to say it almost

390

00:12:01,829 --> 00:12:00,240

gives you the sense that we have this

391

00:12:03,750 --> 00:12:01,839

living breathing organism that we live

392

00:12:04,949 --> 00:12:03,760

on we tend to stay very green or brown

393

00:12:06,550 --> 00:12:04,959

here in houston we don't look at that we

394

00:12:07,910 --> 00:12:06,560

don't really get the fall leaves

395

00:12:08,949 --> 00:12:07,920

anything down here so well tell

396

00:12:10,870 --> 00:12:08,959

everybody what your twitter account is

397

00:12:13,030 --> 00:12:10,880

so they can follow you oh it's at astro

398

00:12:14,470 --> 00:12:13,040

underscore ron at astro underscore ron

399

00:12:16,069 --> 00:12:14,480

so follow along with ron he's always

400

00:12:18,230 --> 00:12:16,079

tweeting out some interesting photos and

401  
00:12:18,949 --> 00:12:18,240  
observations thanks for the plug

402  
00:12:20,470 --> 00:12:18,959  
yeah

403  
00:12:21,829 --> 00:12:20,480  
that's what we're here for

404  
00:12:22,870 --> 00:12:21,839  
ron garan astronaut here of course if

405  
00:12:24,550 --> 00:12:22,880  
you'd like to take a look at all these

406  
00:12:25,990 --> 00:12:24,560  
photos that you saw follow ron on

407  
00:12:29,509 --> 00:12:26,000  
twitter or you can log on to the nasa

408  
00:12:32,629 --> 00:12:30,629  
station there's literally hundreds of

409  
00:12:33,910 --> 00:12:32,639  
thousands of photos out there so uh so

410  
00:12:35,269 --> 00:12:33,920  
you can even find your hometown on there