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USTREAM

1
00:00:08,310 --> 00:00:06,070
still to have seen even a part of a

2
00:00:09,750 --> 00:00:08,320
transit of venus is an event to remember

3
00:00:12,150 --> 00:00:09,760
for a lifetime

4
00:00:15,190 --> 00:00:12,160
and we felt more delight than can easily

5
00:00:26,230 --> 00:00:15,200
be expressed and even this slight gleam

6
00:00:30,310 --> 00:00:27,910
welcome back to nasa headquarters in

7
00:00:34,229 --> 00:00:30,320
washington d.c what you're looking at is

8
00:00:37,830 --> 00:00:34,239
a live web stream from norway of the

9
00:00:40,470 --> 00:00:37,840
venus transit the 2012 venus transit as

10
00:00:43,190 --> 00:00:40,480
it nears its completion

11
00:00:45,270 --> 00:00:43,200
back here live with myself al feinberg

12
00:00:47,270 --> 00:00:45,280
senior producer at nasa television

13
00:00:50,150 --> 00:00:47,280

my colleague dwayne brown office of

14
00:00:52,310 --> 00:00:50,160
communications and the head of our

15
00:00:53,430 --> 00:00:52,320
planetary division at nasa science dr

16
00:00:55,910 --> 00:00:53,440
jim green

17
00:00:57,670 --> 00:00:55,920
first we're going to before we

18
00:01:00,150 --> 00:00:57,680
talk a little bit more about the

19
00:01:02,229 --> 00:01:00,160
conclusion that's about about to occur

20
00:01:05,189 --> 00:01:02,239
we're going to turn it over to jason

21
00:01:07,510 --> 00:01:05,199
townsend our media maven social media

22
00:01:10,789 --> 00:01:07,520
maven who has some really cool stuff to

23
00:01:12,310 --> 00:01:10,799
show us jason yeah hi thanks al we're

24
00:01:13,910 --> 00:01:12,320
still plugging along here putting up a

25
00:01:15,749 --> 00:01:13,920
lot of new images and things like that

26
00:01:18,230 --> 00:01:15,759
we've got a couple of new ones up right

27
00:01:19,749 --> 00:01:18,240
now from the solar dynamics observatory

28
00:01:21,749 --> 00:01:19,759
so we're going to start with a full disk

29
00:01:24,630 --> 00:01:21,759
image here this is this you can see is

30
00:01:26,070 --> 00:01:24,640
the full picture of the sun

31
00:01:27,590 --> 00:01:26,080
in a second here we're gonna see if we

32
00:01:29,990 --> 00:01:27,600
have the full picture here we go and

33
00:01:32,789 --> 00:01:30,000
we've got a wonderful picture with uh

34
00:01:34,310 --> 00:01:32,799
venus up in the upper right hand corner

35
00:01:36,630 --> 00:01:34,320
if you zoom in a little bit on the next

36
00:01:38,149 --> 00:01:36,640
shot here you can see it up close it's a

37
00:01:39,830 --> 00:01:38,159
beauty shot there

38
00:01:42,310 --> 00:01:39,840

this is the venus transit going on this

39
00:01:43,590 --> 00:01:42,320
is past the halfway point and then if we

40
00:01:45,190 --> 00:01:43,600
go to the next one you can see in a

41
00:01:46,789 --> 00:01:45,200
slightly different band you can see

42
00:01:49,590 --> 00:01:46,799
there's the sun again and everything

43
00:01:51,910 --> 00:01:49,600
looking really good and uh also if

44
00:01:54,389 --> 00:01:51,920
you're following at astro underscore

45
00:01:55,910 --> 00:01:54,399
pettit on twitter he's been doing a lot

46
00:01:57,990 --> 00:01:55,920
of photography up on the international

47
00:02:00,230 --> 00:01:58,000
space station so here's one of his

48
00:02:03,590 --> 00:02:00,240
images that he had but if you look on

49
00:02:06,149 --> 00:02:03,600
flickr and you follow um the jsc photo

50
00:02:09,350 --> 00:02:06,159
stream on there or you track it on at

51
00:02:11,589 --> 00:02:09,360
nasa or you track it on nasa google plus

52
00:02:14,070 --> 00:02:11,599
or you track it on nasa facebook we've

53
00:02:16,309 --> 00:02:14,080
put up a link to all of the iss pictures

54
00:02:19,030 --> 00:02:16,319
and there's over 900 of them so at this

55
00:02:20,630 --> 00:02:19,040
point from the space station uh remember

56
00:02:23,030 --> 00:02:20,640
to continue joining the conversation

57
00:02:25,350 --> 00:02:23,040
using the hashtag poundvenustransit and

58
00:02:27,430 --> 00:02:25,360
to follow along on nasa on twitter nasa

59
00:02:29,190 --> 00:02:27,440
on facebook and google plus and if you

60
00:02:30,949 --> 00:02:29,200
are taking photos out there make sure

61
00:02:32,150 --> 00:02:30,959
that you're doing it safely but if you

62
00:02:34,470 --> 00:02:32,160
are make sure to upload them to our

63
00:02:36,710 --> 00:02:34,480

flickr gallery we've got a flickr group

64
00:02:38,949 --> 00:02:36,720
going if you look on flickr you can

65
00:02:41,110 --> 00:02:38,959
look for venus transit that's the group

66
00:02:43,270 --> 00:02:41,120
to look for and upload your own photos

67
00:02:45,750 --> 00:02:43,280
we've also heard that we've had over 200

68
00:02:48,550 --> 00:02:45,760
000 continuous simultaneous viewers on

69
00:02:50,630 --> 00:02:48,560
our webcasts online on nasa.gov and on

70
00:02:52,390 --> 00:02:50,640
venustransit.nasa

71
00:02:53,750 --> 00:02:52,400
so it's been incredible thank you all

72
00:02:55,110 --> 00:02:53,760
for joining us throughout the evening

73
00:02:57,030 --> 00:02:55,120
we're going to keep manning the social

74
00:02:58,149 --> 00:02:57,040
media here all the way through the end

75
00:03:00,470 --> 00:02:58,159
of the event and we're going to have

76
00:03:03,030 --> 00:03:00,480
some amazing time lapse videos here at

77
00:03:05,350 --> 00:03:03,040
the end with the entire full transit

78
00:03:06,869 --> 00:03:05,360
going on so thank you guys very much for

79
00:03:08,710 --> 00:03:06,879
joining us and continue joining the

80
00:03:10,550 --> 00:03:08,720
conversation using that hashtag

81
00:03:12,630 --> 00:03:10,560
poundvenus transit

82
00:03:15,270 --> 00:03:12,640
jason thanks so much and we might add

83
00:03:17,110 --> 00:03:15,280
that that 200 000 estimate is very

84
00:03:19,589 --> 00:03:17,120
conservative so

85
00:03:21,589 --> 00:03:19,599
we we like that and in case you missed

86
00:03:24,149 --> 00:03:21,599
it uh don pettit sending down those

87
00:03:26,550 --> 00:03:24,159
imagery uh he is supposed to be sleeping

88
00:03:29,110 --> 00:03:26,560

right now of course he is not he is he

89
00:03:30,869 --> 00:03:29,120
is uh geeked out about this and uh we

90
00:03:32,710 --> 00:03:30,879
thank him so much for giving us

91
00:03:35,430 --> 00:03:32,720
perspective that nobody else

92
00:03:38,869 --> 00:03:35,440
on this planet has now we'd like to take

93
00:03:41,030 --> 00:03:38,879
you to a tape uh presentation that came

94
00:03:43,830 --> 00:03:41,040
from the jet propulsion lab out in

95
00:03:45,990 --> 00:03:43,840
pasadena california and our colleague

96
00:03:47,589 --> 00:03:46,000
gay hill who has something really fun to

97
00:03:50,390 --> 00:03:47,599
show us okay

98
00:03:53,589 --> 00:03:50,400
hi i'm gay hill at nasa's jet propulsion

99
00:03:56,070 --> 00:03:53,599
laboratory in pasadena california and

100
00:03:58,869 --> 00:03:56,080
right now i'm standing in a place called

101
00:04:00,869 --> 00:03:58,879
cardiac hill it is a parking lot

102
00:04:03,110 --> 00:04:00,879
overlooking the lab you see behind me

103
00:04:05,429 --> 00:04:03,120
here and if you look over here you'll

104
00:04:08,149 --> 00:04:05,439
see that about a half dozen of our

105
00:04:10,949 --> 00:04:08,159
jplers have brought in their own

106
00:04:12,949 --> 00:04:10,959
personal telescopes equipped with solar

107
00:04:15,350 --> 00:04:12,959
filters so they can

108
00:04:17,430 --> 00:04:15,360
share this once in a lifetime event with

109
00:04:19,749 --> 00:04:17,440
some of their co-workers and also people

110
00:04:22,310 --> 00:04:19,759
who live in the neighborhood about 200

111
00:04:24,469 --> 00:04:22,320
people have taken us up on this offer

112
00:04:26,550 --> 00:04:24,479
they brought in their kids and they also

113
00:04:28,950 --> 00:04:26,560

got a lesson just a short time ago from

114
00:04:31,749 --> 00:04:28,960
one of our scientists art chimoluski

115
00:04:34,550 --> 00:04:31,759
teaching them exactly what happens

116
00:04:37,270 --> 00:04:34,560
during a venus transit and they got a

117
00:04:39,030 --> 00:04:37,280
free demonstration too take a look

118
00:04:42,230 --> 00:04:39,040
first i'm going to show you why we're

119
00:04:45,749 --> 00:04:42,240
here today what is venus transit so

120
00:04:49,590 --> 00:04:45,759
we're looking here we start seeing venus

121
00:04:52,230 --> 00:04:49,600
and now venus is going across the sun

122
00:04:54,870 --> 00:04:52,240
there we go and keeps on going and we're

123
00:04:57,189 --> 00:04:54,880
going to be watching it okay it's going

124
00:04:58,870 --> 00:04:57,199
to take about five six hours to go all

125
00:05:01,830 --> 00:04:58,880
the way across the sun she was very

126
00:05:04,070 --> 00:05:01,840
quick so you guys what did you think

127
00:05:06,390 --> 00:05:04,080
we thought it was i thought it was cool

128
00:05:09,350 --> 00:05:06,400
i thought it was honestly cool what did

129
00:05:11,270 --> 00:05:09,360
it look like uh it just looked like a

130
00:05:13,590 --> 00:05:11,280
big ball like a marble with a tiny

131
00:05:15,749 --> 00:05:13,600
little pinhead on it at first i didn't

132
00:05:17,590 --> 00:05:15,759
know what it was but then i looked

133
00:05:21,029 --> 00:05:17,600
closer and

134
00:05:23,670 --> 00:05:21,039
it looked like venus i saw the sun but i

135
00:05:24,710 --> 00:05:23,680
saw this tiny black dot

136
00:05:29,670 --> 00:05:24,720
but

137
00:05:32,790 --> 00:05:29,680
then i looked closer and then i saw the

138
00:05:35,909 --> 00:05:32,800

tiny black dog and i knew that was venus

139
00:05:37,590 --> 00:05:35,919
it was um different because i if you

140
00:05:40,230 --> 00:05:37,600
usually look in the sun you get like

141
00:05:42,070 --> 00:05:40,240
blinded but today we could actually see

142
00:05:44,550 --> 00:05:42,080
it what surprised me about it most was

143
00:05:46,310 --> 00:05:44,560
the fact that i guess that i was able to

144
00:05:48,469 --> 00:05:46,320
see it in my lifetime what are you gonna

145
00:05:50,790 --> 00:05:48,479
do tell your grandkids about this

146
00:05:53,430 --> 00:05:50,800
assume i have assuming i have any

147
00:05:56,150 --> 00:05:53,440
i feel very lucky that i get to see it

148
00:05:58,070 --> 00:05:56,160
when i'm at such a low age because i get

149
00:06:00,390 --> 00:05:58,080
to learn a lot it's really cool you can

150
00:06:02,309 --> 00:06:00,400
see it through and this if and if you

151
00:06:05,430 --> 00:06:02,319
can look closely there's like a really

152
00:06:06,390 --> 00:06:05,440
really extremely tiny black dot which is

153
00:06:07,830 --> 00:06:06,400
venus

154
00:06:10,150 --> 00:06:07,840
if you missed this one that's okay

155
00:06:13,029 --> 00:06:10,160
there's another one coming unfortunately

156
00:06:15,110 --> 00:06:13,039
it's a 105 years away so you can

157
00:06:17,029 --> 00:06:15,120
understand why these kids are stoked

158
00:06:19,990 --> 00:06:17,039
that they just witnessed something that

159
00:06:22,230 --> 00:06:20,000
happens just once in a lifetime i'm gay

160
00:06:23,909 --> 00:06:22,240
ye hill from nasa's jet propulsion

161
00:06:25,909 --> 00:06:23,919
laboratory

162
00:06:28,950 --> 00:06:25,919
all right gay thanks so much

163
00:06:30,629 --> 00:06:28,960

great great great job there lots of fun

164
00:06:32,550 --> 00:06:30,639
events like that going on all over the

165
00:06:33,990 --> 00:06:32,560
world and of course

166
00:06:35,510 --> 00:06:34,000
at the different nasa centers and i'm

167
00:06:36,790 --> 00:06:35,520
going to guess that that young man is

168
00:06:40,230 --> 00:06:36,800
going to have green kids just so he

169
00:06:41,670 --> 00:06:40,240
could tell them that he saw that

170
00:06:44,390 --> 00:06:41,680
gentlemen um

171
00:06:46,710 --> 00:06:44,400
uh we're almost near the end here uh

172
00:06:49,430 --> 00:06:46,720
we've got one more place to go before we

173
00:06:50,629 --> 00:06:49,440
wrap things up here we're going to go to

174
00:06:53,510 --> 00:06:50,639
mutual

175
00:06:56,870 --> 00:06:53,520
lancashire england and the uk

176
00:06:59,749 --> 00:06:56,880
and this is where uh

177
00:07:00,830 --> 00:06:59,759
jeremiah horox who is the gentleman in

178
00:07:05,110 --> 00:07:00,840
18

179
00:07:08,070 --> 00:07:05,120
1639 who first observed the

180
00:07:10,469 --> 00:07:08,080
uh transit of venus with i believe it

181
00:07:12,870 --> 00:07:10,479
was jeremiah craven uh

182
00:07:14,790 --> 00:07:12,880
this is the church where he was a curate

183
00:07:17,909 --> 00:07:14,800
and there was a stained glass window of

184
00:07:20,710 --> 00:07:17,919
him uh there in his honor and memory and

185
00:07:23,430 --> 00:07:20,720
they're having a a great uh ceremony

186
00:07:25,189 --> 00:07:23,440
there and a service uh uh

187
00:07:28,469 --> 00:07:25,199
following the events of the day and uh

188
00:07:30,629 --> 00:07:28,479

just a just a cool shot so gentlemen uh

189
00:07:33,749 --> 00:07:30,639
where do we stand it's it's been fun let

190
00:07:36,790 --> 00:07:33,759
me uh let me give a few shout outs uh to

191
00:07:39,749 --> 00:07:36,800
the centers and uh to nasa tv and to the

192
00:07:41,510 --> 00:07:39,759
web and and all of the folks that made

193
00:07:43,189 --> 00:07:41,520
this happen but there's a special person

194
00:07:45,510 --> 00:07:43,199
that i definitely give a shout out to

195
00:07:47,589 --> 00:07:45,520
and that's kristin erickson she is the

196
00:07:50,950 --> 00:07:47,599
director of the planetary

197
00:07:53,909 --> 00:07:50,960
strategic communications and really was

198
00:07:56,070 --> 00:07:53,919
vital to making all of this happen so

199
00:07:58,550 --> 00:07:56,080
kristin erickson thank you we all thank

200
00:08:00,790 --> 00:07:58,560
you the world thanks you great job as

201
00:08:02,469 --> 00:08:00,800
always and obviously reason why we're

202
00:08:04,869 --> 00:08:02,479
here is because of you and all the work

203
00:08:07,749 --> 00:08:04,879
and the teamwork what's going on

204
00:08:08,710 --> 00:08:07,759
folks we're wrapping up here we've had

205
00:08:10,550 --> 00:08:08,720
fun

206
00:08:13,110 --> 00:08:10,560
thanks for hanging out with us all the

207
00:08:15,110 --> 00:08:13,120
social media but we're going to turn to

208
00:08:17,909 --> 00:08:15,120
jim green who jim thank you again for

209
00:08:19,510 --> 00:08:17,919
being with us for this entire time let's

210
00:08:21,510 --> 00:08:19,520
let's sort of wrap this up and put this

211
00:08:24,150 --> 00:08:21,520
in context we've talked about venus

212
00:08:26,629 --> 00:08:24,160
we've had heliophysicists come here

213
00:08:28,070 --> 00:08:26,639

but this is the year of the solar system

214
00:08:30,309 --> 00:08:28,080
yes it is

215
00:08:33,110 --> 00:08:30,319
you've been pretty busy we have justin

216
00:08:34,790 --> 00:08:33,120
and all of your engineers and scientists

217
00:08:36,790 --> 00:08:34,800
tell us about the year solar system and

218
00:08:38,949 --> 00:08:36,800
there's something special happening in

219
00:08:41,909 --> 00:08:38,959
august that's right uh the year of the

220
00:08:44,470 --> 00:08:41,919
solar system started actually about 600

221
00:08:48,310 --> 00:08:44,480
days ago you see it's a mars year

222
00:08:50,470 --> 00:08:48,320
and that's 670 days long or 77 days long

223
00:08:51,269 --> 00:08:50,480
and during that time period we flow flew

224
00:08:52,790 --> 00:08:51,279
by

225
00:08:55,750 --> 00:08:52,800
two comments

226
00:08:58,389 --> 00:08:55,760
uh and we inserted an orbit three

227
00:09:00,150 --> 00:08:58,399
spacecraft messenger around mercury dawn

228
00:09:03,110 --> 00:09:00,160
around a fabulous

229
00:09:04,230 --> 00:09:03,120
asteroid called vesta and uh

230
00:09:07,190 --> 00:09:04,240
two

231
00:09:10,230 --> 00:09:07,200
other spacecraft uh grail a and b which

232
00:09:11,910 --> 00:09:10,240
we now call ebb and flow around the moon

233
00:09:13,910 --> 00:09:11,920
very successful and then we also

234
00:09:15,110 --> 00:09:13,920
launched a spacecraft called juno to

235
00:09:17,910 --> 00:09:15,120
jupiter

236
00:09:20,710 --> 00:09:17,920
and the mars science laboratory was

237
00:09:21,670 --> 00:09:20,720
launched in november of last year to

238
00:09:23,750 --> 00:09:21,680

mars

239
00:09:25,590 --> 00:09:23,760
and that's the next major event in

240
00:09:27,910 --> 00:09:25,600
planetary science

241
00:09:31,269 --> 00:09:27,920
and that is the landing of the curiosity

242
00:09:32,949 --> 00:09:31,279
rover on mars and that will happen

243
00:09:34,310 --> 00:09:32,959
on the east coast

244
00:09:37,590 --> 00:09:34,320
in august

245
00:09:39,430 --> 00:09:37,600
the the 6th at

246
00:09:41,910 --> 00:09:39,440
1 in the morning if you're on the west

247
00:09:44,630 --> 00:09:41,920
coast it'll be about 10 o'clock

248
00:09:47,110 --> 00:09:44,640
uh in the evening on august the 5th and

249
00:09:49,430 --> 00:09:47,120
this is a fabulous rover it's about a

250
00:09:51,990 --> 00:09:49,440
one-ton vehicle it's the most

251
00:09:54,550 --> 00:09:52,000
complicated and sophisticated

252
00:09:56,550 --> 00:09:54,560
spacecraft we've ever built

253
00:09:59,269 --> 00:09:56,560
and it's going to go back in time and

254
00:10:01,509 --> 00:09:59,279
it's going to look at mars in its past

255
00:10:03,430 --> 00:10:01,519
and whether it could have been habitable

256
00:10:04,389 --> 00:10:03,440
in a time period where there was plenty

257
00:10:05,990 --> 00:10:04,399
of water

258
00:10:07,030 --> 00:10:06,000
and other elements

259
00:10:13,269 --> 00:10:07,040
on

260
00:10:14,230 --> 00:10:13,279
what we're looking at

261
00:10:20,230 --> 00:10:14,240
is the

262
00:10:23,030 --> 00:10:20,240
it's goodbye to venus

263
00:10:26,310 --> 00:10:23,040

you know i actually started out earlier

264
00:10:28,230 --> 00:10:26,320
today saying that venus is a real gift

265
00:10:30,949 --> 00:10:28,240
and it really has been

266
00:10:33,110 --> 00:10:30,959
it's enabled us this is live from hawaii

267
00:10:35,030 --> 00:10:33,120
it's really enabled us to

268
00:10:36,630 --> 00:10:35,040
change our view of the solar system

269
00:10:37,670 --> 00:10:36,640
calculate

270
00:10:39,990 --> 00:10:37,680
what

271
00:10:41,670 --> 00:10:40,000
an astronomical unit is away we've used

272
00:10:44,710 --> 00:10:41,680
that yardstick throughout our solar

273
00:10:47,269 --> 00:10:44,720
system it's enabled us to realize the

274
00:10:49,670 --> 00:10:47,279
sun was the center of the solar system

275
00:10:51,269 --> 00:10:49,680
and all our planets went around the sun

276
00:10:53,190 --> 00:10:51,279
that changed

277
00:10:56,230 --> 00:10:53,200
our culture and

278
00:10:58,870 --> 00:10:56,240
okay here's another live shot

279
00:11:02,870 --> 00:10:58,880
another beautiful shot you can see it's

280
00:11:04,230 --> 00:11:02,880
uh from norway now back to hawaii

281
00:11:06,310 --> 00:11:04,240
so venus

282
00:11:07,590 --> 00:11:06,320
is back now

283
00:11:10,389 --> 00:11:07,600
on its way

284
00:11:12,790 --> 00:11:10,399
making its journey around the sun

285
00:11:16,230 --> 00:11:12,800
and it'll be a while as we said another

286
00:11:18,710 --> 00:11:16,240
105.5 years between uh this one and the

287
00:11:21,509 --> 00:11:18,720
next one back to norway and and now

288
00:11:24,949 --> 00:11:21,519

we're seeing it leave in norway

289
00:11:28,949 --> 00:11:24,959
okay so we saw it yeah we saw it live

290
00:11:31,030 --> 00:11:28,959
from live from hawaii and it left

291
00:11:34,710 --> 00:11:31,040
we've lost that contact but here in

292
00:11:37,269 --> 00:11:34,720
norway uh what we do yeah just barely

293
00:11:39,910 --> 00:11:37,279
there and what we do from norway which

294
00:11:41,350 --> 00:11:39,920
is uh you know quite a quite a different

295
00:11:42,389 --> 00:11:41,360
latitude quite a different viewing

296
00:11:43,430 --> 00:11:42,399
perspective

297
00:11:46,069 --> 00:11:43,440
we still

298
00:11:47,829 --> 00:11:46,079
still see it sitting on the disc just a

299
00:11:49,110 --> 00:11:47,839
little bit and it'll be there for a few

300
00:11:50,470 --> 00:11:49,120
more minutes yeah just about it'll

301
00:11:52,310 --> 00:11:50,480
probably be about a five minute

302
00:11:53,910 --> 00:11:52,320
different there okay difference there

303
00:11:55,750 --> 00:11:53,920
maybe a little less but on that order

304
00:11:58,150 --> 00:11:55,760
yeah so jim let's let's let's get back

305
00:12:00,870 --> 00:11:58,160
to um and you know we're saying goodbye

306
00:12:02,470 --> 00:12:00,880
to venus or the sun saying goodbye and

307
00:12:04,870 --> 00:12:02,480
uh you were talking about maws and

308
00:12:06,710 --> 00:12:04,880
curiosity and and exciting things with

309
00:12:08,150 --> 00:12:06,720
the year of the solar system uh can

310
00:12:10,150 --> 00:12:08,160
continue with that

311
00:12:12,310 --> 00:12:10,160
well the year of the solar system as i

312
00:12:13,829 --> 00:12:12,320
said is just made up of a series of

313
00:12:15,829 --> 00:12:13,839

fabulous events

314
00:12:17,509 --> 00:12:15,839
these are mission milestones but what

315
00:12:19,990 --> 00:12:17,519
what the scientists really want is the

316
00:12:22,150 --> 00:12:20,000
data back from those encounters and

317
00:12:24,230 --> 00:12:22,160
orbit insertions and the data has been

318
00:12:26,629 --> 00:12:24,240
flowing in like crazy and it's going to

319
00:12:28,550 --> 00:12:26,639
enable us to make all kinds of new

320
00:12:31,750 --> 00:12:28,560
discoveries and some of those have been

321
00:12:34,310 --> 00:12:31,760
started to come coming out already

322
00:12:35,269 --> 00:12:34,320
great well um i think we're about ready

323
00:12:37,269 --> 00:12:35,279
to

324
00:12:39,750 --> 00:12:37,279
say goodbye but we've got a couple we

325
00:12:41,030 --> 00:12:39,760
have uh another treat uh

326
00:12:42,150 --> 00:12:41,040
and jim you can give us the background

327
00:12:45,030 --> 00:12:42,160
of this all right let me give you the

328
00:12:46,870 --> 00:12:45,040
background of this this is a uh uh

329
00:12:51,829 --> 00:12:46,880
song it's been missing for what a

330
00:12:54,629 --> 00:12:51,839
hundred years about that uh in 1882

331
00:12:55,990 --> 00:12:54,639
many more people saw venus transit than

332
00:12:58,790 --> 00:12:56,000
ever before

333
00:13:02,870 --> 00:12:58,800
and it really uh uh got uh quite a bit

334
00:13:06,550 --> 00:13:02,880
of notoriety and the the top songwriter

335
00:13:07,990 --> 00:13:06,560
the will i am of that day was uh john

336
00:13:09,509 --> 00:13:08,000
philip sousa

337
00:13:12,230 --> 00:13:09,519
and he developed

338
00:13:13,190 --> 00:13:12,240

this song it's called the venus transit

339
00:13:15,190 --> 00:13:13,200
march

340
00:13:17,590 --> 00:13:15,200
and he developed it for a dedication of

341
00:13:19,509 --> 00:13:17,600
a statue of joseph henry that sits right

342
00:13:22,310 --> 00:13:19,519
in front of the castle on the mall now

343
00:13:25,269 --> 00:13:22,320
joseph henry was our first

344
00:13:27,829 --> 00:13:25,279
scientist of the nation and he led the

345
00:13:30,150 --> 00:13:27,839
smithsonian which we now have the air

346
00:13:32,629 --> 00:13:30,160
and space museum and and quite a

347
00:13:34,629 --> 00:13:32,639
wonderful set of museums associated with

348
00:13:35,990 --> 00:13:34,639
that great group so that's what we're

349
00:13:36,790 --> 00:13:36,000
going to go about that's what we're here

350
00:13:38,310 --> 00:13:36,800
with

351
00:13:40,310 --> 00:13:38,320
hello i want to thank i want to thank

352
00:13:42,629 --> 00:13:40,320
jim green i would like to say we'll see

353
00:13:45,269 --> 00:13:42,639
you uh for the next venus transit but i

354
00:13:47,269 --> 00:13:45,279
probably would not be

355
00:13:49,350 --> 00:13:47,279
around for that um i want to thank

356
00:13:52,389 --> 00:13:49,360
everyone watching us

357
00:13:55,269 --> 00:13:52,399
jason townsend you rock man uh all you

358
00:13:57,590 --> 00:13:55,279
folks out there um it's been great with

359
00:13:59,670 --> 00:13:57,600
my colleague al um

360
00:14:01,350 --> 00:13:59,680
take it away my friend well i just a

361
00:14:04,150 --> 00:14:01,360
couple other folks uh our executive

362
00:14:06,389 --> 00:14:04,160
producer fred brown and anthony stewart

363
00:14:09,509 --> 00:14:06,399

tony stewart not the race car driver but

364
00:14:12,949 --> 00:14:09,519
our tony stewart who is uh put it all

365
00:14:15,750 --> 00:14:12,959
together in our crew uh shiva

366
00:14:19,509 --> 00:14:15,760
and eric and cliff and everybody else

367
00:14:21,430 --> 00:14:19,519
the uh john and ves everybody uh in uh

368
00:14:23,030 --> 00:14:21,440
said and master control everybody's

369
00:14:25,269 --> 00:14:23,040
really worked hard we've been here a

370
00:14:27,990 --> 00:14:25,279
long time and it's been a lot of fun so

371
00:14:29,990 --> 00:14:28,000
uh let's say goodbye uh thanks again jim

372
00:14:32,069 --> 00:14:30,000
and everybody else pleasure my pleasure

373
00:14:34,470 --> 00:14:32,079
enjoy the music ladies and gentlemen

374
00:14:36,870 --> 00:14:34,480
enjoy the images and always remember

375
00:15:05,189 --> 00:14:36,880
science never sleeps