
NASA

1
00:00:09,110 --> 00:00:06,550
good morning everyone this is the

2
00:00:10,230 --> 00:00:09,120
post-launch news conference for our smap

3
00:00:13,030 --> 00:00:10,240
mission

4
00:00:14,150 --> 00:00:13,040
and here to discuss the activities from

5
00:00:16,870 --> 00:00:14,160
this morning

6
00:00:19,109 --> 00:00:16,880
first of all our kent kellogg the smap

7
00:00:20,230 --> 00:00:19,119
project manager from the jet propulsion

8
00:00:24,230 --> 00:00:20,240
laboratory

9
00:00:29,029 --> 00:00:26,950
scott higginbotham the nasa alana 10

10
00:00:31,750 --> 00:00:29,039
mission manager from the kennedy space

11
00:00:34,150 --> 00:00:31,760
center

12
00:00:36,630 --> 00:00:34,160
and jeff yoder the deputy associate

13
00:00:38,950 --> 00:00:36,640

administrator for the nasa headquarters

14
00:00:41,030 --> 00:00:38,960
science mission directorate

15
00:00:43,670 --> 00:00:41,040
and we'll begin first

16
00:00:45,670 --> 00:00:43,680
with a very happy

17
00:00:47,270 --> 00:00:45,680
kent kellogg

18
00:00:50,069 --> 00:00:47,280
yes thank you george

19
00:00:51,750 --> 00:00:50,079
we had a terrific ride into space this

20
00:00:53,270 --> 00:00:51,760
morning aboard the united launch

21
00:00:55,029 --> 00:00:53,280
alliance's

22
00:00:57,750 --> 00:00:55,039
delta ii vehicle

23
00:00:59,670 --> 00:00:57,760
they deposited us exactly where we

24
00:01:01,750 --> 00:00:59,680
wanted to be with very very good

25
00:01:04,469 --> 00:01:01,760
accuracy and precision

26
00:01:06,870 --> 00:01:04,479
we had a very nominal separation and i

27
00:01:09,270 --> 00:01:06,880
believe we have that video we can play

28
00:01:11,750 --> 00:01:09,280
of the separation sequence

29
00:01:14,469 --> 00:01:11,760
as soon as we separated

30
00:01:17,990 --> 00:01:14,479
the spacecraft onboard sequences very

31
00:01:19,910 --> 00:01:18,000
rapidly established communication

32
00:01:21,109 --> 00:01:19,920
via the

33
00:01:24,870 --> 00:01:21,119
nasa

34
00:01:25,749 --> 00:01:24,880
tracking data relay satellite system

35
00:01:28,310 --> 00:01:25,759
they

36
00:01:30,950 --> 00:01:28,320
started the solar array

37
00:01:33,350 --> 00:01:30,960
deployment uh exactly

38
00:01:36,310 --> 00:01:33,360

according to the nominal plan

39
00:01:39,190 --> 00:01:36,320
and you can see here the solar array

40
00:01:40,630 --> 00:01:39,200
beginning to deploy with the earth as a

41
00:01:41,910 --> 00:01:40,640
fantastic

42
00:01:45,109 --> 00:01:41,920
backdrop

43
00:01:46,469 --> 00:01:45,119
very apropos for a mission about the

44
00:01:47,830 --> 00:01:46,479
earth that's going to provide very

45
00:01:50,069 --> 00:01:47,840
important

46
00:01:53,590 --> 00:01:50,079
data on soil moisture

47
00:01:57,109 --> 00:01:53,600
and its freeze thaw state

48
00:02:00,069 --> 00:01:57,119
the solar array deployment uh took about

49
00:02:02,389 --> 00:02:00,079
as long as we expected the video quality

50
00:02:04,389 --> 00:02:02,399
here is actually quite exceptional

51
00:02:05,910 --> 00:02:04,399
uh and there you can see the first panel

52
00:02:09,109 --> 00:02:05,920
starting to deploy

53
00:02:11,430 --> 00:02:09,119
uh by all indications uh this is uh one

54
00:02:13,510 --> 00:02:11,440
of the cleanest uh most visible

55
00:02:15,670 --> 00:02:13,520
deployments we were able to see the

56
00:02:16,869 --> 00:02:15,680
camera by the way is on the upper stage

57
00:02:18,229 --> 00:02:16,879
of the vehicle

58
00:02:20,309 --> 00:02:18,239
uh the

59
00:02:23,110 --> 00:02:20,319
united launch alliance folks

60
00:02:25,270 --> 00:02:23,120
had arranged to let the upper stage wait

61
00:02:27,910 --> 00:02:25,280
for about 150 seconds

62
00:02:29,750 --> 00:02:27,920
uh while pointing uh at us

63
00:02:32,550 --> 00:02:29,760

so we'd have an opportunity to capture

64
00:02:34,150 --> 00:02:32,560
the array deployment and uh we were not

65
00:02:36,550 --> 00:02:34,160
sure we'd be able to see the entire

66
00:02:38,309 --> 00:02:36,560
deployment in the video but

67
00:02:40,070 --> 00:02:38,319
we were able to and

68
00:02:43,190 --> 00:02:40,080
it's fantastic

69
00:02:45,350 --> 00:02:43,200
the spacecraft attitude control system

70
00:02:46,949 --> 00:02:45,360
got us pointed at the sun so we were in

71
00:02:48,229 --> 00:02:46,959
a power positive

72
00:02:52,070 --> 00:02:48,239
situation

73
00:02:54,790 --> 00:02:52,080
within a few minutes uh we had our first

74
00:02:57,589 --> 00:02:54,800
contact with the near earth network

75
00:03:00,710 --> 00:02:57,599
station at svalbard

76
00:03:02,949 --> 00:03:00,720
within 20 minutes of separation that was

77
00:03:05,350 --> 00:03:02,959
right on the nominal plan

78
00:03:07,830 --> 00:03:05,360
we were able to get commands into the

79
00:03:09,589 --> 00:03:07,840
into the observatory and verify that

80
00:03:11,990 --> 00:03:09,599
they'd been executed

81
00:03:13,270 --> 00:03:12,000
we followed that with a second pass over

82
00:03:15,589 --> 00:03:13,280
the alaska

83
00:03:18,790 --> 00:03:15,599
satellite facility

84
00:03:20,869 --> 00:03:18,800
near fairbanks alaska again that was a

85
00:03:23,110 --> 00:03:20,879
very nominal pass

86
00:03:26,070 --> 00:03:23,120
and we were able to get good telemetry

87
00:03:29,030 --> 00:03:26,080
and we just followed that up with a

88
00:03:31,110 --> 00:03:29,040

third pass over the mcmurdo ground

89
00:03:32,630 --> 00:03:31,120
tracking facility so we've been able to

90
00:03:36,309 --> 00:03:32,640
now verify that we have good

91
00:03:39,190 --> 00:03:36,319
communication through the space

92
00:03:41,430 --> 00:03:39,200
satellite uh tracking and relay system

93
00:03:44,149 --> 00:03:41,440
and through all three of the major

94
00:03:45,750 --> 00:03:44,159
nasa uh near-earth ground stations that

95
00:03:47,270 --> 00:03:45,760
we plan to use

96
00:03:50,070 --> 00:03:47,280
with the mission

97
00:03:52,149 --> 00:03:50,080
the observatory health is excellent

98
00:03:55,190 --> 00:03:52,159
we have all of our

99
00:03:57,190 --> 00:03:55,200
subsystems are being powered on

100
00:03:58,229 --> 00:03:57,200
and checked out and look to be working

101
00:04:03,190 --> 00:03:58,239
as

102
00:04:06,070 --> 00:04:03,200
on the instruments yet we will not do

103
00:04:08,070 --> 00:04:06,080
that until about 11 days after launch

104
00:04:09,910 --> 00:04:08,080
but all the engineering subsystems the

105
00:04:11,030 --> 00:04:09,920
communication the the guidance and

106
00:04:14,390 --> 00:04:11,040
control

107
00:04:17,509 --> 00:04:14,400
uh the the uh the computers the power

108
00:04:19,430 --> 00:04:17,519
subsystem are all operating uh nominally

109
00:04:22,710 --> 00:04:19,440
and we've got uh good temperature

110
00:04:25,270 --> 00:04:22,720
performance so this is a fantastic start

111
00:04:28,550 --> 00:04:25,280
to the soil moisture active passive

112
00:04:30,870 --> 00:04:28,560
mission and i want to express thanks to

113
00:04:33,430 --> 00:04:30,880

the nasa launch services program people

114
00:04:36,070 --> 00:04:33,440
that work so hard to get us into space

115
00:04:38,710 --> 00:04:36,080
and the united launch alliance folks

116
00:04:40,469 --> 00:04:38,720
with their fantastic delta ii vehicle

117
00:04:42,469 --> 00:04:40,479
uh that gave us a wonderful ride into

118
00:04:44,950 --> 00:04:42,479
space this morning so we have a lot of

119
00:04:46,390 --> 00:04:44,960
happy people on the on the project side

120
00:04:47,590 --> 00:04:46,400
and we're looking forward to getting

121
00:04:50,310 --> 00:04:47,600
this mission

122
00:04:52,469 --> 00:04:50,320
off and getting some very valuable data

123
00:04:54,469 --> 00:04:52,479
returned for the scientists uh

124
00:04:56,550 --> 00:04:54,479
very quickly

125
00:04:59,350 --> 00:04:56,560
thank you kent and now to scott

126
00:05:01,029 --> 00:04:59,360
higginbotham the ilana 10 mission

127
00:05:03,110 --> 00:05:01,039
manager from the kennedy space center

128
00:05:05,430 --> 00:05:03,120
scott thank you george and good morning

129
00:05:07,749 --> 00:05:05,440
everyone uh let me start by saying we

130
00:05:09,430 --> 00:05:07,759
too want to thank united launch alliance

131
00:05:11,590 --> 00:05:09,440
and my colleagues in the launch services

132
00:05:12,550 --> 00:05:11,600
program for the amazing ride to space

133
00:05:14,950 --> 00:05:12,560
today

134
00:05:17,029 --> 00:05:14,960
all four of the alana 10 cubesats were

135
00:05:20,230 --> 00:05:17,039
ejected from the second stage per the

136
00:05:21,189 --> 00:05:20,240
mission timeline and are flying free

137
00:05:23,029 --> 00:05:21,199
the way

138
00:05:24,790 --> 00:05:23,039

we force these cubesats to operate they

139
00:05:26,950 --> 00:05:24,800
cannot turn on their transmitters for a

140
00:05:28,469 --> 00:05:26,960
period of time after they're deployed in

141
00:05:30,469 --> 00:05:28,479
the interest of protecting the second

142
00:05:32,550 --> 00:05:30,479
stage and the primary mission

143
00:05:34,790 --> 00:05:32,560
so the current timeline has the two

144
00:05:37,749 --> 00:05:34,800
firebird spacecraft and griffix turning

145
00:05:39,749 --> 00:05:37,759
on their transmitters about now about as

146
00:05:41,590 --> 00:05:39,759
we're speaking right now

147
00:05:43,990 --> 00:05:41,600
what they start doing is is beaconing to

148
00:05:46,390 --> 00:05:44,000
the ground sending a brief radio signal

149
00:05:49,029 --> 00:05:46,400
saying i'm here i'm here and they wait

150
00:05:52,070 --> 00:05:49,039
for someone to contact them

151
00:05:53,749 --> 00:05:52,080
we don't expect the to hear back from

152
00:05:54,950 --> 00:05:53,759
the spacecraft for a little while

153
00:05:56,390 --> 00:05:54,960
waiting for them to come over their

154
00:05:57,830 --> 00:05:56,400
ground stations here in the continental

155
00:06:00,550 --> 00:05:57,840
united states

156
00:06:02,950 --> 00:06:00,560
but we may actually hear of their of

157
00:06:05,350 --> 00:06:02,960
their beacons early coming from european

158
00:06:07,430 --> 00:06:05,360
ham radio operators who sometimes listen

159
00:06:09,110 --> 00:06:07,440
in for the signals and then communicate

160
00:06:10,710 --> 00:06:09,120
via the internet that they've heard from

161
00:06:12,150 --> 00:06:10,720
our spacecraft

162
00:06:13,909 --> 00:06:12,160
exocube will turn on a little later

163
00:06:17,029 --> 00:06:13,919

about 11 30 this morning and it will

164
00:06:19,670 --> 00:06:17,039
start beaconing to the ground as well

165
00:06:21,670 --> 00:06:19,680
in summary a great ride today into space

166
00:06:23,110 --> 00:06:21,680
we're looking forward to uh to getting

167
00:06:25,110 --> 00:06:23,120
the return from these satellites as they

168
00:06:27,110 --> 00:06:25,120
begin their missions and i do want to

169
00:06:28,790 --> 00:06:27,120
acknowledge all of the university

170
00:06:30,309 --> 00:06:28,800
students out there that had a part in

171
00:06:32,629 --> 00:06:30,319
building these spacecraft and and

172
00:06:35,590 --> 00:06:32,639
getting them into space today george

173
00:06:38,070 --> 00:06:35,600
thank you scott and now jeff yoder the

174
00:06:39,909 --> 00:06:38,080
deputy associate administrator

175
00:06:42,870 --> 00:06:39,919
for the nasa headquarters science

176
00:06:44,550 --> 00:06:42,880
directorate jeff thank you george

177
00:06:46,230 --> 00:06:44,560
what a morning

178
00:06:48,230 --> 00:06:46,240
you know i want to as my other

179
00:06:50,629 --> 00:06:48,240
colleagues i want to congratulate the

180
00:06:53,350 --> 00:06:50,639
entire smap team the nasa launch

181
00:06:56,550 --> 00:06:53,360
services program our contractors

182
00:06:57,909 --> 00:06:56,560
our partners in academia for a wonderful

183
00:06:59,749 --> 00:06:57,919
wonderful

184
00:07:02,150 --> 00:06:59,759
you know launch this morning you know i

185
00:07:03,670 --> 00:07:02,160
know a lot of people are eager for this

186
00:07:06,309 --> 00:07:03,680
mission to begin delivering the most

187
00:07:07,830 --> 00:07:06,319
accurate and highest resolution maps of

188
00:07:09,510 --> 00:07:07,840

soil moisture

189
00:07:11,270 --> 00:07:09,520
you know ever obtained

190
00:07:12,950 --> 00:07:11,280
you know this data will benefit not only

191
00:07:15,029 --> 00:07:12,960
scientists seeking better understanding

192
00:07:17,350 --> 00:07:15,039
of our planet's climate and environment

193
00:07:19,430 --> 00:07:17,360
but it's you know also a boon for

194
00:07:21,909 --> 00:07:19,440
weather forecasters agriculture and

195
00:07:24,070 --> 00:07:21,919
water resource managers emergency

196
00:07:26,309 --> 00:07:24,080
planners and policy makers

197
00:07:28,790 --> 00:07:26,319
and this map is another example

198
00:07:31,270 --> 00:07:28,800
of how nasa is making a difference in

199
00:07:33,110 --> 00:07:31,280
people's lives around the world and and

200
00:07:35,270 --> 00:07:33,120
that's just tremendous data and

201
00:07:37,749 --> 00:07:35,280
applications for societal benefits are

202
00:07:40,309 --> 00:07:37,759
directly accessible to decision makers

203
00:07:42,150 --> 00:07:40,319
uh stakeholders around the world

204
00:07:43,909 --> 00:07:42,160
his map joined several other missions

205
00:07:45,510 --> 00:07:43,919
several other nasa missions already in

206
00:07:48,309 --> 00:07:45,520
orbit

207
00:07:49,909 --> 00:07:48,319
in different stages of the water cycle

208
00:07:52,070 --> 00:07:49,919
and they give us unprecedented

209
00:07:53,749 --> 00:07:52,080
unprecedented measurements uh vital to

210
00:07:55,430 --> 00:07:53,759
the earth's system

211
00:07:57,589 --> 00:07:55,440
this past year has been extremely

212
00:08:00,150 --> 00:07:57,599
productive one for nasa earth science

213
00:08:01,830 --> 00:08:00,160

last february the global participat

214
00:08:03,430 --> 00:08:01,840
precipitation measurement core

215
00:08:05,430 --> 00:08:03,440
observatory was launched with our

216
00:08:06,790 --> 00:08:05,440
partners in japan

217
00:08:08,950 --> 00:08:06,800
and since then

218
00:08:11,029 --> 00:08:08,960
three new earth science uh spacecraft

219
00:08:12,550 --> 00:08:11,039
and sensors have been sent to space to

220
00:08:14,309 --> 00:08:12,560
study earth

221
00:08:16,950 --> 00:08:14,319
two of these are now mounted on the

222
00:08:19,589 --> 00:08:16,960
international space station

223
00:08:22,070 --> 00:08:19,599
today's launch is map of smap marks the

224
00:08:22,950 --> 00:08:22,080
fifth nasa earth science launch in 11

225
00:08:24,790 --> 00:08:22,960
months

226
00:08:27,110 --> 00:08:24,800
you know that is phenomenal if you just

227
00:08:28,950 --> 00:08:27,120
think about that

228
00:08:30,629 --> 00:08:28,960
these new missions will help answer some

229
00:08:32,550 --> 00:08:30,639
of the critical challenges facing our

230
00:08:35,750 --> 00:08:32,560
planet today and in the future climate

231
00:08:38,949 --> 00:08:35,760
change sea level rise fresh water

232
00:08:41,990 --> 00:08:38,959
resources and extreme weather

233
00:08:44,630 --> 00:08:42,000
events so smap highlights nasa's role in

234
00:08:47,030 --> 00:08:44,640
an as an innovative innovation leader in

235
00:08:49,110 --> 00:08:47,040
earth and climate science we strive to

236
00:08:50,150 --> 00:08:49,120
give the world a consistently expanding

237
00:08:52,389 --> 00:08:50,160
view

238
00:08:55,110 --> 00:08:52,399

and uh and understanding of our planet

239
00:08:56,630 --> 00:08:55,120
from space thanks again to the

240
00:08:58,310 --> 00:08:56,640
incredible team

241
00:09:01,910 --> 00:08:58,320
that have made this launch possible

242
00:09:03,910 --> 00:09:01,920
today of our smap launch george

243
00:09:05,829 --> 00:09:03,920
all right we'll take questions now first

244
00:09:09,190 --> 00:09:05,839
first of all in social media if you

245
00:09:12,070 --> 00:09:09,200
would like to ask a question you can use

246
00:09:14,710 --> 00:09:12,080
ask nasa and send in your questions to

247
00:09:16,790 --> 00:09:14,720
us we'll check first to see if we have

248
00:09:19,990 --> 00:09:16,800
any questions here in the room from any

249
00:09:22,790 --> 00:09:20,000
of our reporters here

250
00:09:25,750 --> 00:09:22,800
any any questions in the room okay

251
00:09:27,750 --> 00:09:25,760
all right um did we get any social media

252
00:09:29,750 --> 00:09:27,760
questions

253
00:09:32,710 --> 00:09:29,760
all right

254
00:09:34,949 --> 00:09:32,720
none from social media questions so in

255
00:09:36,710 --> 00:09:34,959
that event i think uh that's probably

256
00:09:38,150 --> 00:09:36,720
going to conclude our

257
00:09:40,949 --> 00:09:38,160
briefing uh

258
00:09:43,910 --> 00:09:40,959
we are very pleased at

259
00:09:45,990 --> 00:09:43,920
the success of of smack as well as our

260
00:09:48,070 --> 00:09:46,000
cubesats and we thank all of our

261
00:09:48,870 --> 00:09:48,080
participants and our briefings here this

262
00:09:51,269 --> 00:09:48,880
week

263
00:09:52,389 --> 00:09:51,279

so with that that will conclude our

264
00:09:55,430 --> 00:09:52,399
briefing

265
00:10:02,150 --> 00:09:55,440
and our coverage for this map mission

266
00:10:04,470 --> 00:10:03,590
green board

267
00:10:06,230 --> 00:10:04,480
ten

268
00:10:07,269 --> 00:10:06,240
nine eight

269
00:10:08,870 --> 00:10:07,279
seven

270
00:10:10,150 --> 00:10:08,880
six

271
00:10:11,110 --> 00:10:10,160
five

272
00:10:12,069 --> 00:10:11,120
four

273
00:10:13,190 --> 00:10:12,079
three

274
00:10:14,069 --> 00:10:13,200
two

275
00:10:17,110 --> 00:10:14,079
one

276
00:10:19,430 --> 00:10:17,120
engine start and liftoff of the delta ii

277
00:10:21,430 --> 00:10:19,440
rocket with smack making global