1
00:00:08,950 --> 00:00:06,389
hello once again everyone this is the

2
00:00:11,270 --> 00:00:08,960
npp mission science briefing

3
00:00:13,990 --> 00:00:11,280
and here to discuss the missions goals

4
00:00:18,070 --> 00:00:14,000
and objectives of npp

5
00:00:19,910 --> 00:00:18,080
is jim gleason the npp project scientist

6
00:00:23,509 --> 00:00:19,920
from nasa's goddard space flight center

7
00:00:28,630 --> 00:00:26,310
and mitch goldberg the noaa joint polar

8
00:00:30,150 --> 00:00:28,640
satellite system program scientist for

9
00:00:32,870 --> 00:00:30,160
the noaa satellite and information

10
00:00:35,190 --> 00:00:32,880
service in silver spring maryland

11
00:00:36,950 --> 00:00:35,200
and we'll begin first with jim gleason

12
00:00:39,750 --> 00:00:36,960
our project scientist

13
00:00:42,069 --> 00:00:39,760

from goddard jim thank you george we're

14
00:00:44,470 --> 00:00:42,079
very excited to be here today talking to

15
00:00:46,709 --> 00:00:44,480
you about the upcoming npp launch the

16
00:00:48,389 --> 00:00:46,719
first mission designed to provide

17
00:00:51,830 --> 00:00:48,399
observations for both weather

18
00:00:53,430 --> 00:00:51,840
forecasters and climate researchers

19
00:00:55,670 --> 00:00:53,440
it's incredibly valuable to try to

20
00:00:57,350 --> 00:00:55,680
understand what the future environment

21
00:00:59,430 --> 00:00:57,360
may bring

22
00:01:01,830 --> 00:00:59,440
and the future environment is as much

23
00:01:03,830 --> 00:01:01,840
about tomorrow's weather as it is

24
00:01:06,710 --> 00:01:03,840
long-term climate change

25
00:01:08,469 --> 00:01:06,720
people often confuse weather and climate

26
00:01:10,390 --> 00:01:08,479
weather is what's going to happen

27
00:01:12,390 --> 00:01:10,400
tomorrow or this weekend

28
00:01:14,950 --> 00:01:12,400
we just had a great weather forecast for

29
00:01:16,870 --> 00:01:14,960
launch everyone's very very excited

30
00:01:20,149 --> 00:01:16,880
climate is what happens over years and

31
00:01:22,390 --> 00:01:20,159
decades so climate is long-term behavior

32
00:01:25,030 --> 00:01:22,400
weather patterns over time these weather

33
00:01:27,990 --> 00:01:25,040
patterns are what make it easier to grow

34
00:01:29,030 --> 00:01:28,000
corn in iowa than in arizona

35
00:01:30,230 --> 00:01:29,040
so

36
00:01:32,390 --> 00:01:30,240
put simply

37
00:01:34,390 --> 00:01:32,400
climate is what you expect weather is

38
00:01:36,069 --> 00:01:34,400

what you get

39
00:01:39,910 --> 00:01:36,079
and the npp

40
00:01:41,030 --> 00:01:39,920
help scientists better predict the

41
00:01:45,510 --> 00:01:41,040
future

42
00:01:49,910 --> 00:01:45,520
incredibly valuable for economic

43
00:01:54,710 --> 00:01:52,789
so why is npp important to nasa

44
00:01:55,990 --> 00:01:54,720
npp is important to nasa because it

45
00:01:58,389 --> 00:01:56,000
continues

46
00:02:00,950 --> 00:01:58,399
the over 40 years of observations of the

47
00:02:03,749 --> 00:02:00,960
earth that nasa has been making and in

48
00:02:06,310 --> 00:02:03,759
particular continues the decade-long

49
00:02:11,350 --> 00:02:06,320
observations from the earth observation

50
00:02:13,350 --> 00:02:11,360
satellite systems terra aqua and aura

51
00:02:17,350 --> 00:02:13,360
and in the future these observations

52
00:02:20,390 --> 00:02:17,360
will be continued by the jpss satellites

53
00:02:23,990 --> 00:02:20,400
so npp's observations will produce at

54
00:02:25,910 --> 00:02:24,000
least 30 different data sets

55
00:02:27,830 --> 00:02:25,920
they'll contribute to understanding of

56
00:02:29,510 --> 00:02:27,840
all parts of the earth system

57
00:02:31,670 --> 00:02:29,520
they'll understand

58
00:02:33,750 --> 00:02:31,680
how temperature and water vapor are

59
00:02:35,350 --> 00:02:33,760
distributed in the atmosphere

60
00:02:36,470 --> 00:02:35,360
how clouds and aerosols affect

61
00:02:37,190 --> 00:02:36,480
temperature

62
00:02:39,509 --> 00:02:37,200
how

63
00:02:41,990 --> 00:02:39,519

npp's observations will help us

64
00:02:43,750 --> 00:02:42,000
understand the ozone layer and npp's

65
00:02:45,190 --> 00:02:43,760
observations will help us understand the

66
00:02:47,990 --> 00:02:45,200
biosphere

67
00:02:49,350 --> 00:02:48,000
focusing on vegetation on land and in

68
00:02:51,509 --> 00:02:49,360
the ocean

69
00:02:54,869 --> 00:02:51,519
the workhorse of npp is the viirs

70
00:02:56,790 --> 00:02:54,879
instrument producing over 20 data

71
00:02:59,110 --> 00:02:56,800
products covering land

72
00:03:00,229 --> 00:02:59,120
clouds fires and

73
00:03:02,070 --> 00:03:00,239
oceans

74
00:03:04,390 --> 00:03:02,080
and the illustration shows the viirs

75
00:03:06,630 --> 00:03:04,400
instrument on the front of the npp

76
00:03:08,470 --> 00:03:06,640
spacecraft

77
00:03:10,070 --> 00:03:08,480
you will now see a series of images

78
00:03:11,990 --> 00:03:10,080
illustrating just a few of the many

79
00:03:13,030 --> 00:03:12,000
viirs data products that will be

80
00:03:14,710 --> 00:03:13,040
available

81
00:03:16,550 --> 00:03:14,720
the images you're seeing

82
00:03:19,350 --> 00:03:16,560
are from the modis instruments on the

83
00:03:21,750 --> 00:03:19,360
eos terra and aqua missions

84
00:03:24,229 --> 00:03:21,760
and as kenneth said because this data

85
00:03:26,949 --> 00:03:24,239
has proven to be so useful over the past

86
00:03:29,350 --> 00:03:26,959
decade the viirs instrument was designed

87
00:03:31,589 --> 00:03:29,360
to continue to provide these incredibly

88
00:03:33,750 --> 00:03:31,599

valuable data products and that's true

89
00:03:36,149 --> 00:03:33,760
for all the data products on the npp

90
00:03:38,710 --> 00:03:36,159
mission the earth observing satellite

91
00:03:40,149 --> 00:03:38,720
system has demonstrated their value and

92
00:03:42,390 --> 00:03:40,159
their utility

93
00:03:44,949 --> 00:03:42,400
which is why npp will continue to make

94
00:03:46,789 --> 00:03:44,959
those observations

95
00:03:48,630 --> 00:03:46,799
it's ozone whole season

96
00:03:49,830 --> 00:03:48,640
and the ozone mapping and profiling

97
00:03:51,990 --> 00:03:49,840
suite

98
00:03:54,630 --> 00:03:52,000
which should be coming up on the video

99
00:03:55,750 --> 00:03:54,640
is is the instrument on the back

100
00:03:58,789 --> 00:03:55,760
of the

101
00:04:01,429 --> 00:03:58,799
npp spacecraft looking aft as it as a

102
00:04:05,110 --> 00:04:01,439
aft for the limb and then down

103
00:04:07,270 --> 00:04:05,120
um and it's the np the ozone ops

104
00:04:09,509 --> 00:04:07,280
instrument will be mapping the ozone

105
00:04:11,589 --> 00:04:09,519
hull next year this is a what you're

106
00:04:15,190 --> 00:04:11,599
seeing now is a series of images from

107
00:04:17,909 --> 00:04:15,200
this year's ozone hole mapped by the

108
00:04:20,390 --> 00:04:17,919
ome instrument on the eos aura space

109
00:04:22,469 --> 00:04:20,400
spacecraft so and in addition to

110
00:04:25,430 --> 00:04:22,479
monitoring the ozone hole

111
00:04:28,310 --> 00:04:25,440
the omps instrument will carry on the

112
00:04:30,710 --> 00:04:28,320
decades-long ozone record helping us

113
00:04:32,070 --> 00:04:30,720

understand the long-term behavior of the

114
00:04:33,909 --> 00:04:32,080
ozone layer

115
00:04:36,390 --> 00:04:33,919
and basically helping us understand the

116
00:04:38,390 --> 00:04:36,400
effectiveness of the montreal protocol

117
00:04:40,870 --> 00:04:38,400
in controlling ozone-depleting

118
00:04:43,110 --> 00:04:40,880
substances like chlorofluorocarbons

119
00:04:45,270 --> 00:04:43,120
which are found in air conditioners

120
00:04:46,550 --> 00:04:45,280
so why is mpp important to you and your

121
00:04:48,150 --> 00:04:46,560
neighbors

122
00:04:50,790 --> 00:04:48,160
npp is important because it makes

123
00:04:52,469 --> 00:04:50,800
observations and observations help us

124
00:04:53,830 --> 00:04:52,479
make better models

125
00:04:55,909 --> 00:04:53,840
which then help us make a better

126
00:04:57,110 --> 00:04:55,919
prediction of what's going to happen if

127
00:04:58,710 --> 00:04:57,120
we have a

128
00:05:01,029 --> 00:04:58,720
better prediction we can make a better

129
00:05:03,749 --> 00:05:01,039
decision and these decisions can be as

130
00:05:05,830 --> 00:05:03,759
simple as do i bring an umbrella or as

131
00:05:06,870 --> 00:05:05,840
complex as how to adapt to a changing

132
00:05:10,950 --> 00:05:06,880
climate

133
00:05:13,189 --> 00:05:10,960
so in short npp is better observations

134
00:05:15,189 --> 00:05:13,199
for better predictions to make better

135
00:05:16,150 --> 00:05:15,199
decisions thank you

136
00:05:18,230 --> 00:05:16,160
thank you

137
00:05:20,870 --> 00:05:18,240
all right now we will hear from mitch

138
00:05:22,870 --> 00:05:20,880

goldberg from noaa he is the joint polar

139
00:05:24,390 --> 00:05:22,880
satellite system program scientist from

140
00:05:25,670 --> 00:05:24,400
the noaa satellite and information

141
00:05:28,070 --> 00:05:25,680
service

142
00:05:30,150 --> 00:05:28,080
mitch thank you george the launch of npp

143
00:05:31,830 --> 00:05:30,160
is critical for noaa and nasa for the

144
00:05:33,029 --> 00:05:31,840
united states and for the international

145
00:05:34,950 --> 00:05:33,039
community

146
00:05:37,110 --> 00:05:34,960
mpp represents a bridge from current

147
00:05:39,189 --> 00:05:37,120
noaa operational and nasa research

148
00:05:40,870 --> 00:05:39,199
satellites to the future operational

149
00:05:44,150 --> 00:05:40,880
platforms known as the joint polar

150
00:05:46,150 --> 00:05:44,160
satellite system jpss and will provide

151
00:05:48,550 --> 00:05:46,160
essential and improved atmospheric

152
00:05:50,629 --> 00:05:48,560
oceanic and terrestrial observations for

153
00:05:52,390 --> 00:05:50,639
many different applications

154
00:05:54,390 --> 00:05:52,400
the internal community i mean the

155
00:05:56,870 --> 00:05:54,400
international community will also use

156
00:05:58,309 --> 00:05:56,880
npp data to benefit their users for

157
00:06:00,150 --> 00:05:58,319
example noaa has a very strong

158
00:06:02,550 --> 00:06:00,160
partnership with the european

159
00:06:04,150 --> 00:06:02,560
operational satellite agency umetsat

160
00:06:06,469 --> 00:06:04,160
they provide data to noaa from their

161
00:06:07,909 --> 00:06:06,479
operational satellites and likewise we

162
00:06:09,430 --> 00:06:07,919
provide data to them

163
00:06:10,469 --> 00:06:09,440

together we provide better global

164
00:06:12,469 --> 00:06:10,479
coverage

165
00:06:14,070 --> 00:06:12,479
of essential observations enabling

166
00:06:16,070 --> 00:06:14,080
better weather forecasts and

167
00:06:18,070 --> 00:06:16,080
environmental assessments

168
00:06:20,230 --> 00:06:18,080
nbp is particularly very important for

169
00:06:22,150 --> 00:06:20,240
weather forecasting the accuracy of

170
00:06:24,150 --> 00:06:22,160
weather forecasts are based on advanced

171
00:06:26,070 --> 00:06:24,160
numerical weather prediction models

172
00:06:27,749 --> 00:06:26,080
running on the world's fastest computers

173
00:06:29,189 --> 00:06:27,759
which are fed billions of observations

174
00:06:31,189 --> 00:06:29,199
per day and

175
00:06:32,870 --> 00:06:31,199
covering the entire globe

176
00:06:35,990 --> 00:06:32,880
the backbone for those global

177
00:06:38,230 --> 00:06:36,000
observations is the polar satellite data

178
00:06:40,230 --> 00:06:38,240
that both both know nasa and noaa have

179
00:06:41,590 --> 00:06:40,240
worked for decades to improve and to

180
00:06:43,590 --> 00:06:41,600
provide to the operational forecast

181
00:06:45,029 --> 00:06:43,600
community major advancements in the

182
00:06:47,110 --> 00:06:45,039
accuracy of weather forecasting has

183
00:06:49,189 --> 00:06:47,120
taken place in the last 30 years since

184
00:06:51,830 --> 00:06:49,199
the launch of the first noaa operation

185
00:06:53,670 --> 00:06:51,840
polar satellites and mpp will ensure

186
00:06:55,270 --> 00:06:53,680
that these improvements will continue

187
00:06:57,510 --> 00:06:55,280
and that there will be no degradation of

188
00:06:59,830 --> 00:06:57,520

forecast skill

189
00:07:01,990 --> 00:06:59,840
forecasts are used to make decisions in

190
00:07:04,790 --> 00:07:02,000
order to save lives medicaid property

191
00:07:06,469 --> 00:07:04,800
loss and make millions of day-to-day and

192
00:07:08,950 --> 00:07:06,479
longer-term decisions across all

193
00:07:11,270 --> 00:07:08,960
economic sectors affected by weather

194
00:07:14,629 --> 00:07:11,280
such as transportation agriculture

195
00:07:17,350 --> 00:07:14,639
construction energy and tourism

196
00:07:19,510 --> 00:07:17,360
in 2011 alone there has been ten

197
00:07:21,830 --> 00:07:19,520
separate weather events each inflicting

198
00:07:24,309 --> 00:07:21,840
at least one billion dollars in damages

199
00:07:27,749 --> 00:07:24,319
including tornado outbreaks fires

200
00:07:30,070 --> 00:07:27,759
hurricanes and floods and blizzards

201
00:07:32,469 --> 00:07:30,080
npp will provide improved information to

202
00:07:34,309 --> 00:07:32,479
forecasters and emergency managers to

203
00:07:36,150 --> 00:07:34,319
better warn and prepare the public for

204
00:07:38,230 --> 00:07:36,160
severe weather events

205
00:07:40,309 --> 00:07:38,240
with npp observations feeding noaa's

206
00:07:42,309 --> 00:07:40,319
operational weather prediction models we

207
00:07:44,629 --> 00:07:42,319
expect to improve our forecast skills

208
00:07:46,230 --> 00:07:44,639
out to five to seven days in advance of

209
00:07:48,390 --> 00:07:46,240
extreme weather events including

210
00:07:49,670 --> 00:07:48,400
hurricane severe weather outbreaks

211
00:07:51,909 --> 00:07:49,680
and we expect that the advanced

212
00:07:53,990 --> 00:07:51,919
microwave and infrared sounders

213
00:07:56,309 --> 00:07:54,000

which provides critical atmospheric

214
00:07:58,230 --> 00:07:56,319
temperature and water vapor information

215
00:08:00,629 --> 00:07:58,240
and the high spatial resolution imager

216
00:08:02,230 --> 00:08:00,639
on the npp spacecraft to become the

217
00:08:04,629 --> 00:08:02,240
foundations of the global observing

218
00:08:06,790 --> 00:08:04,639
system that is absolutely essential for

219
00:08:09,110 --> 00:08:06,800
noaa's weather prediction capabilities

220
00:08:11,909 --> 00:08:09,120
especially for extreme events such as

221
00:08:14,790 --> 00:08:11,919
last august hurricane irene on the east

222
00:08:17,990 --> 00:08:14,800
coast of the united states

223
00:08:20,469 --> 00:08:18,000
beyond weather forecasting noaa will use

224
00:08:22,150 --> 00:08:20,479
npp data to track ash plumes from

225
00:08:24,070 --> 00:08:22,160
volcanic eruptions which of course is

226
00:08:26,309 --> 00:08:24,080
important for aviation safety

227
00:08:27,909 --> 00:08:26,319
monitor fires vegetation health and

228
00:08:29,990 --> 00:08:27,919
droughts and also to predict the

229
00:08:32,389 --> 00:08:30,000
potential for prolonged period of

230
00:08:34,469 --> 00:08:32,399
drought and fire risk conditions measure

231
00:08:35,750 --> 00:08:34,479
variations in the amount of arctic sea

232
00:08:37,589 --> 00:08:35,760
ice

233
00:08:39,350 --> 00:08:37,599
mpp data will also be used to detect

234
00:08:41,430 --> 00:08:39,360
harmful algae blooms and other hazards

235
00:08:43,430 --> 00:08:41,440
that might endanger fisheries

236
00:08:45,750 --> 00:08:43,440
and fragile coastal ecosystems as well

237
00:08:48,790 --> 00:08:45,760
as human health for example there are

238
00:08:50,790 --> 00:08:48,800

approximately 50 percent more emergency

239
00:08:52,790 --> 00:08:50,800
room visits for respiratory illness

240
00:08:55,269 --> 00:08:52,800
during red tide events

241
00:08:57,110 --> 00:08:55,279
mpp will measure global land sea surface

242
00:08:58,949 --> 00:08:57,120
temperature and clouds

243
00:09:01,269 --> 00:08:58,959
as dr gleason mentioned will provide key

244
00:09:03,430 --> 00:09:01,279
observations of stratospheric ozone for

245
00:09:05,110 --> 00:09:03,440
monitoring the ozone hull and also the

246
00:09:06,870 --> 00:09:05,120
ozone data is used for providing

247
00:09:09,350 --> 00:09:06,880
warnings to the public on

248
00:09:11,509 --> 00:09:09,360
dangerous uv exposure from the sun

249
00:09:13,190 --> 00:09:11,519
so in conclusion noaa is looking forward

250
00:09:14,870 --> 00:09:13,200
to a successful launch

251
00:09:15,750 --> 00:09:14,880
we are very excited about the prospects

252
00:09:17,990 --> 00:09:15,760
for

253
00:09:19,990 --> 00:09:18,000
not only improved operational product

254
00:09:22,630 --> 00:09:20,000
and services but npp will provide

255
00:09:24,949 --> 00:09:22,640
essential data for research to better to

256
00:09:26,949 --> 00:09:24,959
better understand predict and adapt to

257
00:09:28,389 --> 00:09:26,959
our changing environment

258
00:09:29,750 --> 00:09:28,399
we are also looking forward to launch of

259
00:09:32,389 --> 00:09:29,760
g-com w

260
00:09:35,350 --> 00:09:32,399
by japan next spring noah will be using

261
00:09:36,550 --> 00:09:35,360
g-com w amster ii microwave imager

262
00:09:38,070 --> 00:09:36,560
operationally for monitoring

263
00:09:40,070 --> 00:09:38,080

precipitation

264
00:09:41,269 --> 00:09:40,080
total water vapor content snow and ice

265
00:09:43,190 --> 00:09:41,279
cover

266
00:09:44,470 --> 00:09:43,200
sea surface temperature ocean wind speed

267
00:09:45,670 --> 00:09:44,480
and soil moisture in all weather

268
00:09:47,509 --> 00:09:45,680
conditions

269
00:09:48,790 --> 00:09:47,519
furthermore umetsat will be launching

270
00:09:50,710 --> 00:09:48,800
their met up the

271
00:09:52,310 --> 00:09:50,720
satellite next year so

272
00:09:54,389 --> 00:09:52,320
so it's a very exciting year not just

273
00:09:56,230 --> 00:09:54,399
for noaa for the united states and nasa

274
00:09:58,389 --> 00:09:56,240
but also for our close

275
00:10:00,949 --> 00:09:58,399
international partners in europe and

276
00:10:03,350 --> 00:10:00,959
japan thank you

277
00:10:05,190 --> 00:10:03,360
thank you mitch and we're ready now to

278
00:10:07,030 --> 00:10:05,200
take questions once again please you

279
00:10:09,030 --> 00:10:07,040
give your name and affiliation when the

280
00:10:11,430 --> 00:10:09,040
microphone comes to you we'll start here

281
00:10:12,310 --> 00:10:11,440
on this side with nora

282
00:10:14,389 --> 00:10:12,320
thank you

283
00:10:15,910 --> 00:10:14,399
norah wallace santa barbara newspress i

284
00:10:17,750 --> 00:10:15,920
kind of feel like asking what doesn't it

285
00:10:19,509 --> 00:10:17,760
do when you say everything that it does

286
00:10:21,030 --> 00:10:19,519
do

287
00:10:24,150 --> 00:10:21,040
can you talk to us about how improved

288
00:10:27,670 --> 00:10:24,160

mpp is compared to terra aqua and aura

289
00:10:29,910 --> 00:10:27,680
how much more advanced it is

290
00:10:32,150 --> 00:10:29,920
npp is

291
00:10:33,750 --> 00:10:32,160
um

292
00:10:36,389 --> 00:10:33,760
an equivalent to

293
00:10:39,590 --> 00:10:36,399
the the combinations of the it's really

294
00:10:41,750 --> 00:10:39,600
a combination of the measurements on the

295
00:10:45,030 --> 00:10:41,760
eos aqua platform

296
00:10:48,230 --> 00:10:45,040
and some of the measurements on the aura

297
00:10:50,069 --> 00:10:48,240
platform the difference is

298
00:10:53,269 --> 00:10:50,079
that is essentially this is the time for

299
00:10:55,509 --> 00:10:53,279
the the generational leap forward in in

300
00:10:57,509 --> 00:10:55,519
operational weather forecasting

301
00:10:59,030 --> 00:10:57,519
observations the nasa satellites are

302
00:11:01,910 --> 00:10:59,040
research satellites

303
00:11:03,350 --> 00:11:01,920
they're done once maybe maybe twice for

304
00:11:05,670 --> 00:11:03,360
these very large platforms but in

305
00:11:08,230 --> 00:11:05,680
general we don't repeat them so what's

306
00:11:10,230 --> 00:11:08,240
happened is over the past decade

307
00:11:11,990 --> 00:11:10,240
the utility of these observations for

308
00:11:12,949 --> 00:11:12,000
weather forecasting and events has been

309
00:11:16,550 --> 00:11:12,959
proven

310
00:11:18,790 --> 00:11:16,560
and it was just about time for noah to

311
00:11:20,389 --> 00:11:18,800
rebuild its satellite fleet and and come

312
00:11:22,710 --> 00:11:20,399
up with the next generation and they

313
00:11:24,389 --> 00:11:22,720

could do that with confidence because

314
00:11:26,829 --> 00:11:24,399
all of the the

315
00:11:28,389 --> 00:11:26,839
observations and the

316
00:11:32,790 --> 00:11:28,399
um

317
00:11:35,030 --> 00:11:32,800
well it would make make the improvement

318
00:11:38,230 --> 00:11:35,040
so that for for example the research

319
00:11:39,030 --> 00:11:38,240
data from the airs instrument is done

320
00:11:40,710 --> 00:11:39,040
um

321
00:11:42,470 --> 00:11:40,720
into the forecasts and now the

322
00:11:43,750 --> 00:11:42,480
forecasters will have the confidence

323
00:11:45,670 --> 00:11:43,760
that the air's

324
00:11:48,949 --> 00:11:45,680
quality data will continue because the

325
00:11:51,750 --> 00:11:48,959
chris instrument will fly now and in

326
00:11:53,750 --> 00:11:51,760
into the future so it's basically

327
00:11:55,670 --> 00:11:53,760
keeping people

328
00:11:58,230 --> 00:11:55,680
keeping meeting people's expectations

329
00:12:01,990 --> 00:11:58,240
because they've enjoyed the quality data

330
00:12:06,150 --> 00:12:04,470
additional questions janine

331
00:12:07,910 --> 00:12:06,160
janine scully santa maria times the long

332
00:12:11,430 --> 00:12:07,920
poke record can you talk about how

333
00:12:13,750 --> 00:12:11,440
critical it is to get npp up there

334
00:12:15,350 --> 00:12:13,760
in terms of what's the health status of

335
00:12:17,990 --> 00:12:15,360
the current orbiting

336
00:12:19,350 --> 00:12:18,000
noaa satellites which are getting pretty

337
00:12:21,190 --> 00:12:19,360
ancient

338
00:12:23,990 --> 00:12:21,200

well the current node satellite is no

339
00:12:25,910 --> 00:12:24,000
19. that was launched in early 2009 it

340
00:12:29,829 --> 00:12:25,920
has a design life about three years so

341
00:12:31,670 --> 00:12:29,839
if you had three to 2009 it's 2012. so

342
00:12:33,269 --> 00:12:31,680
you know right now it's operating well

343
00:12:35,269 --> 00:12:33,279
but you know you know but if we're

344
00:12:37,670 --> 00:12:35,279
concerned about how long it will last so

345
00:12:39,350 --> 00:12:37,680
it's critical that we that we launch npp

346
00:12:41,110 --> 00:12:39,360
now um

347
00:12:43,269 --> 00:12:41,120
some friday morning

348
00:12:45,350 --> 00:12:43,279
so uh just to make sure that we have

349
00:12:49,910 --> 00:12:45,360
continuity of data sets that's critical

350
00:12:53,350 --> 00:12:51,430
further questions

351
00:12:54,949 --> 00:12:53,360
nora

352
00:12:57,590 --> 00:12:54,959
we heard in this press conference in the

353
00:12:59,750 --> 00:12:57,600
previous one uh about the the major

354
00:13:01,990 --> 00:12:59,760
weather year it's been with the billion

355
00:13:05,030 --> 00:13:02,000
dollars and ten events is there any way

356
00:13:06,629 --> 00:13:05,040
to quantify exactly what npp could have

357
00:13:08,949 --> 00:13:06,639
done to help prevent some of that if it

358
00:13:11,509 --> 00:13:08,959
had already been in in orbit

359
00:13:14,150 --> 00:13:11,519
um or if say next year we have a weather

360
00:13:15,509 --> 00:13:14,160
event uh weather year like this year

361
00:13:19,910 --> 00:13:15,519
well

362
00:13:22,069 --> 00:13:19,920
weatherproof and mpp will provide

363
00:13:24,150 --> 00:13:22,079

additional information so it will

364
00:13:25,829 --> 00:13:24,160
improve

365
00:13:27,269 --> 00:13:25,839
forecasting of streaming events several

366
00:13:29,550 --> 00:13:27,279
days in advance

367
00:13:31,910 --> 00:13:29,560
already you know in

368
00:13:34,629 --> 00:13:31,920
2011 during those 10 events we actually

369
00:13:37,110 --> 00:13:34,639
predicted them pretty well and so

370
00:13:39,189 --> 00:13:37,120
so the npp the importance of npp is to

371
00:13:41,110 --> 00:13:39,199
maintain the accuracy of the forecast

372
00:13:42,550 --> 00:13:41,120
and also there are improvements in the

373
00:13:43,910 --> 00:13:42,560
measurements so we expect those

374
00:13:49,750 --> 00:13:43,920
improvements to

375
00:13:49,760 --> 00:13:52,550
janine

376
00:13:55,670 --> 00:13:53,990
considering the roller coaster this

377
00:13:58,069 --> 00:13:55,680
program has been on you guys seem pretty

378
00:14:00,389 --> 00:13:58,079
calm how excited are you to finally be

379
00:14:02,629 --> 00:14:00,399
this close to launch and seeing it get

380
00:14:04,710 --> 00:14:02,639
to space

381
00:14:07,910 --> 00:14:04,720
um

382
00:14:09,990 --> 00:14:07,920
it's npp anything is possible

383
00:14:11,829 --> 00:14:10,000
um so

384
00:14:13,750 --> 00:14:11,839
it's a it's a really incredibly exciting

385
00:14:15,829 --> 00:14:13,760
time i mean i've been

386
00:14:17,590 --> 00:14:15,839
um wandering around just looking at the

387
00:14:19,670 --> 00:14:17,600
launch vehicle and the rocket going is

388
00:14:21,670 --> 00:14:19,680

really going to happen um when we had

389
00:14:24,870 --> 00:14:21,680
the mission dress rehearsal and we

390
00:14:27,110 --> 00:14:24,880
actually got to zero it was even though

391
00:14:28,629 --> 00:14:27,120
we knew it was rehearsal it was very

392
00:14:30,470 --> 00:14:28,639
exciting i mean it was like it was

393
00:14:32,470 --> 00:14:30,480
really going to happen so when i got a

394
00:14:34,629 --> 00:14:32,480
chance to see the launch vehicle up

395
00:14:36,710 --> 00:14:34,639
close it really does help make it real

396
00:14:39,590 --> 00:14:36,720
so you're looking at

397
00:14:41,269 --> 00:14:39,600
the boosters and the the uh

398
00:14:43,670 --> 00:14:41,279
the bottom of the rocket looking so we

399
00:14:45,590 --> 00:14:43,680
are very very excited they have a large

400
00:14:48,870 --> 00:14:45,600
team of folks here and a large team of

401
00:14:50,550 --> 00:14:48,880
folks at goddard and the science

402
00:14:53,670 --> 00:14:50,560
community is really looking forward to

403
00:14:55,509 --> 00:14:53,680
this so everyone's extremely excited

404
00:14:57,670 --> 00:14:55,519
yes indeed we're excited

405
00:14:59,430 --> 00:14:57,680
i'm excited i've been associated with

406
00:15:01,829 --> 00:14:59,440
this program in one way or the other

407
00:15:04,230 --> 00:15:01,839
since like the 1990s so it's been a long

408
00:15:06,790 --> 00:15:04,240
time we're very excited to

409
00:15:08,550 --> 00:15:06,800
see the future capabilities or the

410
00:15:10,870 --> 00:15:08,560
upcoming capabilities of the new npp

411
00:15:12,230 --> 00:15:10,880
satellite

412
00:15:14,470 --> 00:15:12,240
right we have some questions that are

413
00:15:16,310 --> 00:15:14,480

coming online so steve if you could give

414
00:15:18,509 --> 00:15:16,320
those to us

415
00:15:20,710 --> 00:15:18,519
okay two questions from mike wall at

416
00:15:23,430 --> 00:15:20,720
space.com the first one is how many

417
00:15:25,110 --> 00:15:23,440
different climate variables will npp

418
00:15:27,670 --> 00:15:25,120
monitor and which of these are most

419
00:15:30,389 --> 00:15:27,680
important to or equally sought by the

420
00:15:33,110 --> 00:15:30,399
scientific community

421
00:15:35,189 --> 00:15:33,120
npp will measure over 30 different

422
00:15:37,509 --> 00:15:35,199
climate variables

423
00:15:39,350 --> 00:15:37,519
the most important is

424
00:15:41,509 --> 00:15:39,360
depends on who you ask

425
00:15:43,110 --> 00:15:41,519
but what but what we like to say is the

426
00:15:45,030 --> 00:15:43,120
most important ones are the ones that

427
00:15:47,030 --> 00:15:45,040
have the longest data records

428
00:15:49,269 --> 00:15:47,040
so the ones so certainly the ones that

429
00:15:51,430 --> 00:15:49,279
carry on from from aqua and aura are

430
00:15:54,470 --> 00:15:51,440
important but in my particular

431
00:15:57,350 --> 00:15:54,480
discipline which is ozone we go back to

432
00:15:59,990 --> 00:15:57,360
uh nimbus seven which goes back to 1978

433
00:16:02,629 --> 00:16:00,000
and even even nemes4 which goes back to

434
00:16:05,590 --> 00:16:02,639
1970. so when you're looking for climate

435
00:16:06,710 --> 00:16:05,600
signals the longer the data record it is

436
00:16:21,829 --> 00:16:06,720
the

437
00:16:24,790 --> 00:16:21,839
mission more valuable as a pathfinder

438
00:16:28,870 --> 00:16:24,800

for future jpss satellites or for the

439
00:16:32,710 --> 00:16:30,550
sort of the first answer

440
00:16:35,189 --> 00:16:32,720
we need to keep you know the the

441
00:16:37,430 --> 00:16:35,199
observations from npp are are needed for

442
00:16:38,949 --> 00:16:37,440
the forecasts today

443
00:16:41,189 --> 00:16:38,959
as well as

444
00:16:44,069 --> 00:16:41,199
being a another link in the chain of

445
00:16:46,230 --> 00:16:44,079
ongoing data observations so these are

446
00:16:48,389 --> 00:16:46,240
observations that have been shown to be

447
00:16:51,350 --> 00:16:48,399
extremely critical essential climate

448
00:16:53,829 --> 00:16:51,360
variables and that we have collectively

449
00:16:58,310 --> 00:16:53,839
decided that they need to be continued

450
00:17:02,389 --> 00:16:58,320
to monitor from space from npp jps s1

451
00:17:05,750 --> 00:17:02,399
and hopefully jpss 2 and beyond

452
00:17:06,949 --> 00:17:05,760
any other questions here in the room

453
00:17:09,270 --> 00:17:06,959
all right that will conclude this

454
00:17:11,429 --> 00:17:09,280
briefing and we have one more briefing

455
00:17:13,750 --> 00:17:11,439
to follow immediately that will be on

456
00:17:15,029 --> 00:17:13,760
our elana cubesats