

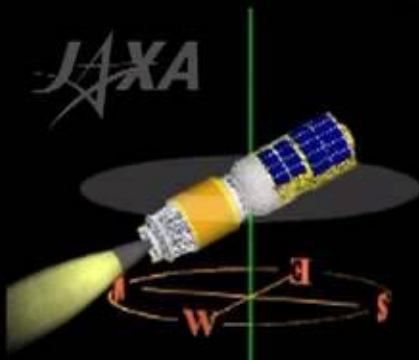
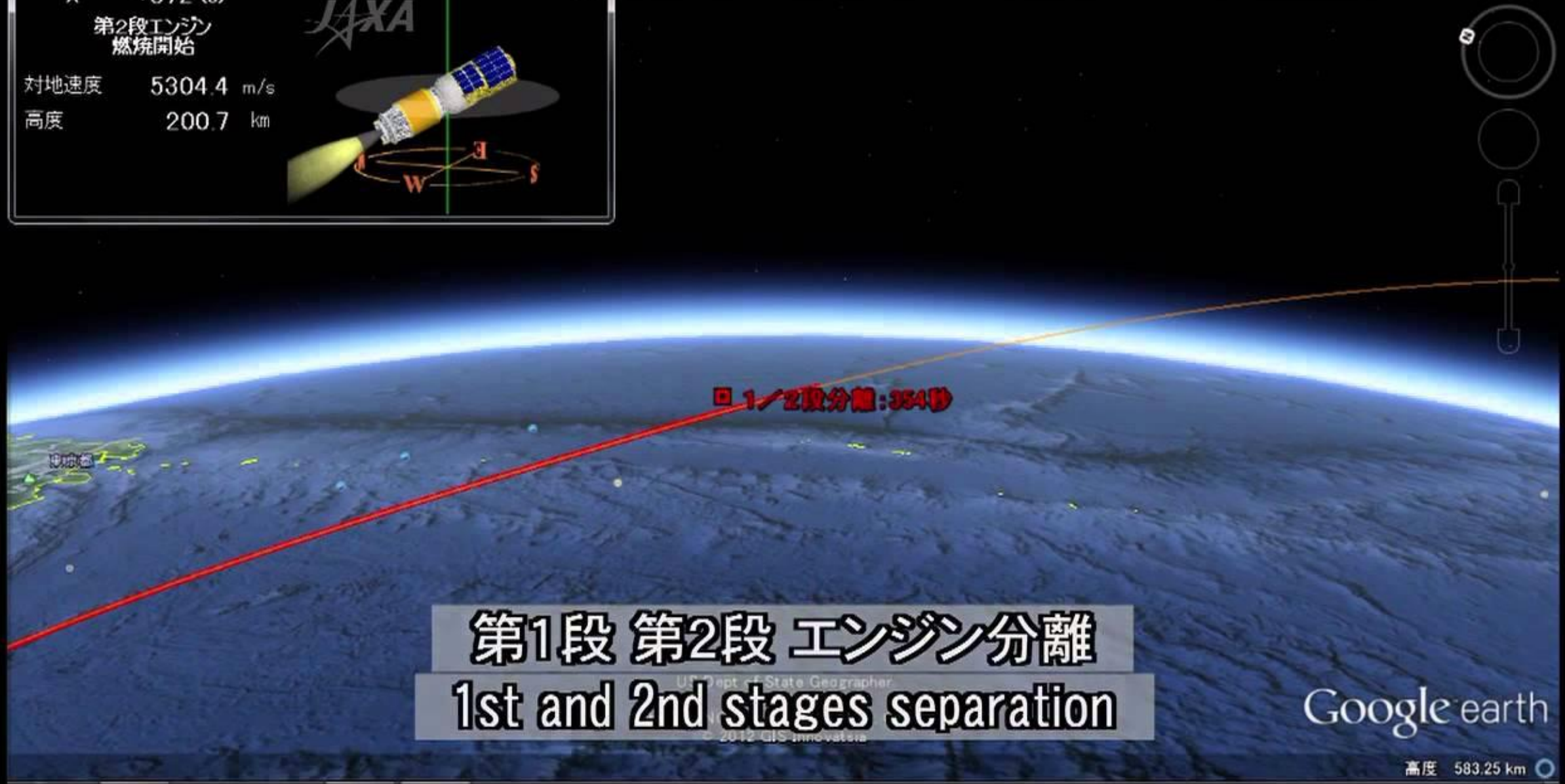
● LIVE 11:12:31 (JST) H2B-F3 291

X +372 (s)

第2段エンジン
燃焼開始

対地速度 5304.4 m/s

高度 200.7 km

第1段 第2段 エンジン分離
1st and 2nd stages separation

Google earth

1
00:00:07,010 --> 00:00:03,139
good thank you go thank you yo thank you

2
00:00:10,100 --> 00:00:07,020
son maybe we thank you treat me get you

3
00:00:11,990 --> 00:00:10,110
to do you have to do that huh you like

4
00:00:16,790 --> 00:00:12,000
the more the long right mode on here

5
00:00:26,859 --> 00:00:16,800
y'all t-minus ten nine eight seven six

6
00:00:31,040 --> 00:00:26,869
five four three two one ignition and

7
00:00:36,880 --> 00:00:31,050
liftoff liftoff of the HTV 3 on its way

8
00:00:46,340 --> 00:00:44,240
nixdorf Southeast Asia hakuouki monetary

9
00:00:49,549 --> 00:00:46,350
sango Giotto sigh stop it sous-vide

10
00:00:51,889 --> 00:00:49,559
oketo sung-hee same is your name she

11
00:00:54,200 --> 00:00:51,899
gotten easier eternity but then do it

12
00:00:57,200 --> 00:00:54,210
it'll open we had to be only a

13
00:01:00,290 --> 00:00:57,210

imma check it out master for all mankind

14

00:01:03,260 --> 00:01:00,300

we had a liftoff of the HTV launch big

15

00:01:07,250 --> 00:01:03,270

with the condo 33 on board from the

16

00:01:10,760 --> 00:01:07,260

tanegashima space center at 1106 and 18

17

00:01:16,070 --> 00:01:10,770

seconds in the morning until I 21 2012

18

00:01:18,499 --> 00:01:16,080

japan standard time shigeo locatin

19

00:01:20,660 --> 00:01:18,509

conserva yo seno bahasa concierto para a

20

00:01:24,170 --> 00:01:20,670

kiss XO kasi dito nice kid scary penis

21

00:01:26,030 --> 00:01:24,180

after liftoff one minute into the flight

22

00:01:27,289 --> 00:01:26,040

of the HTV 3 obviously it's in the

23

00:01:29,179 --> 00:01:27,299

clouds now the weather barrier

24

00:01:30,920 --> 00:01:29,189

preventing us from seeing HTV 3 we were

25

00:01:32,719 --> 00:01:30,930

standing by the solid rocket booster

26
00:01:36,289 --> 00:01:32,729
should burn out at one minute 54 seconds

27
00:01:39,050 --> 00:01:36,299
non Toho Co nota que OS guste mas the

28
00:01:41,270 --> 00:01:39,060
HTV is now flying over the pacific ocean

29
00:01:45,429 --> 00:01:41,280
to the south-east with its initial

30
00:01:48,800 --> 00:01:45,439
flight angle of 108 point five degrees

31
00:01:51,679 --> 00:01:48,810
ok Dora say John is for to the re an

32
00:01:54,800 --> 00:01:51,689
Angus mom she's off the drop say don't

33
00:01:57,080 --> 00:01:54,810
need ok to leave me open up to the HTV

34
00:01:58,999 --> 00:01:57,090
is flying normally and the tanegashima

35
00:02:05,440 --> 00:01:59,009
stations and loosing on the station are

36
00:02:05,450 --> 00:02:12,510
happy

37
00:02:16,750 --> 00:02:14,620
one minute 50 seconds into the flight

38
00:02:18,340 --> 00:02:16,760

standing by for confirmation of the SRB

39

00:02:26,040 --> 00:02:18,350

burnout separation should be shortly

40

00:02:32,550 --> 00:02:26,050

thereafter asada B&N sauce to do this lb

41

00:02:36,030 --> 00:02:34,559

and there goes the first set of solid

42

00:02:38,940 --> 00:02:36,040

rocket boosters it'll be followed by the

43

00:02:40,650 --> 00:02:38,950

second set they thought it'd be a two

44

00:03:02,030 --> 00:02:40,660

minutes 15 seconds under the flight the

45

00:03:05,390 --> 00:03:04,069

two minutes and 40 seconds into the

46

00:03:06,890 --> 00:03:05,400

flight the next major milestone will be

47

00:03:08,030 --> 00:03:06,900

at three minutes and 40 seconds that is

48

00:03:09,920 --> 00:03:08,040

when the fairing that is currently

49

00:03:11,270 --> 00:03:09,930

surrounding the HTV three up on top of

50

00:03:23,550 --> 00:03:11,280

the rocket will be separated will be

51
00:03:23,560 --> 00:03:26,150
Oh

52
00:03:32,840 --> 00:03:28,750
it's young Eagle something like a kazoo

53
00:03:36,020 --> 00:03:32,850
three-minute Justin left off by Italians

54
00:03:38,810 --> 00:03:36,030
in honest say okay skokie roma say so

55
00:03:42,830 --> 00:03:38,820
this ok to ah joong sonic code to the

56
00:03:47,990 --> 00:03:42,840
cotati gains I know jacovic Elementary

57
00:03:49,850 --> 00:03:48,000
yosaku yoku nita nicky romero this the

58
00:03:51,680 --> 00:03:49,860
first stage engine combustion attitude

59
00:03:53,750 --> 00:03:51,690
control and flat trajectory are all

60
00:03:57,610 --> 00:03:53,760
normal the flight goes very smoothly

61
00:04:00,770 --> 00:03:57,620
currently altitude is about one hun

62
00:04:09,880 --> 00:04:00,780
spell Oct is approximately 2.2 nine

63
00:04:14,360 --> 00:04:12,440

they say heading grinde balogh the

64

00:04:19,729 --> 00:04:14,370

fairing you did some varying separation

65

00:04:21,920 --> 00:04:19,739

confirmed once again this is the shroud

66

00:04:23,570 --> 00:04:21,930

that surrounded HTV 34 protection up on

67

00:04:26,420 --> 00:04:23,580

top of the rocket so HCB three now

68

00:04:40,250 --> 00:04:26,430

exposed as the rocket continues its 15

69

00:04:42,620 --> 00:04:40,260

minute at 11 second flight into space at

70

00:04:44,719 --> 00:04:42,630

five minutes and 47 seconds that is when

71

00:04:46,040 --> 00:04:44,729

the first stage engine will cut off the

72

00:04:47,600 --> 00:04:46,050

first stage and second stage will

73

00:04:50,570 --> 00:04:47,610

separate just a few seconds after that

74

00:04:52,129 --> 00:04:50,580

at 554 and then shortly thereafter right

75

00:04:53,810 --> 00:04:52,139

after the 6-minute mark that is when the

76

00:04:55,760 --> 00:04:53,820

second stage engine will ignite that

77

00:04:57,710 --> 00:04:55,770

will burn for pretty much the remainder

78

00:05:00,290 --> 00:04:57,720

of the flight up until the 14 minute 20

79

00:05:03,950 --> 00:05:00,300

second mark and that is when that engine

80

00:05:06,860 --> 00:05:03,960

will cut off here's live telemetry from

81

00:05:09,439 --> 00:05:06,870

the japan aerospace exploration agency

82

00:05:25,920 --> 00:05:09,449

as they continue to monitor the rocket

83

00:05:33,420 --> 00:05:28,430

which are a go go Govinda k cos my stuff

84

00:05:36,060 --> 00:05:33,430

it's five minutes after liftoff okay TOA

85

00:05:38,719 --> 00:05:36,070

during Tony's code to the cotati gains i

86

00:05:42,120 --> 00:05:38,729

encode oo lagu a croc Creek Elementary

87

00:05:45,870 --> 00:05:42,130

yosaku lucky young teen sannan-san an

88

00:05:47,420 --> 00:05:45,880

Aikido metalist the flight trying to

89

00:05:49,970 --> 00:05:47,430

altitude

90

00:05:51,560 --> 00:05:49,980

hundred sixty kilometers velocity is

91

00:06:07,939 --> 00:05:51,570

approximately four point three seven

92

00:06:15,600 --> 00:06:10,260

five minutes 45 seconds into the flight

93

00:06:24,869 --> 00:06:18,420

knights inn ing name so tasty first is

94

00:06:26,369 --> 00:06:24,879

using cut off and we have first aid to

95

00:06:29,429 --> 00:06:26,379

cut off and separation of the first and

96

00:06:33,059 --> 00:06:29,439

second stage first and second stage is

97

00:06:37,980 --> 00:06:33,069

the separation second stage engine will

98

00:06:59,050 --> 00:06:37,990

now ignite I need hi-c second stage

99

00:07:02,050 --> 00:07:00,940

the visiting vehicle officer here in

100

00:07:10,620 --> 00:07:02,060

Mission Control confirming that the

101
00:07:15,909 --> 00:07:13,120
currently flying about 5,300 meters per

102
00:07:17,110 --> 00:07:15,919
second everybody's reporting that the

103
00:07:18,250 --> 00:07:17,120
vehicles under good control and

104
00:07:22,990 --> 00:07:18,260
everything is looking right down the

105
00:07:24,580 --> 00:07:23,000
middle just an incredibly cloudy day

106
00:07:26,080 --> 00:07:24,590
there at the tanegashima space center

107
00:07:28,150 --> 00:07:26,090
there was some rain in the area at the

108
00:07:31,000 --> 00:07:28,160
moment have liftoff very low cloud deck

109
00:07:32,230 --> 00:07:31,010
as you saw the vehicle disappeared into

110
00:07:34,900 --> 00:07:32,240
the clouds pretty quickly right after

111
00:07:41,430 --> 00:07:34,910
liftoff you can see there's some rain

112
00:07:45,640 --> 00:07:43,990
seven minutes and 20 seconds into the

113
00:08:22,790 --> 00:07:45,650

flight everything's still looking pretty

114

00:08:29,420 --> 00:08:25,390

now eight minutes into the flight the

115

00:08:33,290 --> 00:08:29,430

second stage is still burning it's eight

116

00:08:35,870 --> 00:08:33,300

minutes after liftoff Dinah danza no

117

00:08:38,990 --> 00:08:35,880

nazo a says oh say okay cokato Moses

118

00:08:41,180 --> 00:08:39,000

ODIs yenza enojado ah laku NOC you go

119

00:08:44,149 --> 00:08:41,190

Joe go kiddo metal yosaku hockey

120

00:08:46,100 --> 00:08:44,159

goaltend ok nanaki tomato this the

121

00:08:49,819 --> 00:08:46,110

second stage engine combustion attitude

122

00:08:52,310 --> 00:08:49,829

Connie Raja clear all normal altitude is

123

00:08:54,800 --> 00:08:52,320

about two hundred fifty five kilometers

124

00:09:01,550 --> 00:08:54,810

velocity is about a five point six seven

125

00:09:03,590 --> 00:09:01,560

kilometers per second so the HTV three

126
00:09:06,470 --> 00:09:03,600
continuing to gain altitude now at 255

127
00:09:26,340 --> 00:09:06,480
kilometers move about five point six

128
00:09:30,330 --> 00:09:28,830
at five point six seven kilometers per

129
00:09:32,790 --> 00:09:30,340
second about three a half miles per

130
00:09:34,170 --> 00:09:32,800
second the orbital speeds five miles per

131
00:09:38,270 --> 00:09:34,180
second that's what the station travels

132
00:09:43,710 --> 00:09:38,280
edge is an incredible speed roughly

133
00:09:45,270 --> 00:09:43,720
17,500 miles per hour nine minutes 20

134
00:09:46,770 --> 00:09:45,280
seconds into the flight again the second

135
00:09:48,720 --> 00:09:46,780
stage continuing to burn this will

136
00:09:52,470 --> 00:09:48,730
continue up until the 14 minute 20

137
00:09:55,200 --> 00:09:52,480
second point in the flight it'll shut

138
00:09:57,600 --> 00:09:55,210

down and then separation between HTV 3

139

00:09:59,670 --> 00:09:57,610

and its second stage will occur right at

140

00:10:02,070 --> 00:09:59,680

15 minutes and 11 seconds so we will

141

00:10:03,420 --> 00:10:02,080

continue to monitor the flight of this

142

00:10:06,090 --> 00:10:03,430

cargo carrier now headed toward the

143

00:10:26,050 --> 00:10:06,100

International Space Station everything

144

00:10:32,360 --> 00:10:29,480

diego de pinga k cos my stop it's ten

145

00:10:35,570 --> 00:10:32,370

minutes after liftoff okay to our during

146

00:10:37,340 --> 00:10:35,580

Tony's gusta mas o que tu AA Tanegashima

147

00:10:39,920 --> 00:10:37,350

it's Nora no kokoro kokoro no ahsoka

148

00:10:42,920 --> 00:10:39,930

yahan are a avisar a cuckoo oh yah oh

149

00:10:45,380 --> 00:10:42,930

yah mo kio karate I'm sorry Tomas the

150

00:10:47,000 --> 00:10:45,390

flower is progressing very smoothly the

151

00:10:48,920 --> 00:10:47,010

launch vehicle is out of the tracking

152

00:10:51,380 --> 00:10:48,930

range of the tanegashima stations and

153

00:11:11,410 --> 00:10:51,390

the personalization and ogasawara and

154

00:11:17,500 --> 00:11:13,750

approaching the 11-minute mark of the

155

00:11:19,750 --> 00:11:17,510

flight as you heard our counterparts in

156

00:11:22,210 --> 00:11:19,760

Japan confirm it is currently out of the

157

00:11:23,530 --> 00:11:22,220

range the tanegashima tracking the

158

00:11:25,630 --> 00:11:23,540

center is being tracked by some ground

159

00:11:29,710 --> 00:11:25,640

stations now as it heads over the

160

00:11:32,950 --> 00:11:29,720

Pacific Ocean I need an eng- sowa says

161

00:11:37,180 --> 00:11:32,960

oh say okay cokato Moses Oh daddy okay

162

00:11:39,430 --> 00:11:37,190

to our gains I antiche gains are no

163

00:11:42,460 --> 00:11:39,440

kodwa yaku in Hakata join an aikido

164

00:11:45,160 --> 00:11:42,470

metal yosaku yaku locked in your Voki

165

00:11:46,990 --> 00:11:45,170

dome 80 degrees the second stage engine

166

00:11:49,420 --> 00:11:47,000

combustion attitude control and fight

167

00:11:51,760 --> 00:11:49,430

tragic real all normal the flight goes

168

00:11:53,830 --> 00:11:51,770

very smoothly current altitude is about

169

00:11:57,010 --> 00:11:53,840

two hundred eighty seven kilometers

170

00:12:06,170 --> 00:11:57,020

velocity is about 6.45 kilometers per

171

00:12:14,000 --> 00:12:08,980

so the rocket now 287 kilometers that's

172

00:12:16,460 --> 00:12:14,010

178 miles it is currently moving at six

173

00:12:21,050 --> 00:12:16,470

point four kilometers per second or

174

00:12:23,990 --> 00:12:21,060

about four miles per second continuing

175

00:12:28,130 --> 00:12:24,000

to speed up as it heads down toward the

176
00:12:30,590 --> 00:12:28,140
southeast co-ceos Mustafa Jen's I ya

177
00:12:32,750 --> 00:12:30,600
know karate I open optimist the

178
00:12:34,460 --> 00:12:32,760
reservoir station finish talking and the

179
00:12:39,500 --> 00:12:34,470
Guam station is now tracking the launch

180
00:12:45,260 --> 00:12:39,510
vehicle 12 minutes 15 seconds into the

181
00:12:47,420 --> 00:12:45,270
flight everything looking good we are

182
00:12:49,160 --> 00:12:47,430
standing by for that 14 minute and 20

183
00:12:53,030 --> 00:12:49,170
second mark that is when the second

184
00:12:54,889 --> 00:12:53,040
stage will cut off and soon after that

185
00:12:57,350 --> 00:12:54,899
the HTV three cargo carrier itself will

186
00:12:59,870 --> 00:12:57,360
separate from that second stage at 15

187
00:13:03,650 --> 00:12:59,880
minutes 11 seconds and then it will be

188
00:13:07,280 --> 00:13:03,660

in its preliminary orbit which again is

189

00:13:13,610 --> 00:13:07,290

200 x 300 kilometers that is 124 miles

190

00:13:20,019 --> 00:13:13,620

by 186 miles official launch time

191

00:13:24,590 --> 00:13:23,000

the International Space Station was 255

192

00:13:32,720 --> 00:13:24,600

statute miles over the South Pacific

193

00:13:37,189 --> 00:13:34,340

it's a live look inside the Tsukuba

194

00:13:38,509 --> 00:13:37,199

Space Center they're just outside of

195

00:13:40,460 --> 00:13:38,519

Tokyo that is the home of the japan

196

00:13:41,870 --> 00:13:40,470

aerospace exploration agency they're

197

00:13:44,540 --> 00:13:41,880

taking a look at their cargo vehicle as

198

00:14:30,840 --> 00:13:44,550

it continues to head into space 13

199

00:14:36,420 --> 00:14:34,590

I need ing name so tasty soup and

200

00:14:40,199 --> 00:14:36,430

staging cut off so you can see to cut

201
00:14:42,269 --> 00:14:40,209
off confirmed we'll get the wagons i can

202
00:14:54,060 --> 00:14:42,279
save go to the kitty mas the launch

203
00:14:57,690 --> 00:14:56,310
14 minutes and 32 seconds into the

204
00:15:01,140 --> 00:14:57,700
flight we're standing by the vehicles

205
00:15:02,970 --> 00:15:01,150
currently coasting we'll get

206
00:15:04,920 --> 00:15:02,980
confirmation here shortly that the HTV 3

207
00:15:23,100 --> 00:15:04,930
has separated from the second stage

208
00:15:31,420 --> 00:15:28,990
sdv see boondi HTV separation HTV 3 has

209
00:15:36,130 --> 00:15:31,430
separated 15 minutes and five seconds

210
00:15:37,900 --> 00:15:36,140
into the flight his team there in Japan

211
00:15:40,500 --> 00:15:37,910
celebrating the HTV 3 in its preliminary

212
00:15:43,570 --> 00:15:40,510
orbit once again 200 x 300 kilometers

213
00:15:44,980 --> 00:15:43,580

excited to station okay Imam keep

214

00:15:47,800 --> 00:15:44,990

one-upping other here's a live look at

215

00:15:53,250 --> 00:15:47,810

as it separates and continues on its

216

00:15:59,040 --> 00:15:57,080

what jaksa is waiting for its arrival

217

00:16:01,140 --> 00:15:59,050

what do you want some ice the team is

218

00:16:04,590 --> 00:16:01,150

confirming that hcv 3 did separate

219

00:16:06,540 --> 00:16:04,600

cleanly Cody's on book you know it so

220

00:16:08,760 --> 00:16:06,550

the whole liftoff and flied into space

221

00:16:10,920 --> 00:16:08,770

for this third cargo carrier is part of