



1
00:00:05,030 --> 00:00:02,629
here's some of the stories trending this

2
00:00:07,349 --> 00:00:05,040
week at nasa

3
00:00:09,589 --> 00:00:07,359
orbital sciences corporations antares

4
00:00:11,669 --> 00:00:09,599
rocket and cygnus cargo craft launched

5
00:00:14,070 --> 00:00:11,679
from wallops flight facility on the

6
00:00:15,829 --> 00:00:14,080
orbital 2 mission the company's second

7
00:00:17,910 --> 00:00:15,839
operational resupply mission to the

8
00:00:19,990 --> 00:00:17,920
international space station under its

9
00:00:21,189 --> 00:00:20,000
commercial resupply services contract

10
00:00:22,950 --> 00:00:21,199
with nasa

11
00:00:26,150 --> 00:00:22,960
the cygnus spacecraft which is

12
00:00:28,310 --> 00:00:26,160
delivering almost 3 300 pounds of cargo

13
00:00:31,269 --> 00:00:28,320

is targeted to rendezvous with the iss

14

00:00:33,670 --> 00:00:31,279

on july 16th

15

00:00:36,310 --> 00:00:33,680

data from nasa's aquarius instrument has

16

00:00:38,630 --> 00:00:36,320

helped researchers create worldwide maps

17

00:00:40,869 --> 00:00:38,640

of soil moisture showing how the wetness

18

00:00:42,470 --> 00:00:40,879

of the land fluctuates with the seasons

19

00:00:44,709 --> 00:00:42,480

and weather phenomena

20

00:00:47,430 --> 00:00:44,719

soil moisture the water contained within

21

00:00:49,190 --> 00:00:47,440

soil particles is an important player in

22

00:00:51,430 --> 00:00:49,200

earth's water cycle

23

00:00:53,110 --> 00:00:51,440

when it launched in june 2011 the

24

00:00:55,350 --> 00:00:53,120

primary science objective of the

25

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

aquarius mission was to study the salt

26

00:00:59,750 --> 00:00:57,840

content of ocean surface waters but

27

00:01:02,069 --> 00:00:59,760

investigators have since developed a

28

00:01:03,670 --> 00:01:02,079

method to retrieve soil moisture data

29

00:01:05,910 --> 00:01:03,680

from the instruments microwave

30

00:01:08,149 --> 00:01:05,920

radiometer

31

00:01:10,789 --> 00:01:08,159

the core stage for nasa's space launch

32

00:01:12,630 --> 00:01:10,799

system or sls has passed its critical

33

00:01:15,830 --> 00:01:12,640

design review at marshall space flight

34

00:01:17,749 --> 00:01:15,840

center the cdr is a major milestone that

35

00:01:20,390 --> 00:01:17,759

proves the design for the rocket is

36

00:01:22,469 --> 00:01:20,400

mature enough for production it is also

37

00:01:25,030 --> 00:01:22,479

a sign of progress toward nasa's next

38

00:01:27,109 --> 00:01:25,040

giant leap to send humans farther into

39

00:01:29,510 --> 00:01:27,119

the solar system than ever before

40

00:01:30,469 --> 00:01:29,520

including to an asteroid and eventually

41

00:01:32,469 --> 00:01:30,479

mars

42

00:01:34,149 --> 00:01:32,479

representatives from nasa and the boeing

43

00:01:36,469 --> 00:01:34,159

company the prime contractor for the

44

00:01:39,109 --> 00:01:36,479

core stage participated on the critical

45

00:01:41,030 --> 00:01:39,119

design review board

46

00:01:42,870 --> 00:01:41,040

the james webb space telescope has

47

00:01:44,710 --> 00:01:42,880

reached another development milestone

48

00:01:46,950 --> 00:01:44,720

with the completion of static load

49

00:01:49,510 --> 00:01:46,960

testing of its primary mirror backplane

50

00:01:51,429 --> 00:01:49,520

support structure moving the telescope a

51
00:01:52,870 --> 00:01:51,439
step closer to its targeted launch in

52
00:01:54,550 --> 00:01:52,880
2018.

53
00:01:56,389 --> 00:01:54,560
the backplane support structure holds

54
00:01:58,870 --> 00:01:56,399
the telescope's science instruments and

55
00:02:01,350 --> 00:01:58,880
the 21 foot diameter primary mirror

56
00:02:03,109 --> 00:02:01,360
nearly motionless while the telescope

57
00:02:05,429 --> 00:02:03,119
peers into deep space

58
00:02:07,830 --> 00:02:05,439
the primary mirror made up of 18

59
00:02:09,510 --> 00:02:07,840
beryllium mirror segments is the largest

60
00:02:12,790 --> 00:02:09,520
mirror in the telescope and the one

61
00:02:15,030 --> 00:02:12,800
starlight will hit first

62
00:02:17,030 --> 00:02:15,040
repeated high resolution observations by

63
00:02:19,350 --> 00:02:17,040

nasa's mars reconnaissance orbiter

64

00:02:22,229 --> 00:02:19,360

indicate that seasonal carbon dioxide

65

00:02:25,270 --> 00:02:22,239

frost not liquid water is the main

66

00:02:27,750 --> 00:02:25,280

driver in forming gullies on mars today

67

00:02:30,309 --> 00:02:27,760

in 2000 the first reported gullies on

68

00:02:32,150 --> 00:02:30,319

mars generated excitement because of the

69

00:02:34,710 --> 00:02:32,160

possibility the gullies were formed by

70

00:02:37,509 --> 00:02:34,720

liquid water a necessity for all known

71

00:02:40,630 --> 00:02:37,519

life but while mars has plenty of water

72

00:02:43,670 --> 00:02:40,640

ice and water vapor liquid water has not

73

00:02:45,350 --> 00:02:43,680

been confirmed on modern mars

74

00:02:47,110 --> 00:02:45,360

and that's what's up this week at nasa

75

00:02:49,110 --> 00:02:47,120

for more on these and other stories

76

00:02:51,750 --> 00:02:49,120

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