

# Through the Eyes of NASA

2017 Eclipse Across America



1  
00:00:00,729 --> 00:00:03,770

“Here’s some of the stories trending This Week at NASA!”

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00:00:03,770 --> 00:00:10,440

The Aug. 21 total solar eclipse across America is generating a lot of interest – and a

3  
00:00:10,440 --> 00:00:11,509  
lot of questions.

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00:00:11,509 --> 00:00:17,329

You’ll find answers to many of your eclipse questions at NASA’s Eclipse 2017 website

5  
00:00:17,329 --> 00:00:21,050  
-- [eclipse2017.nasa.gov](http://eclipse2017.nasa.gov).

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00:00:21,050 --> 00:00:26,439

The site is full of information to help you prepare for this rare celestial event – including

7  
00:00:26,439 --> 00:00:31,669  
eclipse-related activities, events, viewing safety tips, and other resources.

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00:00:31,669 --> 00:00:36,710

Then, on the day of the eclipse, you can see the event “Through the Eyes of NASA” – during

9  
00:00:36,710 --> 00:00:42,350  
a special NASA TV broadcast that includes coast-to-coast coverage from the ground, from

10  
00:00:42,350 --> 00:00:44,800  
the air and from space.

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00:00:44,800 --> 00:00:49,370  
Coverage begins with a special pre-show at

noon eastern – followed by in-depth coverage

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00:00:49,370 --> 00:00:50,890

at 1pm.

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00:00:50,890 --> 00:00:55,160

You can also watch on Aug. 21 at [www.nasa.gov/eclipselive](http://www.nasa.gov/eclipselive)

14

00:00:55,160 --> 00:01:05,020

The damaged Omni S-band antenna on our Tracking and Data Relay Satellite, TDRS-M, has been

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00:01:05,020 --> 00:01:11,000

successfully replaced at Astrotech Space Operations, near the Kennedy Space Center in Florida.

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00:01:11,000 --> 00:01:16,180

Processing has resumed and the new target launch date is no earlier than Aug. 18, from

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00:01:16,180 --> 00:01:18,430

Cape Canaveral Air Force Station.

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00:01:18,430 --> 00:01:23,820

TDRS-M will join the fleet of Earth-orbiting satellites providing near-constant communication

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00:01:23,820 --> 00:01:28,920

between the ground and spacecraft such as the Hubble telescope, and the International

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00:01:28,920 --> 00:01:33,390

Space Station, as part of the Space Network.

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00:01:33,390 --> 00:01:38,030

The five sunshield layers responsible for protecting the optics and instruments of our

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00:01:38,030 --> 00:01:44,020

James Webb Space Telescope were fully installed recently at NASA industry partner, Northrop

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00:01:44,020 --> 00:01:47,220

Grumman Corporation in Redondo Beach, California.

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00:01:47,220 --> 00:01:52,240

The sunshield layers, which are made of kapton, will help prevent the Sun's background heat

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00:01:52,240 --> 00:01:55,820

from interfering with the telescope's infrared sensors.

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00:01:55,820 --> 00:02:01,200

The layers are capable of reducing the temperatures between the hot and cold sides of the observatory

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00:02:01,200 --> 00:02:04,320

by approximately 570 degrees Fahrenheit.

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00:02:04,320 --> 00:02:12,400

Targeted for launch in 2018, Webb is the most powerful space telescope ever built.

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00:02:12,400 --> 00:02:16,849

On Aug. 9, engineers at our Stennis Space Center conducted another hot-fire test of

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00:02:16,849 --> 00:02:19,750

an RS-25 Engine flight controller.

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00:02:19,750 --> 00:02:24,319

The objective of the test was to "green run" or flight certify the engine controller

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00:02:24,319 --> 00:02:26,790

– which is the brain of the engine.

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00:02:26,790 --> 00:02:31,840

Once proven flight-worthy, the controller will be installed on an RS-25 engine that

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00:02:31,840 --> 00:02:36,569

will help power the first integrated flight of our Space Launch System rocket with our

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00:02:36,569 --> 00:02:40,290

Orion spacecraft, known as Exploration Mission One.

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00:02:40,290 --> 00:02:45,530

SLS is designed to power our astronauts deeper into the solar system than ever before.

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00:02:45,530 --> 00:02:47,280

Chief Technologist Visits Industry Partner

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00:02:47,280 --> 00:02:48,280

(VO)

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00:02:48,280 --> 00:02:53,489

On Aug. 10, our Acting Chief Technologist Douglas Terrier visited industry partner Jacobs,

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00:02:53,489 --> 00:02:55,739

near the Johnson Space Center in Houston.

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00:02:55,739 --> 00:03:00,920

While there, he got a firsthand look at some of the more than 100 NASA space exploration

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00:03:00,920 --> 00:03:03,540

projects Jacobs is working on.

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00:03:03,540 --> 00:03:08,490

These include systems for the Orion spacecraft; hardware and engineering services for the

44

00:03:08,490 --> 00:03:15,280

International Space Station; and technology  
development for deep space exploration.

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00:03:15,280 --> 00:03:17,230

And that's what's up this week @NASA ...