

The science and hubbub behind the coming eclipse on April 8

Some say the solar eclipse on April 8 is a lucky omen. Others say it’s a sign of God’s judgement. But one thing’s for sure. No matter what you believe, this year’s darkening of the sun by the moon promises to be an astronomical display that’s bigger and longer, brighter and more spectacular than the last total solar eclipse that crossed America in 2017. Georgia will not experience total blockage of the sun. But, weather permitting, residents will still see a remarkable occurrence, said Dr. Donovan Domingue, professor of physics and astronomy at Georgia College & State University. It will be the last partial eclipse visible to Georgians until 2045. “Having to wait 21 more years to experience a phenomenon that historically has impressed so many people should encourage us to view this partial eclipse now or travel to its path of totality,” Domingue said. “The event can really give us perspective on the connections between the sun, earth and moon and our relative motions in space like few events can.” On March 26, Domingue will give a 6 p.m. public talk at Mary Vinson Memorial Library in Milledgeville. He’ll explain the nature of solar eclipses, their history and details about April 8. As he did in 2017, Domingue spent many months traveling to Baldwin and Jones County schools, prepping teachers on the science behind an eclipse. He helped create informational lessons and activities for the big day. Between the two events, Domingue also supplied about 30,000 safe-viewing glasses to schools and local libraries. About 20,000 of those were handed out for April 8—funded by Georgia College’s Science Education Center, Department of Chemistry, Physics and Astronomy and the university’s Astronomy Kaolin Endowed Chair. But safety’s not the only thing on people’s minds this year. Today’s Internet is engulfed with “wild conspiracy theories” about the April 8 eclipse despite “perfectly reasonable scientific explana-

tion” for the phenomenon, according to Newsweek. The 2017 and 2024 eclipse pathways overlap to create a giant X across America—a sign of heavenly disapproval to some. But others will travel long distances to the X’s center point near Carbondale, Illinois, thinking it the luckiest place on Earth that day. Certain people fear the eclipse corridor passes too close to the New Madrid Seismic Zone. They point to a series of earthquakes in



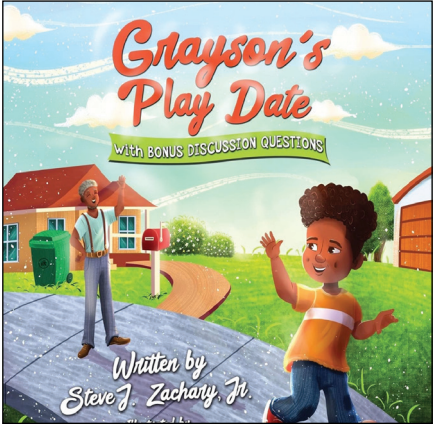
Students enjoying the 2017 partial solar eclipse at GCSU.

the Mississippi Valley that occurred just months after the September 1811 solar eclipse—though Newsweek found no scientific evidence to connect the two. The 2024 eclipse path caused more uneasiness when people realized it moves through Jonah, Texas, and at least two towns called Nineveh in Indiana and Ohio—calling to mind the Old Testament story of repentance.

More strange happenings surround the eclipse. Just days before, there’ll be an alignment of four planets. Then, a horned celestial object nicknamed the “Devil’s Comet” becomes visible—yes, you guessed it—on April 8. Superstitions and portents in the sky have plagued eclipses since ancient days. Even animals and birds act confused during eclipses. But Domingue takes these things in stride. No stranger to fun—the astronomer has Star Wars memorabilia and toys in his office—his reaction to conspiracy is one of a staunch scientist. There’s plenty of ‘real science’ about April 8 to interest people, he said. Two important things make this year’s solar eclipse brighter and more spectacular. The sun will be close to a solar maximum (2017 was close to a solar minimum), and the moon will be a couple thousand miles closer in orbit to Earth. This means viewers may be treated to large eruptions of solar material as they watch the eclipse, while a closer moon appears bigger and blocks more sun. Other fascinating facts: Solar eclipses happen almost every year somewhere on the planet, but total solar eclipses over specific communities are rare. A community might not experience one in 200 or more years. For a region like the U.S. to get two total solar eclipses in just seven years is “a truly remarkable occurrence.” In 2017, the eclipse moved northwest to southeast from Oregon to South Carolina. It was the first U.S. coast-to-coast total solar eclipse in 99 years. This year, the trek is southwest to northeast from Texas to Maine. (See this interactive map.) In 2017, a narrow corridor through 14 states of the U.S. experienced the total solar eclipse—but only the northeastern tip of Georgia did. This year, 13 states in America will experience the eclipse in totality. This year, maximum viewing times are nearly twice as long—4 minutes and 28 seconds in 2024 compared to 2 minutes and 40 seconds in 2017. The 2024 corridor is wider too—about 115 miles in 2024 compared to approximately 70 in 2017.

Ribbon Cutting ceremony tonight for new Tale Trail in Baldwin County

It’s no tall tale: A new trail where families can enjoy reading together is coming to Baldwin County’s Harrisburg neighborhood. Tale Trail is a quarter-mile footpath with a dozen storyboards on posts funded by the Sandra Dunagan Deal Center for Early Language and Literacy at Georgia College & State University. A ribbon cutting ceremony and opening celebration for the trail is today, April 2, at 6 p.m. at the Collins P. Lee Community Center in Milledgeville. The path provides families an opportunity to interact and promote language skills, using activities centered around the book “Grayson’s Play Date” by Steve J. Zachary, Jr., a graduate of Baldwin County High School. The book’s main character is his son, Grayson. “The primary goal of the Tale Trail is to enhance language use by presenting an illustrated book along the walking path with each page of the book displayed,” said Jamie Thomas, early language professional development specialist at



the Deal Center. “Ultimately, the Tale Trail aims to make reading fun, interactive and enjoyable for families,” she said, “while fostering language and literacy development.” Officials from the Milledgeville-Baldwin County Chamber of Commerce will attend the opening.

Families are encouraged to come, explore the trail and meet the author and his family, as well as Grayson, the book’s main character. One storyboard includes a QR code, so families can upload a video of the book being read by the author. Each page has prompts with questions to ask young listeners and activities to boost reading comprehension and interest in literature. Storyboards are constructed so books can be changed periodically. About 20 members of Pi Kappa Alpha Fraternity dug holes recently and cemented the permanent stands with assistance from Georgia College’s Office of Community Engagement and Service. “We want this Tale Trail to spark some fun for families,” Thomas said, “and help them see reading in a new way. Being interactive out in nature and talking about the book encourages back-and-forth language between parents and children.”

Did you know?

Millions of Americans will see the 2024 solar eclipse. But this year’s eclipse will be seen by even larger populations as it moves through more densely populated areas. The next coast-to-coast total solar eclipse in the U.S. is more than two decades away on Aug. 12, 2045. It will move from California to Florida. After that, a total solar eclipse will pass directly through Milledgeville and Macon. The bad news is: It’s not until 2078, so most of us won’t be around to see it. Milledgeville and Central Georgia residents are welcome to view the partial solar eclipse from Georgia College & State University’s Front Campus April 8. It will be 2 hours and 34 minutes long, from 1:47 p.m. to 4:21 p.m. Free protective glasses are available in limited quantities at Mary Vinson Memorial and Twin Lakes libraries and the A&S Fountain.

GCSU international student interprets science project for fifth grader

More than 450 participants from all over Georgia participated at the K-5 State Science & Engineering Fair this year at Georgia College & State University. But one fifth grader from Springdale Elementary School in Macon almost dropped out. Sosuke Nishimiya’s family moved to Macon a few years ago because of his father’s job, and his English is still coming along. He didn’t think he’d be able to effectively explain his project to judges on the effects of acid rain if it fell in Macon, Georgia. Dr. Catrena Lisse, director of GCSU’s Science Education Center, got an email from Nishimiya’s teacher saying he wanted to back out. Lisse immediately started looking for help. She found an international student from Japan, Rihito

Uda, studying at Georgia College this semester. Rihito offered to act as Nishimiya’s interpreter during the fair. The two instantly bonded. Sosuke’s mother said her son is very shy and rarely speaks to anyone as much as he did with Rihito. The international student said it was the first time he had spoken Japanese since coming to Georgia College in the fall. It made him nostalgic for home. Rihito said it was an honor to help Sosuke, and the task filled him with “gratitude.” But it wasn’t easy. Rihito is a business major, in his junior year. He hadn’t encountered science words in English before. But he did his best to take in what Sosuke was telling him.

The boy explained how he used a red cabbage to test the acidity of various solutions like vinegar, water and citric acid. The presence of acid caused the cabbage to change colors. Rhitio stood by Sosuke’s side as the judge asked the boy questions about his project. Rhitio repeated what Sosuke answered. The team was a success. Sosuke’s acid rain project won two awards: a medallion for Grand First Prize in the elementary division and a trophy for Best of Chemical and Materials Sciences. He also received media attention from local TV news stations and the Union Recorder. “I never want language to be a barrier for students to succeed in science,” Lisse said.



Fifth grader Sosuke Nishimiya with his interpreter, left, and science fair judge. He won an award for his project on acid rain.

What’s going on in Bobcat Territory?

Visit frontpage.gcsu.edu/events

Tuesday

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11 a.m.-5 p.m. Blood Drive at GCSU, Donahoo Lounge.
6 p.m. Ribbon cutting for Tale Trail at Collins P. Lee Community, Milledgeville.
7:30 p.m. guest artist and tenor Dr. Jonathan Yarrington will perform Franz Schubert’s “Die schöne Müllerin” in Max Noah Recital Hall.

Wednesday

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10 a.m.-4 p.m. Blood Drive at GCSU, Donahoo Lounge.
4-9 p.m. GCSU Softball doubleheader vs. University of W. Georgia at Peeler Complex.
4:30-6:30 p.m. Farmer and artisan market, 25 vendors on Front Campus.
7:30 p.m. GCSU Theatre presents “The Feast” at Campus Blackbox Theatre.

Thursday

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7:30 p.m. Newell Scholar Lecture-Recital: “Cultural Diplomacy and Music” Dr. Evren Kutlay, piano, at Max Noah Recital Hall.
7:30 p.m. GCSU Theatre presents “The Feast” at Campus Blackbox Theatre.

Friday

5

6-9 p.m. GCSU Baseball doubleheader vs. Claflin University at John Kurtz Field.
7:30 p.m. Senior recital by Lizzy Galloway in Max Noah Recital Hall.
7:30 p.m. GCSU Theatre presents “The Feast” at Campus Blackbox Theatre.

Saturday

6

1-7 p.m. GCSU Baseball doubleheader vs. Claflin University at John Kurtz Field.
1 p.m. Senior Recital: “In Case We Don’t Live Forever” by Kelsey Fosterin Max Noah Recital Hall.
7:30 p.m. GCSU’s three choral ensembles present a combined concert, “Choral Billboard Top Hits” at 7:30 p.m. in First Baptist Church, 330 S. Liberty Street.
7:30 p.m. GCSU Theatre presents “The Feast” at Campus Blackbox Theatre.