Full Article

Relationship between sprite current and morphology
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To editor

Paper was nominated for the Langmuir Award in 2021

Sprites are short-lived, large-scale electrical discharges that happen at the edge of space in the form of a small lightning. The activity of sprites is known to be correlated with the number of lightning. Due to their location, sprites can be detected only from above by aircraft, balloons, or spacecraft. Having very short duration, they can be captured only at specific locations and are not easily accessible for scientific research.

During two prolific nights of observations, our team collected a large dataset of sprites in New Mexico. The sprites were captured out from New Mexico Tech’s Langmuir laboratory, situated in the middle atmosphere. A statistical analysis shows that the number of sprites increases with the number of lightning.

Sprites with more complex morphology and larger size also have larger electrical currents, and therefore a larger impact in the middle atmosphere. More complex morphology and larger size also have larger electrical currents, and therefore a larger impact in the middle atmosphere. Sprites with more complex morphology and larger size also have larger electrical currents, and therefore a larger impact in the middle atmosphere.

According to the research, the probability of observing sprites increases with the number of lightning. The result supports the idea that sprites may be a new category of lightning.

Graduate Student Association

Message from the GSA

We want to encourage our students to get their vaccine during the summer. If they haven’t already, vaccination is the best protection against COVID-19 for yourself and others. According to the CDC, New Mexico’s vaccination rate is 55%. With the new CDC guidelines, all students are encouraged to wear masks indoors except for those eating or drinking.

The student health center is available for all graduate students, even if you are not registered for the fall. They have a nurse practitioner on staff and can offer a wide variety of services such as sick visits, lab evaluations and family planning.

According to the CDC, the risk of more contagious COVID-19 variants is critical. We do our part in increasing the state’s vaccination rate. You can register for your vaccine at vccenm.org. If you are a domestic student, the recent Covid-Relief Bill has some very exciting opportunities for health insurance plans with very low to $0 premiums. We highly encourage you to visit covidactnow.org to find more information and if you qualify. Special enrollment ends on 8/15.

Important Dates

7/16 Completion paperwork for summer graduation

If you are planning to graduate this summer, please complete the completion paperwork of the ordinary committee. (Ph.D.) Contact your academic advisor and Prejudged enrollment from the Dean of Graduate Studies. Please submit your completed paperwork to the Center for Graduate Studies. A plan of study must be submitted to the student’s advisor and ordinary committee.

Student degrees are not completed until all work has been approved by the Dean of Graduate Studies and the student receives their certificate of student enrollment from the Prejudged system.

7/30 End of Summer Semester

If you are a graduate student, check with your advisor on when you will have a term in order to make sure you are not in a lab.

To prepare for the fall semester, please make sure you have a research plan approved special if you are planning to graduate this semester.

8/12 TA Training

This training is mandatory for all TA’s, please have them plan to attend a two-hour training last year. For TA’s who were absent, the information will be presented in the fall. The afternoon information will be presented in the fall. The afternoon information will be presented in the fall.

8/15 Affordable Domestic Student Health Insurance

If you are a domestic student, the recent Care’s Relief Bill has some very exciting opportunities for health insurance plans with very low to $0 premiums. We highly encourage you to visit covidactnow.org to find more information and if you qualify. Special enrollment ends on 8/15.

Announcements

Registration is open please register

Don’t wait till last minute

Registration for the Fall semester is now open please register and don’t wait till last minute. This registering may result in courses being oversold.

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Contact the GSA at graduate.dept@nmt.edu if you have any questions or comments on graduate student resources.