

## The Nature of Math and Science: Analyzing the Presence in Everyday Communication

Article: Upper Atmosphere Gridlock Stalled Dorian by: Associated  
Press

<https://www.usnews.com/news/news/articles/2019-09-03/upper-atmosphere-gridlock-stalled-dorian>

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I chose this article because of how recent the events were and how much it intrigues me. I teach a large unit on weather in kindergarten and I love teaching about storms and hurricanes. I live in Louisiana and both of those topics are very relevant to my students and they have a wealth of previous knowledge about these topics. They also love learning about it.

This article focused on the path that Hurricane Dorian took and how it stopped for 28 hours over the Bahamas. The article quotes meteorologists that try to explain why this may have happened and decide whether or not this is going to be a new normal for future hurricanes.

### **Scientific Knowledge is Open to Revision in Light of New Evidence**

When I originally read the article, this was my first thought about the events of Hurricane Dorian. In the article Jeff Masters, the meteorology director at Weather Underground was quoted saying "This is unprecedented. We've never had a Category 5 stall for so long in the Atlantic hurricane record." (Associated Press, 2019) The article also said that much more research needs to be done on what happened with Dorian.

### **Science is a Way of Knowledge**

In the article Jim Kossin, a National Oceanic and Atmospheric Administration climate scientist, said that this event was very odd but not unprecedented because other storms recently have had similar events but

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none as large as Dorian. I believe that this points to science as a way of knowledge because he cites the history of hurricanes over the past 100 years in the united states and discussed how hurricanes have slowed by 17%.

### **Science Addresses Questions About the Natural and Material World**

This is the area that I believe best fits this article. When a meteorologist forecasts the path of a hurricane it is a scientific guess. The storms can be very unpredictable and don't always have to follow the same patterns of previous storms. The ability to give a projection and forecast based on past storms and other surrounding weather systems helps us be more prepared when storms do hit.

### **Making Sense of the Problem and Persevere in Solving it**

This may not be a math problem but this mathematical practice definitely still applies. There is the obvious problem of being able to forecast that the storm would have stopped for 28 hours but also how storms have changed over the last 100 years. Scientist are still working on making sense of this problem.

### **Reason Abstractly and Quantitatively**

Mathematical reasoning is going to help scientist review the different characteristics of the storm and make sense of why the upper atmosphere

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just got still even though this major storm was there. Scientist can use the readings to further study how this storm moved and why.

**Construct viable arguments and critique the reasoning of others.**

In the article with the experts that were interviewed presented their reactions but may not have agreed fully with each other. Also Kossin states that the reason for the changes in hurricanes is a global warming. That is a view that is critiqued by other scientists.

### References

Associate Press, 2019. Upper Atmosphere Gridlock Stalls Dorian. US News

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