AGC Abstract Examples

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- Please specify whether your abstract is for a paper or a poster (as noted in the first line of the examples).
- Please also note if your abstract is an entry in our student competitions (see the sample poster abstract below for an example of a student entry notation)

PAPER SUBMISSION

HOW PEOPLE PERCEIVE EL NINO ON TWITTER. Xinyue Ye (xye5@kent.edu), Kent State University, Kent OH. Xuebin Wei (weixx@jmu.edu), James Madison University, Harrisonburg VA

Abstract

Social media, such as Twitter, Facebook, YouTube, etc., have become a critical resource where people gather and exchange information. Due to their fast dissemination and massive participation, the credibility of contents on social media is significant. In this paper, we investigated how people perceive El Nino, an extreme weather condition, on Twitter. We have collected Tweets mentioning 'El Nino' from December 2016 to January 2017, and geocoded most of the Tweets based on coordinates, place names or users' locations on their profiles. We have identified a significant increase of Twitter discussions about El Nino when a series rainstorms inundated California in January 2017. Although there were no recorded El Nino events during those rainstorms, many people, even some news media, mistakenly attributed that weather disaster to an El Nino condition. Our findings indicate that massive discussions on social media don't guarantee credibility of the contents. Public perceptions can be misled on social media.

Key Words: GIS, Twitter, El Nino, Public Perception.

POSTER SUBMISSION (STUDENT COMPETITION ENTRY)

ANALYSIS OF ATMOSPHERIC ANOMALIES DURING THE 2009-10 EL NIÑO EVENT AND IMPACT ON WATER RESOURCES IN THE SOUTHWEST. Dorothy McGregor, (mcgregor@unt.edu) University of North Texas, Denton TX.

In the fall of 2009, the 5th strongest El Niño event on record developed in the tropical Pacific and had a pronounced effect on weather in the U.S. during the winter and following spring. The changes in sea surface temperatures caused profound changes in atmospheric circulation patterns and produced a number of unusually strong winter storms tracking across the country. The related atmospheric anomaly patterns were reconstructed using data from the NOAA Reanalysis Model. These variables included, pressure, temperature, precipitation, vertical velocity, humidity and winds among others. The analysis produced a surprisingly complex pattern in which some parameters revealed interpretable results while some did not. One important impact was an increase winter precipitation across the southwest U.S. This is consistent with previous events and is an important input to the water resources of the region.

Key Words: Atmospheric Anomalies, El Nino, Water Resources, Reanalysis, Southwest.