# Boulder

# **Julie Demuth**

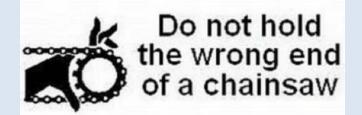




jdemuth@ucar.edu

# What is risk communication?







START LOW . GO SLOW

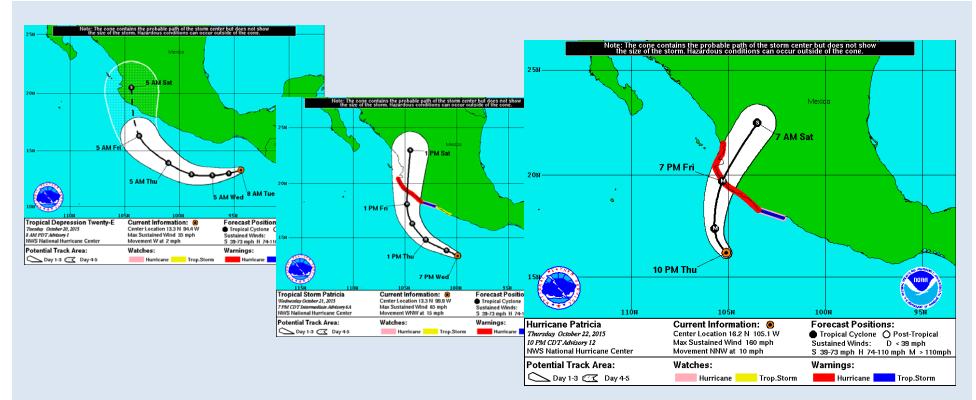
#### FOOD ALLERGY WARNING

Our food may contain peanut products



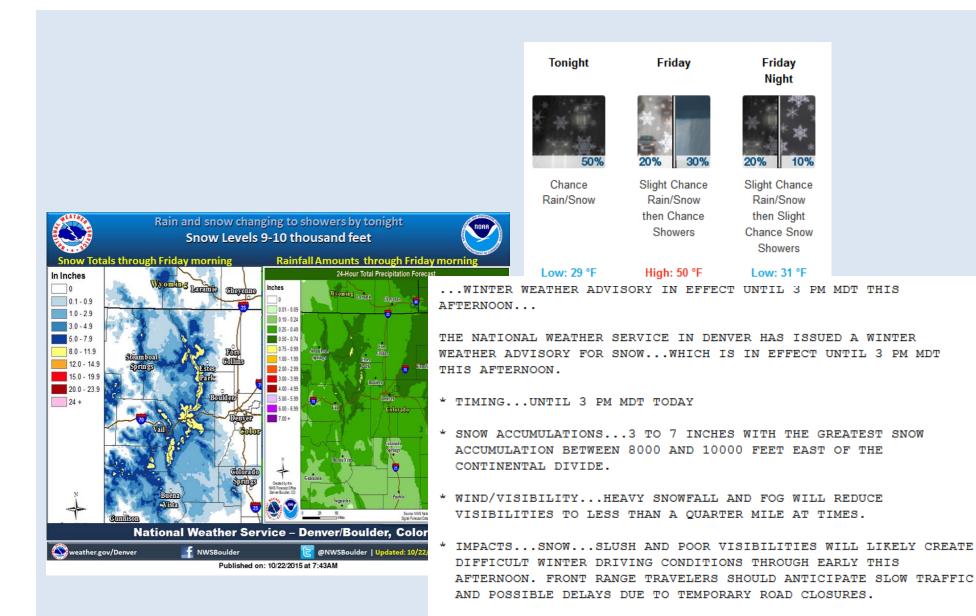


## Weather forecasts = risk communication



#### ...POTENTIALLY CATASTROPHIC HURRICANE PATRICIA TURNING TOWARD SOUTHWESTERN MEXICO...

Confidence is high that Patricia will make landfall in the hurricane warning area along the coast of Mexico as an **extremely dangerous major hurricane**... In addition to the coastal impacts, very heavy rainfall is likely to cause **life-threatening flash floods and mud slides...** 



PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WINTER WEATHER ADVISORY FOR SNOW MEANS THAT PERIODS OF SNOW WILL CAUSE PRIMARILY TRAVEL DIFFICULTIES. BE PREPARED FOR SNOW COVERED ROADS AND LIMITED VISIBILITIES...AND USE CAUTION WHILE DRIVING.



#### Eastbound I-70 closed from Silverthorne to Eisenhower-Johnson Tunnels due to crashes, snowy weather

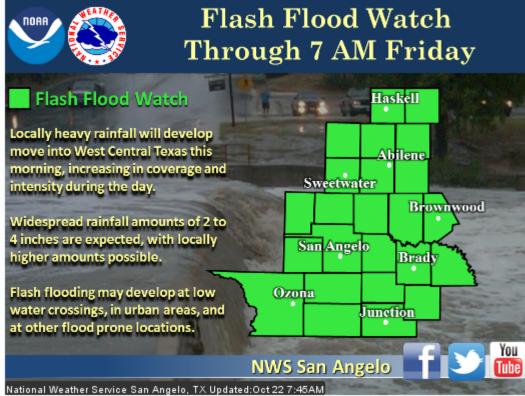
BY: Anica Padilla POSTED: 10:40 AM, Oct 22, 2015 UPDATED: 12 mins ago



Copyright 2015 Scripps Media, Inc. All rights reserved. This material may not be published, broadcast, rewritten, or redistributed. PICTURE BY CDOT

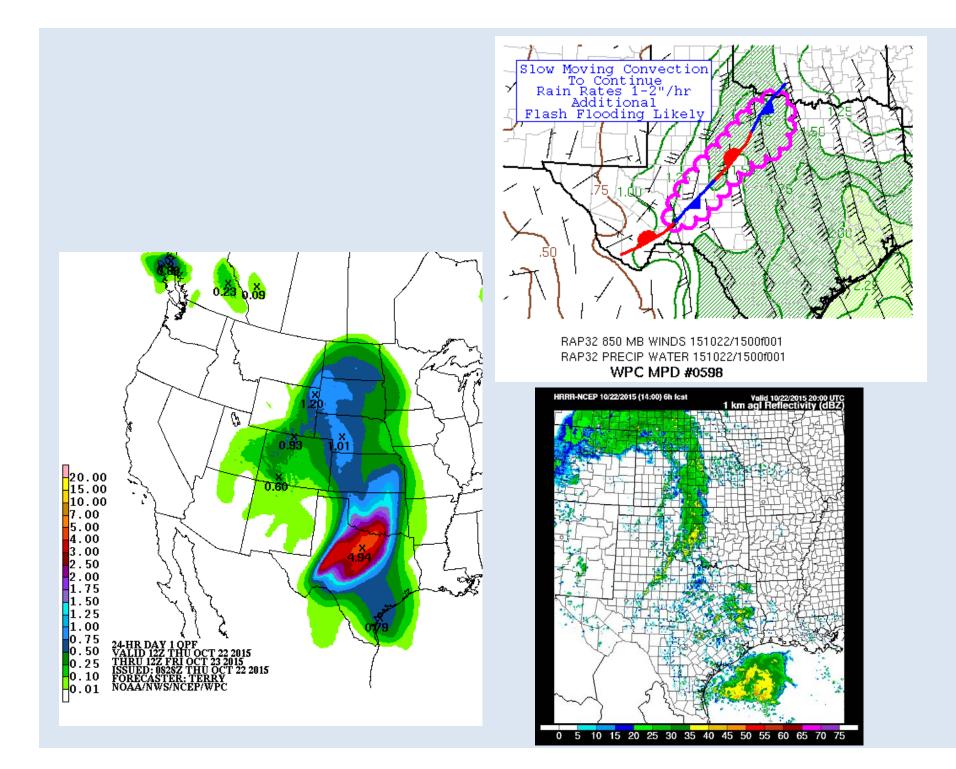


Grand Jct Aspen Leadville Colo Springs Telluride Gunnison Pueblo Lamar

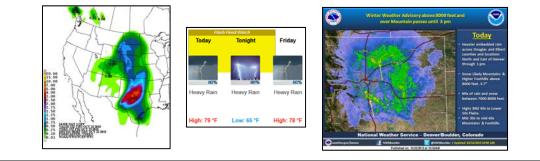


An upper-level storm system will approach the region today. Moisture will continue to increase across the area, and as the storm system interacts with this moisture, showers and thunderstorms will increase in coverage and intensity. Heavy rain will begin to develop this morning, becoming more widespread during the afternoon and evening.

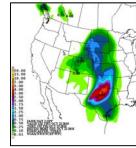
Flash Flood Watch		
Today	Tonight	Friday
80%	80%	60%
Heavy Rain	Heavy Rain	Heavy Rain
High: 79 °F	Low: 65 °F	High: 78 °F



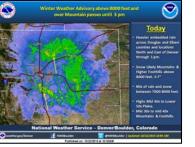
#### Weather forecasts as risk communication



#### Weather forecasts as risk communication







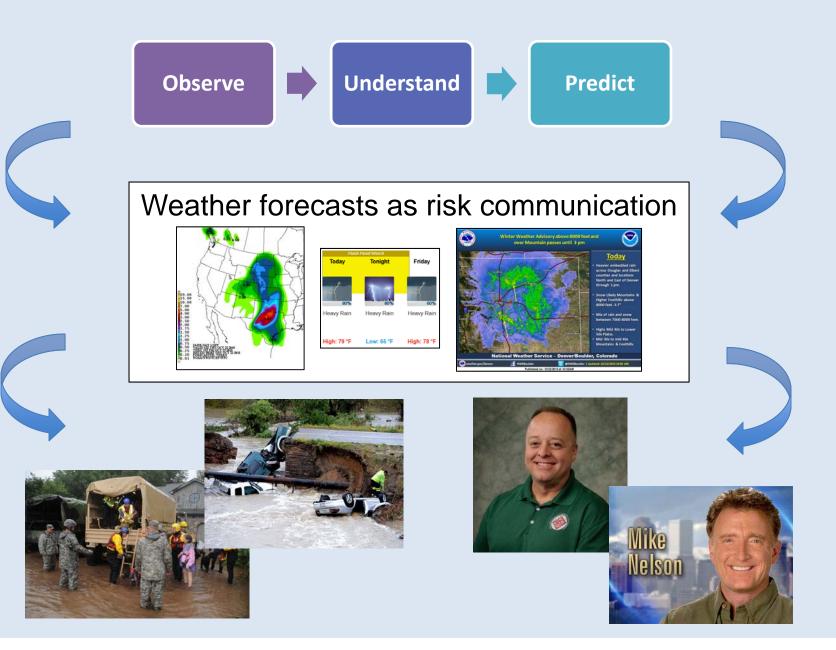




#### **Meteorology research & operations**



### **Meteorology research & operations**





#### 11:00 - 12:30 PM A 50% Chance of An Effective Forecast Session Lead: Julie DeMuth, NCAR

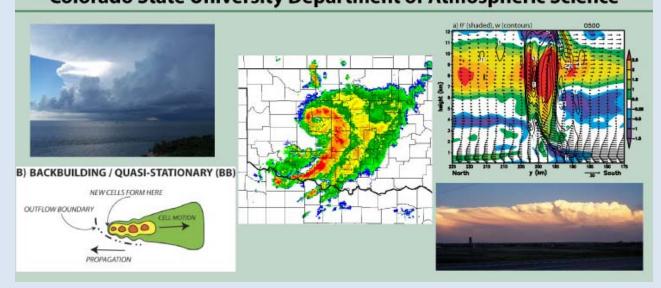
What do and don't we really understand about weather, the risks it poses, and how people perceive and respond to them? This session will include discussion of these topics from the perspective of practitioners who assess and communicate weather risk information to the public, government, and other users, and from researchers who study the weather and weather risk communication.



## **Russ Schumacher**

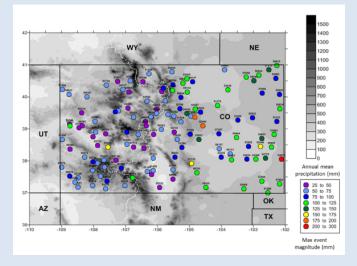
Assistant Professor Colorado State University Dept of Atmospheric Science

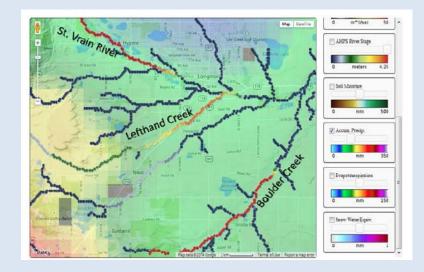
**PRECIPITATION SYSTEMS RESEARCH GROUP** Colorado State University Department of Atmospheric Science





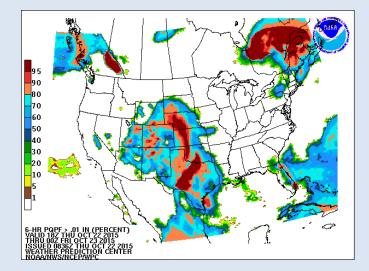
### Kelly Mahoney **Research Scientist REEK COUN NOAA Earth Systems Research Lab** & CU Cooperative Institute for **Research in Environmental Sciences**







## **Daniel Nietfeld** Science and Operations Officer National Weather Service Omaha



THE NATIONAL WEATHER SERVICE IN OMAHA HAS ISSUED A

- \* FLASH FLOOD WARNING FOR... OMAHA METRO AREA INCLUDING... SOUTHWESTERN POTTAWATTAMIE COUNTY IN SOUTHWEST IOWA... EASTERN DOUGLAS COUNTY IN EAST CENTRAL NEBRASKA... NORTHEASTERN SARPY COUNTY IN EAST CENTRAL NEBRASKA...
- \* UNTIL 915 PM CDT
- \* AT 718 PM CDT...DOPPLER RADAR INDICATED NUMEROUS THUNDERSTORMS PRODUCING HEAVY RAIN ACROSS THE OMAHA METRO AREA. UP TO TWO INCHES OF RAIN HAVE ALREADY FALLEN AND FLOODING HAS ALREADY OCCURRED IN PARTS OF THE METRO AREA. ADDITIONAL FLASH FLOODING IS EXPECTED TO BEGIN SHORTLY.

ADDITIONAL RAINFALL AMOUNTS OF TWO INCHES ARE POSSIBLE IN THE METRO AREA.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

BE ESPECIALLY CAUTIOUS AT NIGHT WHEN IT IS HARDER TO RECOGNIZE THE DANGERS OF FLOODING.

TURN AROUND...DONT DROWN WHEN ENCOUNTERING FLOODED ROADS. MOST FLOOD DEATHS OCCUR IN VEHICLES.

&&

- LAT...LON 4116 9583 4116 9588 4114 9588 4112 9587 4111 9587 4112 9614 4137 9613 4137 9577 4128 9576
- \$\$

NIETFELD