

## Weekly Report

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CIRA  
STAR/NESDIS  
National Oceanic and Atmospheric Administration (NOAA)

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Submitted by: Maranda Hutson  
Date of Submission: 18 July 2025  
Prepared by: CIRA and STAR contributors

### **Products and Applications**

**Publications (Citation: followed by a short Summary: (Why & so what), & detailed summary):**

### **Awards and Recognition**

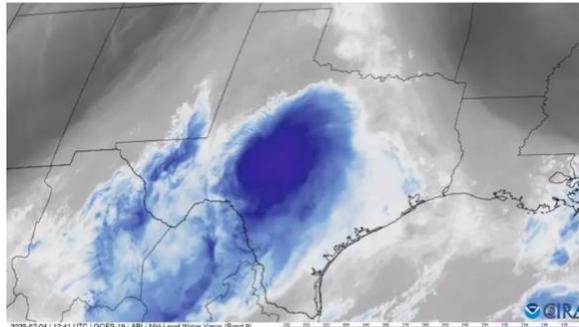
### **Media Interactions and Request**

**Imagery Production Team Satellite Imagery of Houston Flooding Featured by News Media:** In early July, deadly flash flooding in Texas became national news. Satellite visuals created by the Imagery Production Team made available in CIRA's Satellite Library were used by several news outlets to highlight the flooding. More information and links can be found below. (POC: D. Smith, [dakota.smith@colostate.edu](mailto:dakota.smith@colostate.edu) K. Erickson, [kim.erickson@colostate.edu](mailto:kim.erickson@colostate.edu), J. Reiter, [josh.reiter@colostate.edu](mailto:josh.reiter@colostate.edu), CIRA) Funding: GOES-R.

Houston Chronicle: "Fact Check: Can cloud seeding cause severe weather such as the Texas Hill Country flooding?". <https://www.houstonchronicle.com/news/houston-weather/article/cloud-seeding-texas-weather-modification-floods-20758960.php>

## Fact check: Can cloud seeding cause severe weather such as the Texas Hill Country flooding?

By **Roberto Villalpando**, **Ryan Nickerson**, Staff writers  
July 7, 2025



2025-07-04 | 12:41 UTC | OCEBS-19 | ABI | Mid Level Water Vapor (Band 9)  
This enhanced weather satellite image shows water vapor over Texas around 6:40 a.m. July 4. Surges of atmospheric moisture from the Pacific Ocean and remnants of Tropical Storm Barry, which had emerged from the Gulf of Mexico days earlier, converged with existing moisture-rich air. The abundance of water vapor fueled historic rainfall across the Hill Country that led to deadly, catastrophic flooding.  
Geostationary Operational Environmental Satellites/CIRA and NOAA

Fox 4 News: “Satellite shows historic rainfall that triggered catastrophic Texas flooding”.

<https://www.facebook.com/reel/730373563289044>

<https://www.tiktok.com/@fox4newsdallasfortworth/video/7524398465640582430>

<https://www.instagram.com/reel/DL0XtIhSyvV/>

NewsNation: “Satellites captured a massive storm system sweeping through central Texas...”.

<https://www.tiktok.com/@newsnationnow/video/7524473530528927007>

Fox 7 Austin: “Deadly Texas Flood”. <https://www.facebook.com/watch/?v=1436470774212693>

The Miami Hurricane: “Central Texas flood impacts reach UM, raise questions of storm preparedness”. <https://themiamihurricane.com/2025/07/12/central-texas-flood-impacts-reach-um-raise-questions-of-storm-preparedness/>

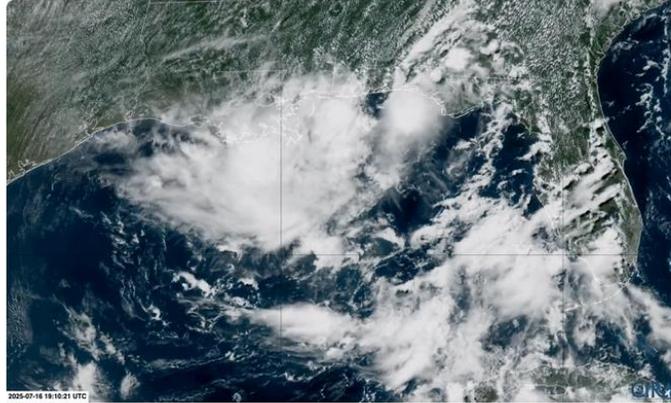
**CIRA GeoColor Featured in CNN Article:** CIRA GeoColor imagery pulled from SLIDER was featured in a CNN article detailing a tropical disturbance along the U.S. Gulf Coast. More information and a link can be found below. (POC: D. Smith, [dakota.smith@colostate.edu](mailto:dakota.smith@colostate.edu) K. Erickson, [kim.erickson@colostate.edu](mailto:kim.erickson@colostate.edu), J. Reiter, [josh.reiter@colostate.edu](mailto:josh.reiter@colostate.edu), CIRA) Funding: GOES-R.

<https://www.cnn.com/2025/07/15/weather/storm-dexter-gulf-flooding-climate>

# A tropical system poses serious flood risk to Louisiana and the Gulf Coast

UPDATED JUL 16, 2025 ▾

By CNN Meteorologist Briana Waxman



A disorganized area of showers and thunderstorms that could eventually become a tropical system rumbles along the Gulf Coast Wednesday afternoon. (CIRA/RAMMB/NOAA)



## **Blog Posts and Social Media**

### **Travel, Workshops, Conferences, and Meeting Reports**

**Optical Flow Testbed Demonstrations at the SPC:** J. Apke visited the Storm Prediction Center in Norman, OK on 9 and 10 July 2025 to demonstrate the Optical flow Code for Tracking, Atmospheric motion vector, and Nowcasting Experiments (OCTANE) suite of products. This testbed, orchestrated by Dr. Kevin Thiel at CIWRO, is designed to highlight how optical flow-enhanced satellite imagery can assist SPC forecasters in diagnosing and nowcasting convection and convection environments. Forecasters will have access both to the CIRA SLIDER and AWIPS versions of the products for an 8-week demonstration period and will provide feedback to improve the product operational utility via web-based surveys. The visit included a brief seminar to SPC forecasters and CIWRO personnel which covered the operational uses of the OCTANE products. (POC: J. Apke, [jason.apke@colostate.edu](mailto:jason.apke@colostate.edu); Funding: NOAA GOES-R PGRR).

# The Optical Flow Code for Tracking, Atmospheric Motion Vector, and Nowcasting Experiments (OCTANE) Suite of Products

**Presenting Author:** *Jason Apke*<sup>1</sup>

**With Contributions From:** Tom Juliano, Jack Tobin, Steven Miller<sup>1</sup>, Bill Line<sup>2</sup>, and Kristopher Bedka<sup>3</sup>

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<sup>3</sup> NASA Langley Research Center, Hampton, Virginia



National Weather Center/SPC 2025

Updated July 7, 2025

**Figure:** SPC Brownbag Seminar title slide presented on 9 July 2025 in Norman, OK.

## Training and Education activities

## Future Meetings and Events (dates, meeting/event, location, staff involved)

## Other

S. Ortland reviewed a manuscript for the American Meteorological Society's *Artificial Intelligence for the Earth Systems* journal. (POC: S. Ortland, [stephanie.ortland@colostate.edu](mailto:stephanie.ortland@colostate.edu))