

# Severe Weather Prediction Using Quantum Information Theory

Tech ID: 25022 / UC Case 2015-245-0

## TECHNOLOGY DESCRIPTION

Leveraging recent breakthroughs in brain imaging for MRI, new techniques realized in software have been developed for analyzing severe weather systems. Using a series of radar time series, early and local identification of tornado formation (tornadogenesis) has been demonstrated. Applications for this work include wide-area networks of sensor-stations to realize very discrete, town-level, early identification of tornado development.

Applications of this technology could realize a much more granular understanding of tornado formation and movement, as well as much more accurate early warning systems that reduce false-positive notifications.

This work is available for commercial development.

## PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	20180285687	10/04/2018	2015-245
Patent Cooperation Treaty	Published Application	2016176684	11/03/2016	2015-245

## CONTACT

University of California, San Diego  
Office of Innovation and Commercialization  
[innovation@ucsd.edu](mailto:innovation@ucsd.edu)  
tel: 858.534.5815.



## OTHER INFORMATION

### CATEGORIZED AS

- **Sensors & Instrumentation**
- Environmental Sensors

### RELATED CASES

2015-245-0