

Jason W. Godwin

Experience

METEOROLOGIST INTERN | NATIONAL WEATHER SERVICE WFO FORT WORTH, TX | JANUARY 9, 2017 – PRESENT

· **Key Responsibilities:**

- **Data Acquisition/Public Service:** Collect and quality-control upper-air observations, issue hydrologic products through RiverPro, issue daily climate summaries. Answer phone calls from general public, emergency managers, and media. Generate graphiccasts and other content for social media.
- **Forecasting:** Issued public and fire weather (planning and spot) forecasts using Graphical Forecast Editor (GFE). Have worked near-term (0-6 hours), short-term (6-24 hours), and long-term (Days 2-8) desks. Issued TAF packages for airports in North and Central Texas (including Dallas/Fort Worth International Airport, Dallas Love Field, Fort Worth Alliance Airport, and Waco Regional Airport). Collaborated with West Gulf River Forecast Center (WGRFC) and Center Weather Service Unit (CWSU) Fort Worth. Have worked radar during severe weather (supercell and wet microburst events) and flash flood events since completing Radar Applications Course in February 2018.
- **Outreach:** Participated in outreach events, Integrated Warning Team (IWT) meetings, storm damage surveys, and taught storm spotter classes at 2018 SKYWARN talks as well as Plano Ham-Com (amateur radio convention). Re-established a connection between our office and an amateur radio group in Young County, TX for severe weather reporting.
- **Programming:** Developed a graphical user interface (GUI) for use in AWIPS-2 for monitoring crosswinds and low-level wind shear at TAF sites. Other programming activities include developing a script for computing various daily climatological statistics (i.e. temperature percentile ranks and distributions for a given day), and a script that generates plots showing distribution and range of GFS Ensemble Forecast System (GEFS) members for a given location.
- **On-Site Deployments:** Deployed to Unified Incident Command at the Texas Motor Speedway for on-site weather support in April 2018.
- **Key Training:**
 - Aviation: Forecasting Clear Air Turbulence (July 2018), Digital Aviation Services (June 2018), Distance Learning Aviation Course (August 2017), Impact of Weather on Air Traffic Management (June 2017). Shadowed forecaster shift on Fort Worth CWSU in April 2018.
 - Fire Weather: Intermediate Wildland Fire Behavior Course S-290 (July 2017).
 - Impacted-Based Decision Support Services (IDSS): IDSS Units 1 (May 2018) and 2 (August 2018).
 - Severe Weather/Radar: Warning Operations Course Core (FY2018) and Severe (FY2018), and Radar Applications Course (FY2018).

WEATHEROPS FORECASTER | WEATHER DECISION TECHNOLOGIES, INC. | MAR. 2015 – DEC. 2016

- Produced forecasts for marine and land-based clients, as well as marine transit forecasts around the world. Forecasts were produced using Graphical Forecast Editor (GFE) run on a global domain as well as a high-resolution North American domain. Specific regions of experience include North America, Gulf of Mexico, Western Europe, Brazil, Australia, South China Sea, and the Persian Gulf.
- Issued tropical cyclone forecasts and tropical weather outlooks for the North Atlantic, West Pacific, North Indian, and Australia regions. Notable events include Tropical Storm Erika, Hurricane Joaquin, and Typhoon Soudelor
- Fielded phone calls from marine and land-based clients. Also prepared and participated in weather briefings for clients in the outdoor event (e.g. concerts, festivals, etc.), logistics, utilities, and oil and gas industries. Outdoor event clients often needed quick forecasts primarily concerning severe, and sub-severe convective weather.
- Real-time weather monitoring for outdoor events and marine operations included extensive use of radar products (including dual-polarimetric radar), satellite, surface observations, and upper-air observations. Issued weather watches, warnings, and advisories using proprietary alerting system.

Education

MASTER'S OF SCIENCE IN METEOROLOGY AND PHYSICAL OCEANOGRAPHY | DECEMBER 2014 | UNIVERSITY OF MIAMI, ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCE

- Thesis topic: *The Environmental Sensitivity of Hurricane Irene's (2011) Structural Evolution*
- Adviser: Sharan Majumdar (committee members: Brian Mapes and Michael Brennan)
- Relevant coursework: Physical Oceanography, Geophysical Fluid Dynamics, Atmospheric Science, Mesoscale Meteorology, General Circulation of the Atmosphere, Computational Fluid Dynamics, and Physics of Remote Sensing I (Passive Systems)

BACHELOR'S OF SCIENCE IN METEOROLOGY WITH SPECIAL DISTINCTION | MAY 2012 | UNIVERSITY OF OKLAHOMA

- Senior capstone project: *Observations of Supercell Structures in Hurricane Irene (2011)* (adviser: Mike Biggerstaff)
- Relevant coursework: Atmospheric Dynamics, Atmospheric Thermodynamics, Meteorological Measurements, Physical Meteorology, IT Skills for Meteorologists, Synoptic Meteorology, Tropical Meteorology, Mesoscale Meteorology, and Radar Meteorology.
- Participated in a student forecasting group called "Oklahoma Weather Lab" (OWL). Issued forecasts for sites across the state of Oklahoma as well as campus forecasts. Also issued forecasts and nowcasted for some university events.
- Acted as forecast shift leader during my junior and senior years and trained students on forecast operations and techniques. Also employed social media to disseminate information about potentially hazardous weather.

Skills & Abilities

- **Programming Languages:** HTML, CSS, SH, BASH, Java, JavaScript, MATLAB, Python (including matplotlib, numpy, scipy, basemap, pandas, tkinter, AWIPS-2 data access framework, and other packages).
- **Software Packages:** AWIPS-II/CAVE, Graphical Forecast Editor (GFE), Microsoft Office (particularly Microsoft Excel), WRF-ARW, and GR2Analyst.
- **Datasets:** grib1, grib2, netCDF, and Level II NEXRAD.
- **Operating Systems:** Windows/PC and Unix/Linux.
- **Certifications:**
 - NOAA Upper-Air
 - FCC Amateur Radio General Class License (call sign: KG5TMP)
- Other technical skills: high-performance computing, data visualization, GitHub, GIS, and radio communications (UHF, VHF, and HF).