



Atmospheric Data Assimilation Scientist

As an Atmospheric Data Assimilation Scientist you will directly contributing to the enhancement of WSI's Numerical Weather Prediction forecast capability by implementing state-of-the-art data assimilation techniques. WSI's NWP forecasts are used throughout the Weather Company to provide on-air "futurecast" forecasts as well as to provide automated forecasts to various business lines. Further, WSI forecasters use output from the system in generating custom forecasts for aviation and energy clients.

You will research, develop, and implement state-of-the-art techniques to assimilate conventional and novel atmospheric observations into atmospheric analyses. The analyses will be used to improve the forecast accuracy of short-range (0-72 hr) regional and global numerical weather prediction (NWP) systems in products designed for both consumer and business-to-business markets.

Essential Duties and Responsibilities:

- Research, recommend, and implement state-of-the-art data assimilation techniques.
- Develop observation operators to assimilate novel observations.
- Implement rigorous and relevant validation techniques in order to objectively assess impact of data assimilation enhancements on forecast quality.
- Play an active role in the product requirements process, giving feedback to product management.
- Update job knowledge by studying state-of-the-art development tools, programming techniques and computing equipment.
- Bring new ideas to the table on improvement of existing data products, efficiencies, and functionality.

Qualifications:

- Ph.D. in Atmospheric Sciences with a focus in Data Assimilation and/or NWP preferred; candidates with an MS in Atmospheric Sciences and 5 years of relevant professional experience with demonstrated achievements will also be considered.
- Ability to develop and implement Ensemble Kalman Filter and/or Variational Data Assimilation techniques.
- Experience with operational numerical weather prediction systems.
- Ability to robustly implement scientific algorithms in software.
- Experience with novel observational data from dual-polarimetric radar and advanced satellite sensors.
- Comfort developing in a unix environment.
- Ability to enhance existing scientific software written in fortran.
- Formal software engineering practices a plus.
- Experience interrogating scientific datasets using tools such as NCL, matlab, GrADS, etc.
- Willingness to work closely with a team in an Agile environment.
- Ability to present results internally and at scientific conferences.

Interested candidates should send their resume and cover letter to jobs@wsi.com – and reference
Atmospheric Data Assimilation Scientist in your communication.

About The Weather Channel Companies

The Weather Channel companies (TWCC) are made up of The Weather Channel® television network, The Weather Channel digital properties, WSI, Weather Underground and Weather Central. The Weather Channel is based in Atlanta and is seen in more than 100 million U.S. households. TWCC also operates Weatherscan®, a 24-hour all-local weather network; The Weather Channel Radio Network; and The Weather Channel HD. The most popular source of weather news and information, TWCC properties reach 60 million monthly Web consumers (weather.com and Desktop) and 30 million monthly mobile users (mobile Web and applications) and offers the second most popular mobile app on all smartphones.

WSI, headquartered in Andover, MA, with locations in Madison, WI and Birmingham, UK primarily provides business-to-business weather services, particularly for the media, aviation, marine and energy sectors, and is the leading provider of professional on-air, online, print, mobile and enterprise weather solutions and forecasting science to companies worldwide. Online weather service Weather Underground is based in San Francisco, and has developed the world's largest network of personal weather stations. Weather Central based in Madison, WI is the leading provider of professional on-air, online, print, mobile and enterprise weather solutions and forecasting science to companies worldwide.

TWCC is owned by a consortium made up of NBC Universal and the private equity firms The Blackstone Group and Bain Capital.

WSI Corporation and the Weather Company is an equal opportunity employer and gives consideration for employment to qualified applicants without regard to race, color, religion, gender, sexual orientation, national origin, disability or protected veteran status.