

About The Position

It is an exciting time for us at Validus Research, as we are expanding our research team. We are a growing company looking to hire a qualified individual with a background in various weather-related perils including: extra-tropical cyclones, convective storms, and most importantly, tropical cyclones. The successful candidate will conduct internally-generated research projects used to guide the Underwriting and Catastrophe Modeling groups within Validus. If you wish to utilize your research background in an applied and practical setting for a leading property catastrophe reinsurer, then please consider applying for this position (contact information at the end of this document).

- *Company Name:* Validus Research (subsidiary of the Validus Group)
- *Industry:* insurance/reinsurance
- *Job Title:* Research Scientist - Meteorologist
- *Location:* New York, NY (downtown)
- *Required Background:* Ph.D. or M.S. (with relevant experience) in meteorology/Atmospheric Science, although backgrounds in physics or applied mathematics will also be considered
- *Start Date:* Immediate
- *Remuneration:* Competitive, commensurate with experience

Main Duties

- Research on specific components relating to tropical cyclone risk using various historical catalogs - frequency, intensity, size and structure, storm surge
- Maintain and improve the algorithms behind Validus' proprietary view of risk in peak zones around the world for tropical cyclones, extra-tropical cyclones, and convective storms
- Assess and evaluate the scientific content behind the various vendor catastrophe models
- Perform claims data studies for recent weather-related natural catastrophes to understand the relationship between hazard and the resulting damageability
- Maintain existing, and develop new, numerical weather prediction solutions for real-time event monitoring and deterministic event creation
- Execute internal communications and external presentations on various scientific content

Required Skills and Abilities

- Strong understanding in the fundamentals in meteorology, and specifically, tropical meteorology
- Strong programming skills in at least one scientific programming language (FORTRAN, MATLAB, R, c++, etc.)

- Experience in analyzing large data sets
- Solid written and verbal communication skills
- Ability to design and execute research projects
- Initiative, coupled with creative and strategic thinking

independently with minimal supervision

Preferred Skills and Abilities

- Experience with parametric hurricane wind field models
- Familiar with third-party catastrophe models (RMS, AIR, EQECAT)
- Competent in installing and running numerical weather prediction systems such as WRF or MM5
- Solid background in statistics
- Background in GIS
- Affiliations with professional societies related to your expertise

Application Submission

- CV
- cover letter
- At least one authored, peer-reviewed publication from your field of expertise

Contact at Validus

Cristina Rionda-Gonzalez

E-mail: cristina.rionda-gonzalez@validusre.com

About Validus Research

Validus Research Inc. (VRI) is the Validus Group subsidiary dedicated to catastrophe research, risk modeling, and development of analytical tools. We employ 30 professionals with advanced degrees in mathematics, statistics, civil engineering, seismology, meteorology, and software engineering. VRI supports Validus operations worldwide through the Validus Capital Allocation and Pricing System (VCAPS), a proprietary risk analytical application. VCAPS offers our operating companies' underwriters, actuaries and management an industry-leading platform for risk assessment and selection. The catastrophe modeling team delivers value both through the VCAPS environment and through tailored services to various teams within the group. Real-time monitoring of our portfolio, a consistent view of risk measures across the globe, and a rigorous approach to model and data quality truly set us apart from our competition in the market.

Since our formation in 2005, Validus has invested substantial resources to ensure that we are at the leading-edge of risk analytics. VRI is at the heart of this effort.