



Atmospheric Scientist/ Researcher



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I spend most of my days examining atmospheric motions, either by working with lots of equations or by using computer models to understand how the atmosphere works. Once we have a better understanding of how the atmosphere works, we can model it more accurately. From time to time I teach and get involved in educational activities for people of all ages.

Areas of expertise:

- Atmospheric gravity waves generated by convection
- Dynamics of the middle and upper atmosphere

How I first became interested in this profession:

I started researching clear-air turbulence as an undergraduate student. I was in the math department, but my advisor was involved in atmospheric science research. Everything else is history.

What helped prepare me for this job:

The most important thing that helped me prepare for this job was being pushed by my mentors to develop ideas and opinions of my own and to think out of the box. My knowledge of math, physics, and computer programming is very useful every day.

My role models or inspirations:

The professors who are so passionate about their research that they have difficulties NOT thinking about it serve as my inspiration.

My education and training:

- B.S., Mathematics, Purchase College, (State University of New York)
- Ph.D., Atmospheric Sciences, University of Washington

My career path:

- 6 years as a research assistant
- 1 year as a postdoctoral researcher
- 2 years as a teaching assistant
- 1 year as an educational outreach coordinator

What I like about my job:

I very much enjoy the independence and freedom to work on whatever I wish to. Research is a lot like solving puzzles, and I love puzzles and figuring out how things work. I also enjoy being able to share my knowledge with different audiences through teaching and outreach activities.

What I don't like about my job:

Sometimes there is too little interaction with people; research involves a lot of independent work.

My advice to anyone interested in this occupation:

Find a topic that really draws your attention before starting on a project. This job requires a lot of self-motivation, and it is much easier to spend the time on something you really like.

Additional Resources:

- American Institute of Biological Sciences
<http://www.aibs.org>
- American Physiological Society
<http://www.faseb.org/aps>
- American Society for Biochemistry and Molecular Biology
<http://www.biophysics.org/biophys/society/biohome.htm>
- American Society for Microbiology
<http://www.asmsusa.org>
- Astrobiology Summer Academy
<http://academy.arc.nasa.gov/>
- Biotechnology Industry Organization
<http://www.bio.org/welcome.html>
- Education Pays Calculator
<http://www.educationpays.org/calc.asp>
- Graduate Student Researchers Program
<http://spacelink.nasa.gov/Instructional.Materials/NASA.Educational.Products/Graduate.Student.Researchers.Program.Brochure/.index.html>
- MATHCOUNTS Competition
<http://mathcounts.org/>
- Minority University Research and Education Programs
<http://mured.nasaprs.com/>
- NASA Cooperative Education Program for college students
<http://spacelink.nasa.gov/Educational.Services/NASA.Education.Programs/Student.Support/NASA.Cooperative.Education.Program/.index.html>
- NASA Jobs
<http://nasajobs.nasa.gov/>
- NASA Office of Life and Microgravity Sciences and Applications
<http://www.hq.nasa.gov/office/olmsa/>
- NASA SHARP Internship Program for high-schoolers
<http://www.mtsibase.com/sharp/>
- NASA Student Employment
http://nasajobs.nasa.gov/stud_opps/employment/index.htm
- NASA Student Involvement Program student contests
<http://www.nsip.net/index.cfm>
- Order NASA career videos such as "Engineers: Turning Ideas into Reality," "Careers: Aerospace Engineer" or "Reaching for the Stars" from NASA CORE.
<http://core.nasa.gov>
- Student's Guide to Astrobiology
<http://www.astrobiology.com/student.html>
- Tech-Interns.com
<http://www.tech-interns.com/>

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Thank you.

