

Aerospace or Aviation Meteorologist

An aerospace meteorologist studies weather conditions that affect airplanes, rockets, satellites, and space missions. They use weather data, radar, satellites, and computer models to predict conditions such as storms, wind, turbulence, and lightning so pilots, astronauts, and engineers can make safe decisions. Aerospace meteorologists work for government agencies, airports, the military, private weather companies, and space organizations, helping keep people and technology safe in the air and in space.

School to Career Pathway

- Take courses in physics, mathematics, and computer programming
- Volunteering or an internship is helpful
- Complete a bachelor's degree in meteorology

Durable Skills

As a meteorologist, you need:

- Strong analytical skills to evaluate large amounts of data produced by computer models.
- Math skills are essential to understand and develop models for weather forecasts and to calculate the relationships between all the atmospheric factors that affect weather.
- The ability to communicate clearly so that the weather information is useful to the public.

Paycheck Peek

\$46.85 hourly, \$97,450 annually

*Note that annual wages vary by location (state, city, or work setting)



Core Duties

Forecast Flight Weather

Predict weather conditions that could affect airplanes, such as thunderstorms, fog, turbulence, or strong winds.

Monitor Space Weather

Track solar storms and other space weather that can interfere with satellites, GPS, and communication systems.

Support Rocket Launches

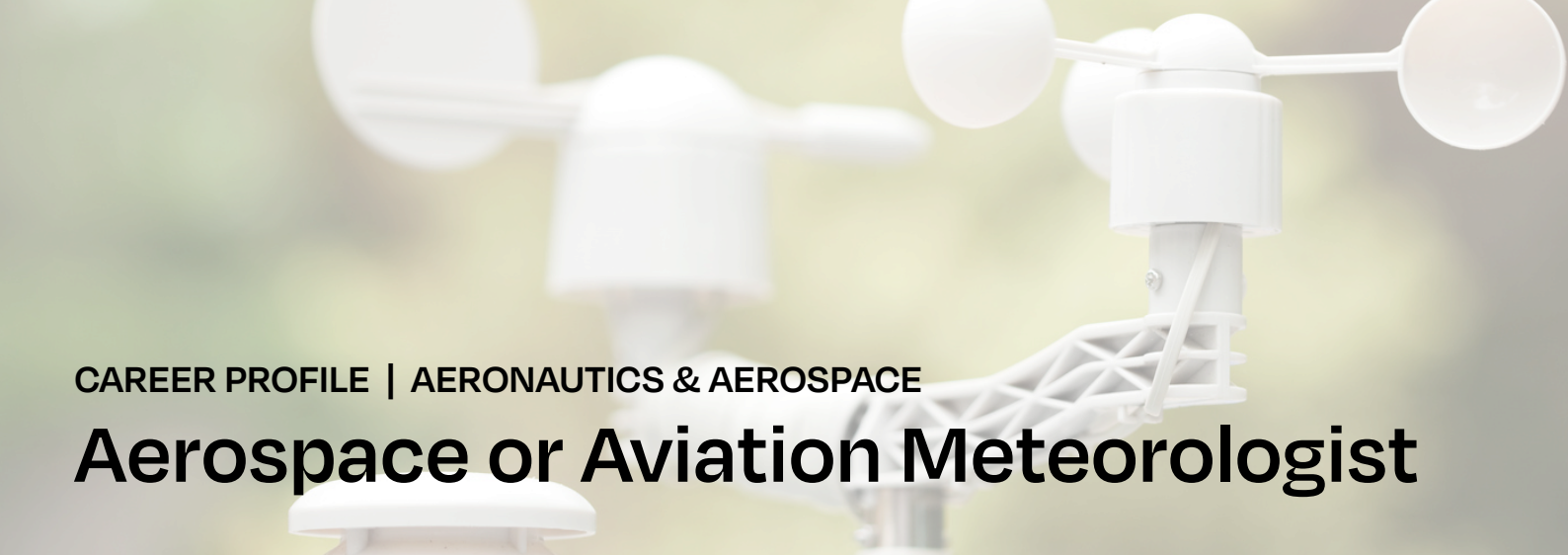
Study weather before a rocket launch to determine if conditions are safe for liftoff.

Analyze Weather Data

Collect and interpret information from satellites, weather balloons, radar, and computer models to make accurate forecasts.

Communicate Weather Information

Share weather forecasts and safety recommendations with pilots, engineers, air traffic controllers, and mission teams.



CAREER PROFILE | AERONAUTICS & AEROSPACE

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Could This Be Your Thing?

- Are you curious about the weather and space?
- Do you like learning about science and math and are interested in using computers, satellites, radar, and other technology to study the atmosphere?
- Are you good at spotting patterns and predicting what might happen next?
- Do you pay attention to details to ensure you have all the information?
- Do you enjoy explaining ideas to others and can share complex information in understandable ways?

Explore Similar Career Pathways

- atmospheric scientist
- hydrologist
- remote sensing scientists and technologists

Dig Deeper Here

Find out more about all careers at: [US Bureau of Labor Statistics Student's Desk](#)

Find out more about STEM careers at: [Careers with STEM: Science](#)

Find out more about the careers above:

- [O*NET Online: Atmospheric and Space Scientists](#)
- [O*NET Online: Hydrologist](#)
- [O*NET Online: Remote Sensing Scientists and Technologists](#)