Atmospheric Scientists, Including Meteorologists

SOC: 19-2021 • Career Profile Report

■ Key Facts

$97,450	**9,400**	**+1.0%**
Median Salary	Employment	Growth Rate

■ Requirements & Salary Range

Education: Bachelor's degree

■ Automation Risk Assessment

Low Risk - 8.0% probability of being automated in the next 10-20 years.

This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■■ Work-Life Balance

7.5/10 - Good work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	6.2/10	**Investigative**	9.4/10
Artistic	5.6/10	**Social**	6.4/10
Enterprising	4.8/10	**Conventional**	6.4/10

■ Top Skills Required

Analytical skills, Communication skills, Critical-thinking skills, Math skills

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Atmospheric Scientists, Including Meteorologists typically perform the following tasks: • Develop or use mathematical or computer models for weather forecasting. • Interpret data, reports, maps, photographs, or charts to predict long- or short-range weather conditions, using computer models and knowledge of climate theory, physics, and mathematics. • Conduct meteorological research into the processes or determinants of atmospheric phenomena, weather, or climate. • Formulate predictions by interpreting environmental data, such as meteorological, atmospheric, oceanic, paleoclimate, climate, or related information. • Broadcast weather conditions, forecasts, or severe weather warnings to the public via television, radio, or the Internet or provide this information to the news media. • Prepare forecasts or briefings to meet the needs of industry, business, government, or other groups. • Gather data from sources such as surface or upper air stations, satellites, weather bureaus, or radar for use in meteorological reports or forecasts. • Develop computer programs to collect meteorological data or to present meteorological information. • Prepare weather reports or maps for analysis, distribution, or use in weather broadcasts, using computer graphics. • Develop and deliver training on weather topics. • Prepare scientific atmospheric or climate reports, articles, or texts. • Analyze climate data sets, using techniques such as geophysical fluid dynamics, data assimilation, or numerical modeling. • Analyze historical climate information, such as precipitation or temperature records, to help predict future weather or climate trends. • Consult with other offices, agencies, professionals, or researchers regarding the use and interpretation of climatological information for weather predictions and warnings. • Speak to the public to discuss weather topics or answer questions. • Apply meteorological knowledge to issues such as global warming, pollution control, or ozone depletion. • Perform managerial duties, such as creating work schedules, creating or implementing staff training, matching staff expertise to situations, or analyzing performance of offices. • Measure wind, temperature, and humidity in the upper atmosphere, using weather balloons. • Direct forecasting services at weather stations or at radio or television broadcasting facilities. • Collect air samples from planes or ships over land or sea to study atmospheric composition.