



Educational Topic

Climatologist

Related Job Titles:

Climate Officer, Climate Forecaster, Climatology Researcher, Climatological Modeling Specialist, Atmospheric Scientist, Earth Systems Scientist

Job Description:

A Climatologist collects climate data, investigates climate indicators and makes predictions regarding climate patterns. This individual uses computer models to study how Earth's climate changes with time. They use glacial ice cores, lake sediments, tree rings, and other sources of information to determine the climate in Earth's past. They use sophisticated computer software programs that assist them in modeling the Earth's climate and check that data against known information. They conduct research to determine if humans are affecting Earth's present and future climate. Some Climatologists study climates on other planets in our solar system.

Interests / Abilities:

- Do you read and understand charts with special symbols easily?
- Can you perform calculations quickly with great accuracy?
- Do you enjoy getting out a road map and figuring out what route to drive when preparing for vacation? Can you see more than one route to a destination?
- Are you curious about your surroundings and what processes shape them?
- Are you patient when it comes to completing forms requiring detailed information?

Education / Training Needed:

The minimum education required for this position is a bachelor's degree in meteorology or atmospheric sciences from an accredited college or university. Experience in computer modeling techniques is extremely helpful for this job. To do research, at minimum a master's degree is required and a Ph.D. is highly desired for this position.

Suggested School Subjects / Courses:

- Math (algebra, trigonometry, calculus)
- Physics
- Meteorology
- Statistics
- Computer modeling
- Geography

Areas of expertise:

- *Synoptic*: analyze data from satellites, radar, and surface-observing instruments
- *Weather forecasters*: prepare forecasts for public and specialized reports for aviation, marine and agriculture
- *Research*: study atmospheric physics, refine theories and improve mathematical/computer models of atmospheric processes and events

