

## **Meteorologists and Climatologists**

Meteorologists and Climatologists are professionals who study the atmosphere, weather patterns, and climate systems to predict weather, analyze climate trends, and provide data-driven insights for decision-making in sectors such as agriculture, aviation, environmental management, and public safety.

### **Duties and Powers**

- Collect and analyze atmospheric, oceanic, and environmental data using instruments, satellites, and computer models.
- Forecast short-term weather conditions and long-term climate trends.
- Conduct research on climate change, weather phenomena, and environmental impacts.
- Develop and operate computer models and simulations to predict weather and climate patterns.
- Prepare reports, charts, and visualizations to communicate findings to governments, organizations, and the public.
- Advise policymakers, emergency services, and industries on weather-related risks and mitigation strategies.
- Monitor and study extreme weather events, such as storms, floods, and heatwaves.
- Ensure data accuracy and maintain records for historical and predictive analysis.
- Collaborate with scientists, researchers, and meteorological agencies on climate and weather studies.
- Educate the public and organizations on climate trends, weather safety, and environmental impacts.