Australian Institute for Disaster Resilience

+61 3 9419 2388
events@aidr.org.au
www.aidr.org.au/events

Masterclass

Meteorology for Disaster Managers

Cost

$495 per person

Includes access to BoM e-learning platform

Register

Register online here.

Learn the fundamentals of weather direct from the Bureau of Meteorology, Australia's official source of weather information.

Across the globe, 90% of major disasters are weather-related. Take your understanding of the weather and natural hazards to the next level by attending this highly recommended one-day masterclass.

This highly informative one-day masterclass provides a practical overview of the science of meteorology, tailored to meet the needs of the disaster resilience sector. Attend the masterclass to learn about the fundamentals of weather and deepen your understanding of weather forecasts and warnings.

Learn from professional meteorologists about a range of topics, including:

- Basic principles of weather forecasting
- Global circulation, the atmosphere and synoptic weather charts
- Understanding rainfall forecasts
- Thunderstorms and severe weather
- Flood forecasts and warnings
- Fire weather and heatwaves
- How to use weather and warning information to make better informed decisions
- Navigating the Bureau of Meteorology website

Developing a deeper understanding of how weather works will enable you to make more informed decisions and plans, as well as provide better risk and hazard information in the workplace and to the community.

This masterclass is facilitated by a professional meteorologist, providing the opportunity to ask questions and clarify your understanding on important weather information relevant to your role.

Audience

This masterclass is essential learning for all who work or volunteer in a disaster resilience-related role. This includes people working on disaster risk reduction, preparedness, planning, policy, response, recovery, community education, communication, business continuity and other areas.

Facilitated by

This masterclass will be led by an operational meteorologist from the Bureau of Meteorology Training Centre. All facilitators are accredited trainers with extensive experience delivering introductory courses about meteorology in locations around Australia.

Indicative program

7:45am	Registration opens
8:00am	Welcome, introductions, and learning outcomes
8:15am	Atmospheric Characteristics Global Circulation Synoptic-scale Systems
10:10am	*Break*
10:25am	Watching the weather Understanding Rainfall Forecasts
12:10pm	*Lunch*
12:55pm	Thunderstorms and Severe Weather Flood Forecasts and Warnings
2:25pm	*Break*
2:40pm	Fire Weather and Heatwaves Making Better Weather Decisions
4:10pm	Wrap-up and questions
4:30pm	Masterclass concludes

Australian Government
Bureau of Meteorology

Australian Institute for Disaster Resilience

+61 3 9419 2388
events@aidr.org.au
www.aidr.org.au/events

Masterclass

Meteorology for Disaster Managers

Cost

$495 per person

Includes access to BoM e-learning platform

Register

Register online here.

Masterclass content and learning outcomes

Atmospheric Characteristics *Our restless globe*	• Explain the role of the sun in driving the weather and seasons • Outline the vertical structure and properties of the atmosphere
Global Circulation *From the tropics to the poles*	• Describe how the atmosphere redistributes heat around the globe • Explain how dry and wet areas of the planet are related to the global circulation and relate this to your local climate
Synoptic-scale Systems *Highs, lows, fronts and troughs*	• Forecast general wind direction, wind strength, rainfall and temperature conditions using the synoptic weather chart • List the major surface and upper weather systems that influence your local area
Watching the Weather *Understanding today's weather to predict tomorrow's*	• Describe how wind, temperature and rain are observed • Interpret satellite imagery using the Bureau's Himawari-8 viewer • Interpret radar imagery and outline the limitations of radar technology
Understanding Rainfall Forecasts	• Develop an understanding of rainfall probabilities • Develop an awareness of how rainfall is forecast • Clarify understanding of rainfall amount and probability
Floods	• Explain the difference between flooding types • Outline the Bureau's flood forecast and warning services • Explain the difference between a flood watch and warning • Describe key flood forecasting uncertainties • Use environmental information to make your own flood forecast • Navigate the Bureau's flood products and warning network
Thunderstorms and Severe Weather	• Describe how thunderstorms develop and evolve • Explain thunderstorm ingredients, structures and types • List threats posed by Severe Thunderstorms • Outline thunderstorm forecast and warning services • Outline Severe Weather phenomena and warning thresholds • Explain the difference between severe weather warnings and severe thunderstorm warnings
Fire Weather and Heatwaves	• Describe weather conditions conducive to fires • Outline the Bureau's fire weather services • Recognise typical weather patterns that lead to increased fire danger • Define a heatwave and describe associated weather patterns
Making Better Weather Decisions	• Develop techniques to optimally use forecasts, warnings and observations provided by the Bureau to enhance decision making