

The impact and value of our work

The Bureau is entirely focused on providing products and services that enhance the wellbeing of all Australians. Here are some of the ways the Bureau contributes to a safe, prosperous, secure and healthy Australia.



Our severe weather forecasts and warnings

- alert Australians to protect themselves and their property from severe weather such as tropical cyclones, thunderstorms and damaging winds
- enable communities to prepare for and respond to the effects of heavy rainfall including flash flooding
- support emergency services agencies to carry out effective emergency and disaster preparation, response and recovery.



Our flood watches and warnings

- alert Australians to protect themselves and their property from riverine flooding
- enable communities to prepare for and respond to the effects of flooding, including making timely evacuations
- support emergency services agencies to carry out effective emergency and disaster preparation, response and recovery.



Our fire weather forecasts and warnings

- alert Australians to weather conditions conducive to the spread of dangerous bushfires
- help state and territory fire agencies predict fire conditions and make decisions about total fire ban days and bushfire warnings
- allow emergency services to pre-position personnel and equipment to minimise fire damage.



Our marine and ocean services

- support safe navigation of Australia's local and coastal waters and high seas
- alert Australians to dangerous winds, waves, tides, currents and surf conditions
- support ports and shipping operations, fishing and aquaculture industries
- support safe and efficient operation of offshore infrastructure such as windfarms and oil and gas platforms.



Our aviation and defence forecasts and warnings

- facilitate safe and efficient aviation sector operations
- inform flight planning and fuel load decisions
- provide alerts on hazardous weather and atmospheric conditions such as turbulence and volcanic ash
- support Australia's defence operations in Australia and overseas including anticipating global climatic events.



Our UV forecasts and heatwave warnings

- help Australians avoid dangerous UV exposure, to protect against skin cancer
- help protect vulnerable Australians against heat exhaustion and heatstroke
- alert health authorities to periods of heightened demand
- allow energy operators to prepare for increased power demand.



Our climate maps and information

- help Australians understand the nation's climate patterns, trends and variations, and climate-related risks
- support natural resource managers to respond to climate risks and opportunities
- inform solar, wind and hydropower installations and production potential
- support insurance claims processes
- support the development of climate-appropriate infrastructure.



Our water and environmental information services

- underpin water planning, efficient water use and water operations
- guide investment in and maintenance of water infrastructure, and aid decision-making in water supply and irrigation activities
- provide transparency to communities and water users around water management and trade
- support ecosystem management.



Our seasonal climate outlooks

- help farmers make decisions about crop planting, fertiliser application and stock management
- allow emergency managers to prepare themselves and their communities ahead of flood, bushfire and tropical cyclone seasons
- help retailers and tourist operators tailor their activities to seasonal variations.



Our everyday weather forecasts

- help Australians plan their everyday activities, from the daily commute, sporting and outdoor activities, to hanging out washing
- support activities in the construction and transport industries
- help tourism operators and event managers optimise their activities and events, and prepare contingencies when required.



Our space weather forecasts

- help defence, aviation, energy, emergency services, and space industries to manage and mitigate the impacts of space weather
- help Australians understand how space weather can significantly disrupt the technology that underpins our energy, transport, communication, navigation and financial systems.