



# Understanding weather and the weather forecast

Week 21

Thunderstorms

Terry Hart



AskBOM: What is a thunderstorm?

A YouTube video thumbnail for 'AskBOM: What is a thunderstorm?'. The thumbnail features a man in a plaid shirt smiling. The text on the thumbnail includes the BOM logo, the title 'AskBOM: What is a thunderstorm?', the hashtag '#AskBOM', a play button icon, and the question 'What is a thunderstorm?'. At the bottom, it says 'Watch on YouTube'. There is also a 'Share' icon in the top right corner of the video frame.

AskBOM: What is a thunderstorm?

#AskBOM

What is a thunderstorm?

Watch on YouTube

<https://youtu.be/HI5YH4bB-Vg>

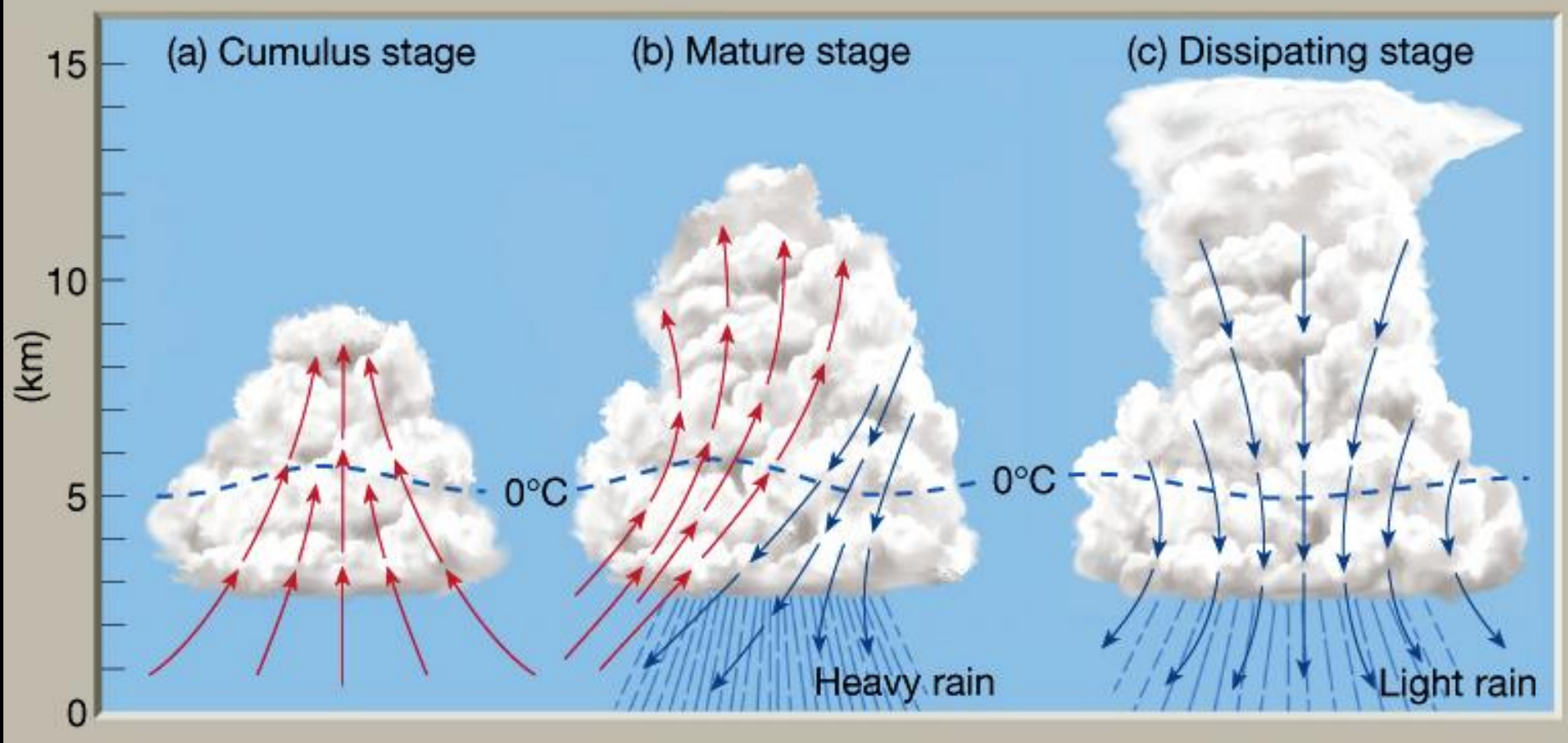


Weather wise videos

Thunderstorms <https://www.youtube.com/watch?v=Z7c4bZwvkr8>

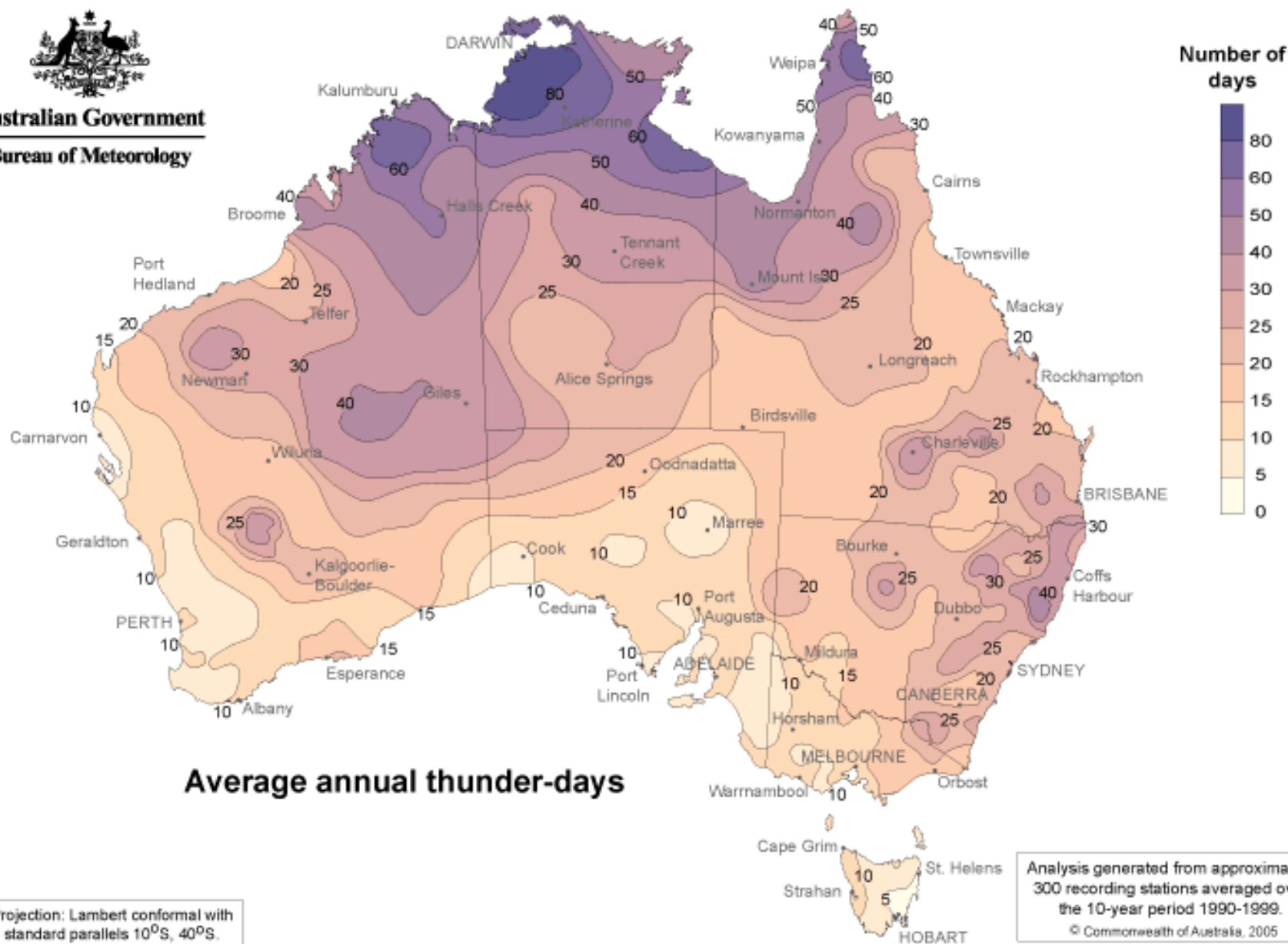


# Stages in development of a cumulonimbus



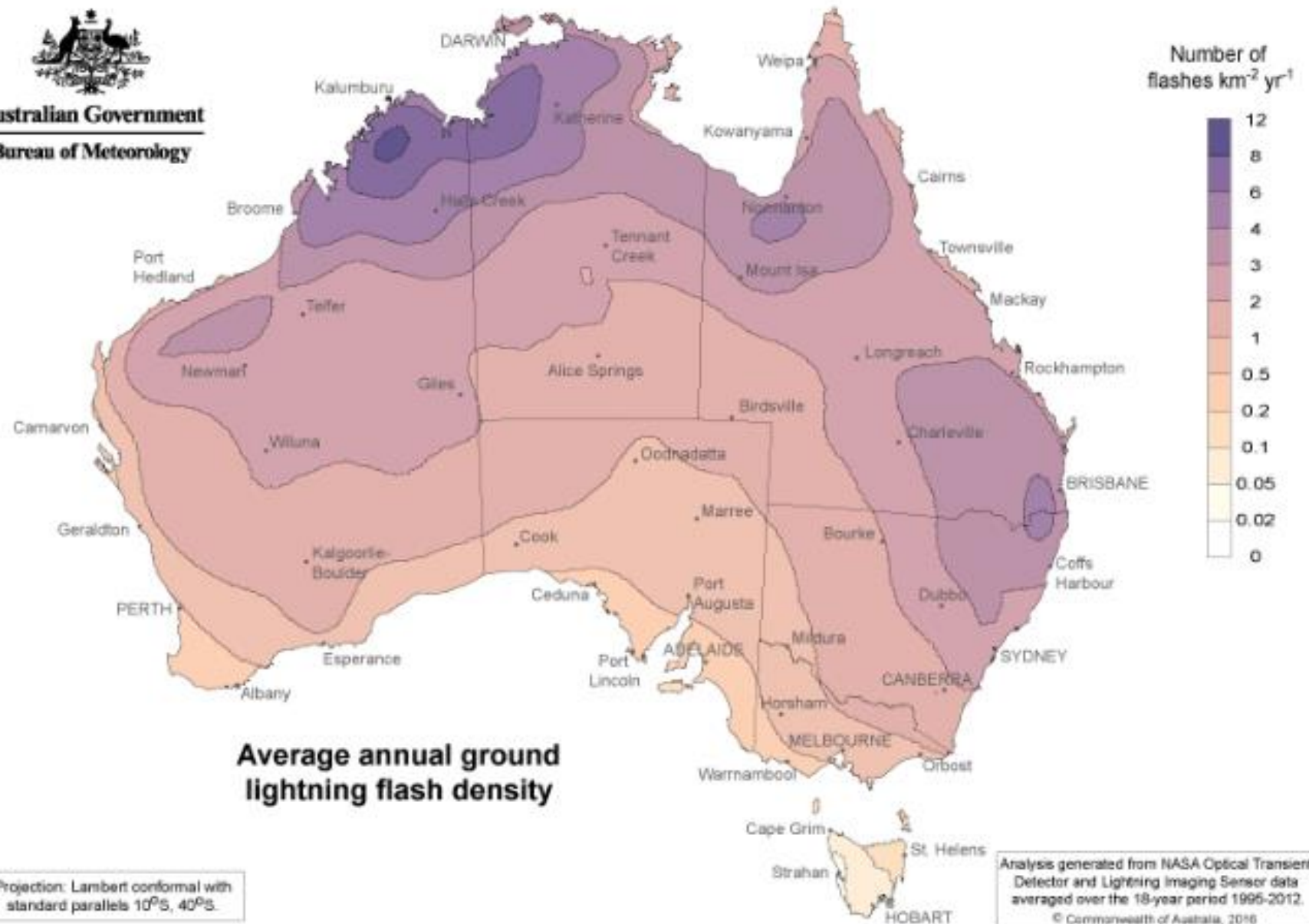


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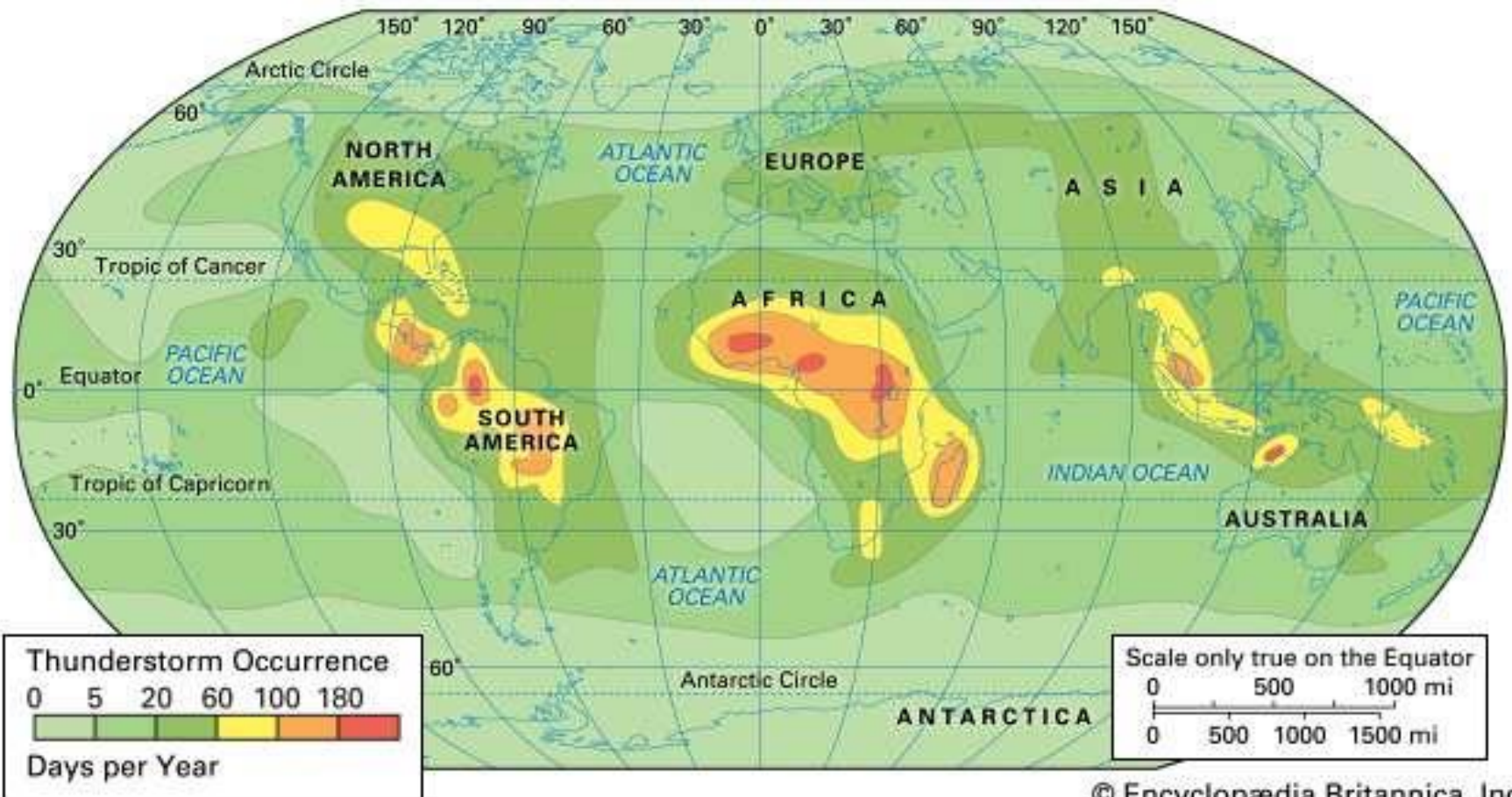


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## WORLD PATTERNS OF THUNDERSTORM FREQUENCY



# Severe thunderstorms

While we experience many types of thunderstorms in Australia, some more intense thunderstorms are referred to as severe thunderstorms. Severe thunderstorms can produce damaging wind gusts, large hail, tornadoes and heavy rain which may cause flash flooding and these phenomena can all cause significant damage.



## How is a severe thunderstorm defined?

Thunderstorms which produce any of the following are classified as severe in Australia:

- large hail (2 cm in diameter or greater)
- damaging wind gusts (90 km/h or greater)
- tornadoes
- heavy rainfall conducive to flash flooding

Most thunderstorms do not reach the level of intensity needed to produce these dangerous phenomena. The Bureau of Meteorology only issues



<http://www.bom.gov.au/weather-services/severe-weather-knowledge-centre/severethunder.shtml>