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Bureau of Meteorology

Space Weather Services Operations during COVID -19 Pandemic

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Introduction

Coronavirus disease 2019 (COVID-19):

- Broke out globally during February 2020
- Became a global pandemic in March 2020 (WHO,2020)
- Since March, lockdown has been enforced across the world
- First confirmed in Australia in January 2020
- Australia banned all international visitors since 19 March



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Australia COVID-19 situation

COVID-19 Summary/ statistics (24 November 2020)

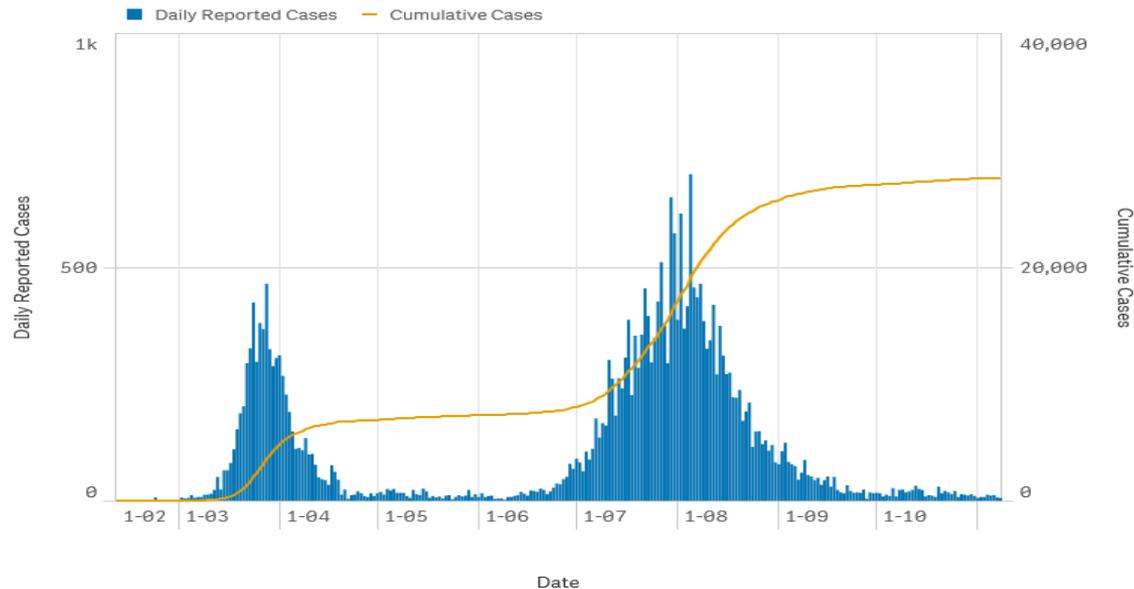


Source: <https://www.health.gov.au>



Australia COVID-19 situation

COVID-19 cases in Australia



Total number of newly reported cases each day by states and territories and the cumulative number of confirmed cases (Source: <https://www.health.gov.au>)



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Australian Government response to COVID-19

Government Actions on COVID -19

The Australian Health Protection Principal Committee(AHPPC):

- Chief Health Officers from each state and territory
- Chief Medical Officer
- Representatives from key departments.

Key decisions and coordinated responses to the COVID-19 outbreak

States and Territories:

- Testing suspected cases
- Monitoring close contacts
- Travel restrictions
- Fever clinics



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Australian Government response to COVID-19

Controlling Coronavirus:

**Australia's COVID-19 response have saved lives:
Australia's success in "controlling" COVID-19 stands out globally**

Australia has performed better than many countries in controlling COVID-19



Lockdown measures Extensive testing Contact tracing Border controls



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COVID- 19 BOM-SWS response

Australian Government organisation that provides essential services integral to:

- 1- The Australian community safety .**
- 2 - The viability of the Australian economy.**

Actions: Consistent with the Australian Public Service (APS)

Guidance: Provided to all Australian Government Agencies

- 1- Ongoing safety and wellbeing of all staff**
- 2- Ensuring continuity of essential services to the Australian community**



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COVID- 19 BOM-SWS response

One Bureau approach:

- National Incident Management Team (IMT)

- Engaging with agencies across the government
- Monitoring the coronavirus situation
- Developing BOM response plans.
- keeping BOM staff informed about the evolving coronavirus situation and BOM's response

Ensuring continuity of essential services to the Australian community



BOM staff designated as 'Home-based' or 'Essential- Home-based'



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SWS Activities during COVID-19 Pandemic

Home Based Work(HBW) adoption March 2020: (relatively seamless)

- **Staff transitioned to laptop based workstations** (prior to the pandemic)

SharePoint, Office 365 and multi factor authentication

In response to the pandemic:

- Staff were able to continue working from home with the tools they routinely used in-office.
- Remote access to in-house servers, workstations and applications

A safe workstation at home

- The workstation self-assessment/ checklist
- E-learning /training updated and simplified
- ICT support
- COVID-19 updates (Evolving situation and BOM's response)

COVID- 19 BOM-SWS response



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A connected workplace:

-Microsoft Teams and slack communication platforms.

Offering screen sharing, files sharing and videoconferencing

-CMR system for videoconferencing

Daily check-in : Staff and their supervisors/managers

Health and work tasks.

- Confidential counselling and support services

- Employee Assistance Program (EPA) (remote counselling services)



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SWS Activities during COVID-19 Pandemic

SWS critical operations at the Australian Space Forecast centre (ASFC):

SWS forecasters and support staff were categorised as "Home based –Essential"

- Could attend the office during lockdown, but only when required
- Forecasting from home (on weekends) was already a routine activity (prior the pandemic).
- Home based forecast (relatively straightforward)
- Remote access to in-house servers, workstations and applications that support SW forecasting.

Services and reports output were uninterrupted:

- Clear procedures and these are maintained
- Written Communication procedures
- Backup forecaster roster created
- Communications channel



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SWS Activities during COVID-19 Pandemic

SWS critical operations at the Australian Space Forecast centre (ASFC)

Space weather services for the International Civil Aviation Organization (ICAO):

Australia Canada France Japan (ACFJ) consortium is On Duty Centre (ODC)

-forecasters are required to attend the Sydney office

A safe place to work

- Social Distancing
- Good hygiene practices
- Cleaning
- Masks for on duty forecaster



SWS Activities during COVID-19 Pandemic

Some issues: Challenges to HWB

- Transition to remote working is uneven
- Productivity effects are also uneven
- New and previously unused technology such as MS Teams
- Organise equipment for HBW and make documentation available on new platforms.
- Communication procedures needed to be written
- There were occasions when MS Teams failed.
- Home networks did cause some issues early on.
- **Concern continue for personal safety when on public transport (when ACFJ is ODC).**
- **Refit during the pandemic:**
- The move to level 16 and back to level 15 during the pandemic(Without major issues)
- Power outage on 15 August when ACFJ ODC (was relatively seamless)



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Summary and Remarks

Australia has performed better than many countries in controlling COVID19:

- Attributed to a combination of lockdown measures, extensive testing, contact tracing and border controls.
- These measures carry with them substantial social and economic harms (the scale of the loss of life avoided).
- Impact of border responses due to our geography (more difficult for other countries).
- The lockdown measure: The sooner you do it, the better in terms of how quickly you can then come out of it.

COVID 19 BOM-SWS actions:

Entirely consistent with the rest of the APS and the guidance provided to all Australian Government Agencies.

One Bureau approach:

Focused on keeping staff safe and healthy while at the same time continuing to provide essential services to the Australian community

- **To date** we have been fortunate that no Bureau staff member has been diagnosed with coronavirus.



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Acknowledgment

We have continued to demonstrate our ability to deliver critical services with impact and value under what are unusual and challenging circumstances.

My sincere thanks to:

Lianne Grant (ASFC acting Manager)

Senior/ Space Weather Forecasters

-Colin Yulie (Operations Manager)

Operations Team.

- Incident and Crisis Management Teams:

CMT and IMT

-Everyone from across the Bureau who have been involved.

Thank you all for your ongoing hard work, continued dedication, patience and flexibility during this challenging period.