



# Weekly Australian Climate, Water and Agricultural Update

No. 28/2021

22 July 2021

## Summary of key issues

- During the week ending 21 July 2021, cold fronts and troughs brought rainfall to much of southern Australia. A high-pressure system and associated cloud free skies saw little to no rainfall across the northern half of the country ([see Section 1.1](#)).
- Above average soil moisture for most cropping regions likely supported on-going crop development, even in regions that received little to no rainfall. Parts of eastern South Australia received between 10 and 25 millimetres this week which constitutes their highest weekly rainfall total for the current winter growing season.
- The Bureau of Meteorology this week officially declared the establishment of a negative Indian Ocean Dipole (IOD) event, following eight weeks of negative index values. A negative IOD event increases the chance of above average rainfall for southern and eastern Australia and the far north during winter and spring. It is also typically associated with an early onset of northern rainfall ([see Section 1.2](#)).
- The outlook for August 2021 indicates that there is a 75% chance of rainfall totals between 10 and 100 millimetres across parts of eastern, south-western and far southern Australia. Rainfall totals in excess of 100 millimetres are expected across alpine regions of New South Wales and Victoria, the west coast of Tasmania and isolated parts of south-western Australia ([see Section 1.3](#)).
- The outlook for August to October suggests there is a 75% chance of receiving between 50 and 200 millimetres across cropping regions in New South Wales, Victoria, South Australia and Western Australia, as well as much of Queensland. Totals of less than 50 millimetres are expected in isolated northern cropping regions in Queensland and Western Australia.
- Low pressure systems and cold fronts across southern Australia are likely to bring rainfall to parts of New South Wales, Victoria, South Australia, Western Australia and Tasmania over the next 8 days to 29 July 2021. However, high pressure systems to the north are likely to prevent substantial rainfalls for northern parts of Australia, including Queensland and the Northern Territory ([see Section 1.4](#)).
- The forecast rainfall for cropping regions will continue to support the growth of early sown crops and establishment of later sown crops, as well as boosting soil moisture. Those parts of eastern South Australia, which recorded good falls this week are likely to receive some follow-up rainfall over the coming 8-days.
- Water storage in the Murray–Darling Basin (MDB) increased by 776 gigalitres (GL) between 14 July 2021 and 21 July 2021. The current volume of water held in storage is 17,693 GL, which represents 70% of total capacity. This is 51% or 5,981 GL more than at the same time last year.
- Allocation prices in the Victorian Murray below the Barmah Choke have not been updated this week due to data source issues. On 9 July 2021 the allocation prices were \$184 per ML. Prices are lower in the Goulburn-Broken, Murrumbidgee, and regions above the Barmah choke due to the binding of the Goulburn intervalley trade limit, Murrumbidgee export limit, and Barmah choke trade constraint.

# 1. Climate

## 1.1. Rainfall this week

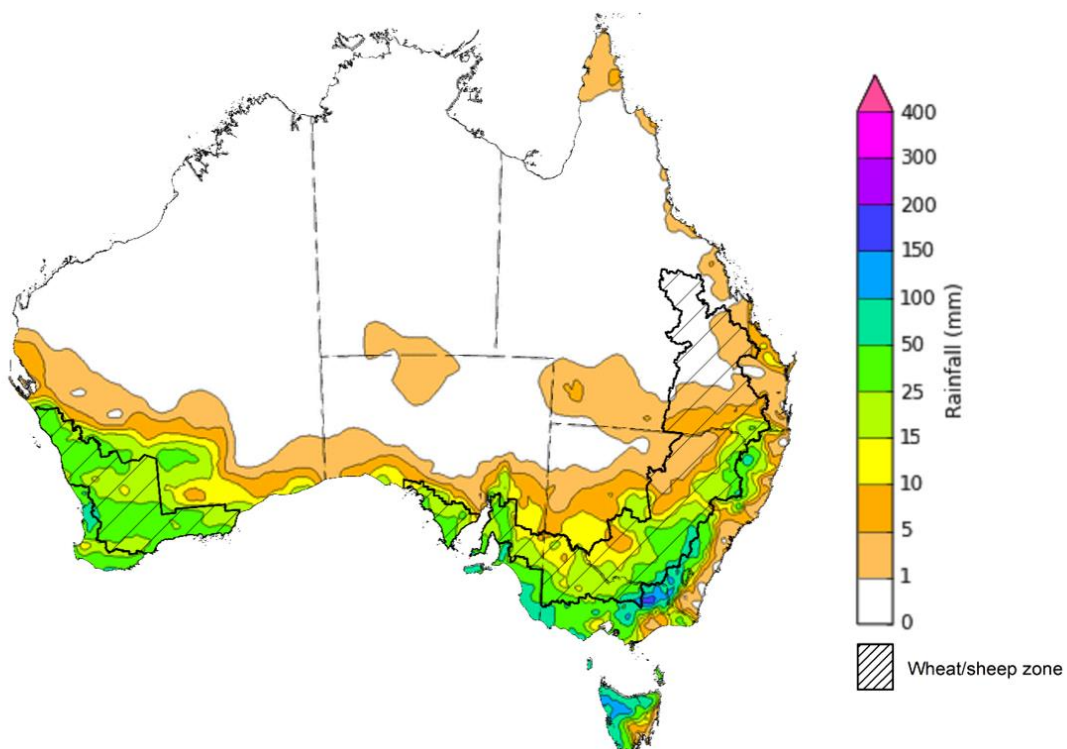
During the week ending 21 July 2021, cold fronts and troughs brought rainfall to much of southern Australia. The rainfall was interrupted by a high-pressure system over central Australia in the middle of the week. This high-pressure system and associated cloud free skies saw little to no rainfall across the northern half of the country.

Rainfall totals of between 10 and 50 millimetres were recorded across parts of eastern and southern New South Wales, isolated areas of south-eastern Queensland, the south of South Australia, the south-west of Western Australia and Tasmania, as well as much of Victoria. Rainfall totals in excess of 50 millimetres were recorded in isolated parts of eastern New South Wales, Victoria, South Australia, Western Australia and Tasmania.

In cropping regions, rainfall totals of between 10 and 50 millimetres were recorded in eastern and southern New South Wales and most of Victoria, South Australia and Western Australia. Little to no rainfall was recorded across cropping regions in north-western New South Wales and Queensland during the week ending 21 July 2021.

Above average soil moisture for most cropping regions likely supported on-going crop development, even in regions that received little to no rainfall. Parts of eastern South Australia received between 10 and 25 millimetres this week which constitutes their highest weekly rainfall total for the current winter growing season. However, continued weekly rainfall totals of between 15 and 50 millimetres leaves low lying areas across areas of central New South Wales and southern Western Australia at risk of crop losses due to waterlogging.

**Rainfall for the week ending 21 July 2021**



©Commonwealth of Australia 2021, Australian Bureau of Meteorology

Issued: 21/07/2021

Note: The rainfall analyses and associated maps utilise data contained in the Bureau of Meteorology climate database, the Australian Data Archive for Meteorology (ADAM). The analyses are initially produced automatically from real-time data with limited quality control. They are intended to provide a general overview of rainfall across Australia as quickly as possible after the observations are received. For further information go to <http://www.bom.gov.au/climate/rainfall/>

## 1.2. Climate Drivers

Throughout winter the climate drivers with the largest potential impact on Australia's climate patterns are the El Niño–Southern Oscillation (ENSO), the Indian Ocean Dipole (IOD) and the Southern Annular Mode (SAM). These climate drivers will likely influence the outlook for Australia's winter cropping season.

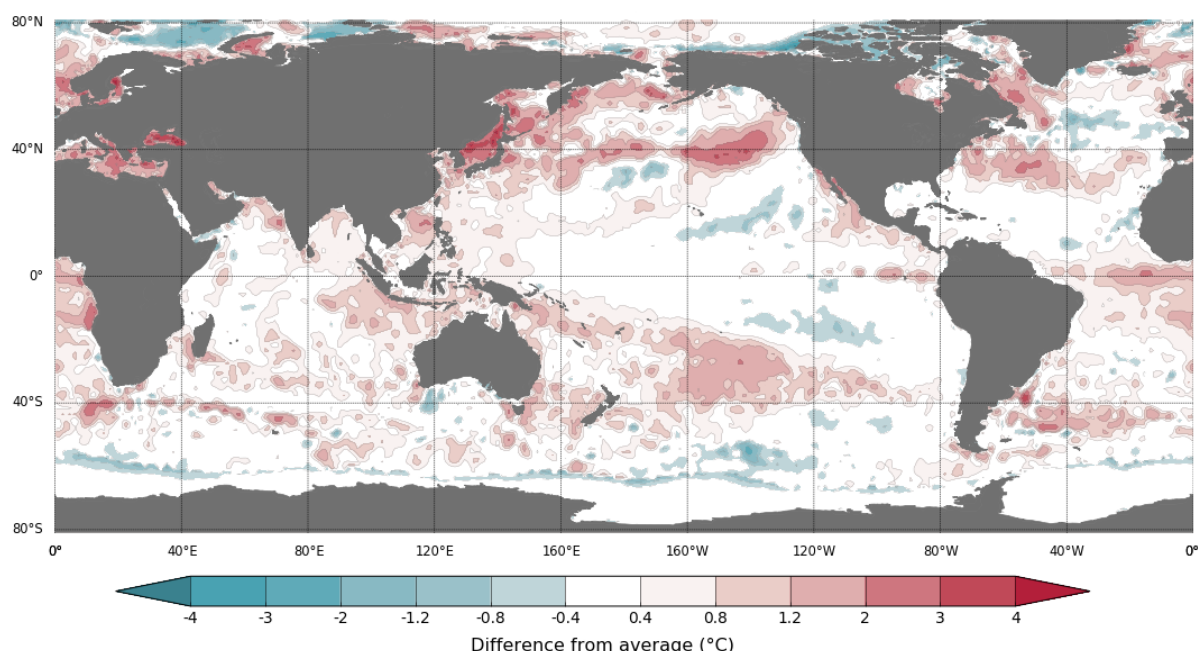
The Bureau of Meteorology this week officially declared the establishment of a negative IOD event in the Indian Ocean, following eight weeks of negative index values. A negative IOD event increases the chance of above average rainfall for southern and eastern Australia and the far north during winter and spring. It is also typically associated with an early onset of northern rainfall.

ENSO conditions, on the other hand, remain neutral according to oceanic and atmospheric indicators, reducing its influence on Australia's climate. International climate models surveyed by the Bureau of Meteorology agree that ENSO conditions are likely to remain neutral throughout August. Three of the seven models, however, expect the development of a La Niña event in mid-to-late spring. Only one model expects a La Niña event in December. The SAM has also returned to neutral and is expected to remain neutral over the coming weeks. It is therefore unlikely to have a significant influence on Australia's climate.

Sea surface temperature anomalies have been close to average across the tropical Pacific Ocean over the previous week. Warm anomalies in the western Pacific have weakened slightly, while warm anomalies near the Maritime Continent and along the east coast of Australia have persisted. Neutral Pacific equatorial sea surface temperatures are associated with neutral ENSO conditions.

Warm sea surface temperature anomalies have persisted near Western Australia and Indonesia. Meanwhile, sea surface temperatures in the western Indian Ocean largely remained neutral over the past week. The warm anomalies in the eastern Indian Ocean and the ocean surrounding Australia underpin the establishment of the negative IOD event.

**Difference from average sea surface temperature observations 12 July to 18 July 2021**



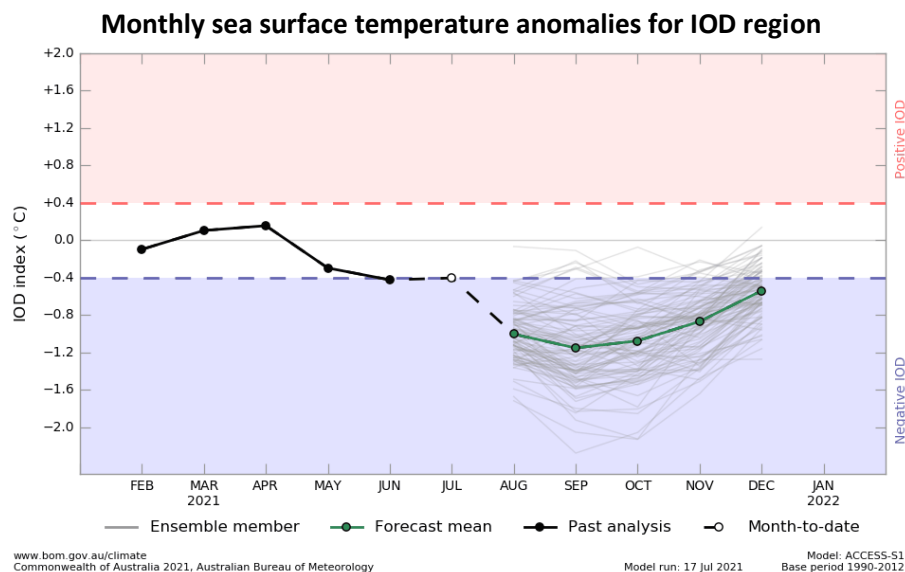
Data: BOM SST  
Climatology baseline: 1961 to 1990  
© Commonwealth of Australia 2021, Australian Bureau of Meteorology

<http://www.bom.gov.au/climate>

Weekly average: 18 July 2021  
Created: 19/07/2021

As at 18 July, the Indian Ocean Dipole (IOD) weekly value was  $-0.62^{\circ}\text{C}$ . This is the eighth consecutive week that the IOD has been below the negative threshold ( $-0.4^{\circ}\text{C}$ ). A negative IOD, and warmer sea surface temperatures in the eastern Indian Ocean, is associated with above average rainfall for much of southern Australia in winter and spring. It also increases the chances of below average maximum temperatures in southern Australia, while increasing the chances of above average minimum and maximum temperatures in northern Australia.

Although the Madden-Julian Oscillation (MJO) doesn't directly influence the Australian climate at this time of year, the strengthening of an MJO to Australia's north may reinforce the impact of the negative IOD event. The majority of international climate models surveyed by the Bureau of Meteorology expect the negative IOD event to persist until November, with all but one model expecting a return to neutral conditions in December.



### 1.3. National Climate Outlook

These climate outlooks are generated by ACCESS–S (Australian Community Climate Earth-System Simulator–Seasonal). ACCESS–S is the Bureau of Meteorology's dynamical (physics-based) weather and climate model used for monthly, seasonal and longer-lead climate outlooks.

For further information, go to <http://www.bom.gov.au/climate/ahead/about/>

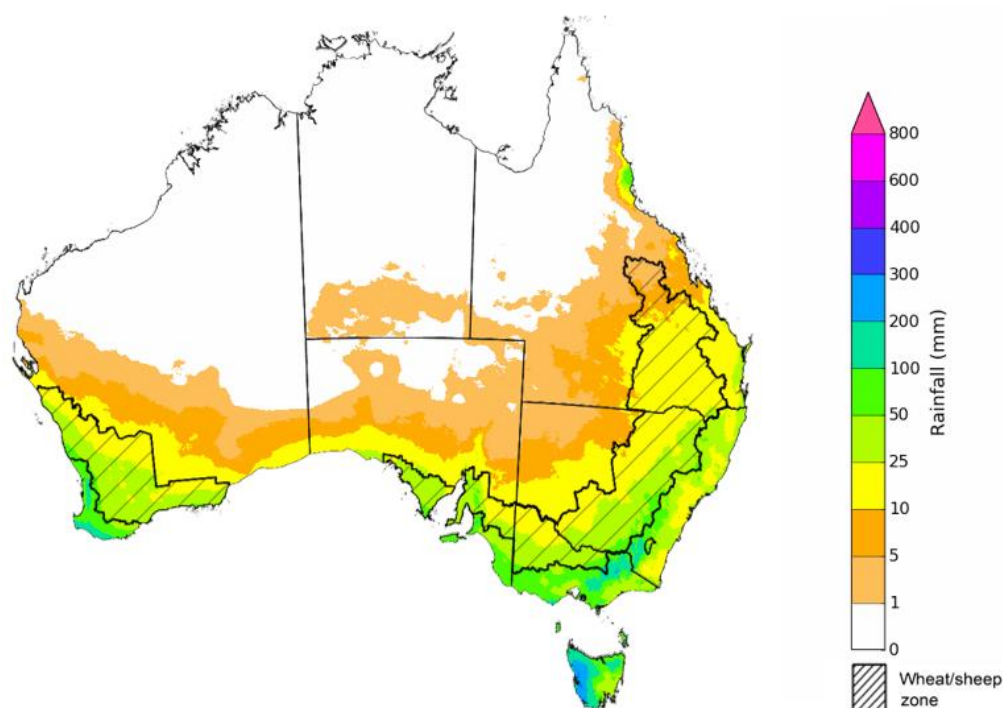
The Bureau of Meteorology's latest rainfall outlook indicated wetter than average conditions are expected for much of eastern and central Australia during August. The wetter than average conditions expected for most cropping regions reaffirms the positive production outlook for Australia's 2021 winter cropping season. The ACCESS-S climate model suggests there is close to a 65% chance of exceeding average August rainfall totals across much of Australia.

The outlook for August 2021 indicates that there is a 75% chance of rainfall totals between 10 and 100 millimetres across parts of eastern, south-western and far southern Australia. Rainfall totals in excess of 100 millimetres are expected across alpine regions of New South Wales and Victoria, the west coast of Tasmania and isolated parts of south-western Australia.

Across cropping regions there is a 75% chance of rainfall totals of between 5 and 10 millimetres in parts of northern Queensland. There is a 75% chance of rainfall totals between 10 and 50 millimetres for New South Wales, southern Queensland, Victoria, South Australia and Western Australia. These expected rainfall for August will support the ongoing growth, and eventual yield development, of winter crops in most regions. Parts of New South Wales and Western Australia are already exceptionally wet, and substantial rainfall may negatively impact crop development and yield potential.

Rainfall totals in some cropping regions of western Victoria and eastern South Australia, are currently tracking at well below average for the winter growing season. These areas have a 75% chance of receiving 10 to 25 millimetres in August. If realised, these falls will support the establishment and growth of dry-planted crops in these regions.

#### Rainfall totals that have a 75% chance of occurring August 2021



©Commonwealth of Australia 2021, Australian Bureau of Meteorology

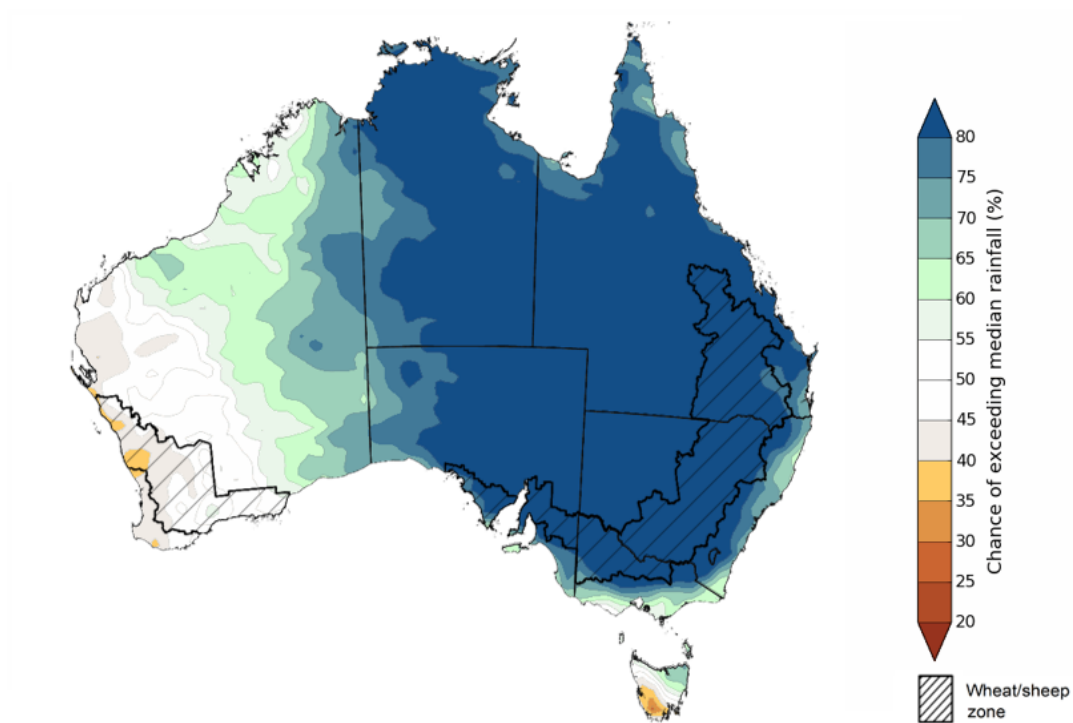
Issued: 15/07/2021



The rainfall outlook for August to October suggests there is a greater than 80% chance of exceeding average rainfall across much of New South Wales, Queensland, Victoria, South Australia and the Northern Territory. There is no strong tendency toward above or average rainfall across the west of Western Australia and parts of Tasmania (Bureau of Meteorology 'National Climate Outlook', 15 July 2021).

Bureau of Meteorology rainfall outlooks for August to October have greater than 55% past accuracy across most of Australia. Outlook accuracy is greater than 65% across much of New South Wales, Queensland, the north of South Australia and much of the Northern Territory. On the other hand, there is low past accuracy for isolated areas of southern Western Australia and parts of eastern New South Wales and Victoria.

### Chance of exceeding the median rainfall August to October 2021



©Commonwealth of Australia 2021, Australian Bureau of Meteorology

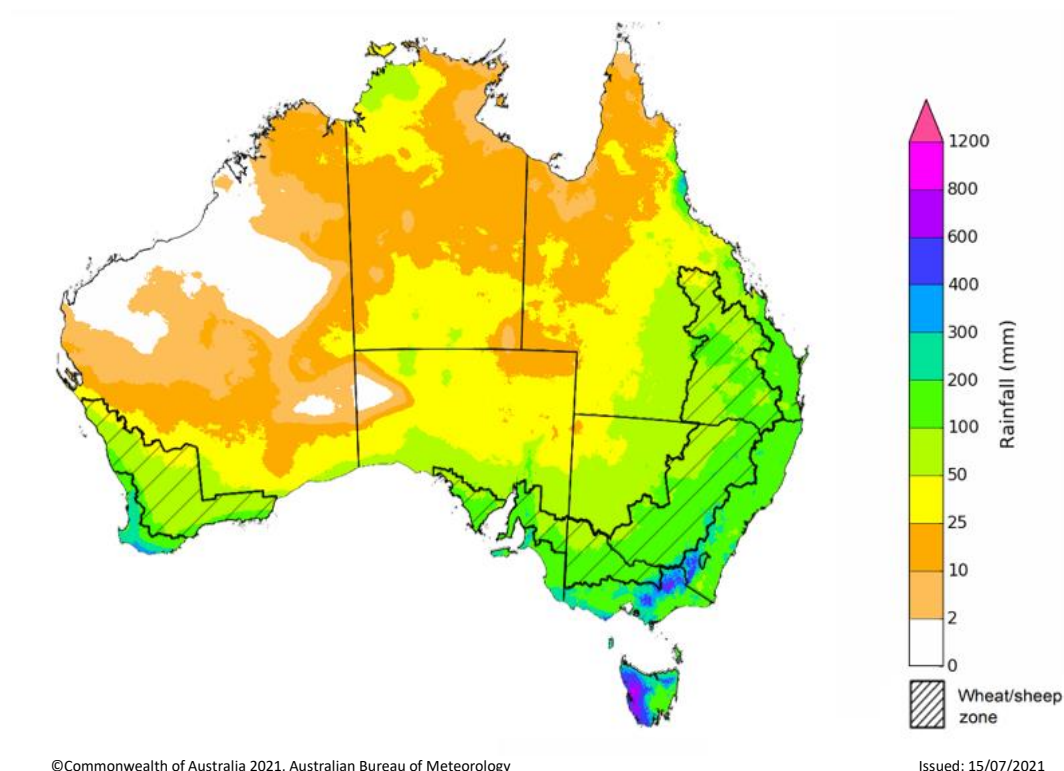
Issued: 15/07/2021

The outlook for August to October suggests there is a 75% chance of rainfall totals between 50 and 200 millimetres across much of New South Wales and Victoria, and parts of south-eastern Queensland, the south of Southern Australia, the south of Western Australia and eastern Tasmania. Rainfall totals in excess of 300 millimetres are likely across parts of alpine regions of New South Wales and Victoria, and the far south-west of Western Australia and western Tasmania.

Across cropping regions, there is a 75% chance of receiving between 50 and 200 millimetres in New South Wales, Victoria, South Australia and Western Australia, as well as much of Queensland. Totals of less than 50 millimetres are expected in isolated northern cropping regions in Queensland and Western Australia.

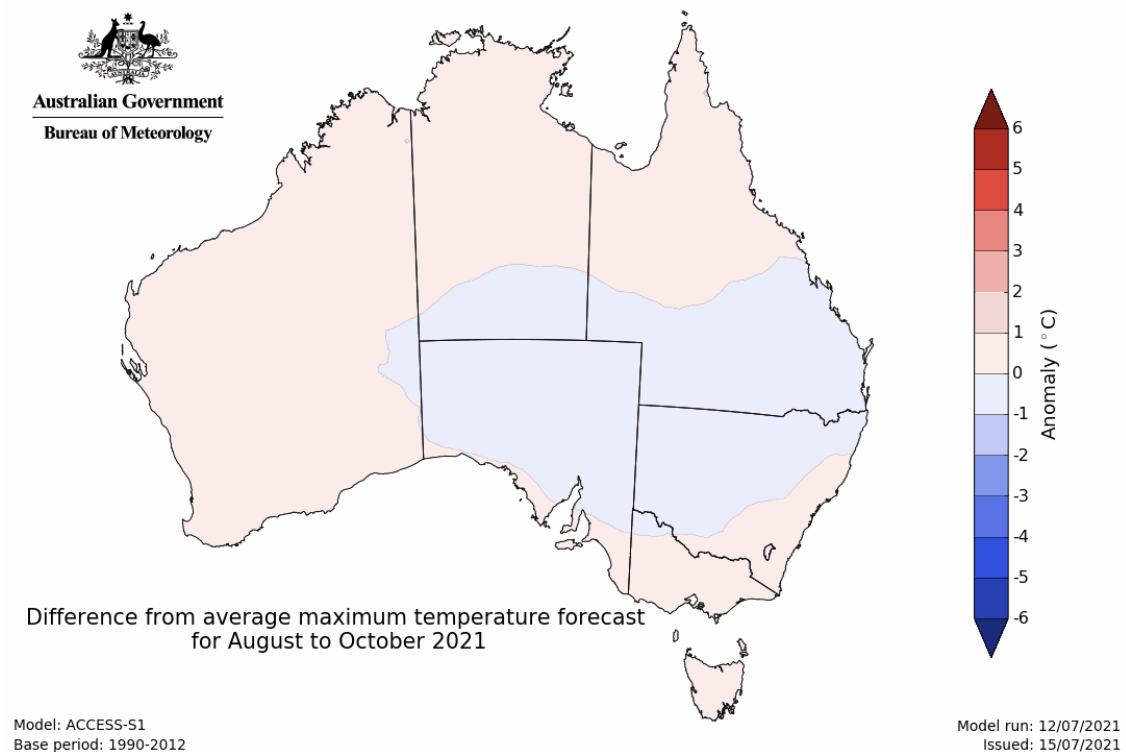
These rainfall totals are slightly below average for this three-month period across some Western Australian cropping regions, and slightly above average for cropping regions of New South Wales, Queensland and Victoria. Above average soil moisture levels in New South Wales and parts of Queensland, and the probability of close to average in-season rainfall in August to October, will assist with maintaining or improving current yield potential in most winter cropping regions.

### Rainfall totals that have a 75% chance of occurring August to October 2021

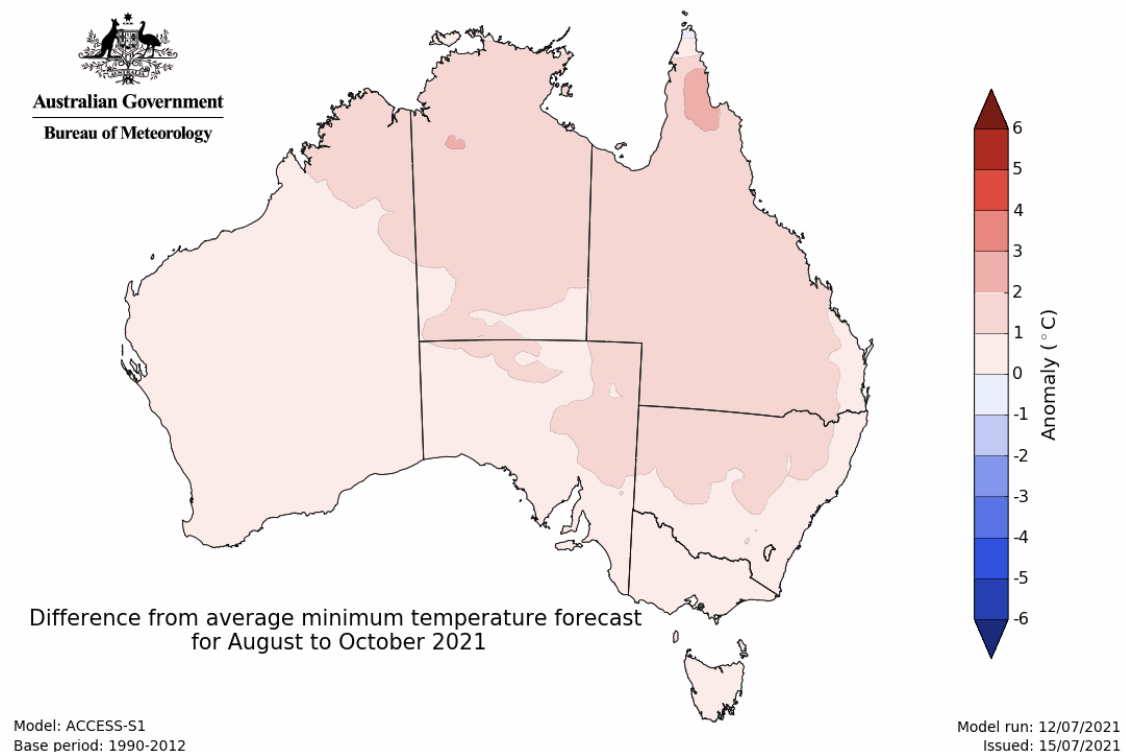


The temperature outlook for August to October 2021 indicates that maximum temperatures across most of Australia are likely to be close to the 1990-2012 average (- 1°C to 1°C). Minimum temperatures are expected to be slightly above average for much of Queensland and the Northern Territory, as well as parts of New South Wales, South Australia and Western Australia (Bureau of Meteorology 'National Climate Outlook', 15 July 2021).

### Predicted maximum temperature anomaly for August to October 2021



### Predicted minimum temperature anomaly for August to October 2021





## 1.4. Rainfall forecast for the next eight days

Low pressure systems and cold fronts across southern Australia are likely to bring rainfall to parts of New South Wales, Victoria, South Australia, Western Australia and Tasmania over the next 8 days to 29 July 2021. However, high pressure systems to the north are likely to prevent substantial rainfalls for northern parts of Australia, including Queensland and the Northern Territory.

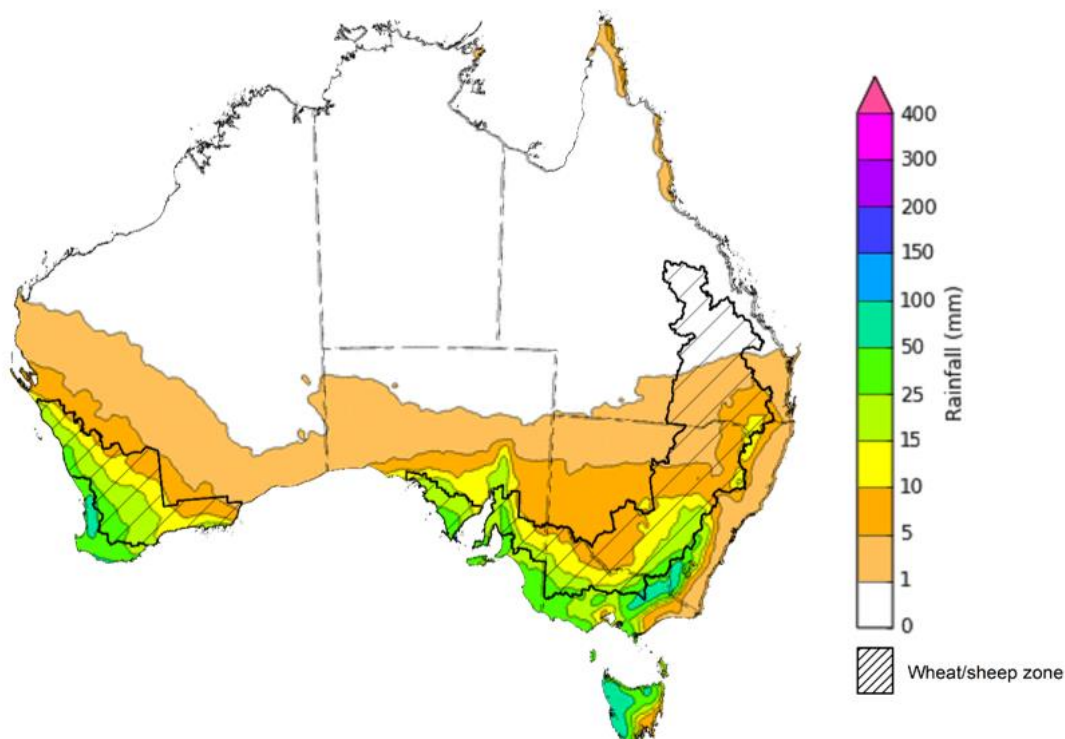
Rainfall totals of between 10 and 50 millimetres are forecast for isolated parts of New South Wales and Queensland, as well as much of Victoria, the south of South Australia, south-west Western Australia and much of Tasmania.

In Australia's cropping regions, rainfall totals of between 10 and 25 millimetres are forecast for south-eastern New South Wales and isolated parts of south-east Queensland, as well as much of Victoria, South Australia and Western Australia. Rainfall totals in excess of 25 millimetres are forecast in isolated parts of New South Wales, Victoria, South Australia and Western Australia.

The forecast rainfall for cropping regions will continue to support the growth of early sown crops and establishment of later sown crops, as well as boosting soil moisture. Those parts of eastern South Australia, which recorded good falls this week are likely to receive some follow-up rainfall over the coming 8-days.

Soil moisture levels are above average across eastern and western cropping regions, which will support ongoing crop growth and eventual yield potential. The low rainfall expected for much of central and northern New South Wales will provide a reprieve from potential waterlogging. The forecast rainfall for parts of Western Australia, on the other hand, may exacerbate waterlogging, negatively affecting crop growth.

**Total forecast rainfall (mm) for the period 22 July to 29 July 2021**



©Commonwealth of Australia 2021, Australian Bureau of Meteorology

Issued: 21/07/2021

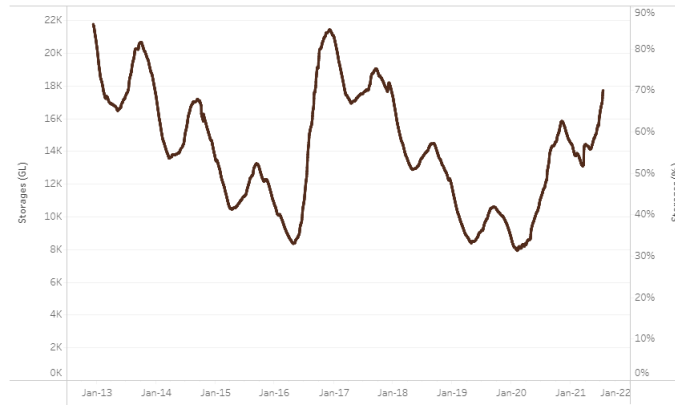
Note: This rainfall forecast is produced from computer models. As the model outputs are not altered by weather forecasters, it is important to check local forecasts and warnings issued by the Bureau of Meteorology.

## 2. Water

### 2.1. Water markets – current week

Water storage in the Murray–Darling Basin (MDB) increased by 776 gigalitres (GL) between 14 July 2021 and 21 July 2021. The current volume of water held in storage is 17,693 GL, which represents 70% of total capacity. This is 51% or 5,981 GL more than at the same time last year.

**Water storages in the Murray-Darling Basin, 2013–2021**

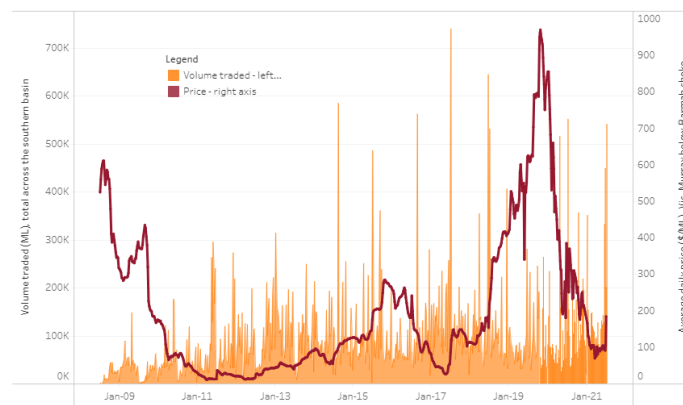


Water storage data is sourced from the Bureau of Meteorology.

Allocation prices in the Victorian Murray below the Barmah Choke have not been updated this week due to data source issues. On 9 July 2021 the allocation prices were \$184 per ML. Prices are lower in the Goulburn-Broken, Murrumbidgee, and regions above the Barmah choke due to the binding of the Goulburn intervalley trade limit, Murrumbidgee export limit, and Barmah choke trade constraint.

Region	\$/ML
NSW Murray Above	95
NSW Murrumbidgee	115
VIC Goulburn-Broken	120
VIC Murray Below	184

**Surface water trade activity, Southern Murray–Darling Basin**



The trades shown reflect estimated market activity and do not encompass all register trades. The price is shown for the VIC Murray below the Barmah choke. Historical prices (before 1 July 2019) are ABARES estimates after removing outliers from BOM water register data. Prices after 1 July 2019 and prior to the 30 October 2019 reflect recorded transaction prices as sourced from Ruralco. Prices after the 30 October 2019 are sourced from Waterflow. Data for volume traded is sourced from the BOM water register. Data shown is current at 22 July 2021.

To access the full, interactive, weekly water dashboard, which contains the latest and historical water storage, water market and water allocation information, please visit

[http://www.agriculture.gov.au/abares/products/weekly\\_update/weekly-update-220721](http://www.agriculture.gov.au/abares/products/weekly_update/weekly-update-220721)

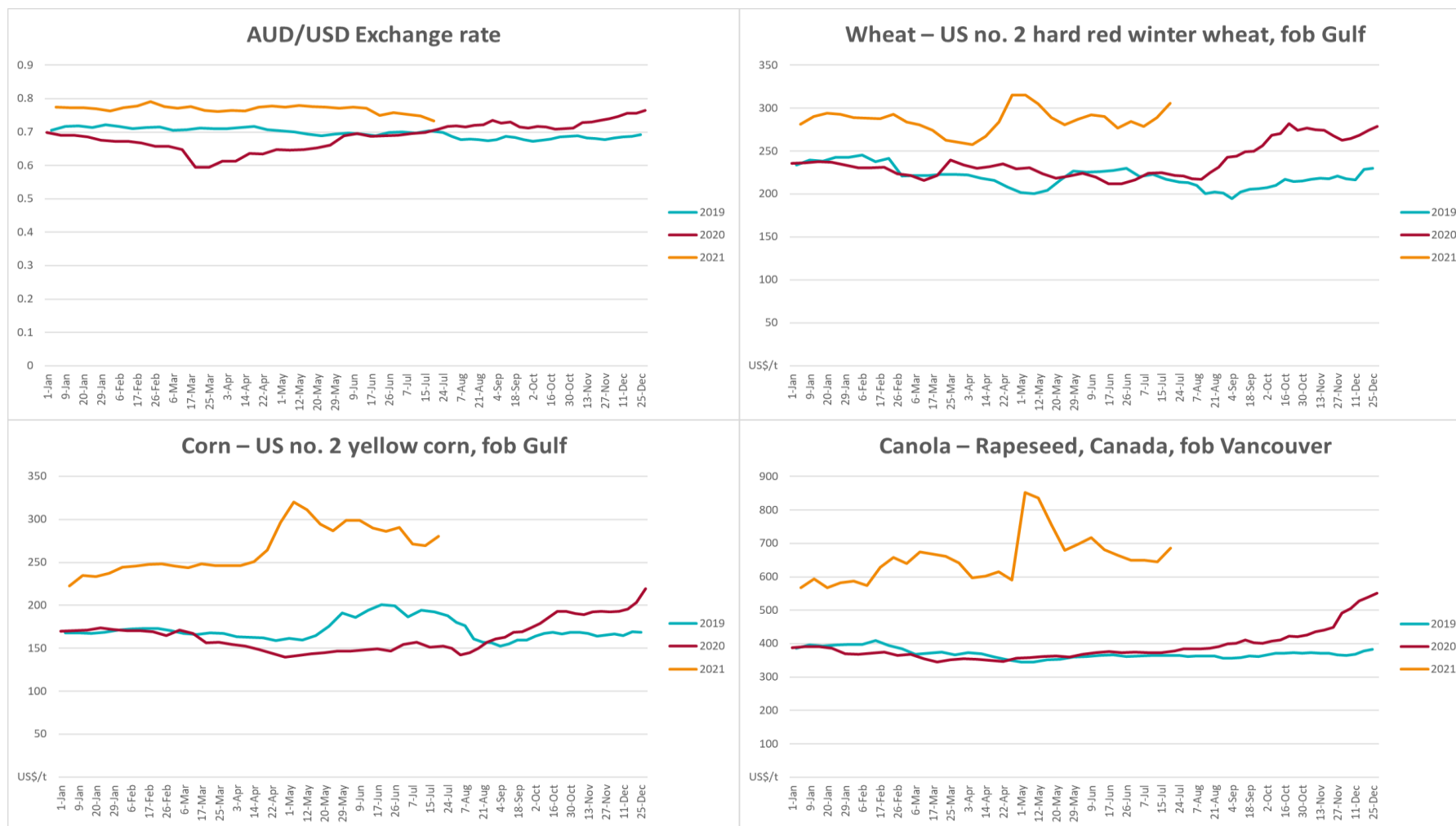
### 3. Commodities

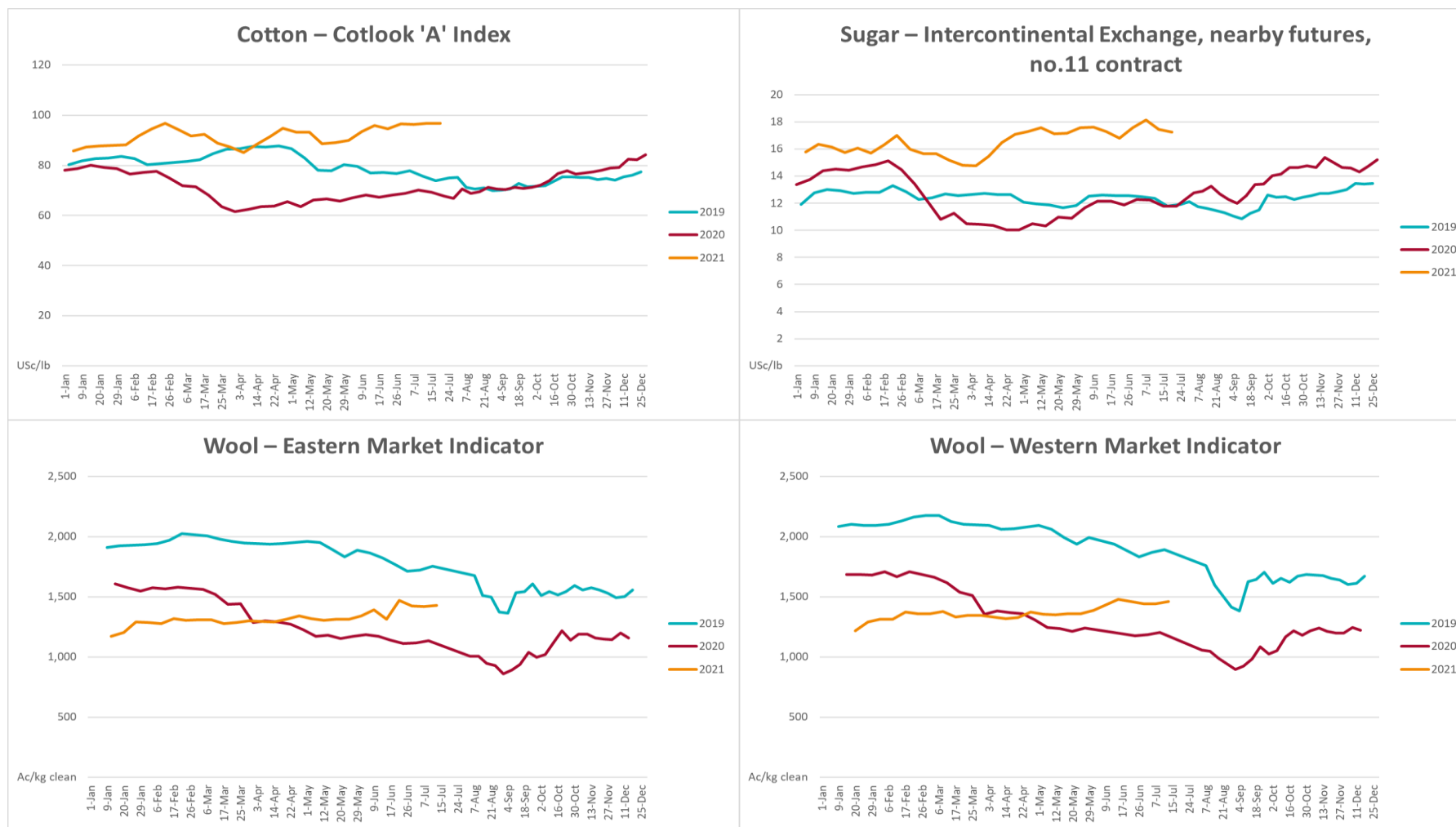
Indicator	Week ended	Unit	Latest price	Previous week	Weekly change	Price 12 months ago	Annual change
<b>Selected world indicator prices</b>							
AUD/USD Exchange rate	21-Jul	A\$/US\$	0.73	0.75	-2%	0.72	2%
Wheat – US no. 2 hard red winter wheat, fob Gulf	21-Jul	US\$/t	305	289	6%	221	38%
Corn – US no. 2 yellow corn, fob Gulf	21-Jul	US\$/t	280	269	4%	150	87%
Canola – Rapeseed, Canada, fob Vancouver	21-Jul	US\$/t	686	644	6%	384	79%
Cotton – Cotlook 'A' Index	21-Jul	USc/lb	97	97	0%	67	45%
Sugar – Intercontinental Exchange, nearby futures, no.11 contract	21-Jul	USc/lb	17.2	17.4	-1%	12	40%
Wool – Eastern Market Indicator	14-Jul	Ac/kg clean	1,428	1,420	1%	1,183	21%
Wool – Western Market Indicator	14-Jul	Ac/kg clean	1,462	1,442	1%	1,370	7%
<b>Selected Australian grain export prices</b>							
Milling Wheat – APW, Port Adelaide, SA	21-Jul	A\$/t	390	385	1%	328	19%
Feed Wheat – ASW, Port Adelaide, SA	21-Jul	A\$/t	390	377	3%	311	25%
Feed Barley – Port Adelaide, SA	21-Jul	A\$/t	321	317	1%	273	17%
Canola – Kwinana, WA	21-Jul	A\$/t	757	751	1%	626	21%
Grain Sorghum – Brisbane, QLD	21-Jul	A\$/t	368	374	-2%	355	4%
<b>Selected domestic livestock indicator prices</b>							
Beef – Eastern Young Cattle Indicator	21-Jul	Ac/kg cwt	991	968	2%	759	31%
Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic	21-Jul	Ac/kg cwt	696	680	2%	580	20%
Lamb – Eastern States Trade Lamb Indicator	21-Jul	Ac/kg cwt	898	882	2%	906	-1%
Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers	07-Jul	Ac/kg cwt	318	318	0%	386	-18%
Goats – Eastern States (12.1–16 kg)	23-Jun	Ac/kg cwt	875	872	0%	723	21%
Live cattle – Light steers ex Darwin to Indonesia	17-Feb	Ac/kg lwt	355	355	0%	360	-1%
Live sheep – Live wethers (Muchea WA saleyard) to Middle East	19-May	\$/head	145	145	0%	N/A	N/A

Indicator	Week ended	Unit	Latest price	Previous week	Weekly change	Price 12 months ago	Annual change
<b>Global Dairy Trade (GDT) weighted average prices <sup>a</sup></b>							
Dairy – Whole milk powder	21-Jul	US\$/t	3,730	3,864	-3%	3,138	19%
Dairy – Skim milk powder	21-Jul	US\$/t	2,971	3,126	-5%	2,436	22%
Dairy – Cheddar cheese	21-Jul	US\$/t	4,022	3,949	2%	3,781	6%
Dairy – Anhydrous milk fat	21-Jul	US\$/t	5,615	5,632	0%	5,530	2%

**a** Global Dairy Trade prices are updated twice monthly on the first and third Tuesday of each month.

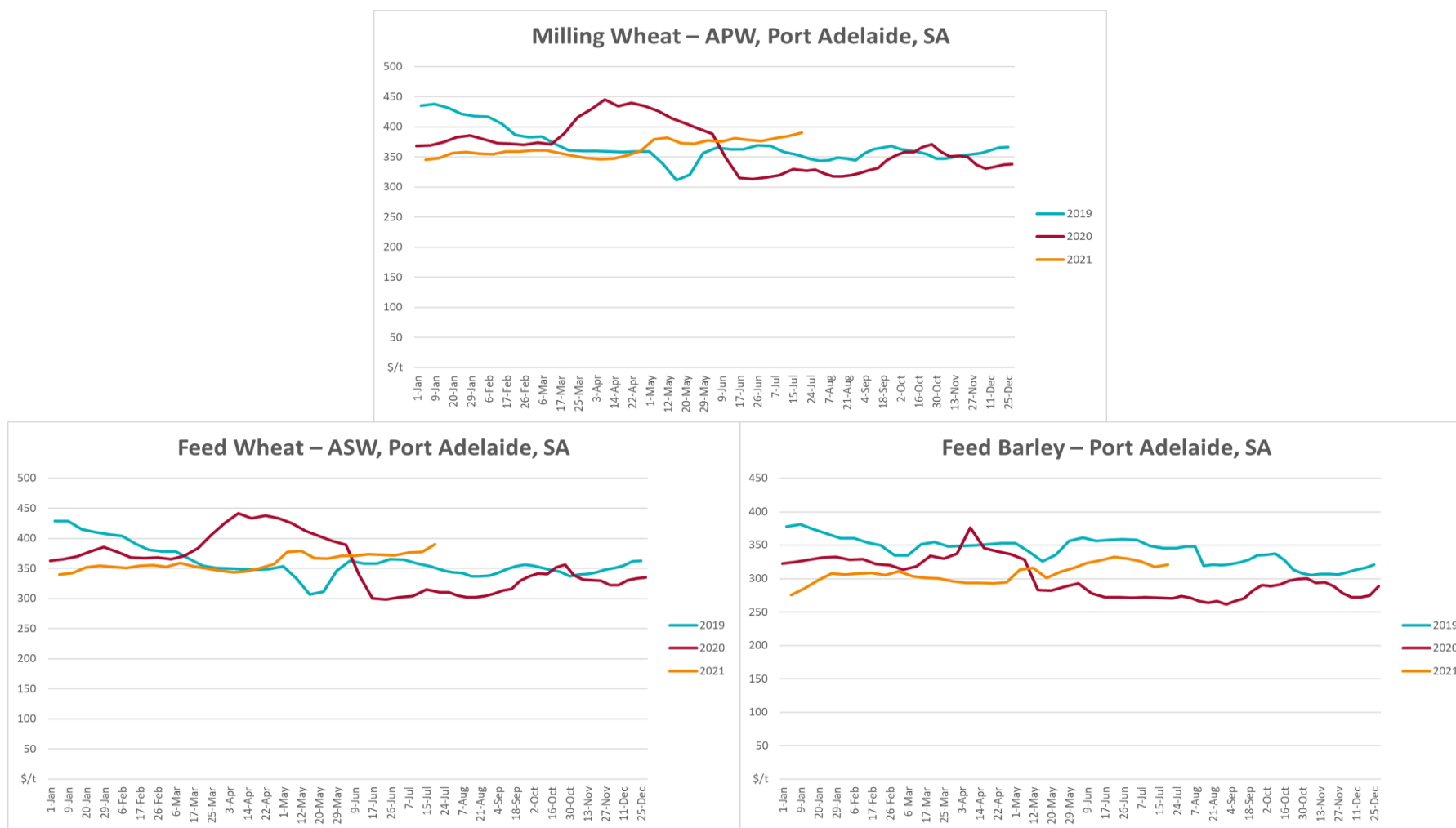
### 3.1. Selected world indicator prices

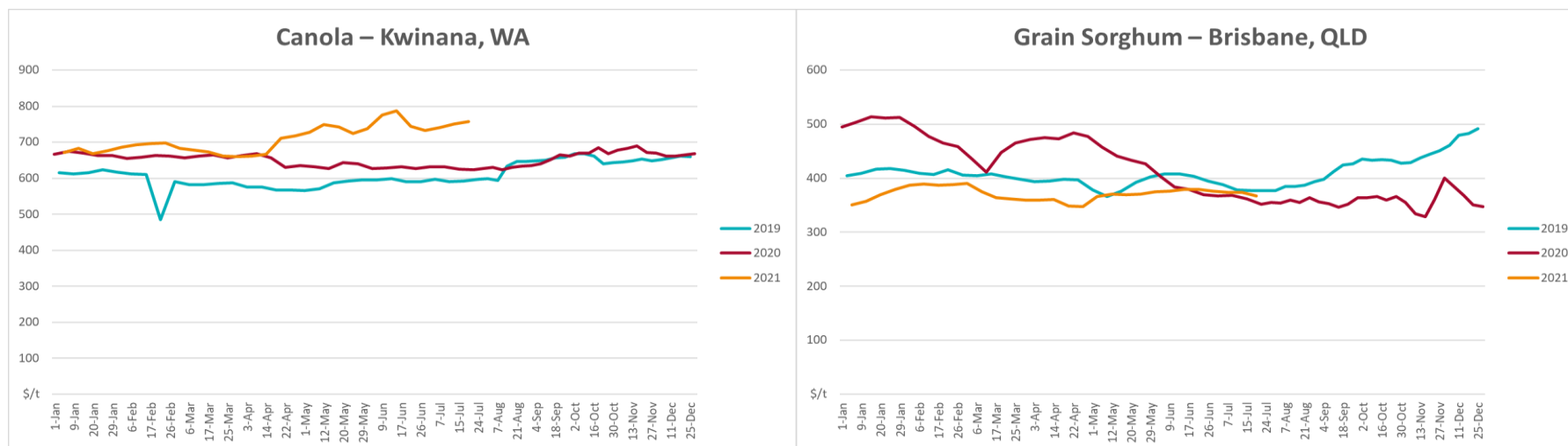




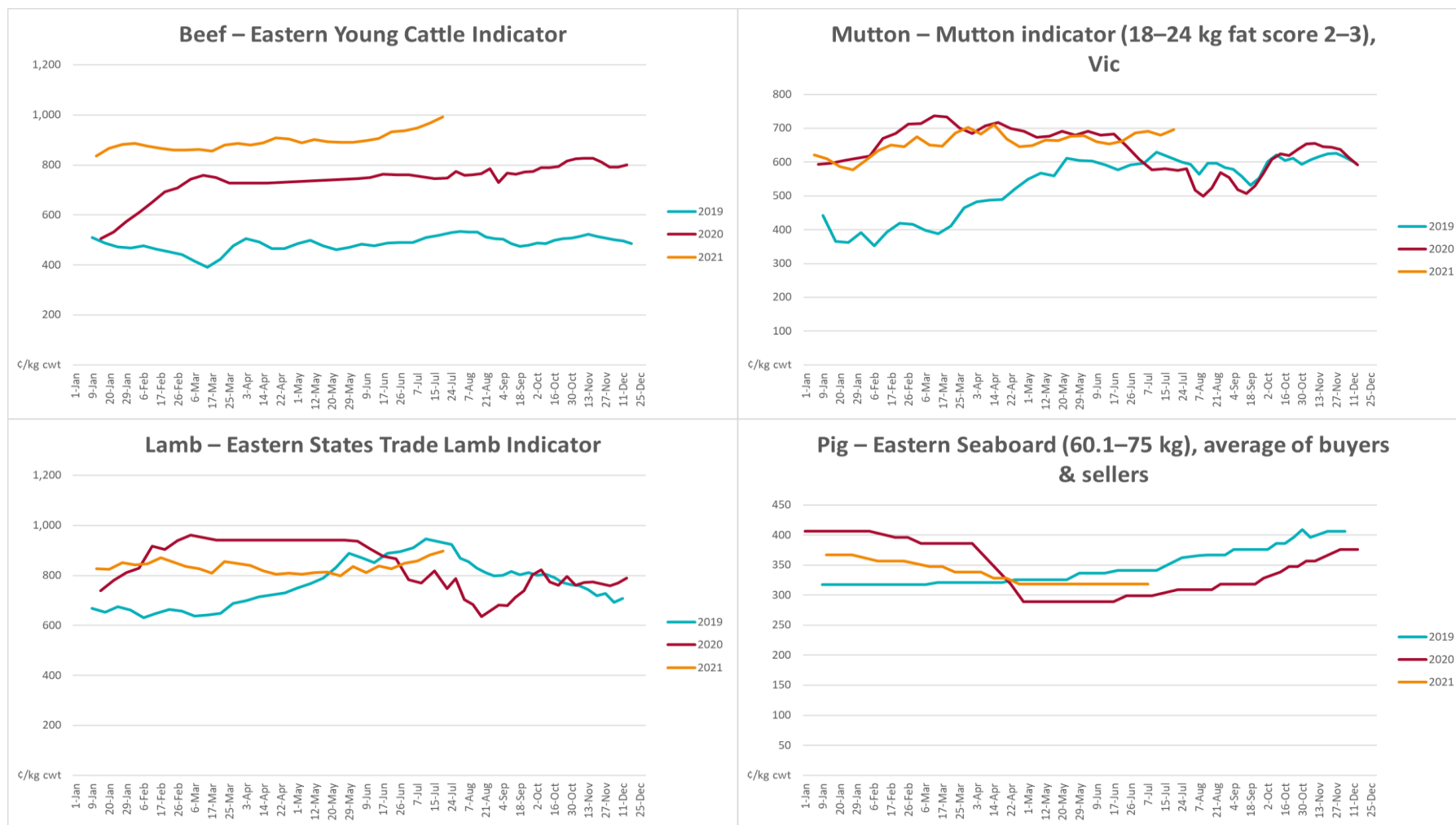


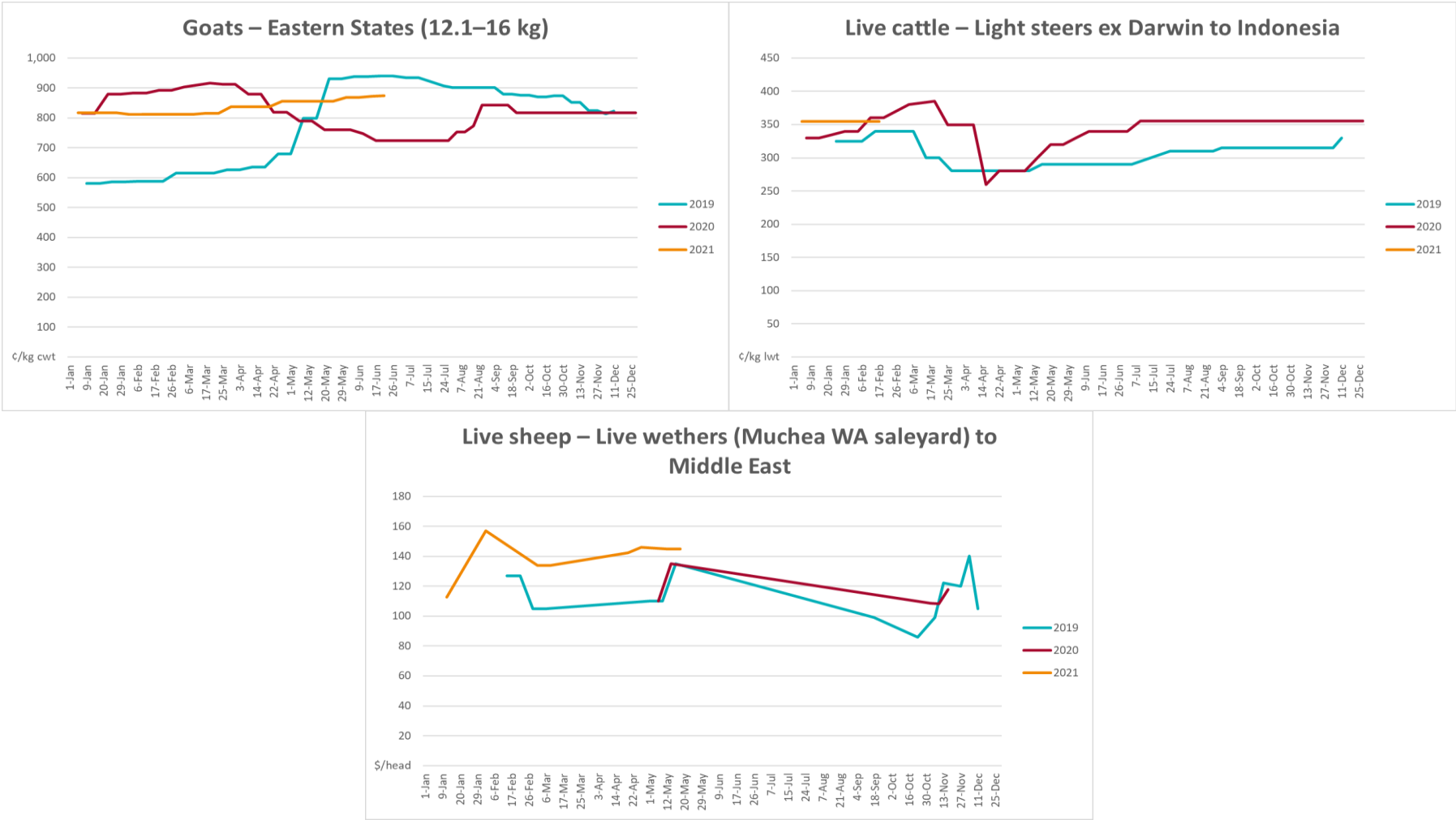
### 3.2. Selected domestic crop indicator prices



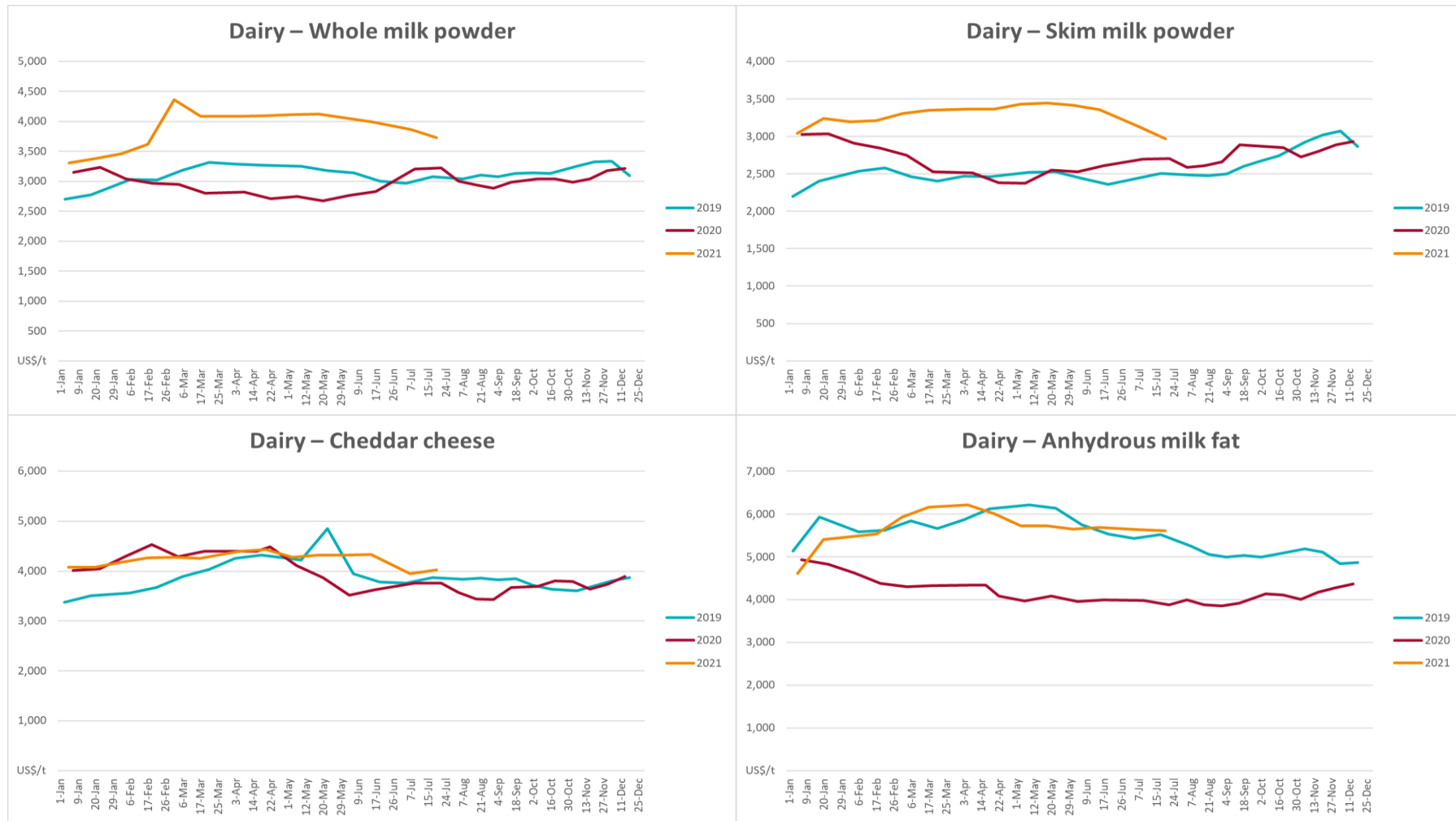


### 3.3. Selected domestic livestock indicator prices

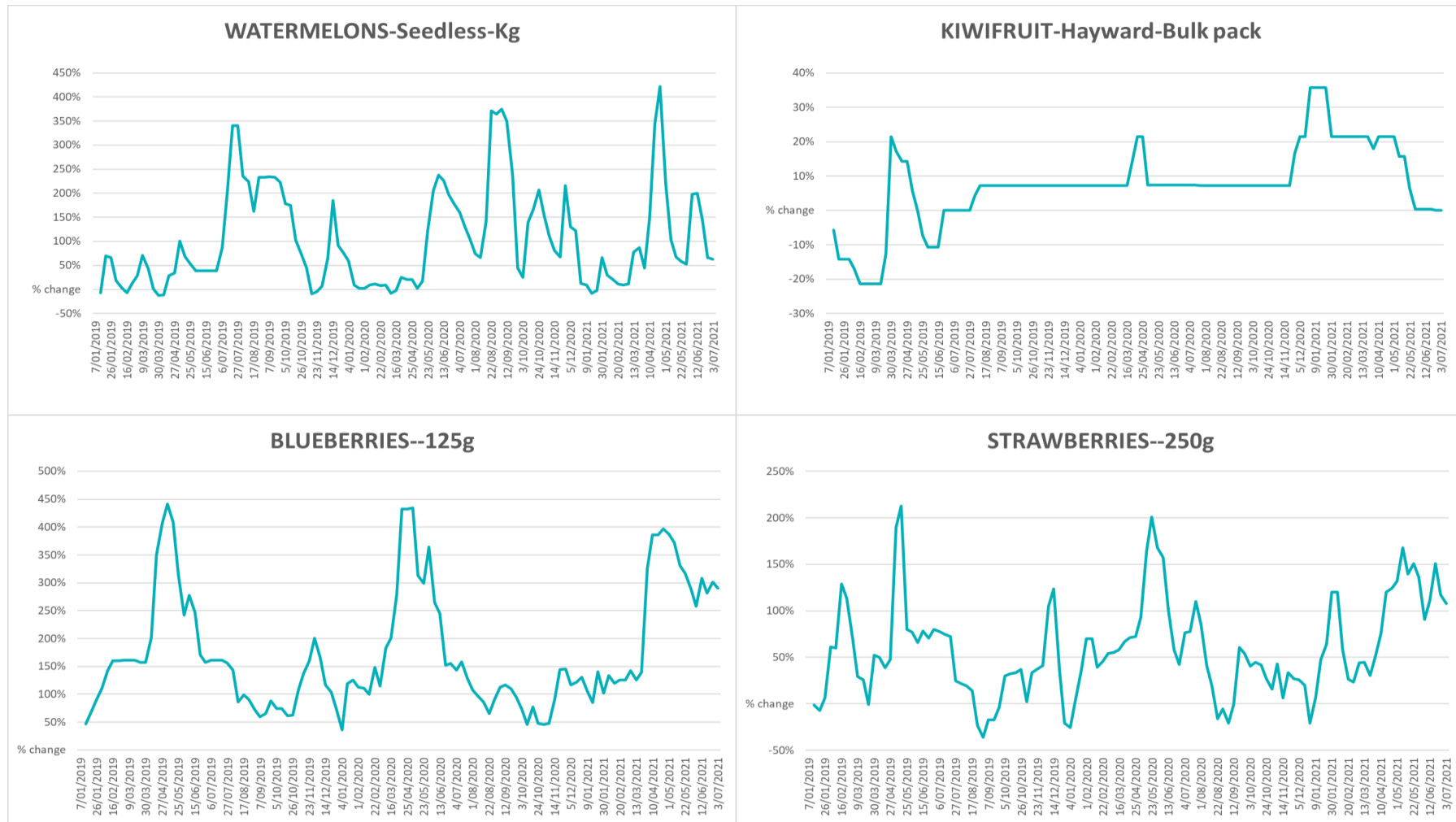




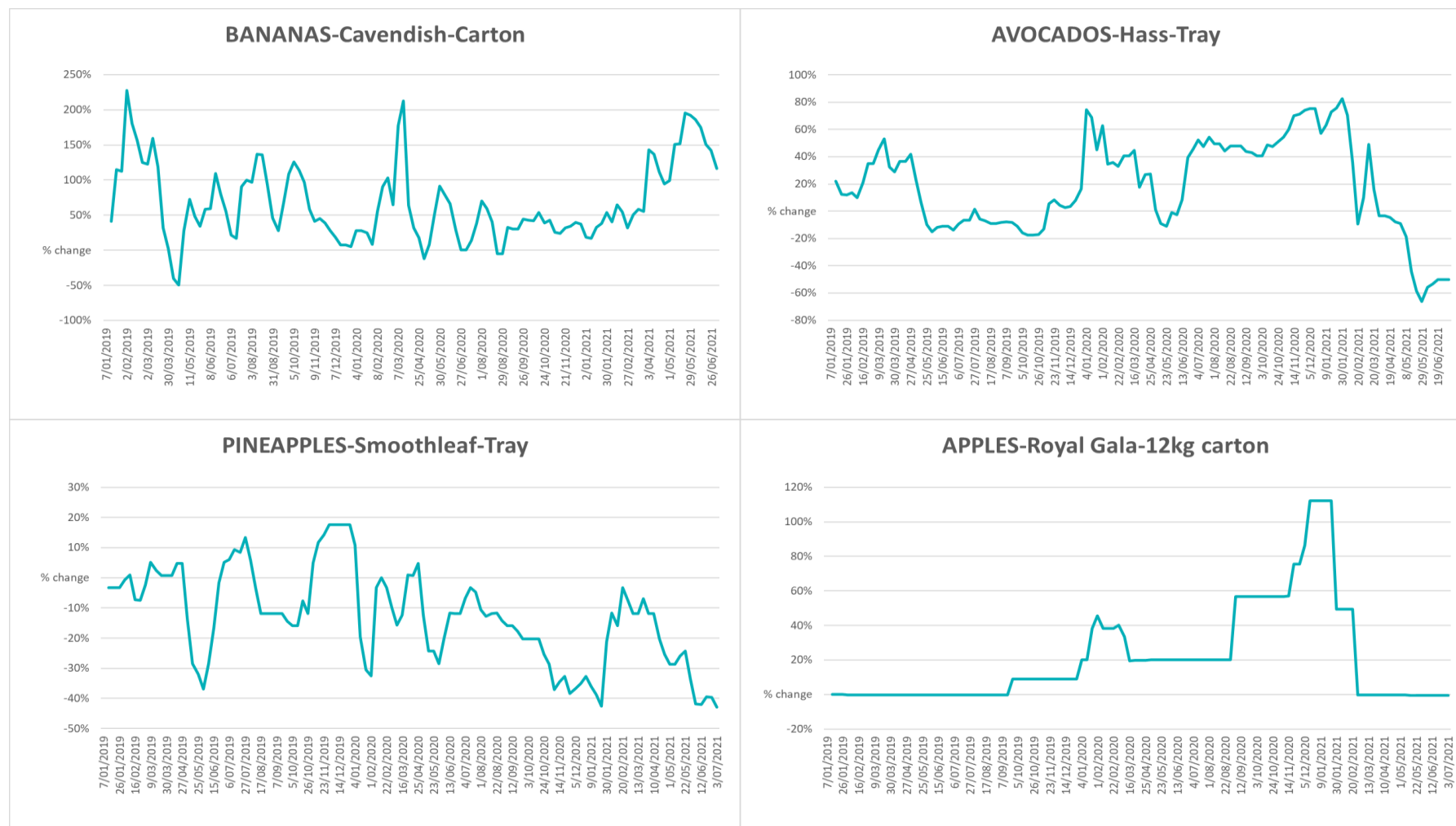
### 3.4. Global Dairy Trade (GDT) weighted average prices

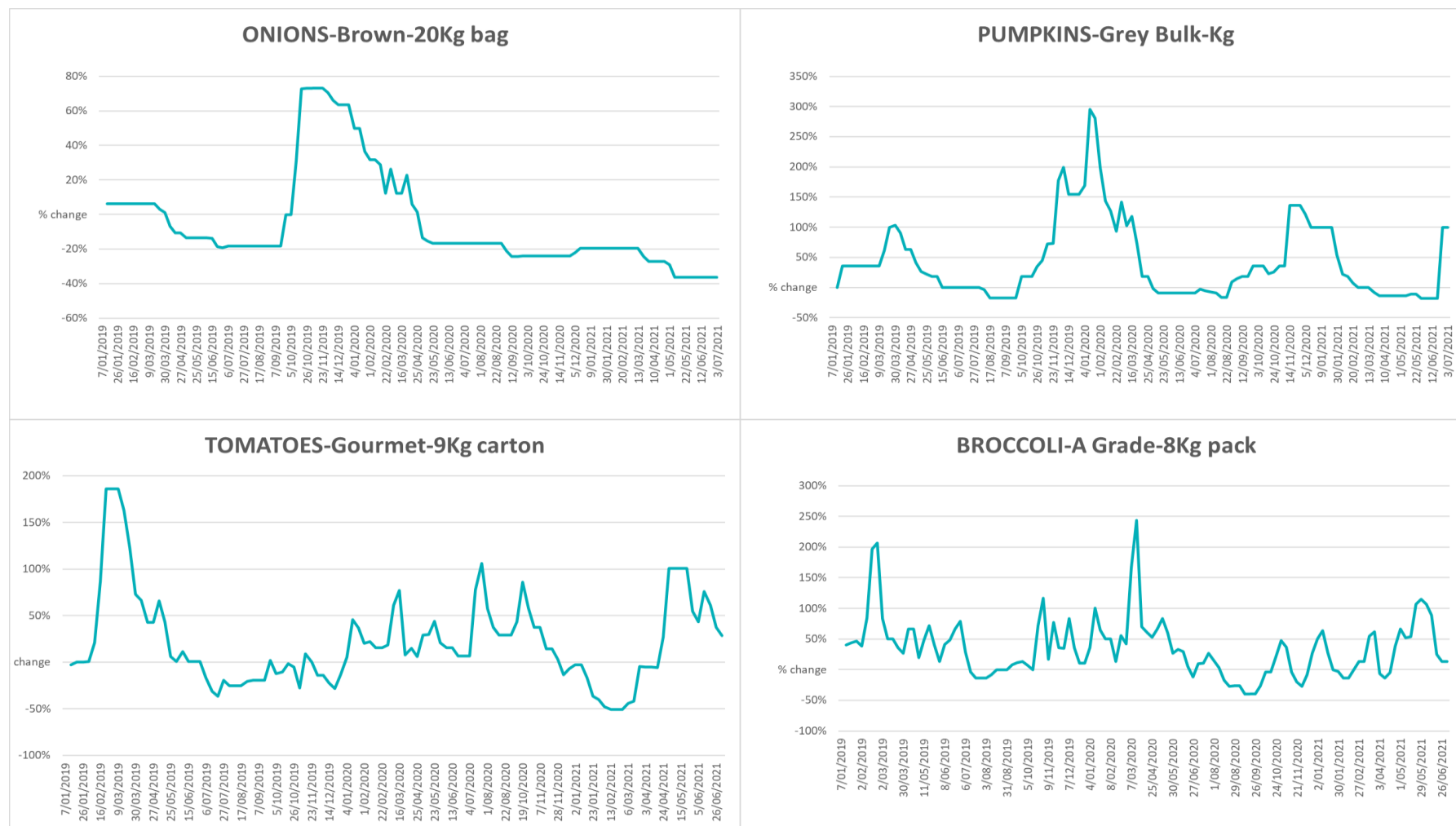


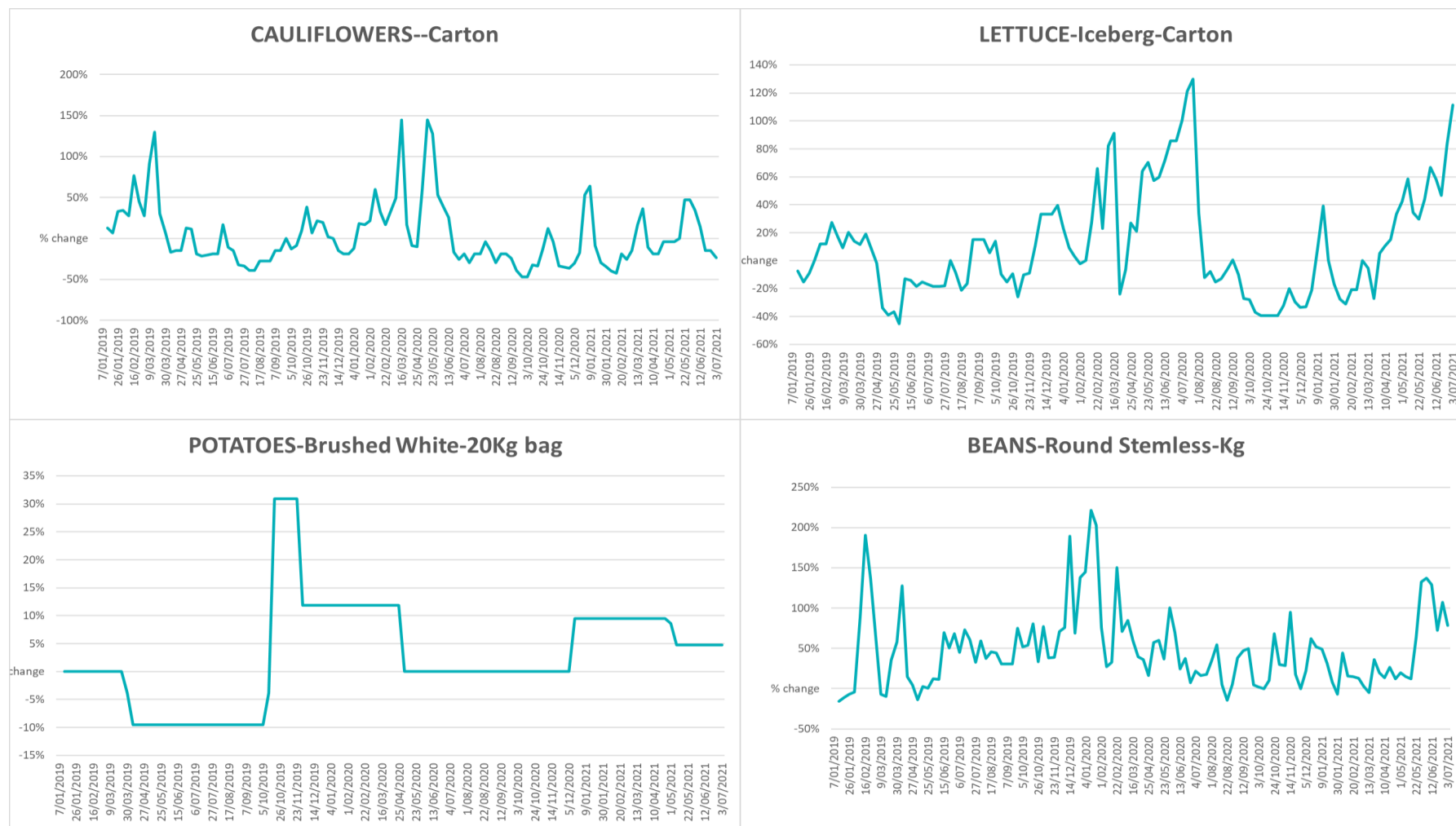
### 3.5. Selected fruit and vegetable prices

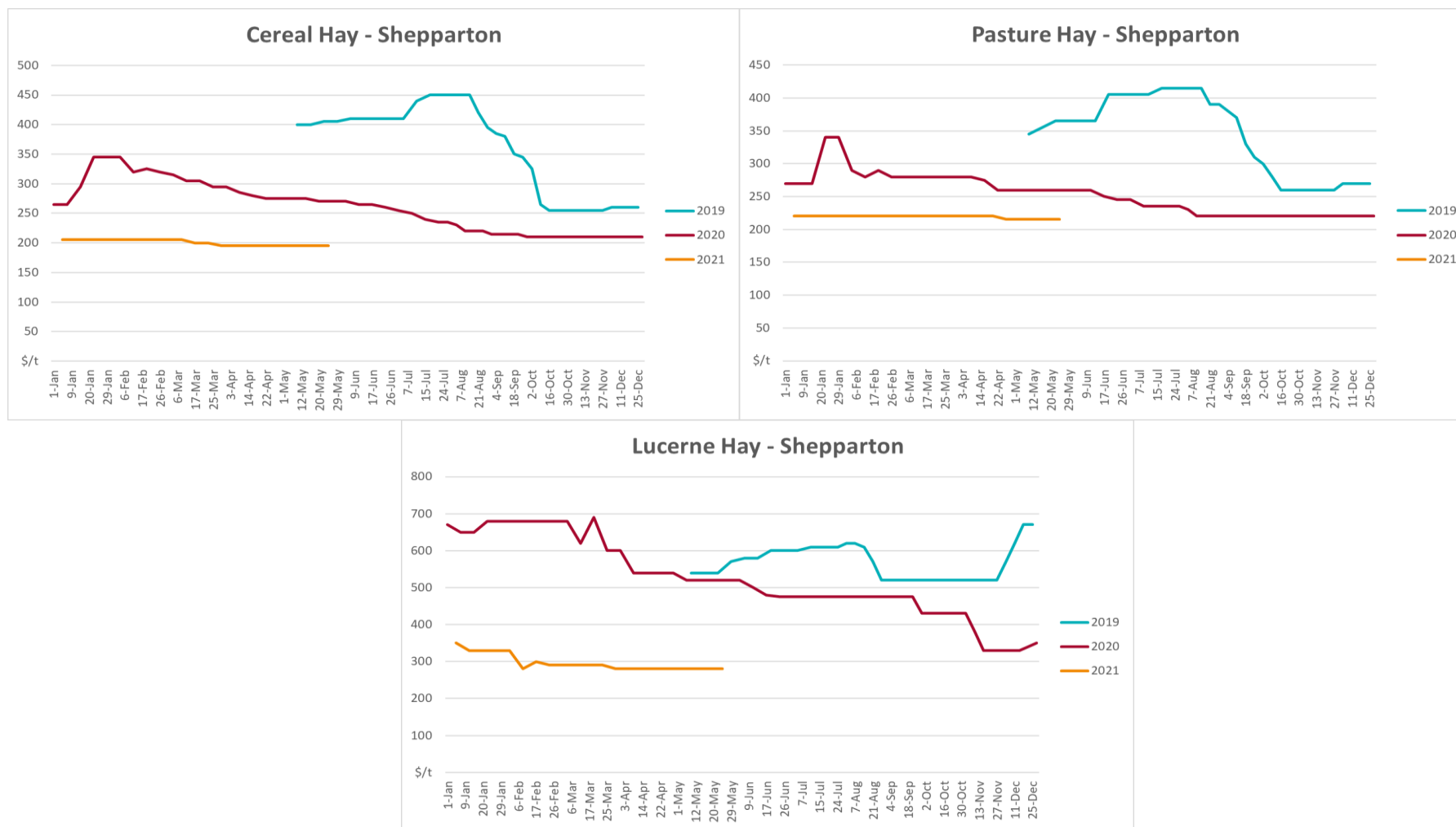












## 4. Data attribution

### Climate

#### Bureau of Meteorology

- Weekly rainfall totals: [www.bom.gov.au/climate/maps/rainfall/](http://www.bom.gov.au/climate/maps/rainfall/)
- Monthly and last 3-month rainfall percentiles: [www.bom.gov.au/water/landscape/](http://www.bom.gov.au/water/landscape/)
- Temperature anomalies: [www.bom.gov.au/jsp/awap/temp/index.jsp](http://www.bom.gov.au/jsp/awap/temp/index.jsp)
- Rainfall forecast: [www.bom.gov.au/jsp/watl/rainfall/pme.jsp](http://www.bom.gov.au/jsp/watl/rainfall/pme.jsp)
- Seasonal outlook: [www.bom.gov.au/climate/outlooks/#/overview/summary/](http://www.bom.gov.au/climate/outlooks/#/overview/summary/)
- Climate drivers: <http://www.bom.gov.au/climate/enso/>
- Soil moisture: [www.bom.gov.au/water/landscape/](http://www.bom.gov.au/water/landscape/)

#### Other

- Pasture growth: [www.longpaddock.qld.gov.au/aussiegrass/](http://www.longpaddock.qld.gov.au/aussiegrass/)
- 3-month global outlooks: [Environment and Climate Change Canada](#), [NOAA Climate Prediction Center](#), [EUROBRISA CPTEC/INPE](#), [European Centre for Medium-Range Weather Forecasts](#), [Hydrometcenter of Russia](#), [National Climate Center Climate System Diagnosis and Prediction Room \(NCC\)](#), [International Research Institute for Climate and Society](#)
- Global production: <https://ipad.fas.usda.gov/ogamaps/cropmapsandcalendars.aspx>
- Autumn break: Pook et al., 2009, <https://rmets-onlinelibrary-wiley-com.virtual.anu.edu.au/doi/epdf/10.1002/joc.1833>

### Water

#### Prices

- Waterflow: <https://www.waterflow.io/>
- Ruralco: <https://www.ruralcowater.com.au/>

#### Bureau of Meteorology:

- Allocation trade: <http://www.bom.gov.au/water/dashboards/#/water-markets/mdb/at>
- Storage volumes: <http://www.bom.gov.au/water/dashboards/#/water-storages/summary/drainage>

#### Trade constraints:

- Water NSW: <https://www.watarnsw.com.au/customer-service/ordering-trading-and-pricing/trading/murrumbidgee>
- Victorian Water Register: <https://www.waterregister.vic.gov.au/TradingRules2019/>

### Commodities

#### Fruit and vegetables

- Datafresh: [www.freshstate.com.au](http://www.freshstate.com.au)

#### Pigs

- Australian Pork Limited: [www.australianpork.com.au](http://www.australianpork.com.au)

#### Dairy

- Global Dairy Trade: [www.globaldairytrade.info/en/product-results/](http://www.globaldairytrade.info/en/product-results/)

#### World wheat, canola

- International Grains Council

#### World coarse grains

- United States Department of Agriculture

#### World cotton

- Cotlook: [www.cotlook.com/](http://www.cotlook.com/)

#### World sugar

- New York Stock Exchange - Intercontinental Exchange

#### Wool

- Australian Wool Exchange: [www.awex.com.au/](http://www.awex.com.au/)
- Domestic wheat, barley, sorghum, canola and fodder
  - Jumbuk Consulting Pty Ltd: <http://www.jumbukag.com.au/>

#### Cattle, beef, mutton, lamb, goat and live export

- Meat and Livestock Australia: [www.mla.com.au/Prices-and-market](http://www.mla.com.au/Prices-and-market)

### Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

### Creative Commons licence

All material in this publication is licensed under a [Creative Commons Attribution 4.0 International Licence](https://creativecommons.org/licenses/by/4.0/) except content supplied by third parties, logos and the Commonwealth Coat of Arms.

Inquiries about the licence and any use of this document should be emailed to [copyright@awe.gov.au](mailto:copyright@awe.gov.au).



### Cataloguing data

This publication (and any material sourced from it) should be attributed as:

ABARES 2021, Weekly Australian Climate, Water and Agricultural Update, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, 22 July 2021. CC BY 4.0 DOI:

<https://doi.org/10.25814/5f3e04e7d2503>

ISSN 2652-7561

This publication is available at [https://www.agriculture.gov.au/abares/products/weekly\\_update](https://www.agriculture.gov.au/abares/products/weekly_update)

Department of Agriculture, Water and the Environment

GPO Box 858 Canberra ACT 2601

Telephone 1800 900 090

Web [awe.gov.au/abares](http://awe.gov.au/abares)

### Disclaimer

The Australian Government acting through the Department of Agriculture, Water and the Environment, represented by the Australian Bureau of Agricultural and Resource Economics and Sciences, has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Agriculture, Water and the Environment, ABARES, its employees and advisers disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on any of the information or data in this publication to the maximum extent permitted by law.

### Statement of Professional Independence

The views and analysis presented in ABARES publications, including this one, reflect ABARES professionally independent findings, based on scientific and economic concepts, principles, information and data. These views, analysis and findings may not reflect or be consistent with the views or positions of the Australian Government, or of organisations or groups who have commissioned ABARES reports or analysis. More information on [professional independence](#) is provided on the ABARES website.

### Acknowledgements

This report was prepared by Cameron Van-Lane and Matthew Miller.