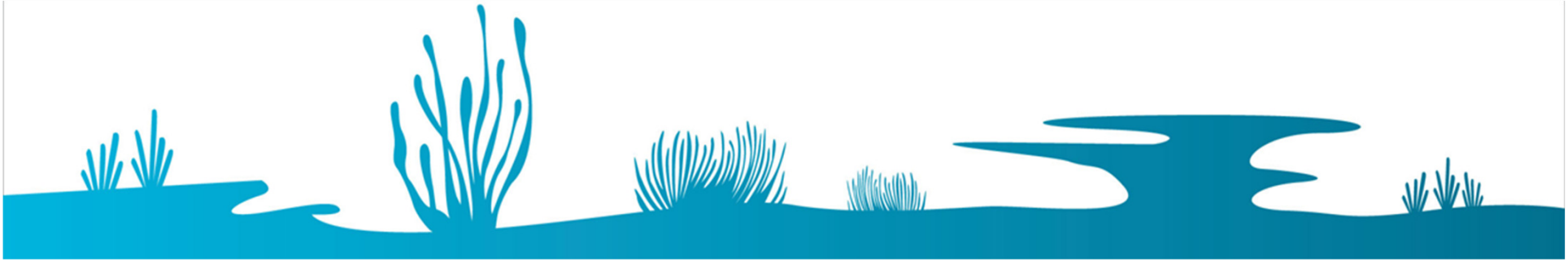
Climate and Oceans Support
Program in the Pacific

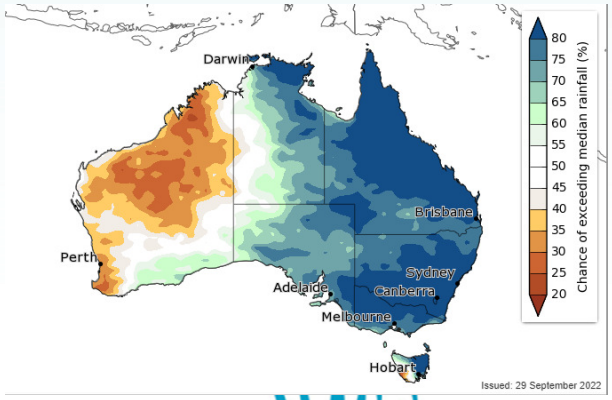
Communicating Seasonal Climate Outlooks



Climate versus weather

"Climate is what you expect; weather is what you get."

Next 3 months



Next 7 days

Different information for different audiences

1. **Farmer**

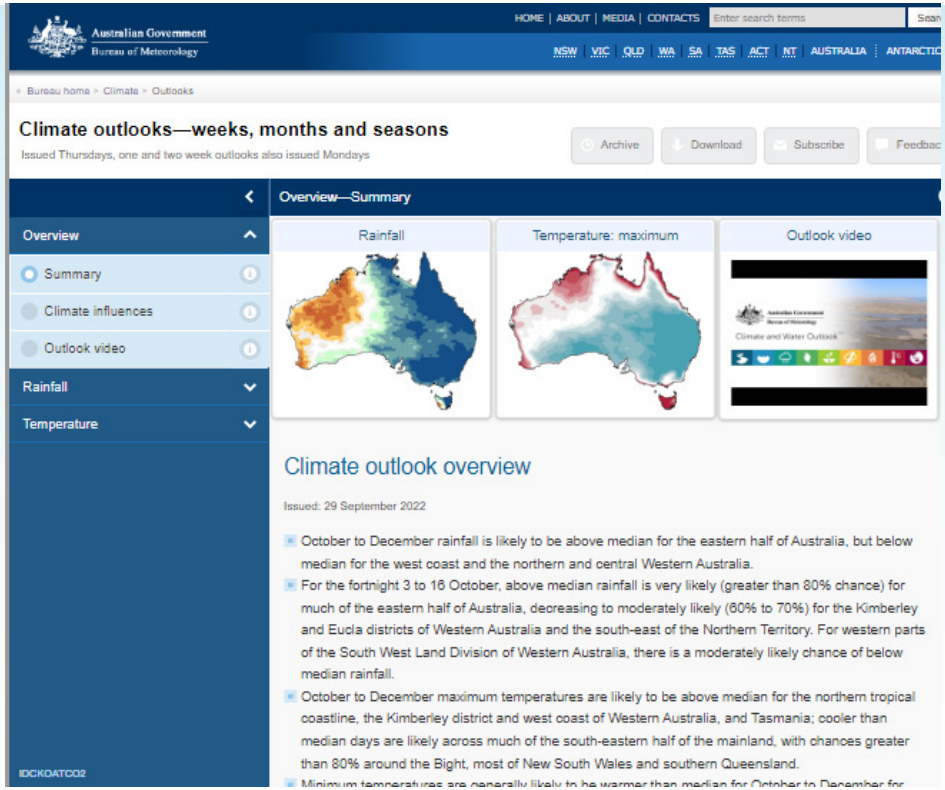
2. Water Manager

3. Woman washing clothes

Channels to communicate climate information

- Bulletin
  - Website
  - Direct email
  - Social media eg Facebook post
  - Media release
  - Direct briefings
  - Media eg TV, newspaper, Radio
  - Other?

Different needs of different audiences



- Text
- Maps
- Description
- Video

http://www.bom.gov.au/climate/outlooks/#/overview/summary

Best language

No acronyms.

- ENSO is an exception to this rule.
- SCO should not be used. It can be shortened to ‘the outlook.’
- Do not use ‘JFM’ – use Jan-Mar period (NDJFMA in the Pacific).

***Main point upfront**.*

- *This can be qualified with another sentence if required*

Location first:

- Good: “Northern Australia is expected to be warmer than average…”
- Bad: “It will be warmer than average in Northern Australia…”

Short sentences.

- One key point per sentence (i.e. try to avoid double/triple barrelled sentences)

Don’t refer to ‘confidence’ and ‘outlook’ in the same sentence.

Other Research Findings

- **Maintain accuracy** of information. This does not mean the full story has to be presented immediately.
- **Use Talking headings**. For example, the heading is not just ‘rainfall’ it could be ‘higher than normal rain expected’

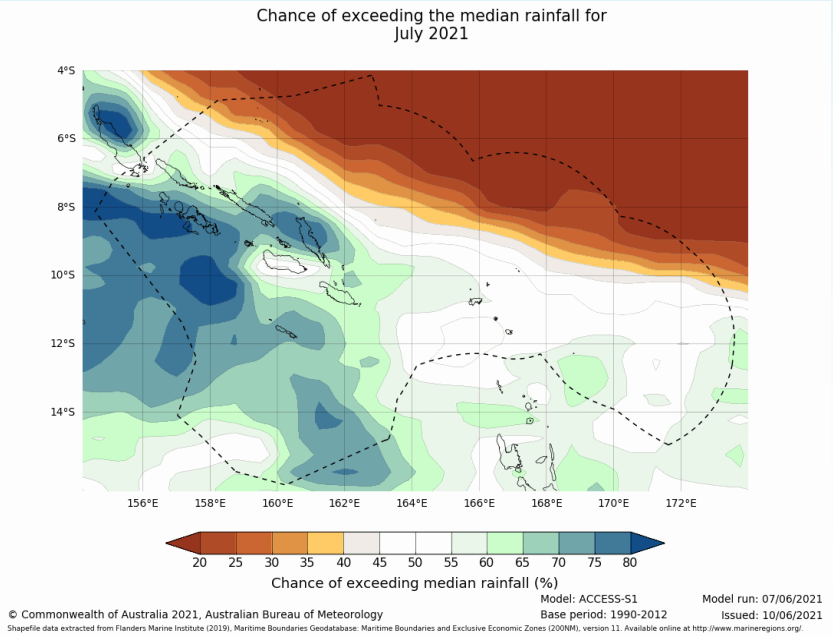
Current	Other or preferred options
Odds	Likelihood or likely Chance
Probability or probabilities	Likelihood Chances (ok to use in some instances)
Anomalies	May need phrase to describe. Difference from average or normal
Favoured	Likely
Median	Normal / Usual / **Average (but be careful as mean is also a form of 'average').**
Percent consistent	Past accuracy
Chance of exceeding median	Chance above average
A return to neutral conditions.	Neither El Nino nor La Nina

Median Outlooks
Above/Below median

Converting percentages to words
From 40 to less than 60% - average
Between 60 to 80% - likely or favour
Greater than 80% - very likely

For most of the Solomon Islands, July rainfall is *likely* to be above average.

(There is little guidance for the Santa Cruz islands and Guadalcanal.)

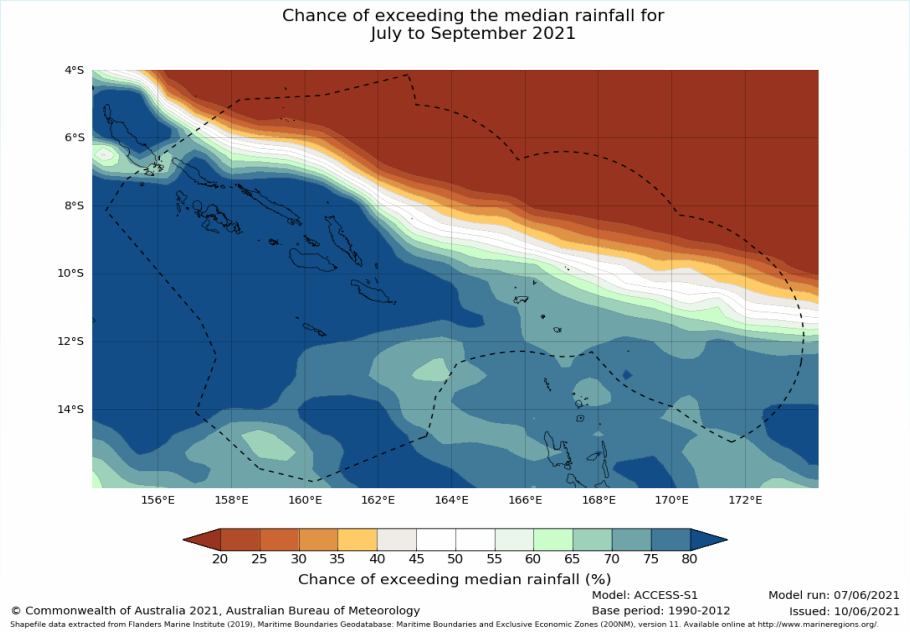


Median Outlooks
Above/Below median

Converting percentages to words
From 40 to less than 60% - average
Between 60 to 80% - likely or favour
Greater than 80% - very likely

The Solomon Island's July to September rainfall is *very likely* to be above average for most of the country

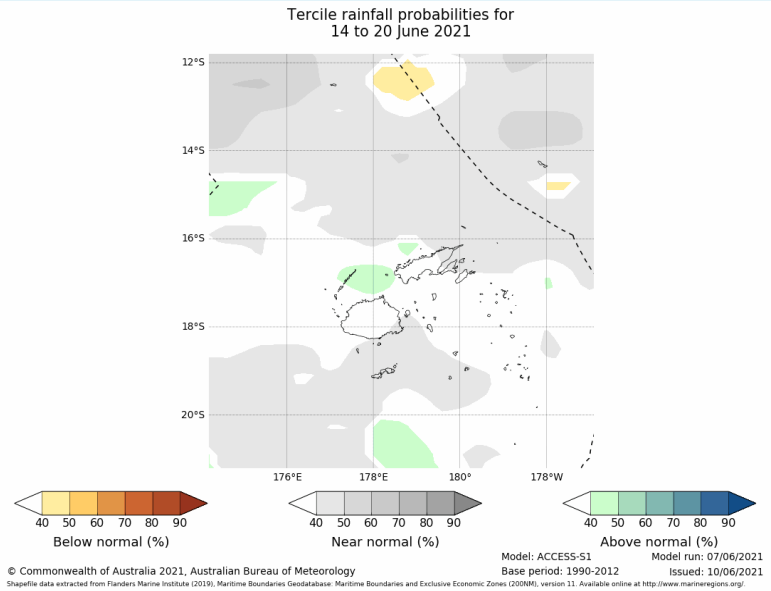
(note very likely doesn't apply to Temotu islands to the far east).



Tercile Outlooks
Below/Normal/Above Normal

Converting percentages to words
Less than 40% - little guidance
Between 40-59% - likely or favour
Greater than 60% - very likely

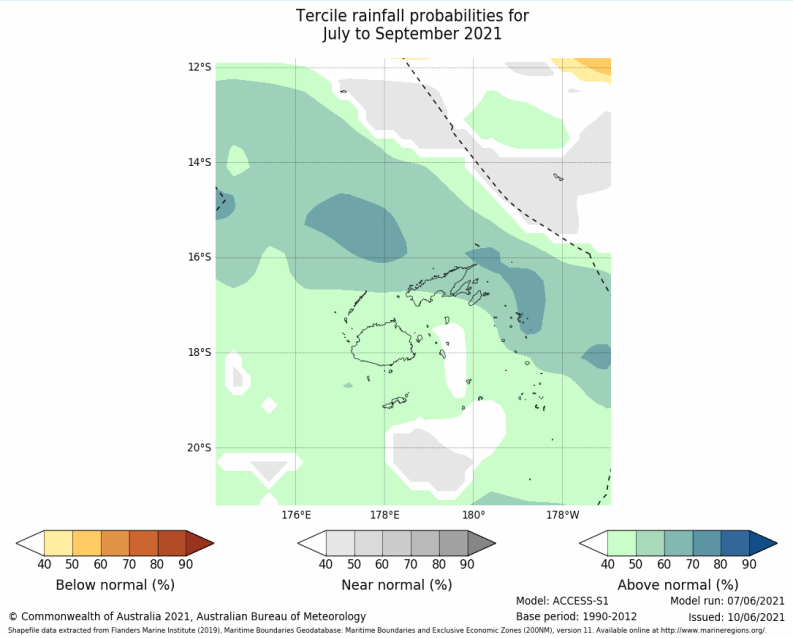
For main islands of Fiji, the rainfall outlook for 14 to 20 June 2021 offers little guidance as the chances of above normal, normal and below normal rainfall are similar. Near normal rainfall is likely (favoured) for Rotuma and Kadavu.



Tercile Outlooks
Below/Normal/Above Normal

Converting percentages to words
Less than 40% - little guidance
Between 40-59% - likely or favour
Greater than 60% - very likely

For northeast Vanua Levu and the northern Lau Group for July to September 2021, above normal rainfall is very likely. Above normal rainfall is likely (favoured) for the reminder of the main islands. For Rotuma there is no clear guidance.

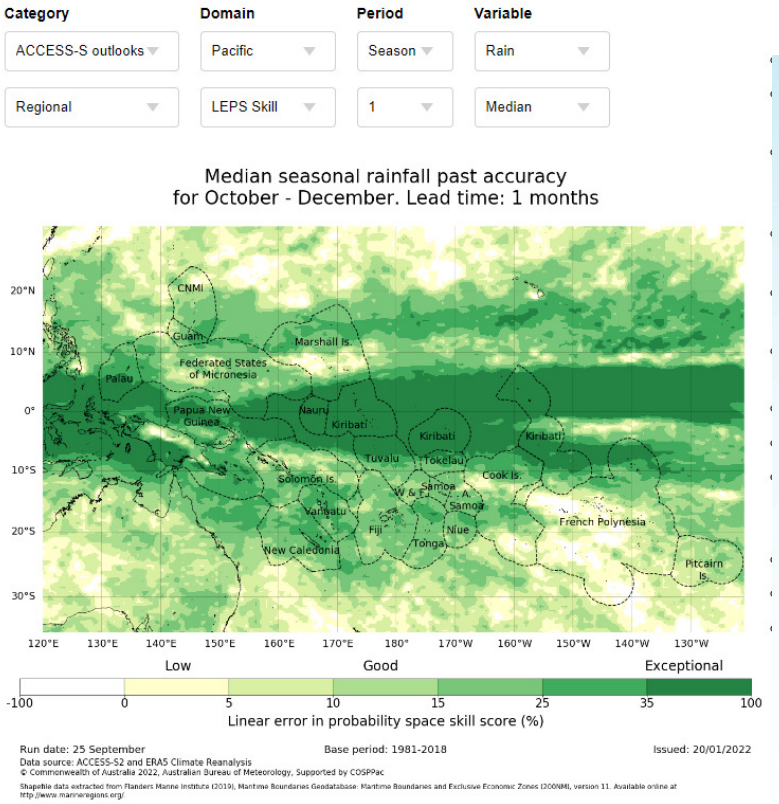


Communicating Uncertainty

- Communicating uncertainty and forecast skill is a huge challenge globally.
- No forecast (weather, seasonal climate and hydrological prediction) is complete without a description of its uncertainty.
- Using clear and consistent language is one way of addressing uncertainty in seasonal climate forecasts.

Skill

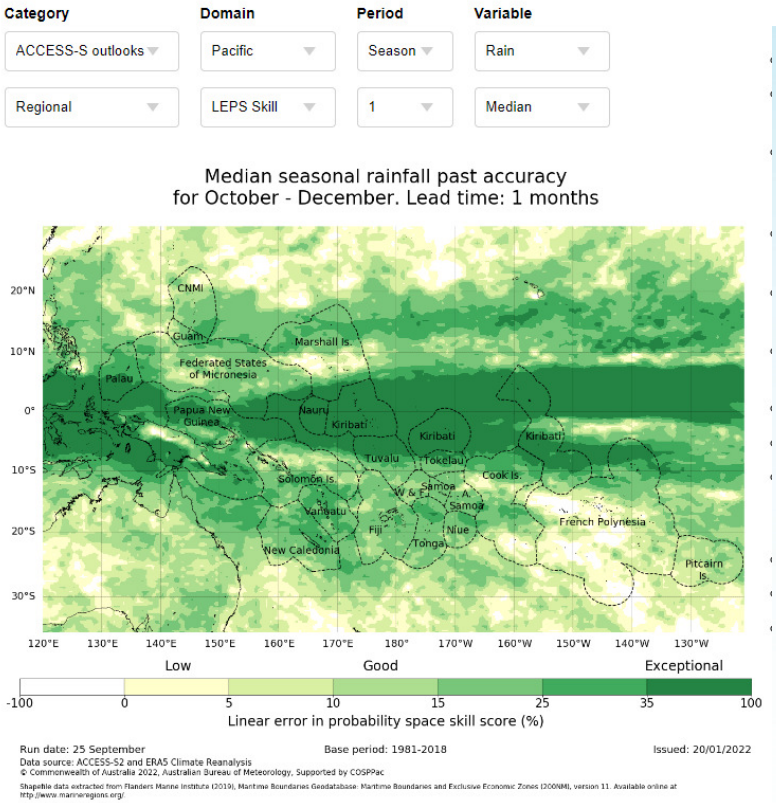
- Stronger the green, better the skill
- Skill calculated over 37 years (1981-2018)
- Lock into ENSO, confident for 6 months



http://www.bom.gov.au/climate/pacific/outlooks/

Communicating Uncertainty

LEPS Value	Word
X < 0.0	Very Low
0 ≤ X < 5	**Low**
5 ≤ X < 10	Moderate
10 ≤ X < 15	**Good**
15 ≤ X < 25	High
25 ≤ X < 35	Very High
X ≥ 35	**Exceptional**

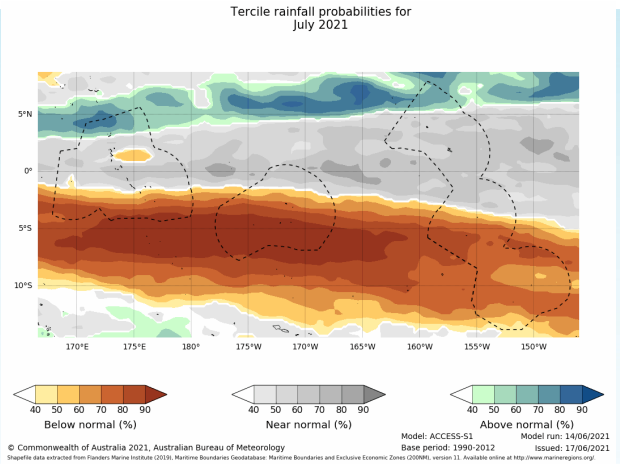


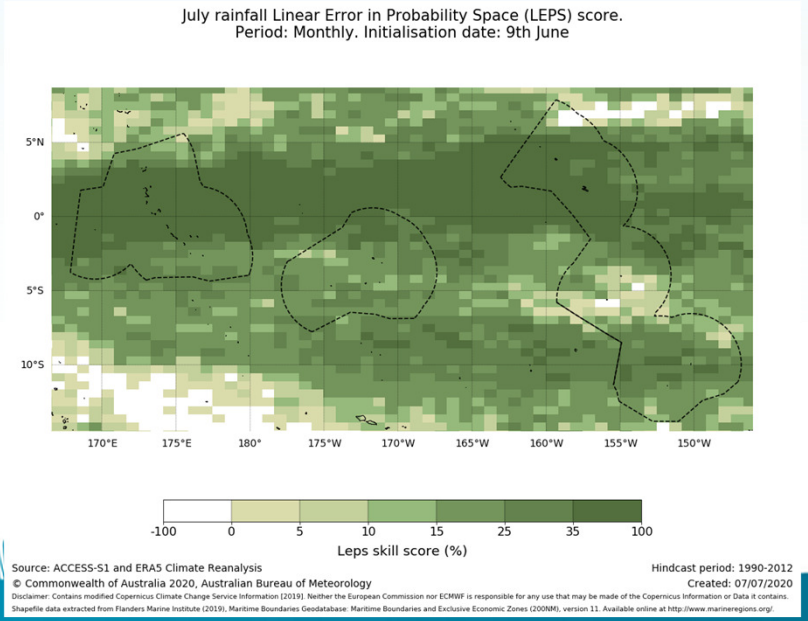
http://www.bom.gov.au/climate/pacific/outlooks/

Tercile Forecast and Skill Below/Normal/Above Normal

Rainfall across the Gilbert Island's are likely to be close to average for July 2021. For the Phoenix Island's below normal rainfall is very likely, and for the northern Line island's normal rainfall is favoured while below normal is favoured for the southern Line Island's.

Confidence in these outlooks is very high with the exception of the Phoenix Island's where it is high and the central Line Island's EEZ where confidence is low.



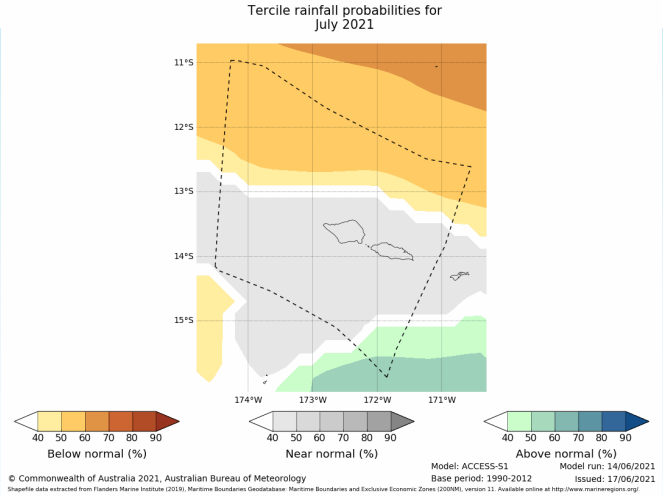


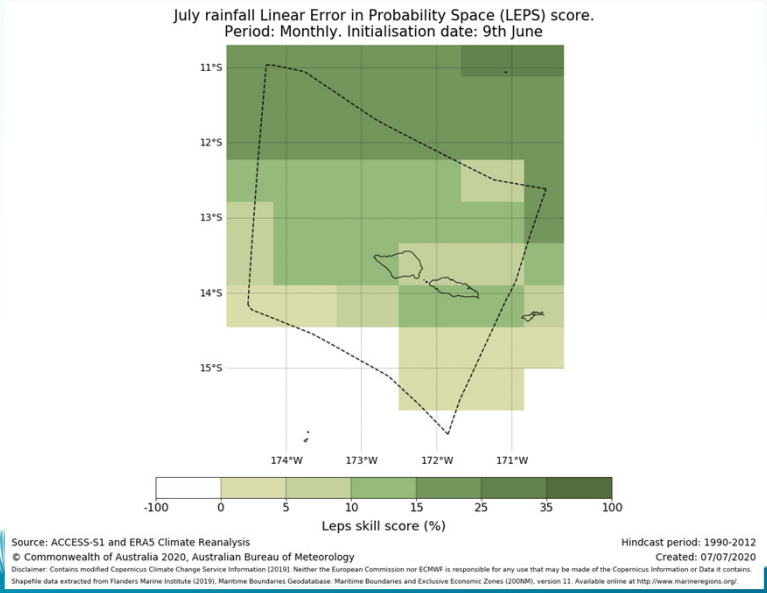
Tercile Forecast and Skill Below/Normal/Above Normal

Rainfall across Samoa is likely to be near average for July 2021.

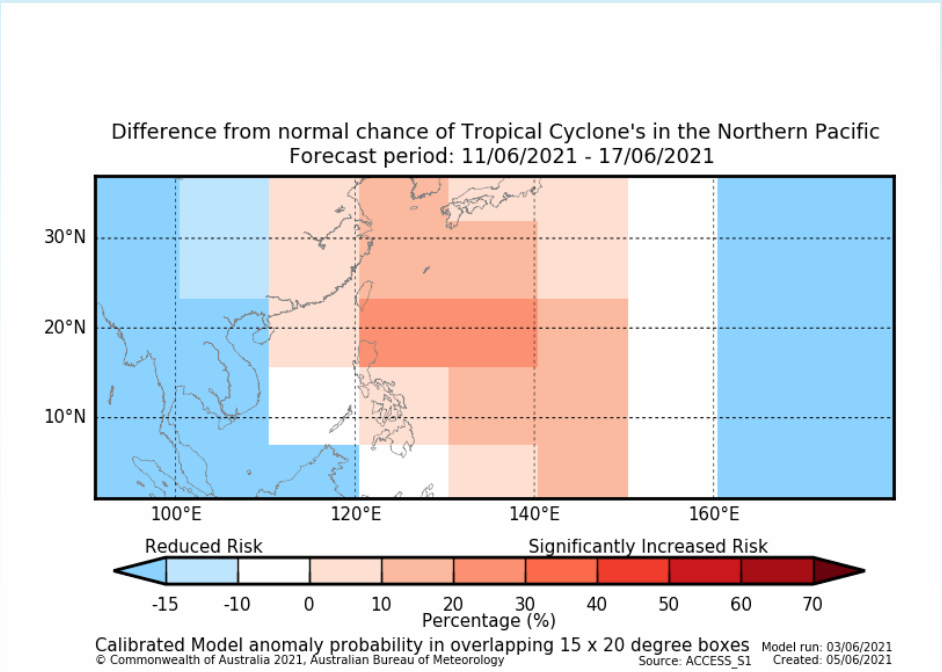
Confidence in these outlooks is low.

Could be 'low to moderate', however consider that the probabilities are a light grey colour (not strong). There is also no strong climate driver impacting the forecast.

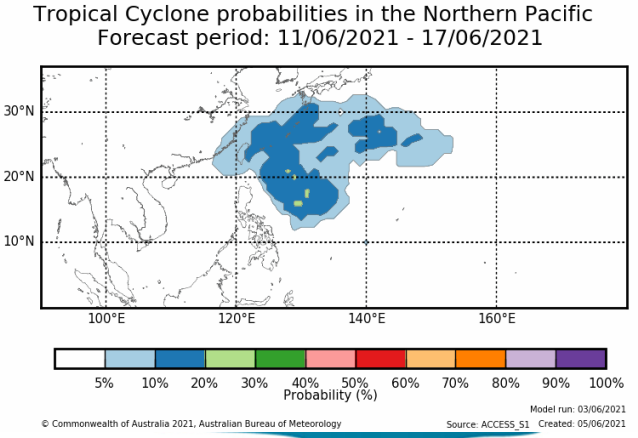




Tropical Cyclone interpretation example – NW Pacific



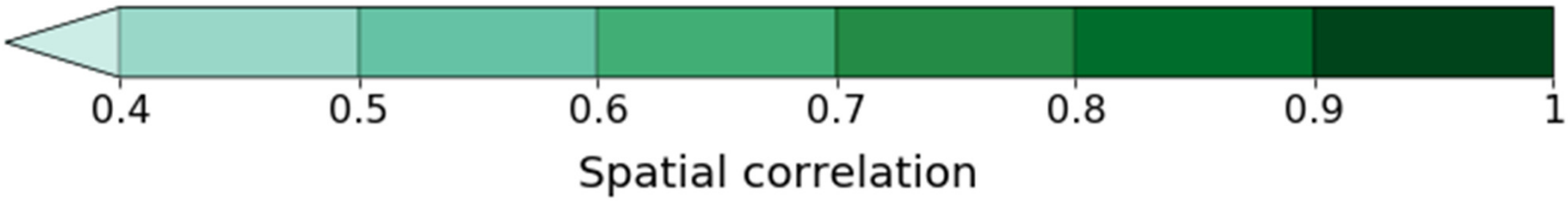
Tropical Cyclone occurrence risk is significantly higher over the northern Philippines, Guam and the Mariana Islands region, elsewhere there is increased risk in the north west Pacific for 11 to 17 June.



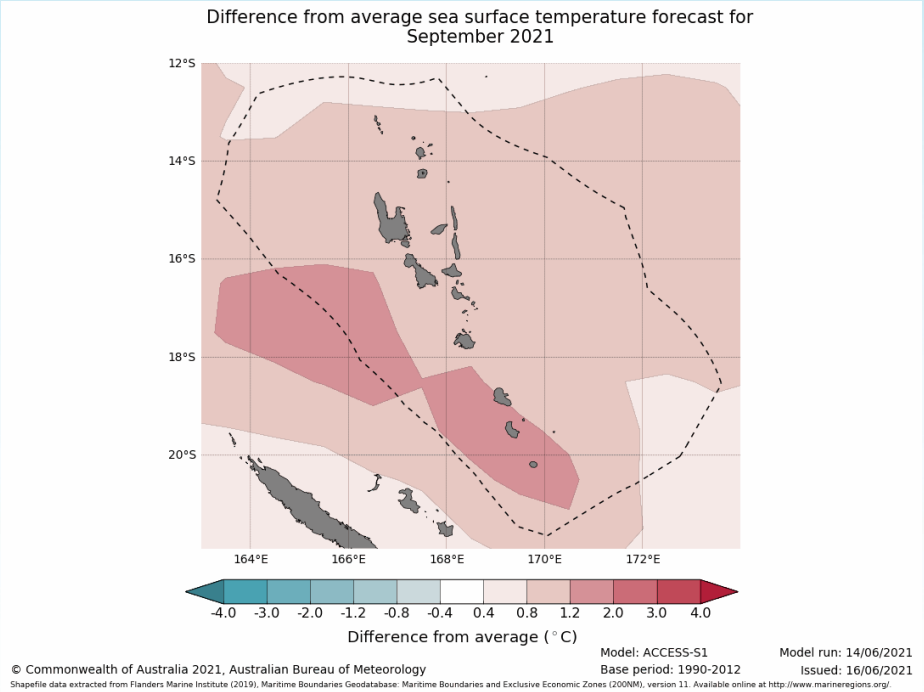
http://www.bom.gov.au/climate/pacific/outlooks/

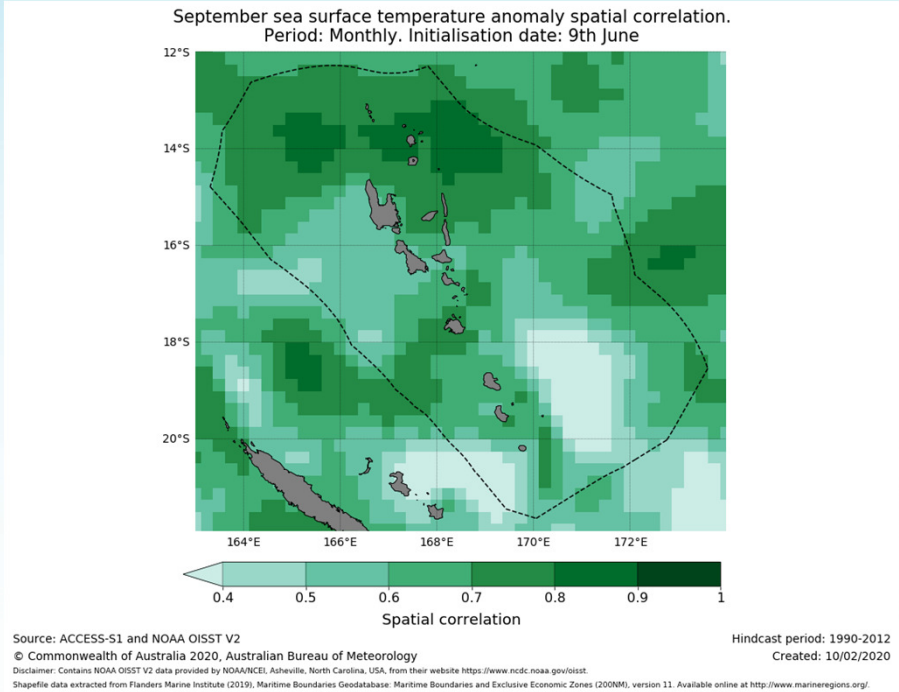
Communicating Ocean Outlooks

- Ocean outlooks available from ACCESS-S are typically shown as the ensemble mean.
- This shows the SST and Sea Level forecast as a predicted value, rather than probabilistic.
- Ensemble mean is most commonly conveyed using correlation coefficients.
- Typically we refer to the skill as either having:
  - No skill (lightest green colour <0.4)
  - Has skill (0.4 to 0.6)
  - Moderate skill (0.6 to 0.8)
  - Good skill (>0.8)



Exercise: Vanuatu SST
How would you explain this outlook?

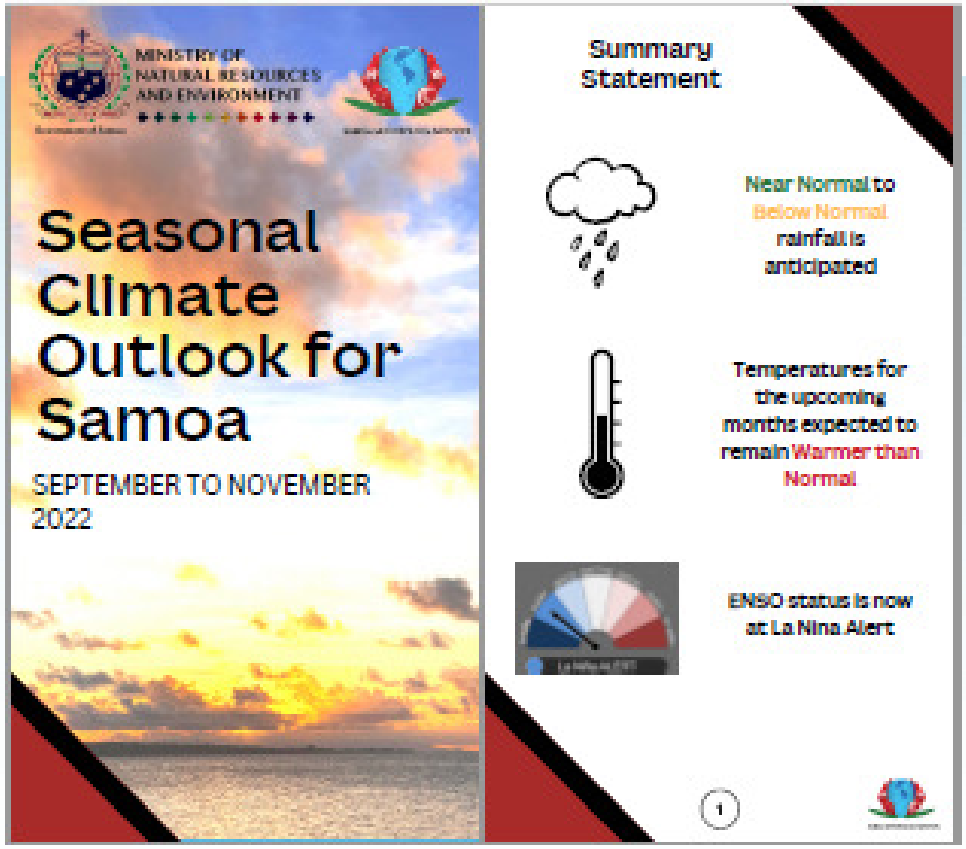




SST will be warm at Vanuatu.

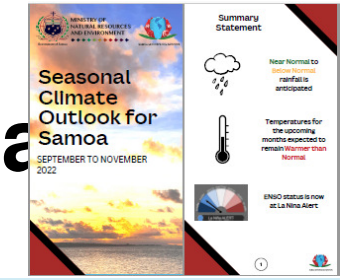
Sea Surface Temperature is likely to be warmer than average across the Vanuatu EEZ in September, with predicted temperatures between 1.2 and 2C in the south east. Model forecast skill ranges from moderate to good in the south east.

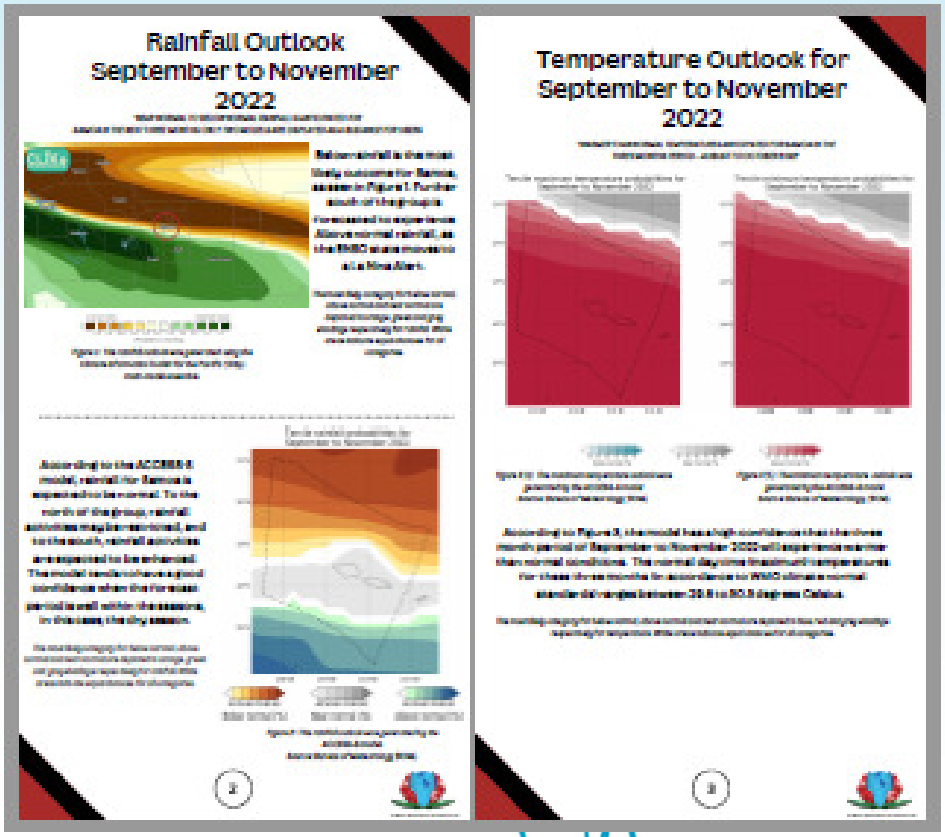
Seasonal Climate Outlook for Samoa

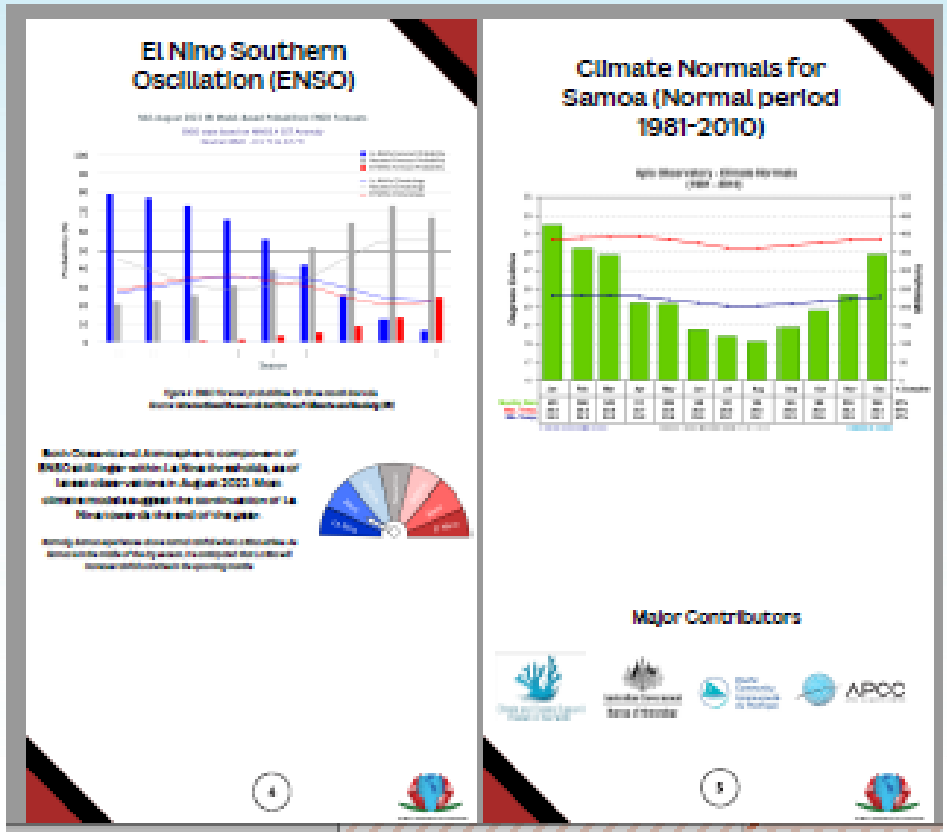


http://www.samet.gov.ws/

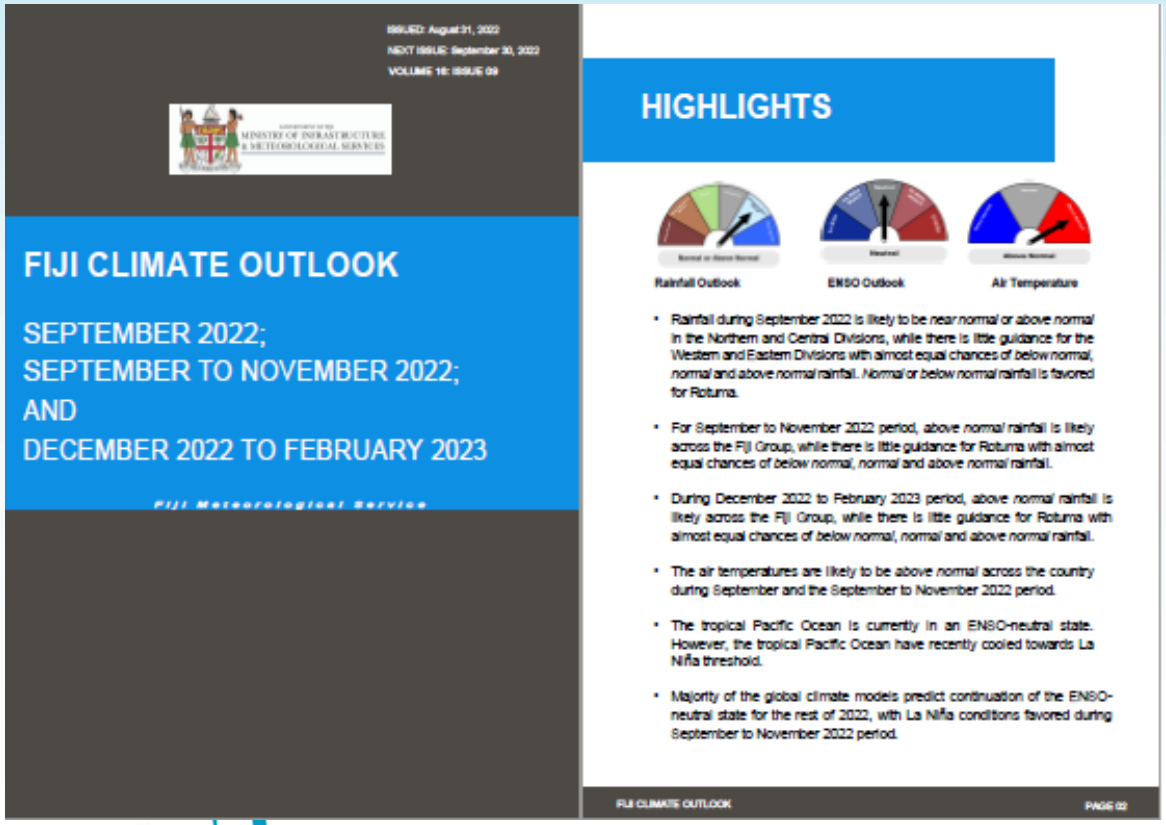
Seasonal Climate Outlook for Sa







Fiji Climate Outlook



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VOLUME 16: ISSUE 09

MINISTRY OF INFRASTRUCTURE & METEOROLOGICAL SERVICES

FIJI CLIMATE OUTLOOK

SEPTEMBER 2022;
SEPTEMBER TO NOVEMBER 2022;
AND
DECEMBER 2022 TO FEBRUARY 2023

Fiji Meteorological Service

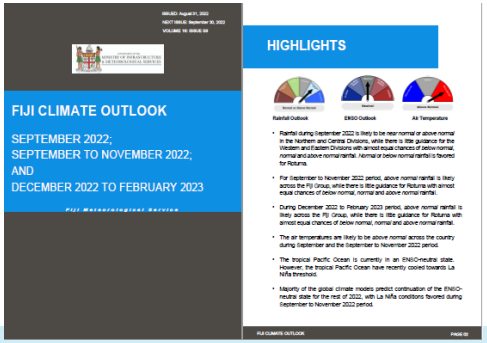
HIGHLIGHTS

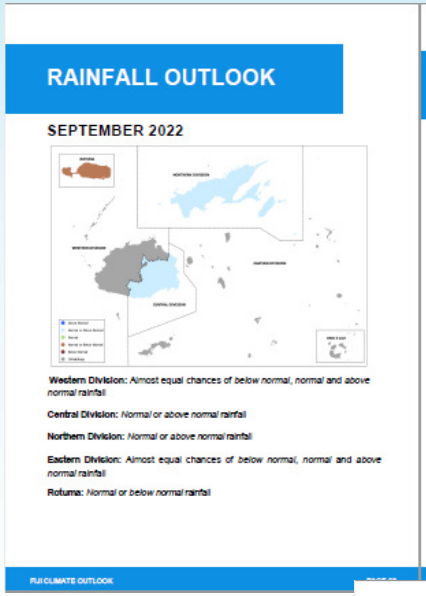
Rainfall Outlook | ENSO Outlook | Air Temperature

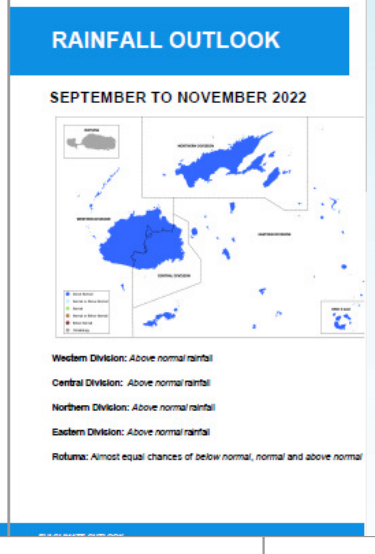
- Rainfall during September 2022 is likely to be *near normal* or *above normal* in the Northern and Central Divisions, while there is little guidance for the Western and Eastern Divisions with almost equal chances of *below normal*, *normal* and *above normal* rainfall. *Normal* or *below normal* rainfall is favored for Rotuma.
- For September to November 2022 period, *above normal* rainfall is likely across the Fiji Group, while there is little guidance for Rotuma with almost equal chances of *below normal*, *normal* and *above normal* rainfall.
- During December 2022 to February 2023 period, *above normal* rainfall is likely across the Fiji Group, while there is little guidance for Rotuma with almost equal chances of *below normal*, *normal* and *above normal* rainfall.
- The air temperatures are likely to be *above normal* across the country during September and the September to November 2022 period.
- The tropical Pacific Ocean is currently in an ENSO-neutral state. However, the tropical Pacific Ocean have recently cooled towards La Niña threshold.
- Majority of the global climate models predict continuation of the ENSO-neutral state for the rest of 2022, with La Niña conditions favored during September to November 2022 period.

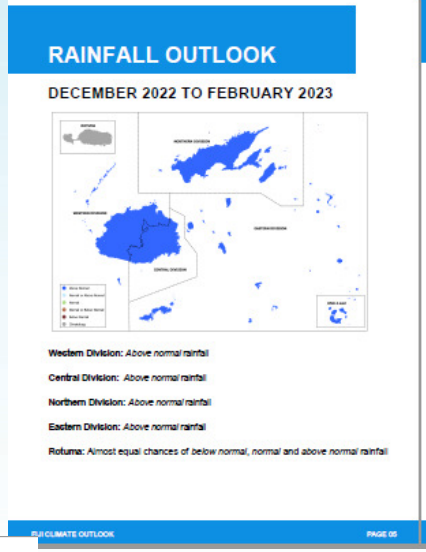
FIJI CLIMATE OUTLOOK PAGE 02

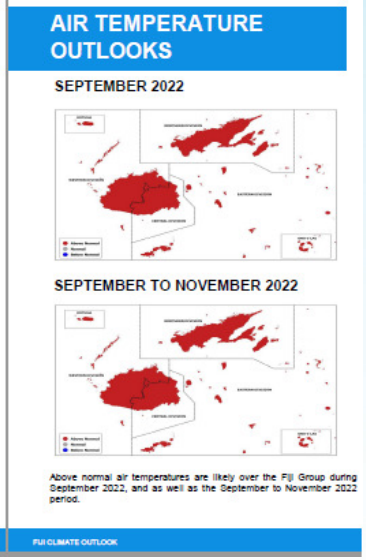
Fiji Climate Outlook

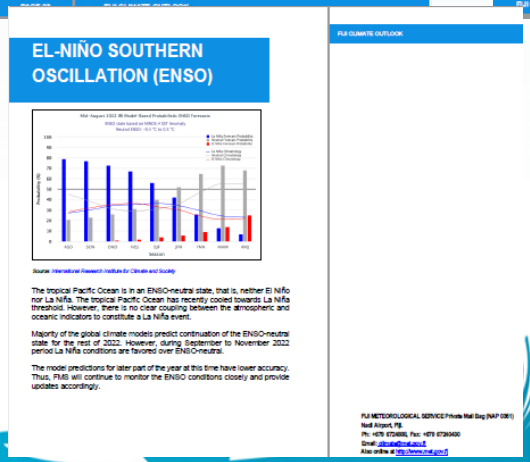






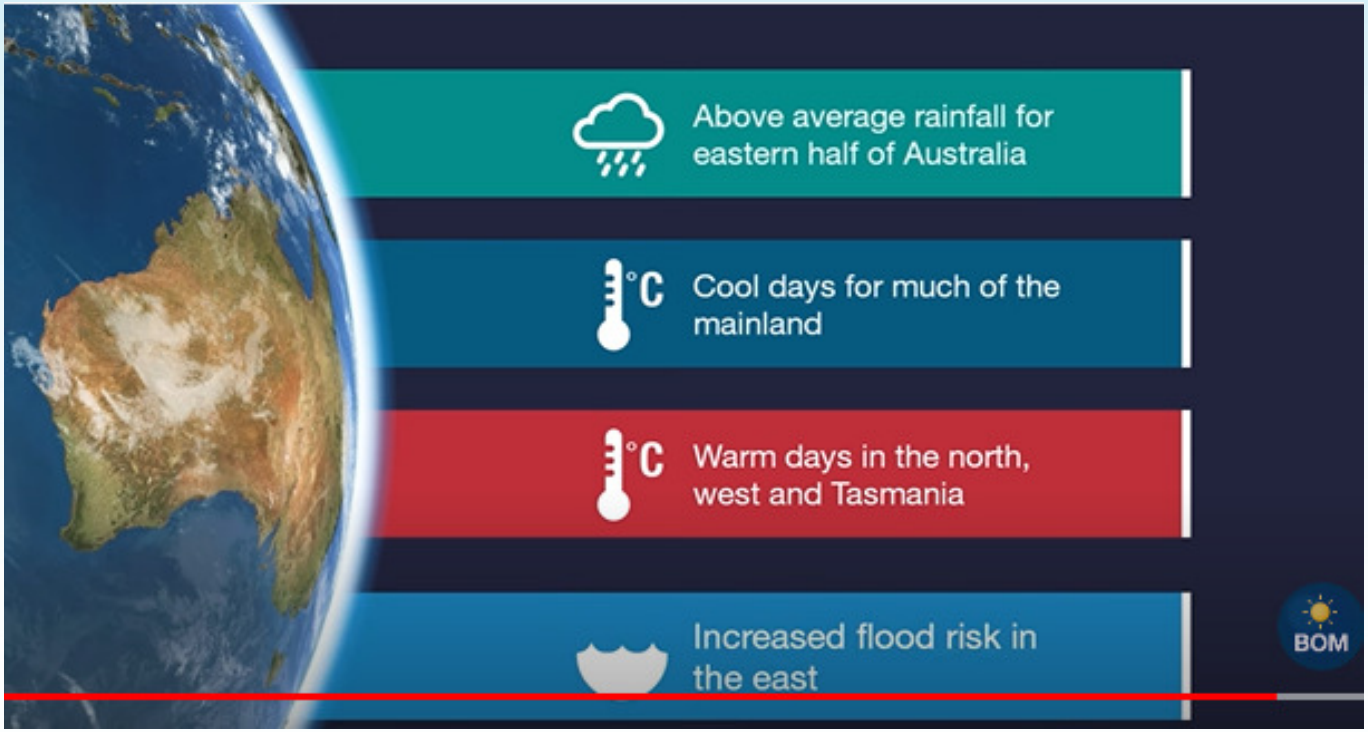






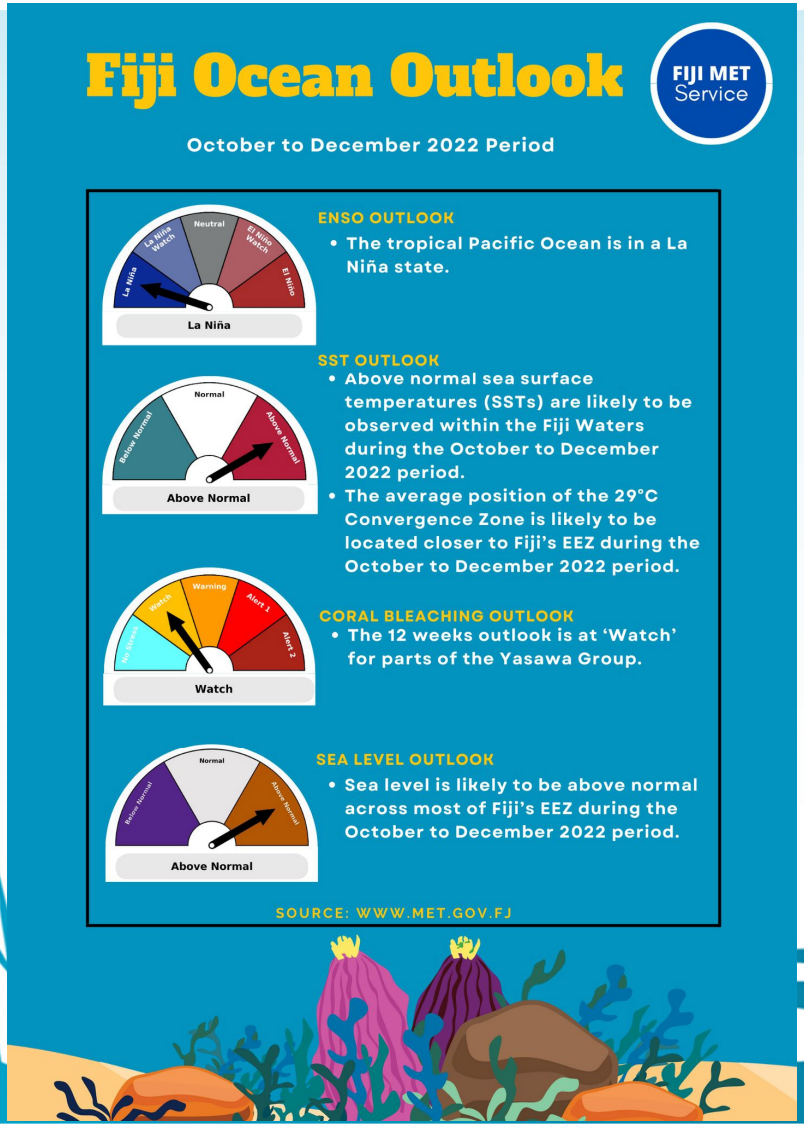
https://www.met.gov.fj/index.php?page=climateOutlooks#September%202022climateOut2022.08.31%2015.36.51.pdf

Climate Outlook video - summary



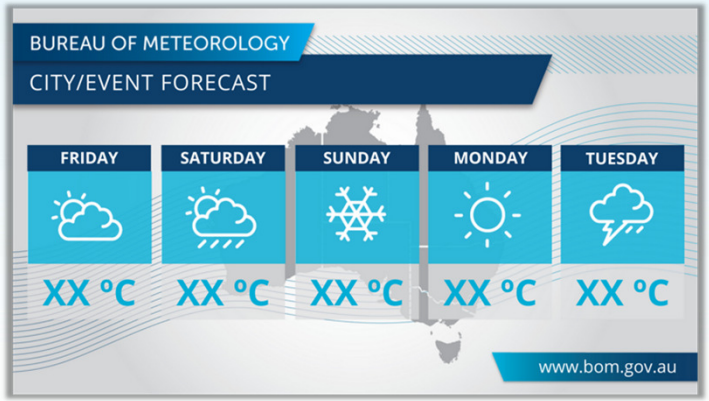
https://www.youtube.com/watch?v=IjtwyCsak1Y

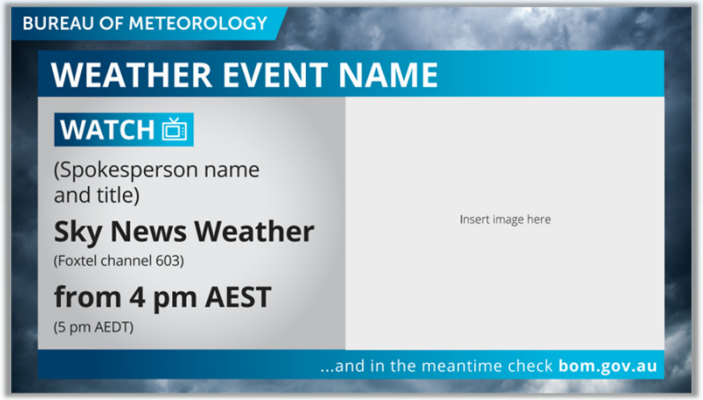
Social media - Ocean Outlook



For social media graphics – try Canva

Web-based tool for professional, on-brand graphics





Summary

- Different information in alternate channels for various audiences
- Set language for outlooks and skill
  eg "Rainfall across Samoa is likely to be near average for July 2021. Confidence in this outlook is high"
- Outlook products at
  http://www.bom.gov.au/climate/pacific/outlooks/