

# ACCESS-S Workshop

**MODULE: 18-20 Ocean and Climate Outlook** 

Forum (OCOF)





# **Topics in this module**

- OCOF History
- OCOF process
- National OCOF report template

#### **Expected learning outcomes**

- Appreciate the OCOF development over the years
- Understanding of OCOF reporting process
- Understand how to fill the OCOF report template

These outcomes are important for smooth delivery of OCOF reports and discussions



#### 1. Brief History

The Ocean and Climate Outlook Forum was first established in 2007 under the Australian funded Pacific islands Climate Prediction Project. Since then, the Climate and Oceans Support Programme in the Pacific (COSPPac) preceded the PI-CPP project which ran from 2003-2012.

Ms. Janita Pahalad and Simon McGree and other BOM officers involve in this platform was a concept coined at an information *talanoa* session with Met Directors discussing the need for more technical support and guidance on developing climate bulletins and updates on ENSO status – which is one of the main climate drivers for the Pacific.

Over 15 years later, the Pacific Meteorological Services came together to celebrate the 175th meeting of OCOF with Pacific Islands Meteorological Services and COSPPac technical partners. Since its establishment over many Climate Officers have been trained, tailored and specific support to internship and mentorship, inclusion of ocean science and information lead by SPC, translating OCOF information and data to communication products for early warning, and transitioning from fax to telephones to virtual online systems



## From Online Climate Outlook Forum to Ocean and and Oceans Support Climate Outlook Forum

- The Forum was initial looking into rainfall and temperature forecast
- With increase demand to provide sectoral products, COSPPac renamed this forum to Ocean and climate Outlook Forum in 2021
- Partners –BoM, SPREP, SPC and **NMS**
- Shifted from phone connection to Zoom links
- Shift from statistical forecasting to dynamical forecast





## 2. OCOF process

SPREP	SPC	ВоМ	NMS
Prepare reporting templates			
Send out notification email			
Send out Reminder email			Submit OCOF report
Review of country reports	Review of country reports	Review of country reports	
Send revised version to NMS			Review changes and submit final version
Submit final version to NMS and Partners			
OCOF discussion	OCOF discussion	OCOF discussion	OCOF discussion
4			

- When you receive a reminder email, that means all predictors/maps are updated and you should start working on your report
- Delay in your part will also delay on our review
- Partners prefer 3 days before OCOF to review all country reports
- Any report that comes in a day before OCOF teleconference will not be reviewed and included in the summary document
- A OCOF summary document will be circulated and available online



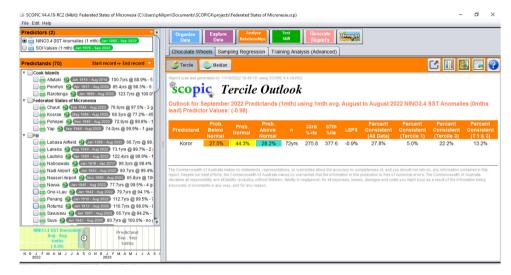
## 3. OCOF report template - Table 1: Monthly Rainfall

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 181 Part 1i. Monthly and Seasonal Outlooks for November and November to January 2023 Part 2i. Monthly and Seasonal Outlooks for November and November to January 2023 Part 2i. Monthly and Seasonal Outlooks for September and September to January 2023 Country: Seasonal: November to January Rainfull (Image 2) Seasonal sea surface temperature (Image 6): Monthly sea surface temperature (Image 5): TABLE 1: Monthly Rainfall Monthly sea level (Image 7): Seasonal sea level (Image 8): The monthly and seasonal SST outlook for November and November to January predicts [above normal/below Insert Table 1 (copied from Excel) on the line below, then delete this line of text. normal/near normal) temperatures of utmost (highest SST). (Include descriptions of areas with the temperatures) 4-week Coral Bleaching (Image 9): The monthly SST outlook for November predicts (above normal/below normal/near normal) temperatures of utmost Part 2: Recent Ocean Observation Monthly and last three months: September 2022/July to September 2022 statement Monthly/Three months: September 2022 and July to September 2022 The seasonal SST outlook for November to January predicts (above normal/below normal/s temperatures of utmost (highest SST). [Include descriptions of areas with the temperatures]. Part 1i. Monthly and Seasonal Outlooks for November and November to January 2023 Monthly: September Last three months: July to September 2022: The monthly sea level anomaly outlook for November reveals (above normal/below normal/near normal) sea leve Sea Surface Temperature (Image 1): Sea Surface Temperature (Image 4): height differences of minimum sea level) to (maximum sea level) for (insert parts of the country). Significant sea level height difference of utmost (highest sea level) over (insert parts of the country). sert which part of your country). In (insert which part of your country), the outlook (offers little guidance) OR Coral bleaching outlook for the next four weeks reveals (no thermal stress/Watch/Warning/Alert 1/ Alert 2) over Daily coral bleaching alert (Image 3): TABLE 2: Three-month Total Rainfall for July to Sentember 2022 TABLE 3: Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders Insert Table 2 (copied from Excel) on the line below, then delete this line of text Part 2: Recent Ocean summary statement Total Number of Monthly and last three months: September/July to September 2022 September The sea surface temperature was (above normal/below normal/near-normal) ranging from (minimum SST) to 2022 [maximum SST] for [insert parts of the country] for September. Significant SST [above normal/below normal/ normal] ranging from [minimum SST] to [maximum SST] were experienced over [insert parts of the country]. Climate Bulletin For the last three months, July to September, the SST was (above normal/below normal/near-normal) for (insert EAR Watch Rootalu Climate The sea level anomaly for September was <a href="mailto:country">datove normal/below normal/pear.noomal</a> for (insert parts of the country) ranging from <a href="mailto:minimum sea">minimum sea</a> level anomaly) to <a href="mailto:mailto Ocean Outlook Coral bleaching alerts reveals (no thermal stress/Watch/Warning/Alert 1/ Alert 2). Very High: 25-45 < 35 Euceptional: X a-35 Very High: 25-45 c 25 Europeins at 12-35 Very High: 25-ct < 95 Exceptional: X > 95 Very High-15 of c 95 Europeional-X > 95

What is your internal process of producing your OCOF report?



## 3. OCOF report template - Table 1: Monthly Rainfall



**TABLE 1: Monthly Rainfall** 

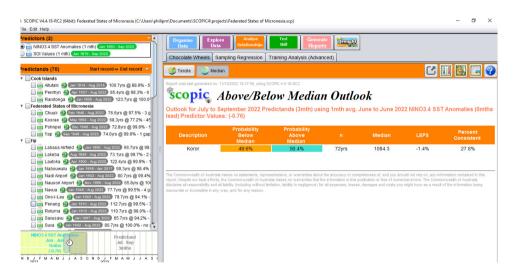
	Jul-2022	Aug-2022	Sep-2022				
Station (include data period)			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Total (mm)		Rank			
Koror (1951-2022)	409.5	332.0	135.9	275.8	377.6	330.5	5/72

Present rainfall totals to 1 decimal place

	Jul-2022	Aug-2022	Sep-2022				
Station (include data period)			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Koror (1951-2022)	409.5	332.0	135.9	275.8	377.6	330.5	5/72



## 3. OCOF report template - Table 2: Three-month Total Rainfall



		Three-month Total 33%tile 67%tile Median				
Station	Rainfall (mm)					Rank
Koror (1951-2022)	877.4	Below normal	1003.8	1238.5	1084.3	14/72

21	Three-n	nonth Total	33%tile	67%tile	Median	
Station	Rainfall (mm)					Rank
Koror (1951-2022)	877.4	Below normal	1003.8	1238.5	1084.3	14/72
					·	·



### 3. OCOF report template - Part 1i. Monthly and Seasonal Outlooks

Index of /files/project/OCOF

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marshall islands/2022-02-24 02:39

solomon islands/2022-03-09 03:52

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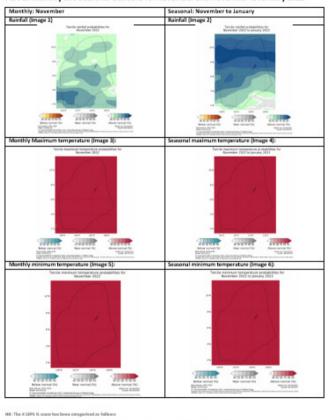
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Part 1i. Monthly and Seasonal Outlooks for November and November to January 2023



Apache/2.4.29 (Ubuntu) Server at access-s.clide.cloud Port 80

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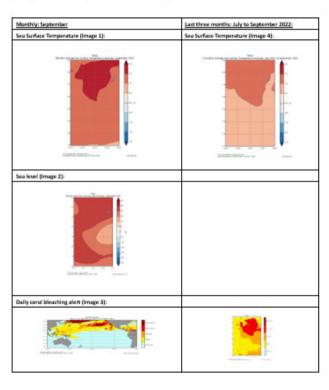
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## 3. OCOF report template - Part 2: Recent Ocean Observation

Part 2: Recent Ocean Observation

Monthly/Three months: September 2022 and July to September 2022



Index of /files/project/OCOF Last modified Size Description Parent Directory FSM/ 2022-03-09 03:50 2022-03-09 03:52 cook islands 2022-03-09 03:50 fiji/ 2022-03-09 03:50 -2022-03-09 03:51 marshall islands/2022-02-24 02:39 -2022-03-09 03:51 -2022-03-09 03:51 palau/ 2022-03-09 03:51 -2022-03-09 03:52 solomon islands/ 2022-03-09 03:52 tonga/ 2022-03-09 03:53 tuvalu/ 2022-03-09 03:53 n vanuatu/ 2022-03-09 03:53 -

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Apache/2.4.29 (Ubuntu) Server at access-s.clide.cloud Port 80



## 3. OCOF report template – Summary Statement

Monthly and last three months: September 2022/July to September 2022 statement

Write you monthly/three rainfall summary. Include ranking if there are extreme rainfall

# Part 1i. Monthly and Seasonal Outlooks for November and November to January 2023

#### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for November to January is likely or very likely to be (above normal/below normal/near-normal) over (insert which part of your country). In (insert which part of your country), the outlook [offers little guidance] OR shows November to January's rainfall is likely or very likely to be (above normal/below normal/near-normal).

Maximum and minimum temperatures during November are likely or very likely to be (above normal/below normal/near-normal) over (insert which part of your country).

Maximum and minimum temperatures averaged over November to January are likely or very likely to be (above normal/below normal/near-normal) over (insert which part of your country).

#### Summary Statement

#### Monthly and last three months: September 2022/July to September 2022 statement

Below normal rainfall was recorded at Koror for the month of September 2022 and for the period July to September 2022. September 2022 was the fifth driest month in 72 years of records.

#### Part 1i. Monthly and Seasonal Outlooks for November and November to January 2023

#### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for November and for the period November to January is very likely to be above normal for Koror and majority of the country.

Maximum and minimum temperatures during November are very likely to be above normal across Karor and the whole country.

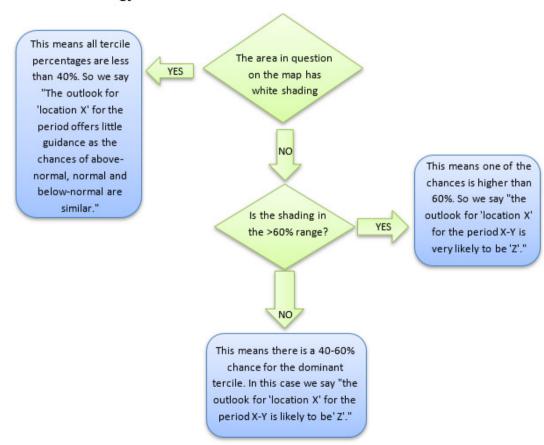
Maximum and minimum temperatures overaged over November to January are very likely to be above narmal across Palav.

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## 3. OCOF report template - Summary Statement

#### Tercile Terminology Flowchart





## 3. OCOF report template – Summary Statement

- Part 2: Recent Ocean summary statement
- Monthly and last three months: September/July to September 2022
- The sea surface temperature was (above normal/below normal/near-normal) ranging from (minimum SST) to (maximum SST) for (insert parts of the country) for September. Significant SST (above normal/below normal/near-normal) ranging from (minimum SST) to (maximum SST) were experienced over (insert parts of the country).
- For the last three months, July to September, the SST was (above normal/below normal/near-normal) for (insert parts of the country) ranging from (minimum SST) to (maximum SST).
- The sea level anomaly for September was (above normal/below normal/near-normal) for (insert parts of the country) ranging from (minimum sea level anomaly) to (maximum sea level anomaly).
- Coral bleaching alerts reveals (no thermal stress/Watch/Warning/Alert 1/Alert 2).

#### Part 2: Recent Ocean summary statement

#### Monthly and last three months: September/July to September 2022.

The sea surface temperature was above normal ranging from 1.0°C to 2.0°C for Palou waters for September. Significant SST above normal ranging from 1.0°C to 1.5°C were experienced over Karor and the whole country.

For the last three months, July to September, the SST was above normal for Koror and the main islands ranging from 1.0°C to 1.5°C.

The sea level anomaly for September was above normal for Koror and majority of the country ranging from 200mm to 250mm

Coral bleaching alerts reveals Alert Level 2 over Koror, the main Islands and northern waters of Palau.



### 3. OCOF report template – Summary Statement

- Part 2i. Monthly and Seasonal Outlooks for September and September to January 2023
- Ocean Variable statement
  - (If monthly and seasonal SST outlook are similar)
- The monthly and seasonal SST outlook for November and November to January predicts (above normal/below normal/near normal) temperatures of utmost (highest SST). (Include descriptions of areas with the temperatures).
  - (If month and seasonal SST outlook are different)
- The monthly SST outlook for November predicts (above normal/below normal/near normal) temperatures of utmost (highest SST). (Include descriptions of areas with the temperatures).
- The seasonal SST outlook for November to January predicts (above normal/below normal/near normal) temperatures of utmost (highest SST). (Include descriptions of areas with the temperatures).
- The monthly sea level anomaly outlook for November reveals (above normal/below normal/near normal) sea level height differences of (minimum sea level) to (maximum sea level) for (insert parts of the country). Significant sea level height difference of utmost (highest sea level) over (insert parts of the country).
- Coral bleaching outlook for the next four weeks reveals (no thermal stress/Watch/Warning/Alert 1/ Alert 2) over (insert parts of country).

#### Part 2i. Monthly and Seasonal Outlooks for November and November to January 2023

#### Ocean Variable statement

The manthly and seasonal SST author's for November and November to January predicts above normal temperatures of utmost 1.2 °C over Karor, the main islands and northern waters of Palou.

The manthly sea level anomaly authork for November reveals near normal levels for adjacent waters of Karor and the mains islands while the authork for extended waters reveals sea level height differences of 30mm to 200mm for the rest of the country. Significant sea level height difference of utmost 200mm over northern and southern waters of Palau. The seasonal sea level anomaly authork for the period November to January 2023 reveals near normal levels for adjacent waters of Karor and the mains islands while the authork for extended waters reveals sea level height differences of 60mm to 200mm for the rest of the country. Significant sea level height difference of utmost 200mm over southern waters of Palau.

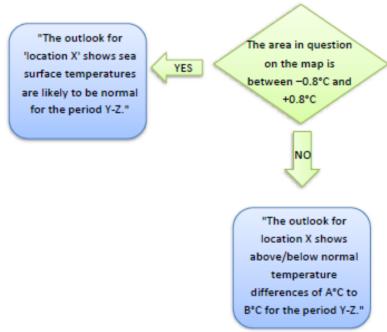
Coral bleaching autiook for the next four weeks reveals Alert 2 over Koror, the southern main islands and its southwest to west waters and Alert 1 for the northern main islands and northern waters of Palau.

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## 3. OCOF report template – Summary Statement

#### Ocean Terminology Flowchart (SST anomaly)



Replace A°C to B°C with the anomaly range in the area of interest (e.g. 0.8°C to 2.0°C)

Replace 'location X' with the region, island or area name.

Period Y-Z, is the month or season



## 3. OCOF report template – TABLE 3: Stakeholder Engagement

Product	Date: Septe mber 2022	Stakeholder	Total Numb er of Partici pants	Numb er of male	Number of female
Climate Bulletin					
EAR Watch					
Monthly Climate Briefing					
Ocean Outlook					
Climate data request					
	Stidlid ZUZ L Bi	Total			

Document who your have provide your climate related products to:

- Products
- Training
- Data
- Meetings/presentation
- Document their needs/gaps

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## 3. OCOF report template – TABLE 3: Stakeholder Engagement

Product	Date: September 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
EAR Watch	8	National Emergency Committee (NEC)  Office of the Vice President  Office of the President  NEMO Coordinator  National Weather Service  Bureau of Budget and Planning  Bureau of Tourism  Bureau of Commercial Development  Attorney General's Office  Bureau of Youth, Applied Arts and Careers  Bureau of Public Health  Bureau of Public Work	28	19	9



## 4. OCOF products – to help with development of report



#### **OCOF** Training

## Climate Module 5B – Updated OCOF tables using Excel

#### Covering:

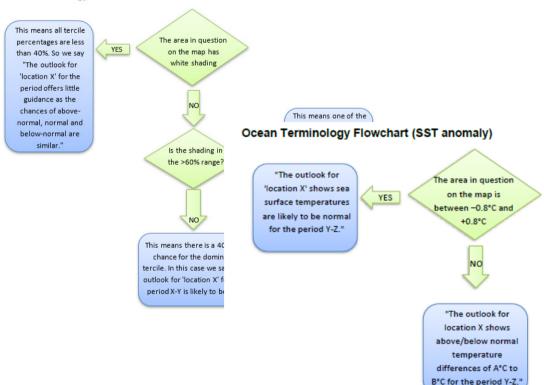
- · Creating OCOF Tables using Excel
- . Using Excel and Word to produce the final product

#### **Learning Outcomes**

By the end of this module the participants should:

- Know how to fill in the tables for the OCOF using the new Excel and Word templates
- ☑ Be aware of the error checking in the new Excel OCOF spreadsheet

#### Tercile Terminology Flowchart



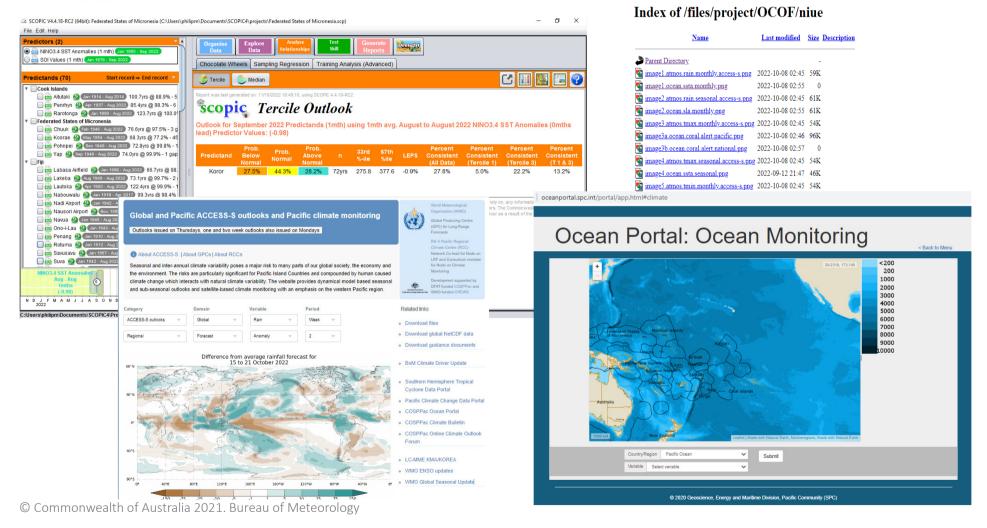
Replace A°C to B°C with the anomaly range in the area of interest (e.g. 0.8°C to 2.0°C)

Replace 'location X' with the region, island or area name.

Period Y-Z, is the month or season



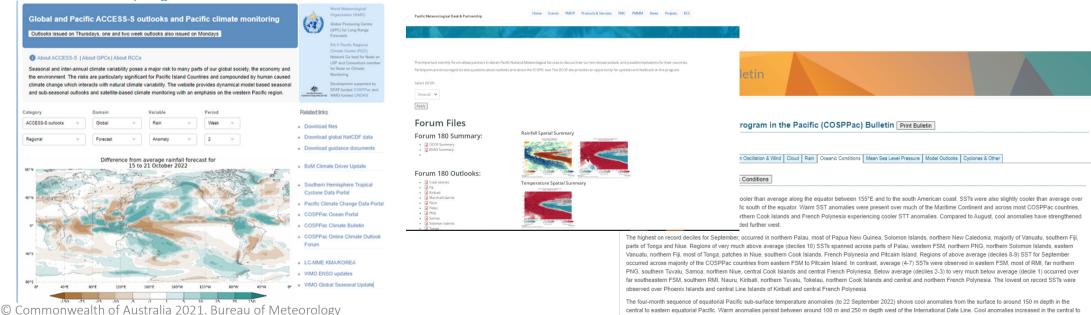
## 4. OCOF report products - Maps





#### 5. OCOF useful links

- 1. ACCESS-S website: http://access-s.clide.cloud/index.html
- 2. OCOF products: https://www.pacificmet.net/products-and-services/online-climate-outlook-forum
- 3. Pacmet Desk Website: <a href="https://www.pacificmet.net/products-and-services/climate-bulletin">https://www.pacificmet.net/products-and-services/climate-bulletin</a>
  - www.pacificclimatechangescience.org
  - o www.pacificclimatefutures.net
  - www.pacificclimatechange.net
  - o www.pacificmet.net/rcc
  - o www.rccap.org





## 5. OCOF and linkages to climate related bulletins

Once we establish a good knowledge and understanding on the climate drivers and where extreme events can

occur, we can translate that region

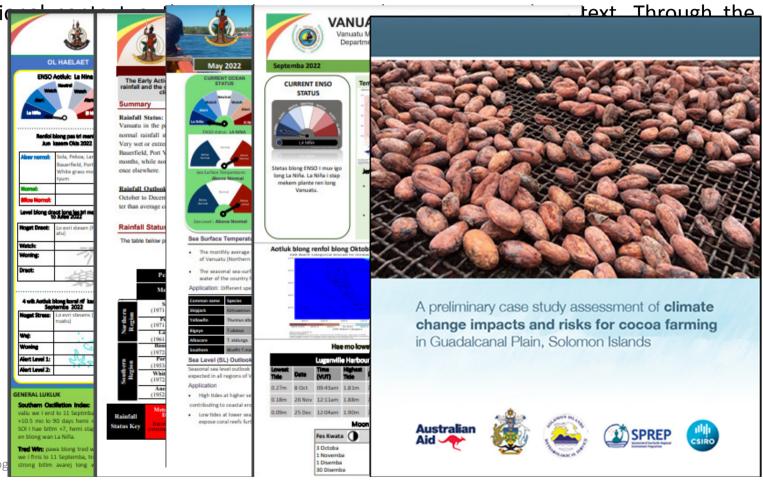
following bulletin

Climate bulletin

2. Ocean bulletin

3. EAR Watch bulletin

4. Sectoral bulletin





#### 6. Common Mistakes

- 1. Naming of files
  - A. Tuvalu\_OCOF\_outlooks\_num.docx
  - B. OCOF-table-calculations.num.Tuvalu.xlsx
- 2. Send us an email if you have made change to rainfall data for past months
- 3. If maps are not updated on the FTP link, use the Ocean portal and ACCESS-S website to get the maps
- 4. DO NOT RUSH TO PRODUCE YOUR TABLES. Give it a day or two to work on this



#### 6. Take home message

- 1. There are documented process that are provided to guide the development of your report. If you have queries, please do let us know
- 2. Use the flow charts to develop your summary statement
- 3. Produce your report on time and submit 3 days before teleconference
- 4. Note that any report submitted a day before the teleconference will not be accepted for review
- 5. Include your stakeholders in your report This help us to understand how our products help with the sectors
- 6. Include all climate officers in the discussions –NOT ONLY THOSE THAT HAVE OCOF ON THEIR JOB DESCRIPTIONS
- Be available for OCOF discussions

WE ALL WORK TOGETHER TO PROVIDE SIMPLLE, TIMELY AND ACCURATE CLIMATE SCIENCE DRIVEN SERVICES TO HELP DECISION MAKING AT THE REGIONAL, NATIONAL AND SECTORAL LEVEL.



# Questions???

# Work on your OCOF 181