



**METEOROLOGICAL  
SERVICE  
SINGAPORE**  
Centre for Climate Research Singapore



# ASMC – a regional collaboration for improved weather and climate services in Southeast Asia

Thea Turkington

Subseasonal and Seasonal Prediction

MRC, April 2018

# ASMC background



**ASMC- ASEAN Specialised Meteorological Centre**

[asmc.asean.org](http://asmc.asean.org)

Established in 1993

Hosted by Meteorological Service Singapore

Objective:

- Monitor and assess land and forest fires, as well as transboundary haze
- Conduct seasonal outlooks and climate projections for the ASEAN region

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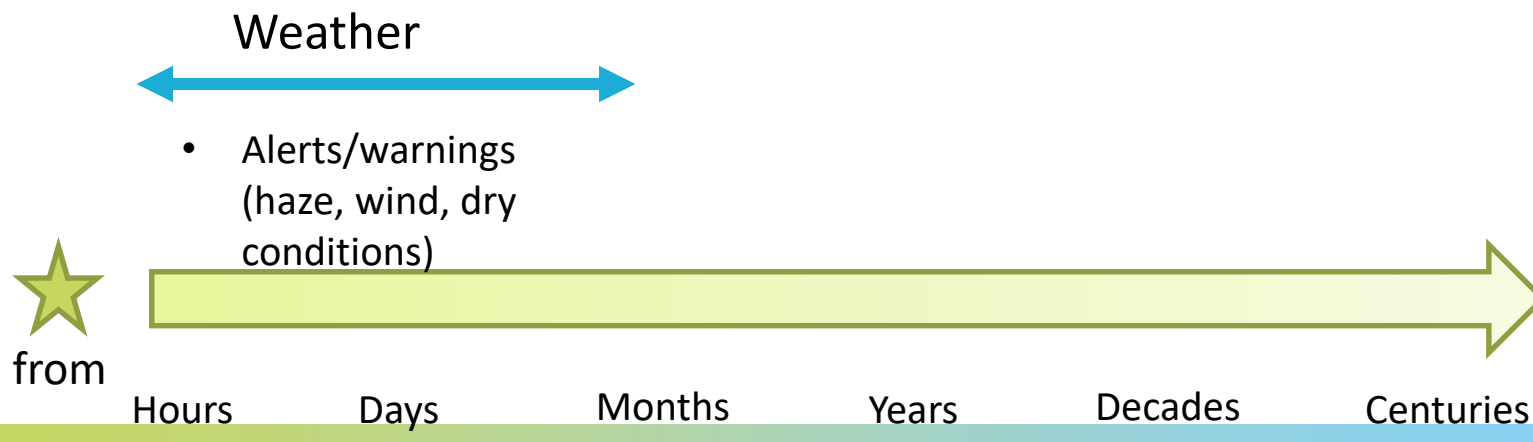
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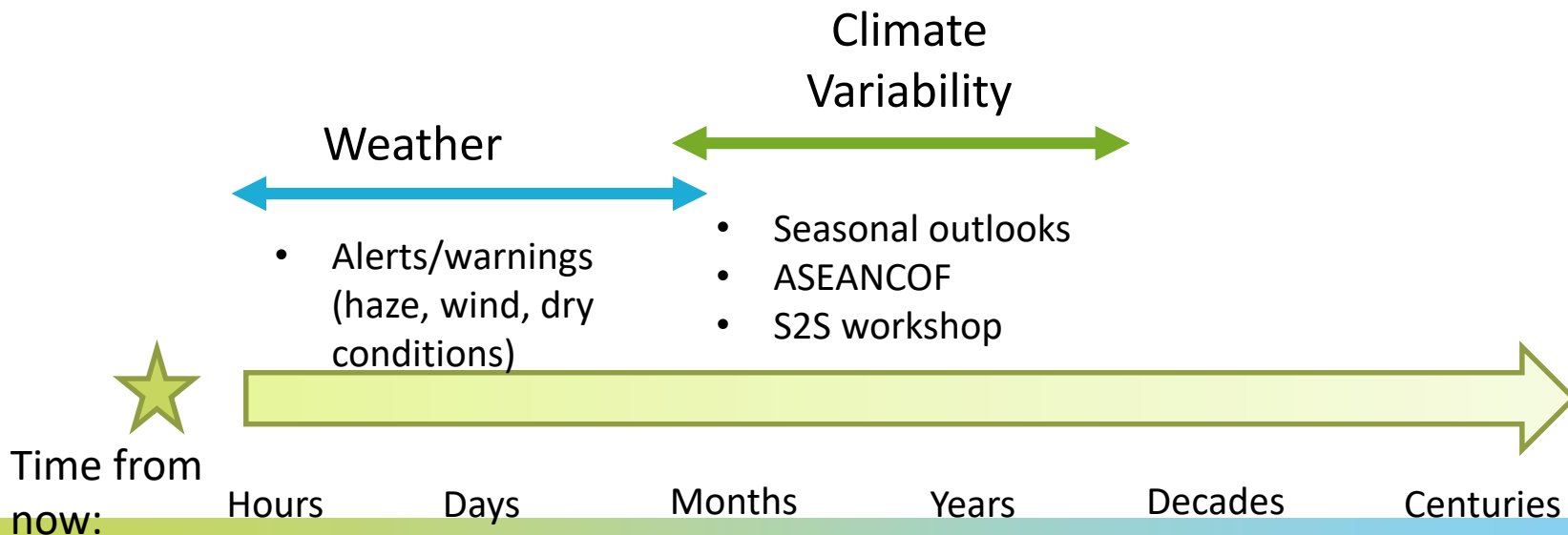
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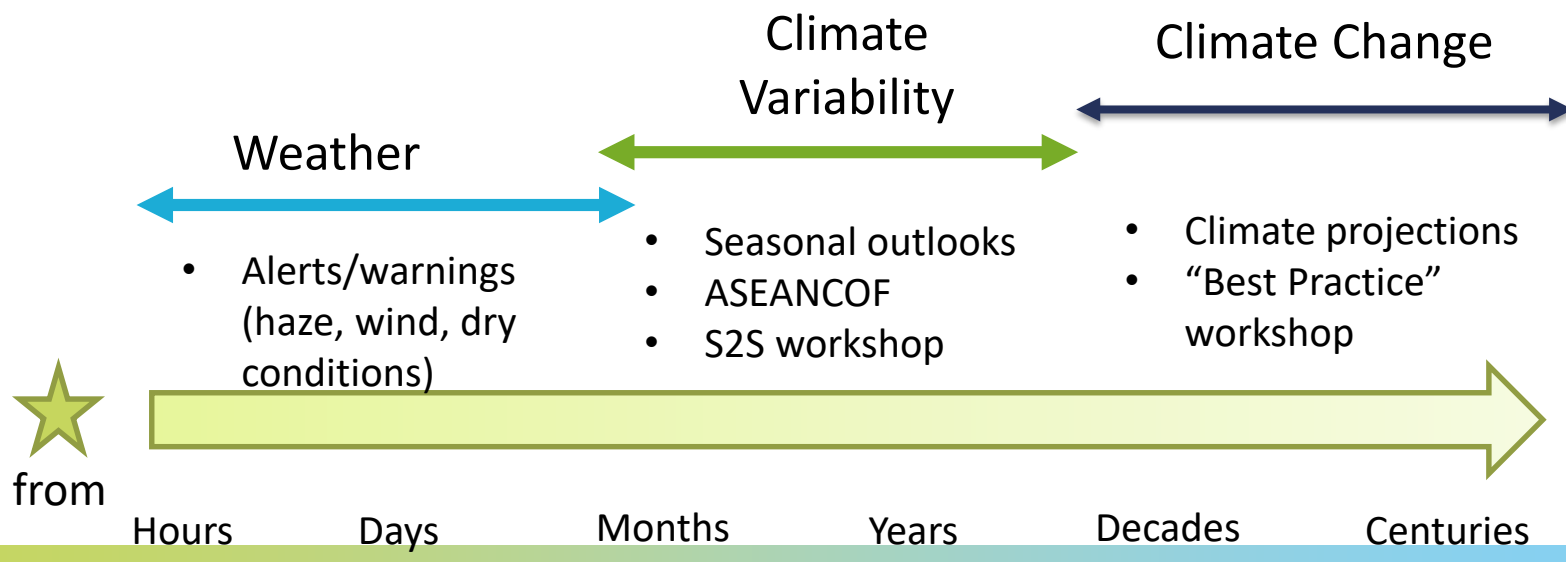
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# “Best Practice” Workshop on Climate Change Projections and Their Applications in ASEAN Countries

20-23<sup>rd</sup> March, Singapore

## Aims:

- Review existing regional climate change scenarios and usage;
- To develop best practice guidelines for the production and usage;
- To enhance regional networking and ensure better integrations of regional actors.

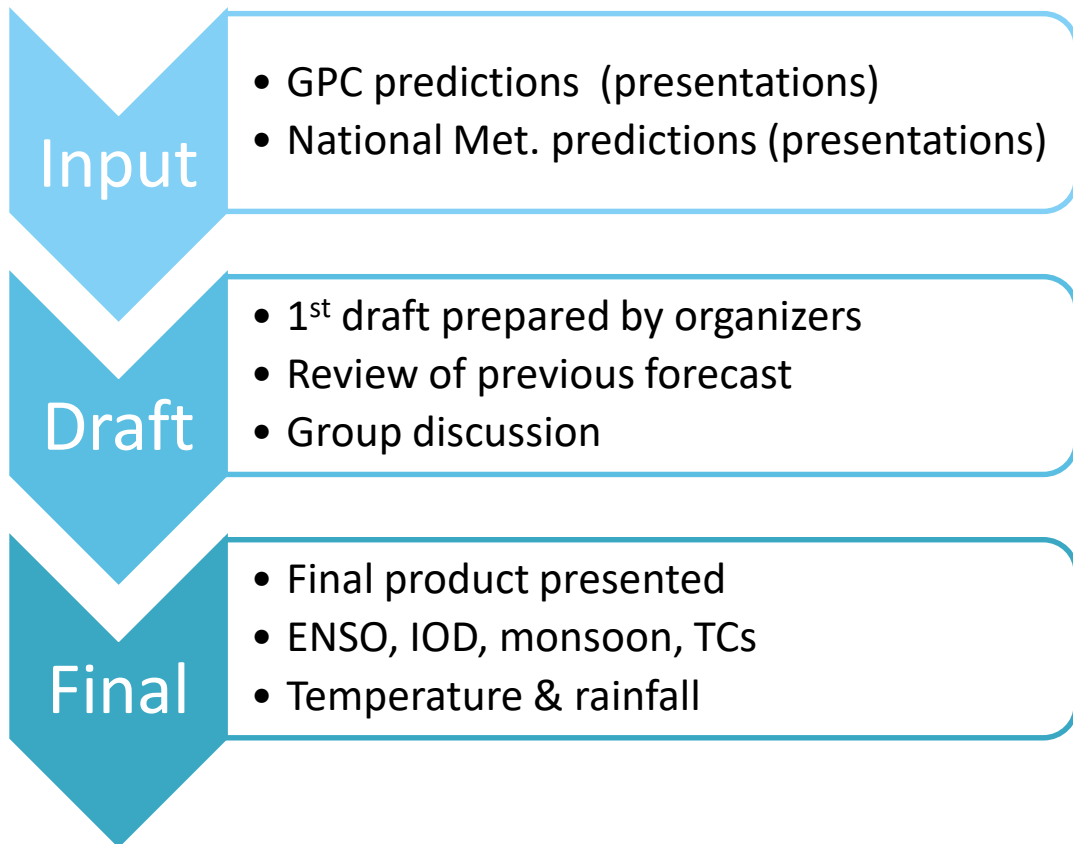
## Outcomes:

- A lot of good work being done in the region, but would benefit from a regional network to bring together information and provide guidance on how to use projections in an operational context;
- Need to make information more easy for end users to understand;
- A good dialogue is needed –providing climate projections/data is not enough

# The ASEANCOF process

## Physical Meeting

Attending: National Met Services, Global Modelling Centres (GPCs), End users



Disseminated by National Met Services



*Themes: Agriculture, Water, Disaster Risk Reduction*



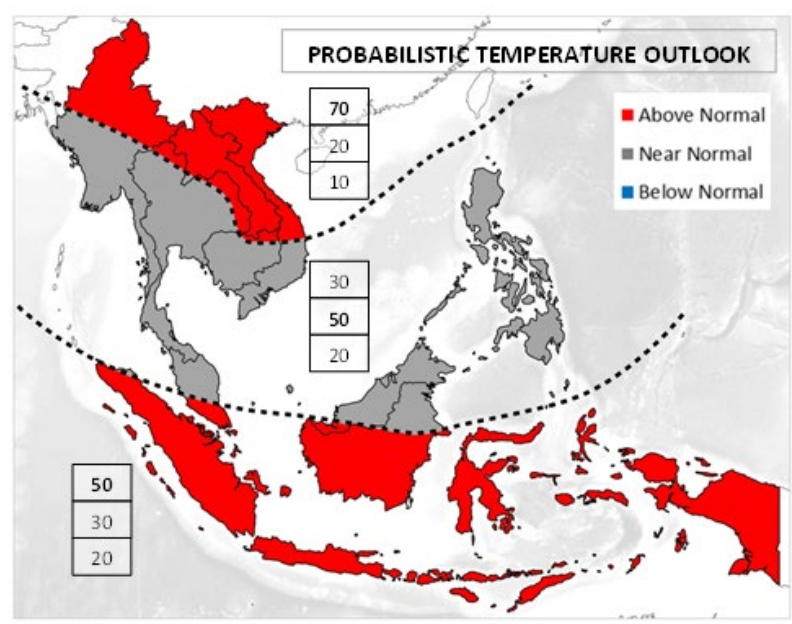
ONE ASEAN  
ONE RESPONSE



# Example (partial) outlook

## December-January-February Temperature 2016/17

Slightly above to above normal air temperatures are very likely to occur over much of Southeast Asia region for the upcoming Northern Hemisphere winter monsoon season (Dec-Jan-Feb), with the highest probabilities over the northern portions of Myanmar, Vietnam, and Lao. Near average air temperatures are predicted over Thailand and Philippines. Thailand and Philippines.



Produce a similar map for  
precipitation

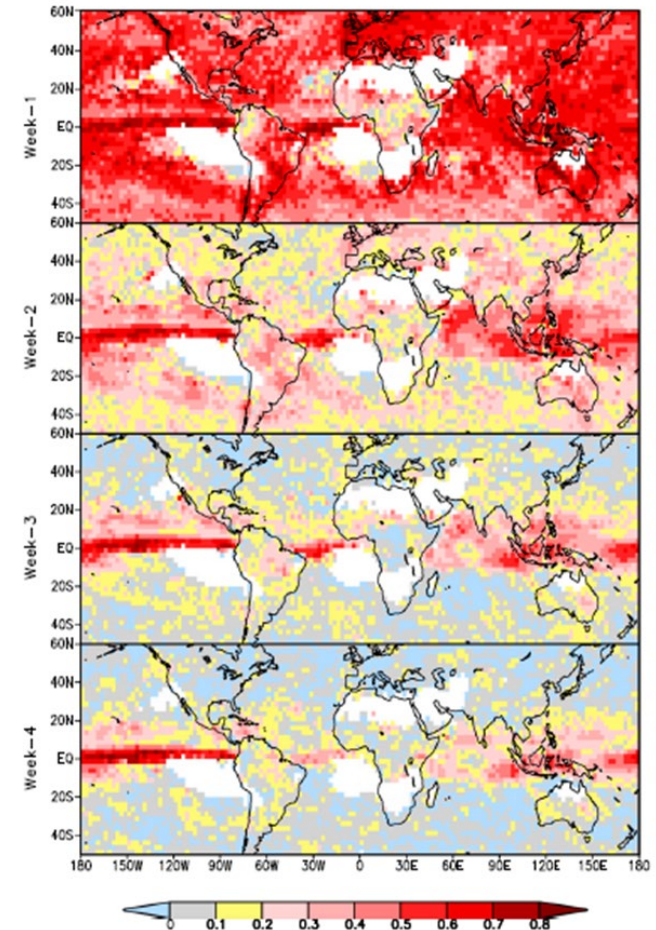
**Statement on is very important  
ENSO & IOD**



# S2S-SEA Capability Building Programme (Objectives & Activities)

- Aim to **investigate the usefulness** of 2 weeks – 2 months forecasts for our region.
- An innovative research programme to **prepare for release** of real time products.
- Involve all **ASEAN NMSs** who are interested and engage **S2S international experts**.

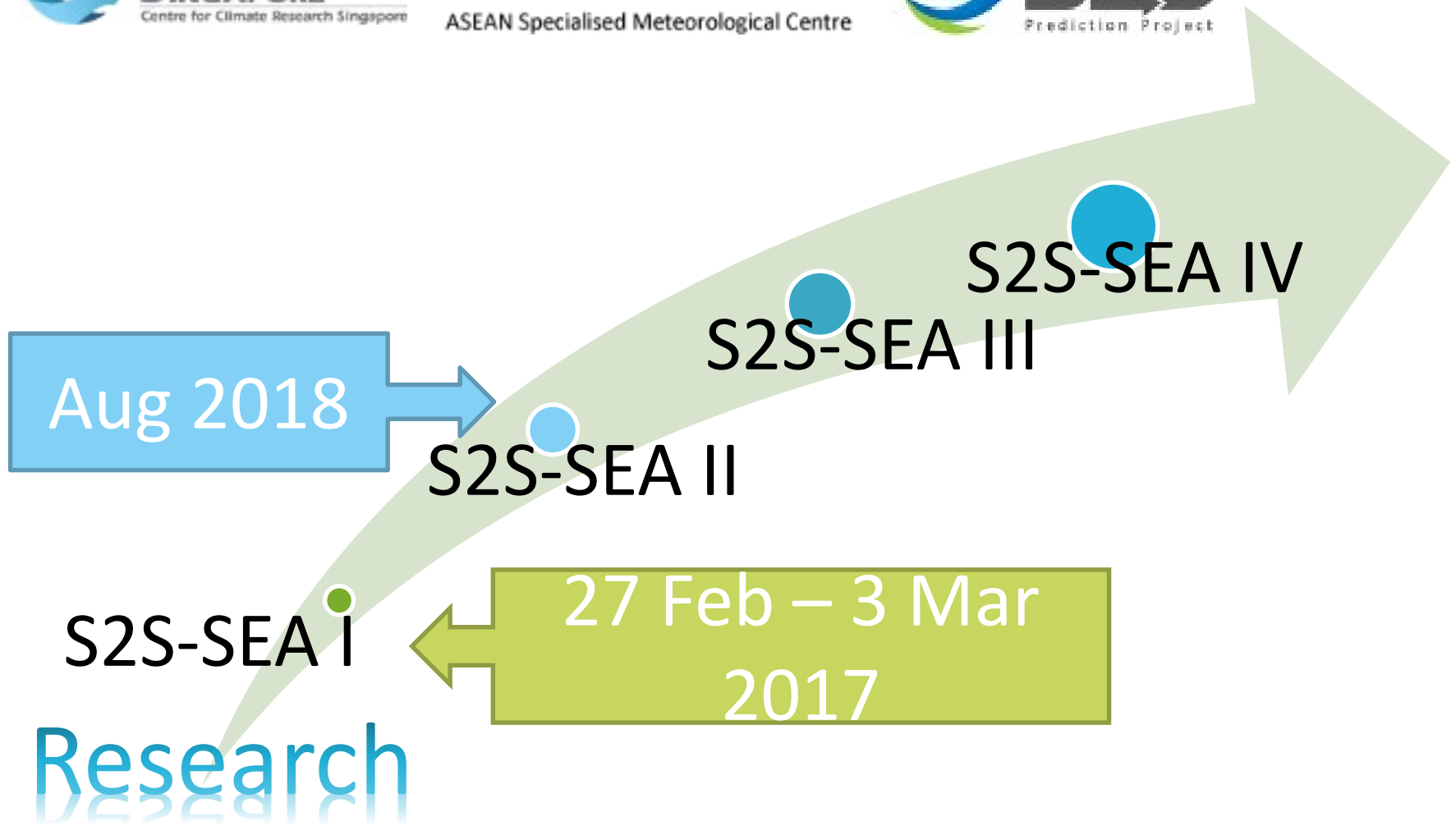
ECMWF Precip Fcst vs CMAP: 1992–2008

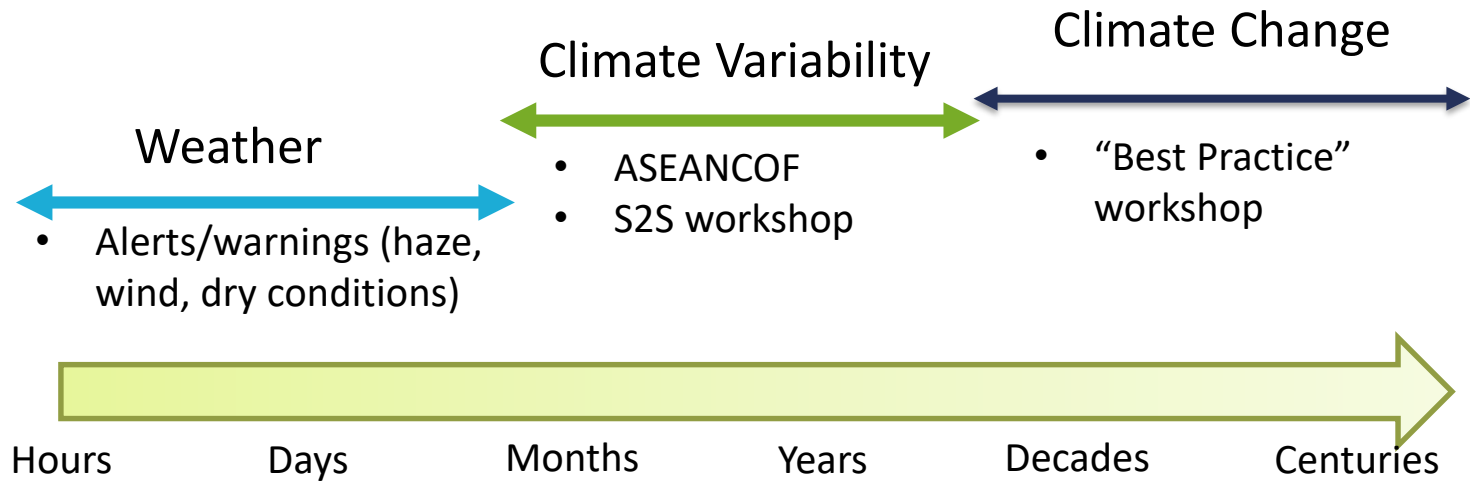


(Li and Robertson, 2015, MWR)

JJAS correlation score

# S2S-SEA Workshop Series





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Thank you



Can read more about ASMC & ASEANCOF:  
[http://asmc.asean.org/asmc\\_asean\\_cof\\_about/](http://asmc.asean.org/asmc_asean_cof_about/)



# The ASEANCOF Journey (so far...)

- ASEANCOF-1: Science, GPC and NMS representation. **2013 No users, no training.**
- ASEANCOF-2: Skype **videoconference** ahead of 2014 SW Monsoon.
- ASEANCOF-3: Held in MSS, Singapore, November 2014 and included **user participation** (water management sector). **One day training BMKG, Indonesia**, May 2015. Combined with **NOAA-USAID** training session.
- ASEANCOF-4: **MSS, Singapore** in November 2015. **Drought and DDR** participation. Training Sub-seasonal and seasonal applications to drought
- ASEANCOF-5: **Email** correspondence ahead of 2016 SW monsoon
- ASEANCOF-6: **PAGASA, Philippines**, November 2016: 3 day training sub seasonal & extremes
- ASEANCOF-7: **Online**, May 2017 (questionnaire, email, & group chat)



ASEANCOF-3



Training Session

# SEA RCC-Network

WMO RA V Southeast Asia (SEA) RCC-Network  
Demonstration Phase

[RCC Functions](#) | [News & Events](#) | [Climate of Southeast Asia](#) | [Links](#)



In demonstration phase

Three nodes:

- Climate monitoring ([PAGASA, Philippines](#))
- Climate data ([BMKG, Indonesia](#))
  - [SACA&D](#)
- Long range forecasting ([MSS, Singapore](#))
  - Rainfall, Temperature, Wind
  - TC outlook provided by PAGASA

In future, plan to  
add sub seasonal  
forecasts

