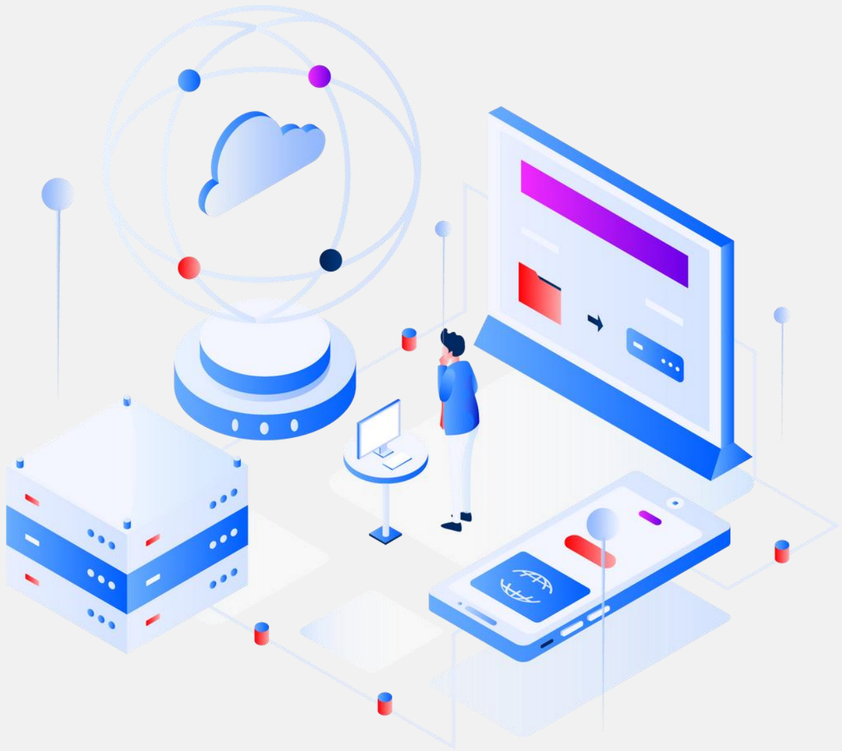

Producer-User Engagement, Co-Production, and Legacy

From the POV of the ASEAN Coordinating Centre for Humanitarian Assistance on disaster management

Keith Paolo C. Landicho
Disaster Monitoring and Analysis Officer, AHA Centre

The ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre)

is an intergovernmental organisation which aims to facilitate cooperation and coordination among ASEAN Member States and with the United Nations and international organisations for disaster management and emergency response in the ASEAN region

ASMC and the AHA Centre

The working coordination and arrangement

- Fortnightly Outlook Guidance
  - Rainfall and temperature outlook
  - Active weather phenomena (IOD, La Nina/El Nino, MJO)
- Regional Assessment of Extremes
- Plots (Quartile, Tercile, Percentile)
- Research (ARMOR, AGU 2020, AOGS 2022)
- Projects (DMRS Integration, DMA workflow integration)

WMO and the AHA Centre

Participation

How user-researcher co-development and engagement practices are employed to produce S2S forecast applications and to better understand user's needs and S2S forecast limitations. *Subseasonal-to-Seasonal (S2S) Real Time Pilot Initiative of the S2S Prediction Project*

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Information Products (User to End-user)

1 **The Current Methods**

Information Products

The AHA Centre issues on a regular basis (weekly disaster update and monthly disaster review and seasonal outlook) as well as on a needs-basis (flash and situation update); ARMOR

2 **The AHA Centre's Reach**

AHA Centre network

The AHA Centre has an extensive network of more than 1,000 key actors in the ASEAN Region (National Disaster Management Organisations, Civil Society Organisations, UN agencies, IFRC/ICRC, etc.)

3 **The Engagement**

Subscriber and Follower Engagement

ASEAN Disaster Information Network: 15,000+ unique users in 2022
AHA Centre Website: 98,000+ visits in 2021
AHA Social Media: 28,000+ followers as of 2021

4 **The Use-cases**

Future Use Case Scenarios

Integration of data into the ASEAN Disaster Monitoring and Response System; Full integration into the information products; Full integration into the Disaster Monitoring and Analysis Workflow

Three-weeks notice: Forecasting Extreme Weather Events with Subseasonal-to-Seasonal Climate Prediction

Raizan Rahmat, Threa Turkington, Ryan Kang, Kareff Rafisura, Govindarajalu Srinivasan

Potential applications of S2S for disaster preparedness. Ongoing efforts by the Association of Southeast Asian Nations (ASEAN) Specialised Meteorological Centre (ASMC) and its collaborators, including the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), and the ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre), are underway to explore the utility of S2S in operational decision-making in Southeast Asia in conjunction with information on the more established weather and seasonal timescales. These efforts include a pilot project (ESCAP, ASMC, & RIMES, 2019), with National Meteorological Hydrological Services and other end users from Southeast Asia to join later in the project.

ASEAN Risk Monitor and Disaster Management Review (ARMOR) 2nd edition.
https://ahacentre.org/publication/armor/

Can S2S Predictions Improve Disaster Risk Preparedness for the Southeast Asia Region? A Review of June 2020

Thea Turkington, Raizan Rahmat, Ryan Kang, Keith Paolo Landicho, Kareff Rafisura, Govindarajalu Srinivasan

Through the lens of the June 2020 case study, we review the progress so far in developing regional S2S products for DRR in Southeast Asia. Based on the standard weekly anomaly precipitation and 90th percentile plots, wetter conditions were forecasted for the equatorial region (where there is good hindcast skill) four weeks beforehand, increasing in severity and likelihood as the event approached. This case study presents AHA Centre's experience in using these forecasts to focus their monitoring efforts, in conjunction with NMHSs weather forecasts. However, while the AHA Centre is an experienced meteorological data user, communicating S2S information to users less familiar with climate science has proved tricky. Furthermore, progress in developing tailored products has been slow due to communication gaps between the forecast producers and users and capacity in the region. Beyond a summary of lessons learnt, we also discuss whether the standard regional S2S products can be used for S2S climate services, or whether only tailored sub-region products are truly useful.

AGU Fall Meeting 2020. A101. Subseasonal to Seasonal Climate Prediction, Processes, and Services. https://www.agu.org/Fall-Meeting-2020

Two Years of S2S Outlooks for Hydrometeorological Disasters as Part of the S2S Southeast Asia Pilot Project

Thea Turkington, Wee Leng Tan, Ryan Kang, Keith Paolo Landicho, G. Srinivasan

Explore the usefulness of S2S products for disaster risk reduction for Southeast Asia in real-time as part of the S2S Real-Time Pilot Initiative.

Events are taken from the ASEAN disaster Information Network. Southeast Asia divided up into 4 regions (Mainland Southeast Asia) and 5 regions (the Maritime Continent) for counting of 'misses' and 'true negatives'. - While percentage correct is higher for Mainland southeast Asia, due to fewer recorded disasters, overall better relationship between predicted areas of very heavy rainfall and disasters over the Maritime continent.

Maritime continent - higher number of disasters in database, lower false alarm rate, lower percent correct; Mainland Southeast Asia - lower number of disasters in database, higher false alarm rate, higher percent correct

Reflections: high number of missed events in Maritime Continent, reporting of disasters, institutional connections to make best use of information.

S2S can fill a critical information gap in disaster preparedness - shift from reactive to proactive

Asia Oceania Geosciences Society (AOGS) 2022

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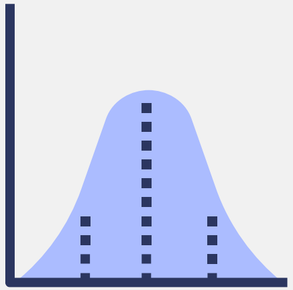
Scientific merit and accuracy



Probabilistic forecast; accuracy measures

Spatially-targeted/ Spatially-contextualised

Informative and Communicative

Impact-based forecasting for accessibility

Ease of access (AHA Centre network)

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Legacy

Disaster communication, systems interoperability, data accessibility and availability, integration into disaster management workflow and the AADMER Work Programme 2021-2025

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From the home of One ASEAN One Response, a million thanks for all the support!

Any questions?

Credits and unending thanks

S2S for Disaster Risk Reduction in Southeast Asia: S2S SEA Pilot Project February 2020-October 2022

Product Providers: ASMC (Thea Turkington, Wee Leng Tan, Ryan Kang)
Product Users: AHA Centre (Keith Landicho, Lawrence Dimailig, Sadhu Zukhruf Janottama, Mohammad Fadli)
Support: RIMES, UN ESCAP

AHA CENTRE
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ASMC
ASEAN SPECIALISED METEOROLOGICAL CENTRE

Regional Integrated Multi-Hazard Early Warning System
RIMES

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific