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MEMORANDUM

TO : **The Assistant Secretary**
Policy, Planning and Foreign Assisted and Special Projects

All Bureau Directors

All Regional Executive Directors

The OIC Director
Policy and Planning Service

FROM : **The Undersecretary**
Policy, Planning and International Affairs

SUBJECT : **WEATHER FORECAST FOR SOUTHEAST ASIA IN
JANUARY TO MARCH 2021**

DATE : 19 January 2021

This refers to the email dated 15 January 2021 sent by Aida Hayati Mohd Hassan, Peatland Programme - Global Environment Centre (Malaysia), forwarding a Seasonal Forecast for the ASEAN Region for January - March 2021.

The forecasts are information derived from the ASEAN Specialised Meteorological Centre (ASMC) and the APEC Climate Center (APCC). This information is useful for reference in undertaking necessary precaution and preventive measures for fire risk.

For your information and reference.


ATTY. JONAS R. LEONES

MEMO NO. 2021-74

Let's Go Green!!!

Weather forecast for Southeast Asia in January-March 2021

Aida Hayati Mohd Hassan <aidahayati@gec.org.my>

Fri, Jan 15, 2021 at 2:43 PM

Reply-To: aidahayati@gec.org.my

To: kampongspeu@yahoo.com, sunvisal@gmail.com, msphaylinbouakeo@gmail.com, nreia.env@gmail.com, usoenaingmoecaf@gmail.com, bmb@bmb.gov.ph, krisma_15@yahoo.com, director@bmb.gov.ph, bpkmd@bmb.gov.ph, adirector@bmb.gov.ph, forestfirefly_503@yahoo.com, cawed@bmb.gov.ph, joynavarro930@yahoo.com, zoisanegl@gmail.com, oueiea.dendr@gmail.com, nenengandres@yahoo.com.au, zoisanegl@yahoo.com, mardiah@asean.org, Johann.FARNHAMMER@eeas.europa.eu, Muamar.VEBRY@eeas.europa.eu, berthold.haasler@giz.de, barbara.goncalves@giz.de, htain.lin@giz.de, ines.saragih@giz.de, anindhitya.anindhitya@giz.de, aphrodita.angraini@giz.de, i.cossio@ifad.org, d.terzano@ifad.org, e.wulandari@ifad.org, a.suwito@ifad.org, fparish@gec.org.my, M.Brady@cgiar.org, R.Klaver@cgiar.org, A.Dermawan@cgiar.org, M.Handayani@cgiar.org, f.bresciani@ifad.org, t.rath@ifad.org, Peter.HANINGTON@ext.iucn.org, pjhanington@gmail.com, peter.hanington@iucn.org, Scott.PERKIN@iucn.org, Alexander.McWilliam@iucn.org, nirarta.samadhi@wri.org, almag.pradana@wri.org, EUSUPAWRI@wri.org, etwin.sabarini@asean.org, ervina.magdalena@asean.org, mmbarroa_2007@yahoo.com, Kunying_b@hotmail.com, piraporn.p@pcd.go.th, p_petchtong@hotmail.com, Phornprasit@hotmail.com, thanhnn@kiemlam.org.vn, tuyenhlnp@gmail.com, ayajnav77@yahoo.com, fredamyanmar@gmail.com, sannlwin69@gmail.com, Peter.HANINGTON@iucn.org, SeintSann.Zaw@iucn.org, quoilp@gmail.com, aidahayati@gec.org.my, faizuddin@gec.org.my, faris@gec.org.my, asikin@gec.org.my, jonathan@gec.org.my, mulyadi@gec.org.my, serena@gec.org.my

Dear partners,

We would like to share with you a Seasonal Forecast for the ASEAN Region for January - March 2021.

The forecast are mainly derived from information from the ASEAN Specialised Meteorological Centre (ASMC) and APEC Climate Center (APCC).

Similar weather forecast and outlook is also available on ASEAN Specialised Meteorological Centre website: (<http://asmc.asean.org/home/>).

Other relevant links are listed in the attached papers too.

We hope this information is useful for reference in undertaking necessary precaution actions and preventive measures for fire risk.

Thank you.

Best regards;

Aida Hayati

Aida Hayati Mohd Hassan

Peatland Programme

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SEASONAL WEATHER AND FIRE RISK FORECAST FOR ASEAN REGION (JAN-MAR 2021).pdf

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SEASONAL WEATHER AND FIRE RISK FORECAST FOR ASEAN REGION JANUARY – MARCH 2021

ASEAN Specialised Meteorological Centre (ASMC¹) suggests La Niña conditions are present over the tropical Pacific Ocean, with climate models predicting La Niña conditions to last through the first quarter of 2021. La Niña conditions are typically associated with wetter-than-normal conditions over the Southeast Asia region.

The APEC Climate Center (APCC²) El Niño-Southern Oscillation (ENSO) Alert suggests “La Niña” for January – June 2021. During November 2020, negative sea surface temperature anomalies were observed over the equatorial Pacific. The Niño3.4 index is expected to gradually increase from -1.3°C to -0.4°C for January – June 2021. Based on the running 3-month mean Niño3.4 index, the latest APCC ENSO outlook suggests a 87% probability of La Niña for January – March 2021. The conditions are expected to gradually decrease and a 48% chance of neutral conditions is expected during April – June 2021.

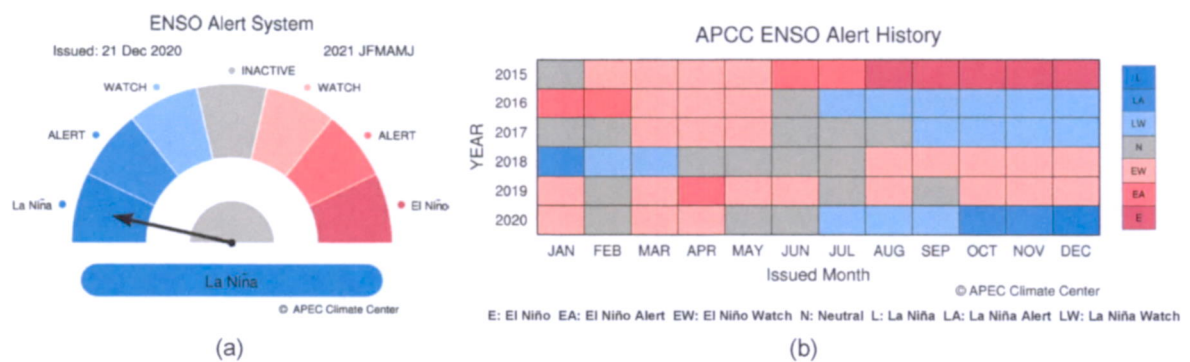


Figure 1(a) ENSO Alert status for January – June 2021; and (b) history of monthly ENSO Alert from 2015 – 2020

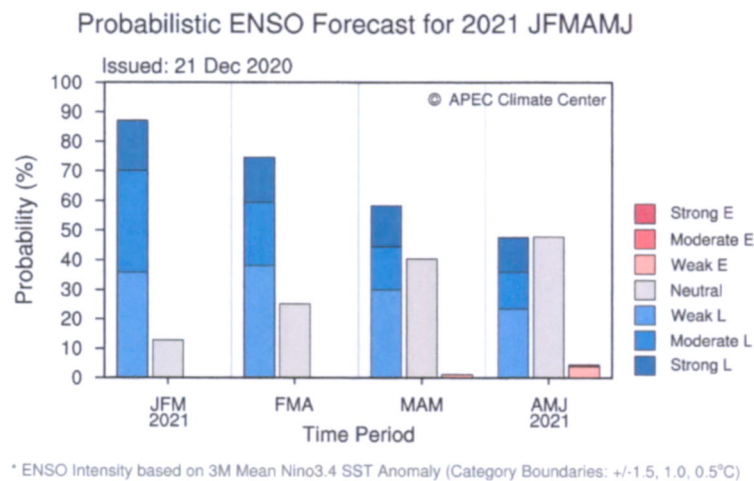


Figure 2: Predicted monthly mean Niño3.4 index for January – June 2021.

¹ Information from ASEAN Specialised Meteorological Centre (<http://asmc.asean.org/home/>)

² Information mainly from APEC Climate Center (<https://www.apcc21.org/main.do?lang=en>)

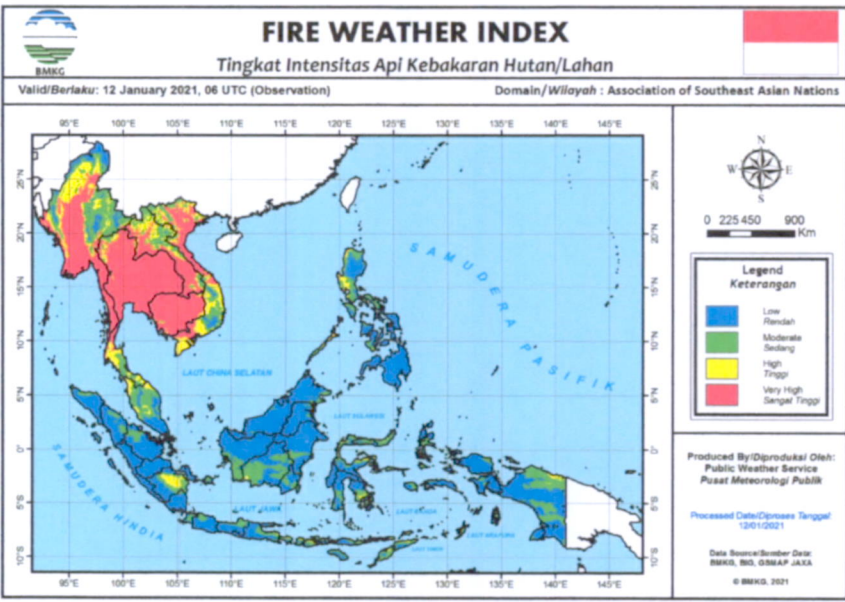
Northeast Monsoon conditions prevailed over the ASEAN region in December 2020. During the Northeast Monsoon, the northern ASEAN region typically experiences its traditional dry season, with the prevailing winds blowing mainly from the northeast or east. On the other hand, the southern ASEAN region typically experiences wet conditions during the initial months of the Northeast Monsoon, and experiences dry and occasionally windy conditions from end January or early February until March, with the prevailing winds blowing mainly from the northwest or north.

For January to March 2021 period, ASMC forecasted above-normal rainfall predicted over northern Borneo, Sulawesi, part of Sumatra, Peninsular Malaysia and southern Viet Nam.

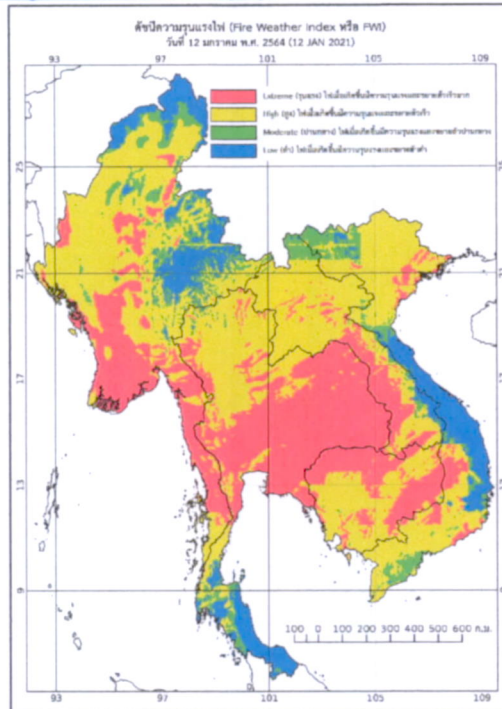
Warmer-than-usual temperature is expected over Philippines and eastern part of Southern ASEAN region (Borneo and Sulawesi). Much of Mekong countries, except Myanmar, may experience below- to near-normal temperatures.

The above-normal rainfall over southern Viet Nam over the next three months is expected to help subdue the hotspot activities there. However, scattered hotspots with smoke haze may be detected elsewhere in the Mekong sub-region where dry conditions are forecast. An increased risk of hotspot activities and smoke haze development may also be expected over Myanmar, Thailand and northern Lao PDR under prolonged dry conditions. In the southern ASEAN region, the hotspot activities are expected to remain subdued, but isolated hotspots with localised smoke plumes may develop occasionally as the region enters the dry phase of the Northeast Monsoon in end January or early February. Significant fire risk observed in Sumatra in March while elsewhere looks wetter than normal.

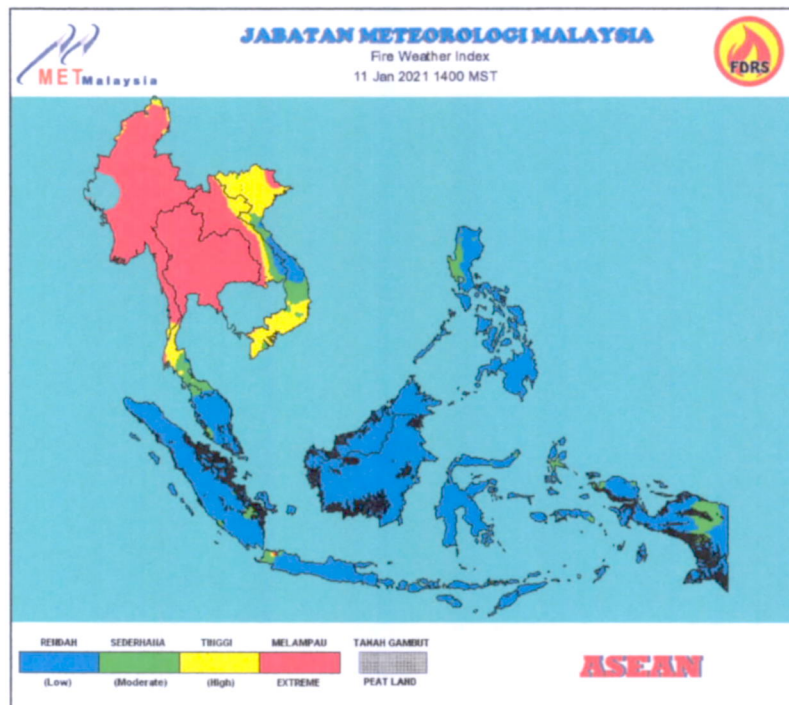
The dry season of the northern ASEAN region has started in December 2020 and may extend into May 2021. Escalation in hotspot activities are expected and smoke haze has been detected in the first fortnight of January 2021. In order to support fire management activities, Fire Danger Rating Systems (FDRS) have been developed to provide early warning to indicate the potential for fire ignition. Several regional FDRS are available for public access are:

No	Agency/ Website/ Information
1	<p>BMKG (Badan Meteorologi, Klimatologi dan Geofisika, Indonesia) https://www.bmkg.go.id/cuaca/kebakaran-hutan.bmkg?index=fwi&wil=asean&day=obs</p>  <p>The figure is a map titled 'FIRE WEATHER INDEX' for Southeast Asia, dated 12 January 2021. It shows fire intensity levels across the region, with a legend indicating five categories: Low (blue), Moderate (green), High (yellow), Very High (orange), and Sangat Tinggi (red). The map shows high intensity (red and orange) in northern Sumatra and parts of northern Borneo, while other areas show lower intensities. The map includes a scale bar (0-900 km), a compass rose, and the BMKG logo.</p>

2 DNP (Department of National Parks, Wildlife and Plant Conservation, Thailand)
<http://www2.dnp.go.th/gis/FDRS/FDRS.php>



3 MET Malaysia (Malaysian Meteorological Department)
<https://www.met.gov.my/iklim/fdrs/afdrs>



The figures on the following pages show anomalies for precipitation and temperature for ASEAN for January till March 2021 as issued on 21 December 2020 by the APCC. For rainfall, brown colour represents less than normal and green more than normal. For temperature, red colour indicates higher than normal and blue represents lower than normal.

Other information on weather conditions, hotspot, haze and fire danger rating can be found on the following links:

ASEAN Haze Action Online (<http://haze.asean.org/>)

Hotspot and haze information at ASEAN Specialised Meteorological Centre (<http://asmc.asean.org/home/>)

Information on Fire Danger Rating System (FDRS) at Malaysian Meteorological Department (<http://www.met.gov.my/iklim/fdrs/afdrs?lang=en>)

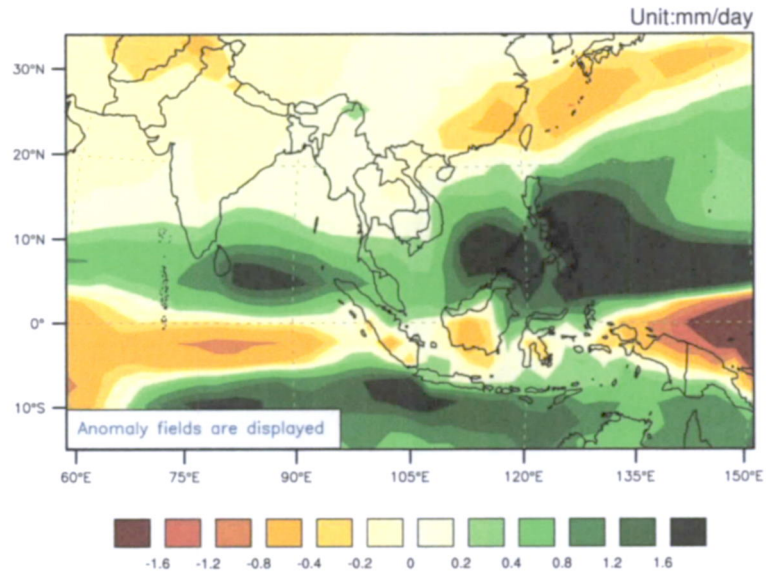
Information by Badan Meteorologi, Klimatologi dan Geofisika of Indonesia on FDRS (<https://www.bmkg.go.id/cuaca/kebakaran-hutan.bmkg>)

Hotspot information (adjustable confidence levels for hotspots) by Lembaga Penerbangan dan Antariksa Nasional (LAPAN) of Indonesia (<http://lowres-catalog.lapan.go.id/monitoring/>)

Information on FDRS for Northern Southeast Asia by Department of National Parks, Wildlife and Plant Conservation of Thailand (<http://www2.dnp.go.th/gis/FDRS/FDRS.php>)

Subscription to ASEAN Fire Alert Tool (<https://www.aseanfirealert.org/>) to manage land parcels of which information on FDRS and hotspot will be delivered daily to smartphone of subscribers

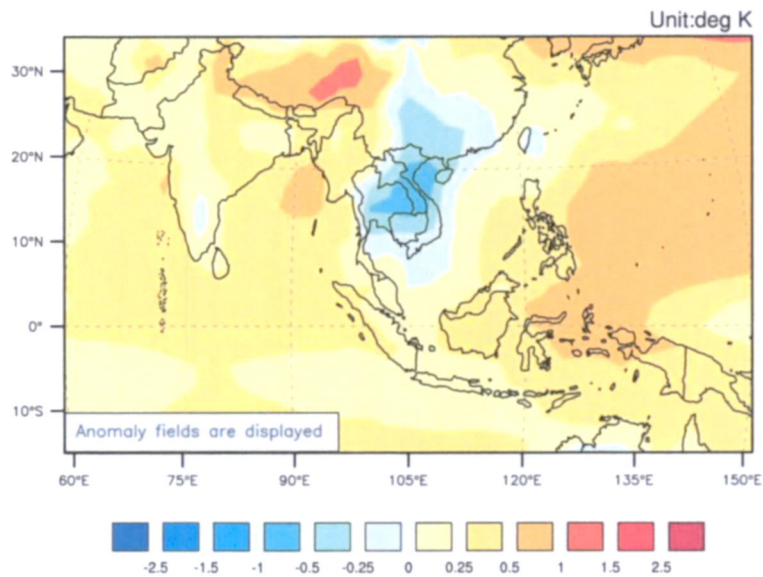
Precipitation for January-March 2021



Issued: 21 Dec 2020

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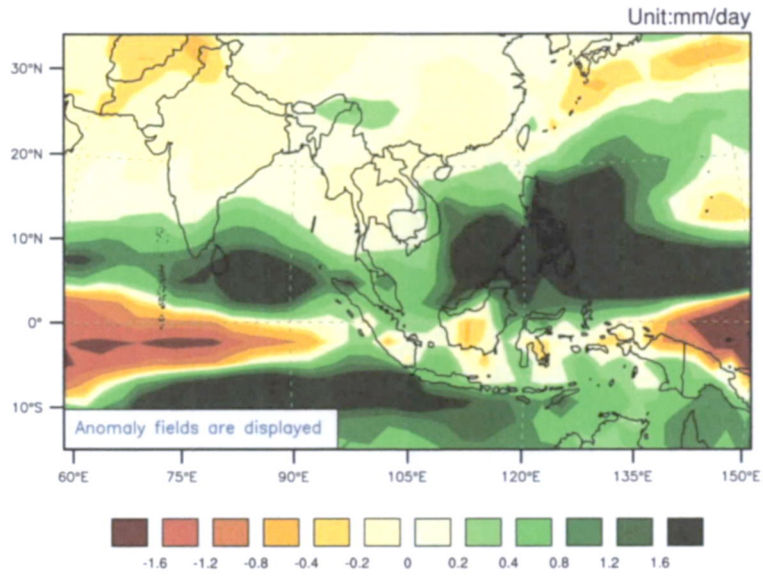
Temperature at 2m for January-March 2021



Issued: 21 Dec 2020

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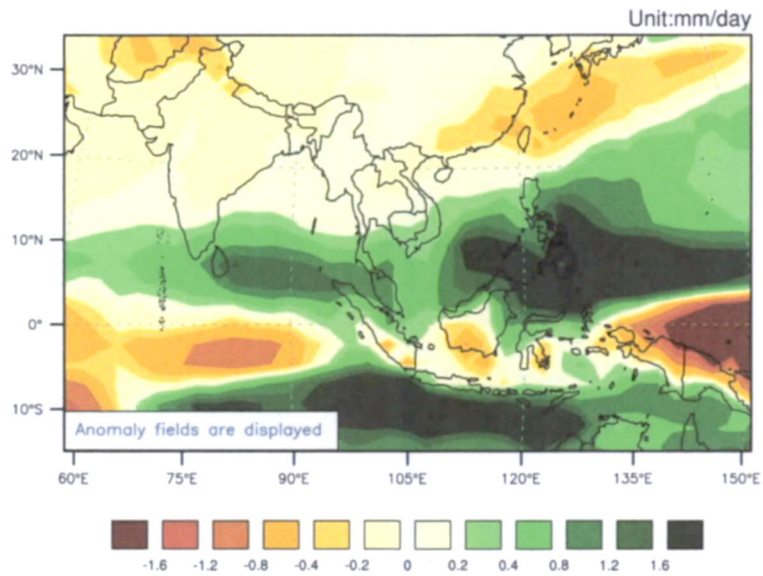
Precipitation for JAN 2021



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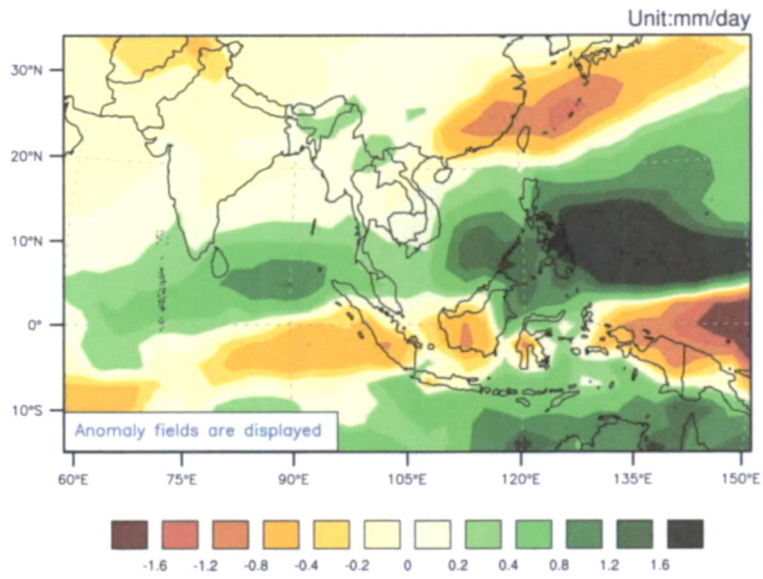
Precipitation for FEB 2021



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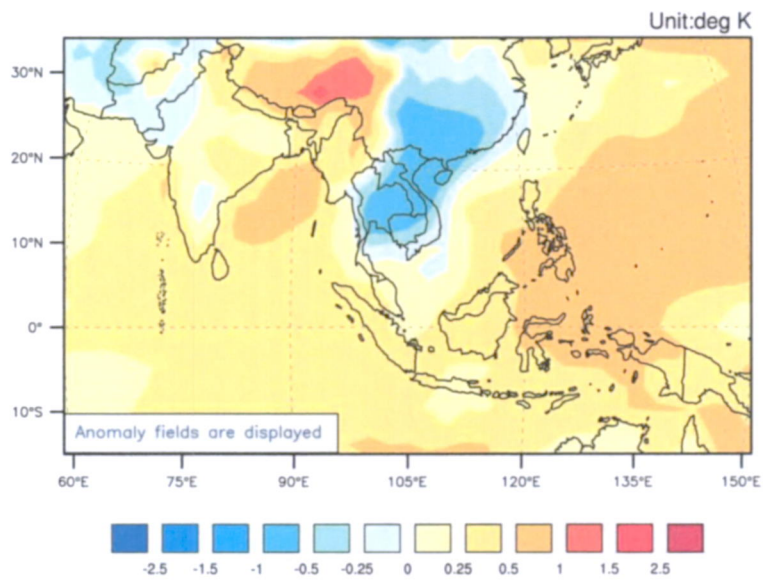
Precipitation for MAR 2021



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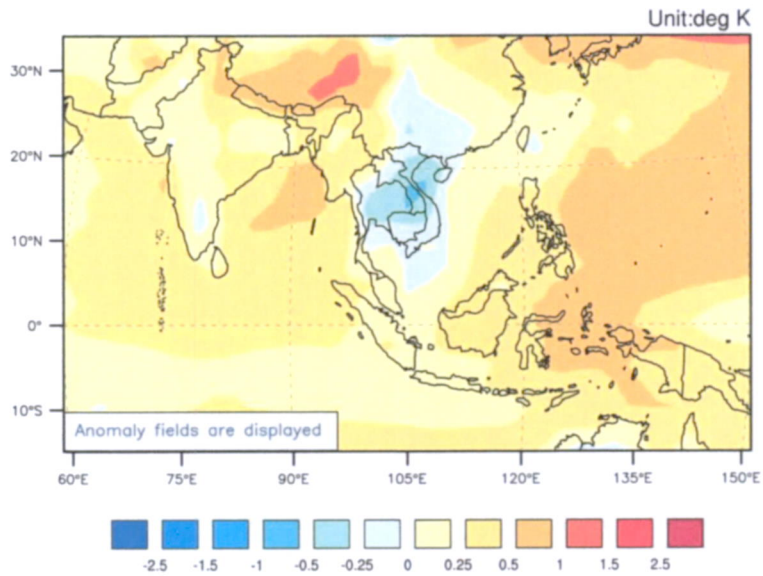
Temperature at 2m for JAN 2021



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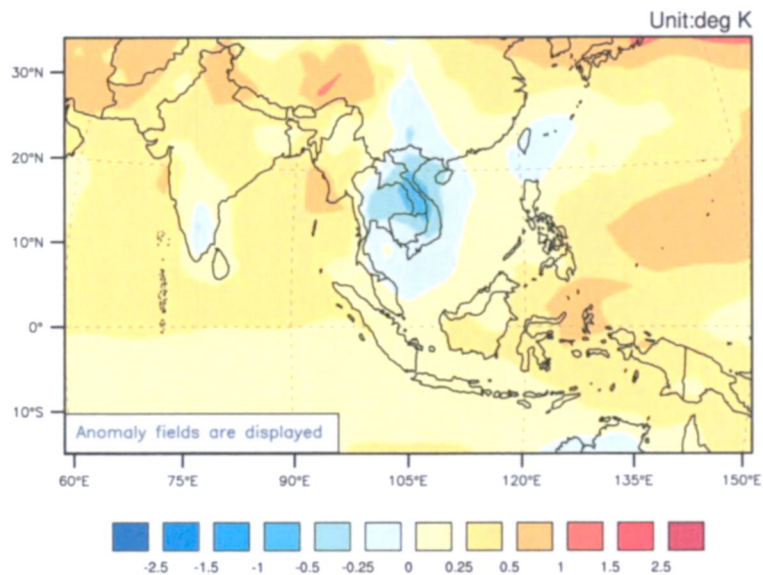
Temperature at 2m for FEB 2021



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Temperature at 2m for MAR 2021



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