

MEMBER REPORT

Member Name

**ESCAP/WMO Typhoon Committee
20th Integrated Workshop
Macao, China
1st - 5th December 2025**

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[The total number of items for each Member **should not exceed 15**. Please also kindly confine inputs to those relevant to tropical cyclone and Typhoon Committee issues.]

I. Overview of tropical cyclones which have affected/impacted Member’s area since the last Committee Session

1. Meteorological Assessment (highlighting forecasting issues/impacts)

The 2025 weather patterns in Lao PDR from January through October demonstrated significant regional variation. In January to February Lao PDR effected by cold stream weather from China country and during two this month’s saw light to moderate rainfall in Northern and Central parts of Laos.

In March continued with a uniform pattern of light rain throughout the country, but this shifted in the later half of the month include thunderstorms, lighter storm, and strong winds along with hail in certain locations. The trend of thunderstorms, varying from light to moderate intensity and often accompanied by hail and strong winds, persisted in to late April. From May to June thunderstorm activity was widespread, with certain regions experiencing moderate to heavy rainfall, hail and strong winds. This was followed form mid-July by an extended period of light to moderate rain covering large area, and notably heavy to very heavy rainfall in the northwestern, central and southern part of Laos. During May to mid-July of this year effected by southwest monsoon.

In August to September continued with light to moderate rainfall in all parts, and heavy to very heavy rainfall accompanied by strong winds across the Lao PDR, due to the impact of tropical cyclones and typhoons, which occurred in the Pacific Ocean and the South China Sea.

Overall, In all parts of Laos PDR in this year are affected by southwest monsoon, tropical cyclones and typhoons. When comparing the amount of rainfall with normal, saw the precipitation of the rainfall form northern, central and southern parts are above normal. See Figure1 and Table 1.

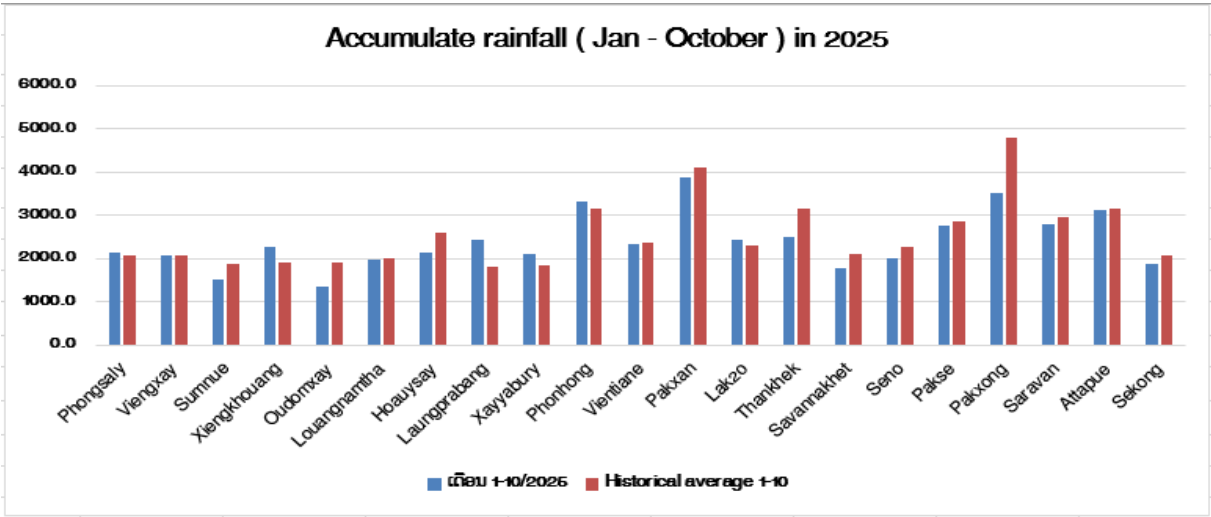


Figure 1 Accumulate Rainfall January to October 2025

Table1 % of Rainfall Accumulate Rainfall in each region of Lao PDR in 2025 compared to long-term average

NO	station	rainfall 2025		Long term average rainfall			%		Δ			(%)Rainfall Jan - Oct 2025
		October	Jan to October	October	Jan to Oct	annual	Month	Year	Month	Jan to O	Year	
1	Phongsaly	86.4	2232.5	92.8	2064.2	1589.6	93.1	140.4	-6.4	168.3	642.9	<u>North-Eastern Region</u> 144.4
4	Viengxay	104.4	2293.4	100.5	2088.2	1556.6	103.9	147.3	3.9	205.2	736.8	
5	Sumnuea	52.2	1630.6	97.2	1860.8	1282.3	53.7	127.2	-45.0	-230.2	348.3	
6	Xiengkhuang	57.7	2340.9	64.3	1921.4	1437.6	89.7	162.8	-6.6	419.5	903.3	
7	Oudomxay	72.0	1340.5	64.2	1919.2	1430.4	112.1	93.7	7.8	-578.7	-89.9	<u>North-Western Region</u> 139.4
2	Luangnamtha	96.0	2076.0	102.2	2005.8	1518.6	93.9	136.7	-6.2	70.2	557.4	
3	Huaysay	62.8	2048.7	110.3	2588.5	1873.4	56.9	109.4	-47.5	-539.8	175.3	
8	Luangprabang	115.3	2545.3	94.0	1808.2	1309.9	122.7	194.3	21.3	737.1	1235.4	
9	Sayabury	44.8	2140.8	95.1	1848.0	1312.5	47.1	163.1	-50.3	292.8	828.3	<u>Central Region</u> 148.6
10	Phonhong	41.8	3760.6	113.6	3156.9	2283.4	36.8	164.7	-71.8	603.7	1477.2	
11	Vientiane	87.5	2470.2	83.2	2361.3	1671.1	105.2	147.8	4.3	108.9	799.1	
12	Paksan	61.9	4247.6	80.4	4099.2	3036.9	77.0	139.9	-18.5	148.4	1210.7	
13	Lakzo	62.2	2880.8	66.5	2297.7	1620.7	93.5	177.7	-4.3	583.1	1260.1	<u>Southern Region</u> 162.0
14	Thakhek	74.7	2746.4	124.2	3155.4	2187.3	60.1	125.6	-49.5	-409.0	559.1	
15	Savannakhet	44.2	2097.1	88.8	2122.8	1470.6	49.8	142.6	-44.6	-25.7	626.5	
16	Seno	43.8	2259.8	82.4	2264.8	1594.8	53.2	141.7	-38.6	-5.0	665.0	
17	Pakse	93.9	3326.5	101.8	2873.8	1983.5	92.2	167.7	-7.9	452.7	1343.0	148.6
18	Pakxong	236.4	4157.4	276.6	4808.1	3432.1	85.5	121.1	-40.2	-650.7	725.3	
19	Saravan	154.6	3621.3	129.7	2946.3	2029.8	119.2	178.4	24.9	675.0	1591.5	
20	Attapue	216.6	3862.0	145.5	3163.7	2185.6	148.9	176.7	71.1	698.3	1676.4	
21	Sekong	140.7	2473.2	108.1	2071.1	1487.6	130.2	166.3	32.6	402.1	985.6	
Country average		92.9	2692.9	105.8	2544.1	1823.5	86.9	148.8	-12.9	148.9	869.4	148.6

1.1 The Tropical cyclones which have affected/impacted Member's area since the last Committee Session

From last July to September, there are 6 tropical cyclones pass to Lao PDR, 3 tropical cyclone there are not affected to Laos such as: Typhoon KAJIKI, Tropical depression, Typhoon Lagasa, Nongfa and 2 tropical cyclone effected in all part of Lao PDR, namely: Tropical Storm Wipha and Typhoon Bualoi.

1.2 Tropical Storm Wipha (2506)

On July 22 2025, Tropical Storm Wipha moved up the northern part of Vietnam and has weakened into a low pressure area with strong winds covering the northern region, has caused light to moderate rainfall in all regions, and heavy to very heavy rainfall along with strong winds in some areas of the northern and central provinces.

The effects of Tropical Cyclone Wipha there are flooding, flash floods, landslides and erosion in Houaphan, Xiengkhouag, Louaprabang, Sayabury, Bokeo and Vientiane provinces.



Figure 2. The impacts by TS Soulik

1.3 Typhoon Bualoi (2520)

On September 29th 2025, Typhoon Bualoi made landfall in central Vietnam. Then continued to move through northern and central of Lao PDR. This resulted in light to moderate thunderstorms and heavy to very heavy rainfall in each region. The impact of this Typhoon, caused flooding, flash floods, and landslides in Sumneua, Xiengkhouag, Bolikhamsay and Vientiane provinces.



Figure 3. The impacts by Typhoon Bualoi

2. Hydrological Assessment (highlighting water-related issues/impact)

In late July and August 2025, Laos experienced severe weather and flooding due to Tropical Storm Wipha and later Typhoon Kajiki, causing casualties, significant displacement, damaged homes, and infrastructure, with Khammouane Province being particularly affected by floods and landslides. The Mekong River levels also rose, impacting Vientiane and other areas. The Laos-China Railway suspended services, and authorities issued warnings for further heavy rains, flash floods, and landslides.

According to the local government, intense rainfall from Tropical Depression Wipha caused widespread flooding and landslides across northern and central Lao PDR, affecting 46 districts and over 571 villages, with four people dead, seven missing, and thousands displaced. Khammouane Province was the most affected, with severe flooding in Hinboun District impacting over 335 families and causing extensive damage to homes, farmland, and infrastructure. A total of 14 provinces across Lao PDR were affected by monsoon floods and landslides, with nine of them, Vientiane Province, Bolikhamxay, Luang Prabang, Xayaboury, Xieng Khouang, Huaphan, Xaysomboun, Khammouane, Houaphan, and Bokeo, directly impacted by Tropical Depression Wipha. DMH has issued warnings as Mekong River levels continue to rise, particularly in Vientiane Capital and Pakse

Between 21 and 30 July 2025, heavy rainfall associated with the remnants of Tropical Depression Wipha caused widespread flooding and landslides across northern and central provinces of Lao PDR. A disaster update has been released following Tropical Depression Wipha, which brought heavy rainfall and triggered flooding, flash floods, and landslides across several provinces in Lao PDR between 21 and 25 July 2025.

Between 27 and 28 July, in Hinboun District, Khammouane Province, floods submerged homes, some up to the ceilings of single-storey buildings, and affected 13 villages. The flooding damaged rice fields (41.32 hectares), crops (4.30 hectares), livestock (2 pigs), and 41 fishponds, impacting more than 335 families. Road access between Thongmixay and Paklay districts was temporarily cut off due to erosion and fallen trees, but has since been restored by local authorities. Total damages in the district are estimated at over 1.2 billion Lao kip (equivalent USD 554,796).

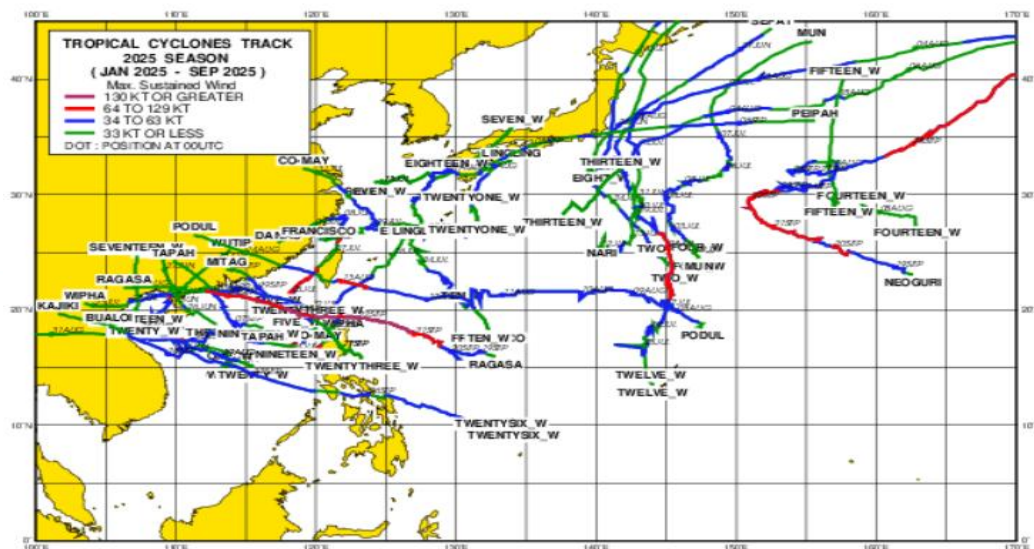
As of 29 July, water levels in the Mekong River had risen significantly. At Sisattanak (Km4 Station) in Vientiane Capital, as well as in Nong Khai and Pakse, water levels reached warning thresholds. The Mekong River Commission has forecasted that flood levels in Vientiane Capital and Pakse may be exceeded between 30 July and 3 August, urging people living in low-lying areas to remain alert for flash floods and landslides. On 31 July, the Department of Meteorology and Hydrology issued a water level warning for Mekong tributaries due to the combined effect of a low-pressure system and the southwest monsoon. Provinces including Khammouane, Savannakhet, and Champasak are experiencing rising water levels. In some locations, such as the Xe Bang Hieng and Xe Champhone, river levels have already exceeded flood levels. Authorities have advised people in riverside and low-lying areas to remain on high alert for potential flash floods over the next few days.

In Khammouane province of Laos, heavy rainfall flooded eight villages. Flash floods also hit Xaysomboun province after several days of continuous rain, causing rivers to overflow and inundate homes and roads. The remnants of Kajiki caused heavy rain and flash flooding in the North.

Two typhoons occurred (as of Wipha, 21-30 July 2025, and Kajigi, 25-26 August 2025). Typhoon Wipha landed in the middle and northeastern part of Laos at dawn on September 21, and brought a lot of rainfall as it passed through the northern region toward the west. The maximum accumulated precipitation for one day after Wipha landed was 126 mm in Pakbeng City, 108 mm in Paklay, the northwest area of Laos, and 112 mm in Paksan City, 123 mm in Thakhek city, 160 mm in Kao City, 125 mm in Savannakhet, 117 mm in Pakse, the middle-east of the country. Since the typhoon's landing and movement route was in the northeast region on the right side of the country, there was some damage to the infrastructures, land properties, and transportation systems by flooding, and a few local landslides occurred. However, fortunately, there were a few casualties but no significant economic loss. In addition, the rainy season in Laos this year, a little earlier than usual, started in early March.

3. Socio-Economic Assessment (highlighting socio-economic and DRR issues/impacts)

Tropical Cyclone Impact to Lao PDR in 2025 . The Climate characteristic in Lao PDR is influenced by the southwest Monsoon and associated with direct/indirect of Tropical Cyclone from Western North Pacific and South China Sea. In 2025 There are 6 tropical cyclones direct impacted to Lao PDR namely: Wipha, Kajiki, Ragasa, Bualoi and indirect Nongfa

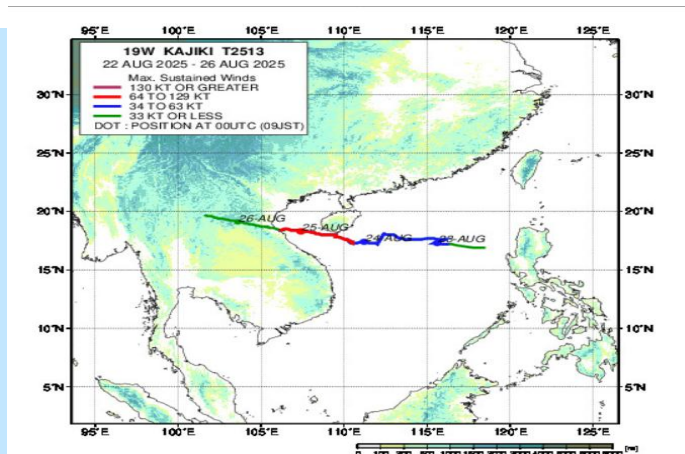


- Tropical Cyclone Impact to Lao PDR in 2025

TS2506: WIPHA



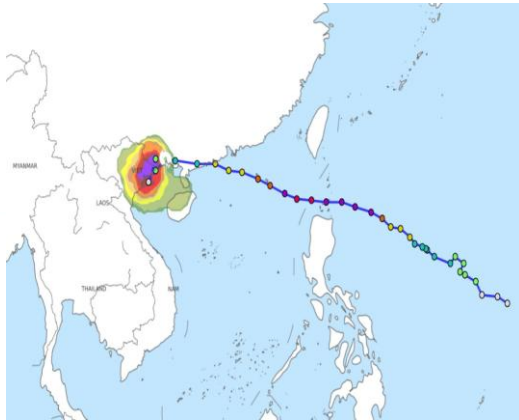
TS2513: KAJIKI



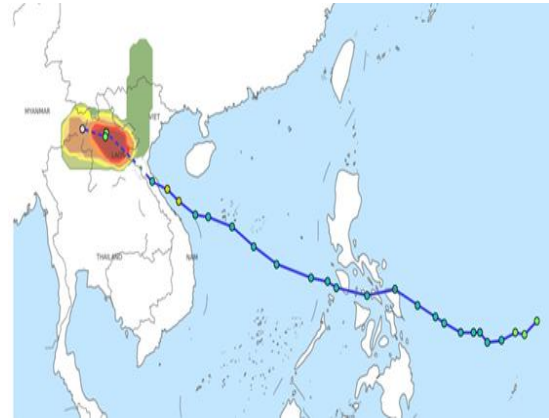
From 21 to 24 July 2025, Tropical Storm Wipha moved across the northern and central parts of the Lao PDR, bringing light to moderate rainfall and heavy to very heavy rainfall in some areas.

Typhoon KAJIKI formed in the central South China Sea on 25 August 2025, passed near the southern tip of Hainan Island on 26 August 2025, and moved up the northern coast of Vietnam on 27-28 August 2025. This storm has weakened into a depression and continues to move through central and northern Lao PDR.

TS2518: RAGASA



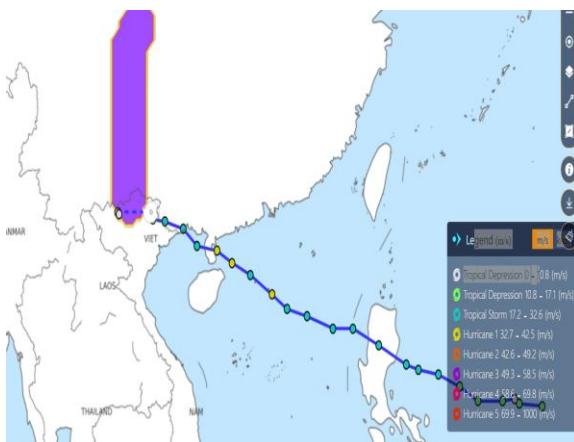
TS2520: BUALIO



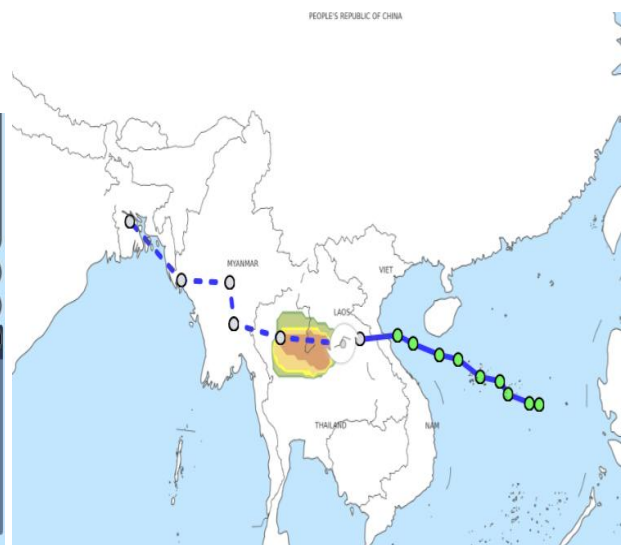
During 25 to 26 September 2025 (Ragasa) continued to weaken into a strong low pressure area. At the same time, the strong southwest monsoon will cover most of the country, which will cause Laos to experience light to moderate rainfall in each region and heavy to very heavy rainfall along with strong winds in some areas of the southern provinces such as Saravan, Pakse, Sekong and Attapeu.

During 29 to 30 September 2025, Tropical Cyclone Bualoi is expected to move through the provinces of Bolikhamxay, Xiengkhouang, Houaphanh, Phongsaly, Xaysomboun, Luang Prabang, Oudomxay, Bokeo and Luang Namtha. It will then weaken and become a low pressure area with strong winds over northern Laos. At the same time, the southwest monsoon will strengthen over all parts of Laos and will bring light to moderate thunderstorms and heavy to very heavy rains, along with strong winds in some areas in each region

TS 2521: MATMO



TS 2514: NONGFA



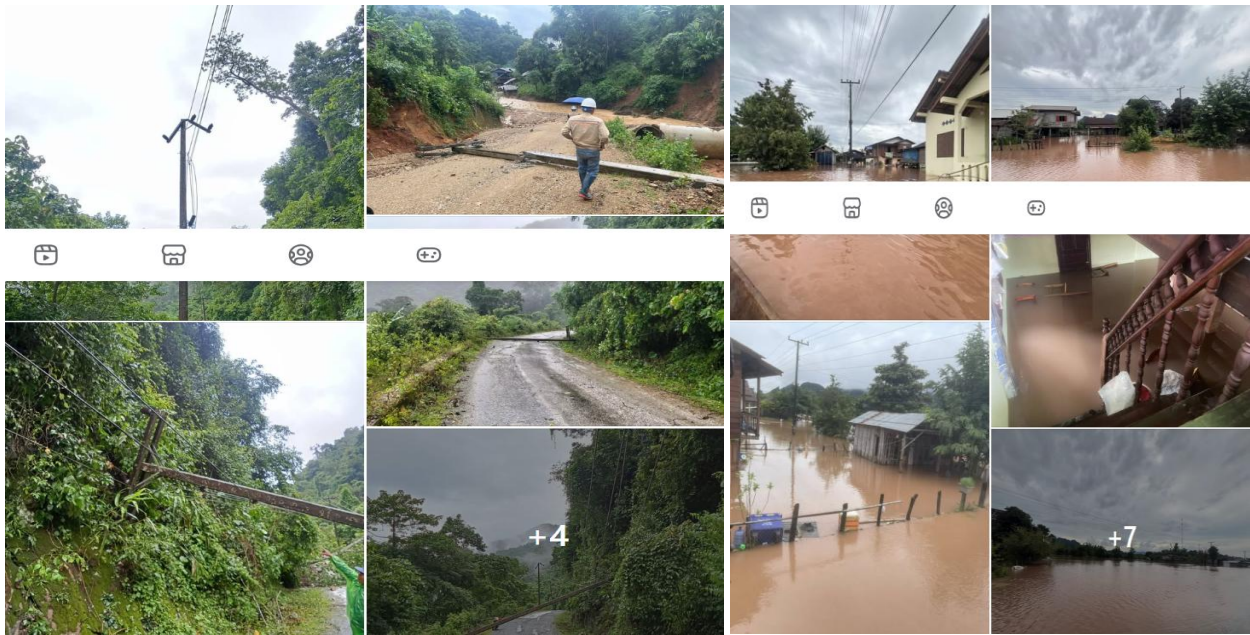
Tropical Cyclone Nongfa, the 14th in 2025, will move through central and southern Lao PDR on the evening of September 29, 2025. It will bring light to moderate thunderstorms in all regions and heavy to very heavy rainfall along with strong winds in some areas such as: Bolikhamxay, Xaysomboun, Vientiane Capital and Xayaboury during August 30 to 31 Sep 2025.

- Wipha Impact: Topical storm passed It caused flash floods, landslides and strong winds, causing deaths and damage to people's homes and property, especially in the provinces of Houaphan, Xieng Khouang, Bokeo, Luang Prabang, Xayaburi, Vientiane, Xaysomboun and Borikhamxay.



- Kajiki Impact: Topical storm passed It caused flash floods, landslides and strong winds, homes and property and where villages were inundated and access routes cut off, especially in the provinces of in Khammouane and Bolikhamxay provinces.

On 25-26 August 2025, Sam Tai District, Houaphan Province was affected by storm Kajiki, causing the 22 kV medium-voltage grid system to collapse and many power poles to fall.



- Ragasa Impact: Topical storm passed Heavy rains and flooding in the central and southern provinces, which caused widespread flooding of banana plantations in Nam Kong Village, Phouvong District, Attapeu Province on 26 September 2025.

Daily rainfall during 25 - 27 September 2025

ສະຖານີ	ວັນທີ 25 ກັນຍາ 2025	ວັນທີ 26 ກັນຍາ 2025	ວັນທີ 27 ກັນຍາ 2025
ບໍ່ແກ້ວ	32.4 ມມ	06.0 ມມ	11.8 ມມ
ຫຼວງພະບາງ	28.0 ມມ	02.0 ມມ	ບໍ່ມີຝົນຕົກ
ໂພນໂຮງ	02.7 ມມ	45.0 ມມ	ບໍ່ມີຝົນຕົກ
ປາກຊັນ	118.8 ມມ	ບໍ່ມີຝົນຕົກ	02.6 ມມ
ວຽງທອງ	29.0 ມມ	02.6 ມມ	10.2 ມມ
ສະຫວັນນະເຂດ	08.4 ມມ	29.6 ມມ	03.4 ມມ
ປາກເຊ	126.4 ມມ	84.4 ມມ	13.5 ມມ
ປາກຊ່ອງ	38.6 ມມ	17.4 ມມ	24.1 ມມ
ນິຄົມ34	15.5 ມມ	21.9 ມມ	27.5 ມມ
ສາລະວັນ	33.4 ມມ	42.8 ມມ	22.0 ມມ
ເຊກອງ	16.7 ມມ	17.2 ມມ	36.6 ມມ
ທ່າແຕ່ງ	06.6 ມມ	14.3 ມມ	36.6 ມມ
ດາກຈຶງ	03.8 ມມ	33.8 ມມ	38.3 ມມ
ກະລຶມ	10.8 ມມ	20.6 ມມ	50.4 ມມ
ອັດຕະປື	17.3 ມມ	26.0 ມມ	11.9 ມມ



- Impact of Tropical Storm Boualoi: During 28-30 September 2025, heavy rains, landslides and flash floods occurred in the northern, central and southern provinces, such as Houaphanh, Xieng Khouang, Luang Prabang, Pakxan, Vientiane, Xaysomboun, Borikhamxay, Savannakhet, causing houses and roads to be flooded, valuables such as vehicles to be swept away by the water, and some livestock to be lost.

Daily rainfall during 25 - 27 September 2025

	ປະລິມານນ້ຳຕົກຕາມວັນ ແຕ່ວັນທີ 28 - 30/09/2025		
	28/09/2025	29/09/2025	30/09/2025
ສະຖານີ	04.1 ມມ	21.8 ມມ	15.5 ມມ
ບຶງຂາວ	25.9 ມມ	49.5 ມມ	05.6 ມມ
ຊຳປາອຳ	36.1 ມມ	58.4 ມມ	05.8 ມມ
ວຽງໄຊ	01.0 ມມ	82.6 ມມ	12.8 ມມ
ຫຼວງພະບາງ	ບໍ່ມີຝົນຕົກ	94.8 ມມ	38.1 ມມ
ໄຊຍະບູລີ	ບໍ່ມີຝົນຕົກ	29.3 ມມ	37.0 ມມ
ນະຄອນຫຼວງວຽງຈັນ	ບໍ່ມີຝົນຕົກ	18.5 ມມ	3.6 ມມ
ໄຊສົມບູນ	02.7 ມມ	114.8 ມມ	96.3 ມມ
ໂພນໂສງ	ບໍ່ມີຝົນຕົກ	37.9 ມມ	86.3 ມມ
ປາກຮັບ	11.3 ມມ	84.0 ມມ	06.9 ມມ
ຫຼີ້ນຊາວ	100.5 ມມ	53.7 ມມ	00.6 ມມ
ວຽງທອງ	14.4 ມມ	78.7 ມມ	08.6 ມມ
ນາກາຍ	34.0 ມມ	48.0 ມມ	02.0 ມມ
ອຳເພາ	14.8 ມມ	49.6 ມມ	ບໍ່ມີຝົນຕົກ
ສະຫວັນນະເຂດ	65.2 ມມ	111.2 ມມ	ບໍ່ມີຝົນຕົກ
ເຊໂນ	73.0 ມມ	63.8 ມມ	00.5 ມມ
ປາກເຊ	82.2 ມມ	25.9 ມມ	ບໍ່ມີຝົນຕົກ
ປາກອ່ອງ	73.3 ມມ	24.8 ມມ	ບໍ່ມີຝົນຕົກ
ນິຄົມ 34	93.6 ມມ	71.7 ມມ	00.7 ມມ
ສາລະວັນ	80.8 ມມ	20.4 ມມ	08.2 ມມ
ເຊກອງ	39.9 ມມ	35.1 ມມ	ບໍ່ມີຝົນຕົກ
ອຳແຕງ	53.6 ມມ	20.3 ມມ	10.8 ມມ
ຕາກຈຶງ	50.0 ມມ	10.3 ມມ	01.5 ມມ
ກະລຶມໃໝ່	110.6 ມມ	11.8 ມມ	ບໍ່ມີຝົນຕົກ
ອັດຕະປື	23.4 ມມ	11.8 ມມ	ບໍ່ມີຝົນຕົກ



❖ Socio Economic loss by Typhoon Bualoi is Number (2520)

Viengxay and Samtai districts affected by typhoon Boualoi A source from Houaphanh province reported that on 29 September 2025, heavy rains continued for several hours, causing the water level in various rivers to increase, especially the Soi River in Houa Na Village, Samtai District and Soi Village, Viengxay District, Houaphanh Province, flooding homes and agricultural land along the riverbanks, causing considerable damage.

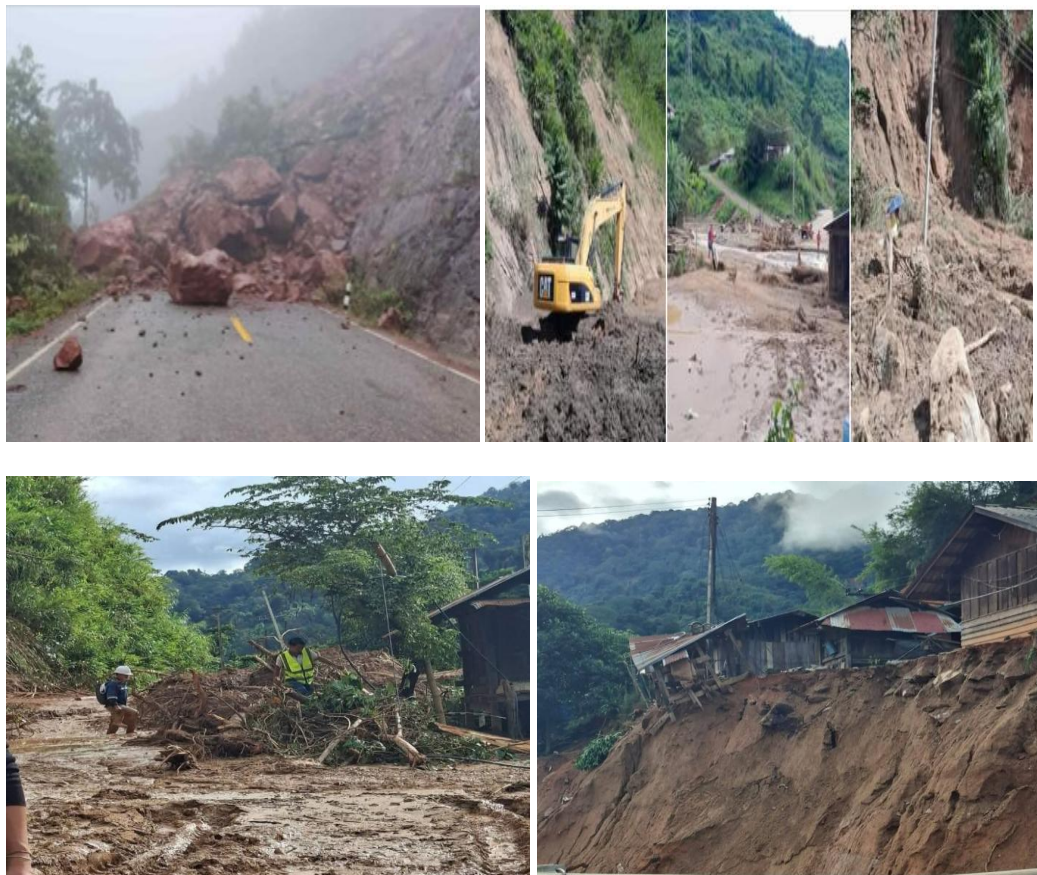


❖ Socio Economic loss by Tropical Storm Kajiki, Number (2513)

The socio-economic loss from Tropical Storm Kajiki, This year, Lao PDR and the ASEAN region have been severely affected by several tropical storms that have occurred continuously. The main storms include: Wipha, Khajiki, Lakasa, Boualoi and Matmo which occurred between July and October 2025. These storms have affected areas in many countries such as: China, Vietnam, Thailand, including the Lao PDR. For the Lao PDR, many aspects have been affected, especially water management of hydropower dams, irrigation dams, agricultural areas, power grids and many infrastructures.



❖ Socio Economic loss by Landslides



During 28-30 September 2025, heavy rains continued for several days, causing landslides and flooding in many places. Transportation in this area was cut off and traffic was not possible. The area from Thathom District, Xaysomboun Province to Khoun District, Xieng Khouang Province was affected by the Tropical Cyclone Bualio.

❖ Socio Economic loss by Local storm



On 29 April 2025, there were light to moderate and heavy thunderstorms with strong winds in many areas of Lamam District, Sekong Province, causing the roofs of electricity poles to collapse and some people's houses to be damaged and destroyed.

- Disaster Response from Government



To declare the affected areas as a National Emergency Disaster Zone
The Government is leading the response through the National Disaster Prevention and Control Committee, chaired by the Deputy Prime Minister

- ❖ Disaster Response from line Agencies and Development Partner



Lao PDR's rainy season – along with Typhoon Kajiki and Tropical Storm Nongfa – saw multiple provinces impacted by flooding. With support from the Government of Japan and WHO, Ministry of Health and Provincial health education teams deployed to multiple provinces to provide vital health and safety advice – particularly crucial as floodwaters recede but health risks remain.

❖ Disaster Response from line Agencies and Development Partner



Public Works and Transport sector: Repaired road and pre-assessment



Agriculture and Forestry sector: pre-assessment

4. Regional Cooperation (highlighting regional cooperation and related activities)

II. Summary of Progress in Priorities supporting Key Result Areas

[The total number of items for each Member **should not exceed 15**. Please also kindly confine inputs to those relevant to tropical cyclone and Typhoon Committee issues.]

1. [Activity or title of project (in bold lettering)]

Main text:

[Main text describing the project/activity (preferably within 1-2 pages, including photos, diagrams, URLs, references, etc.)]

Identified opportunities/challenges, if any, for further development or collaboration:

[Describe relevant opportunities and challenges arising from this project/activity, if any]

Priority Areas Addressed:

[This part should indicate which “Priority” of different Working Groups (namely, Integrated, Meteorology, Hydrology and DRR) in the KRAs Table of the TC Strategic Plan 2022-2026 (http://www.typhooncommittee.org/docs/SP2022_FINAL.pdf, or Appendix I at the end of this document) are addressed in this project/activity. Please see the example of this template for the suggested presentation format for the “Priorities” of different “Working Groups”. The number of priorities for each project/activity is preferably **no more than five**]

Key Pillars of UN’s Early Warnings for All (EW4All) Initiative Addressed:

Key Pillars of EW4All	Please ✓ the related pillar(s)
Disaster risk knowledge and management	
Detection, observation, monitoring, analysis, and forecasting	
Warning dissemination and communication	
Preparedness and response capabilities	

[This part should indicate which “Pillars” of EW4All initiative are addressed in this project/activity. Please see the example of this template. Member can select more than one pillar if appropriate. Details of the four pillars are available from the link below:
<https://public.wmo.int/en/earlywarningsforall>]

Contact Information:

Member: [Member]

Name of contact for this item: [Point of Contact]

Telephone: [Telephone Number]

Email: [Email Address]

2. [Activity or title of project (in bold lettering)]

Main text:

[Main text describing the project/activity (preferably within 1-2 pages, including photos, diagrams, URLs, references, etc.)]

Identified opportunities/challenges, if any, for further development or collaboration:

[Describe relevant opportunities and challenges arising from this project/activity, if any]

Priority Areas Addressed:

[This part should indicate which “Priority” of different Working Groups (namely, Integrated, Meteorology, Hydrology and DRR) in the KRAs Table of the TC Strategic Plan 2022-2026 (http://www.typhooncommittee.org/docs/SP2022_FINAL.pdf, or Appendix I at the end of this document) are addressed in this project/activity. Please see the example of this template for the suggested presentation format for the “Priorities” of different “Working Groups”. The number of priorities for each project/activity is preferably no more than five]

Key Pillars of UN’s Early Warnings for All (EW4All) Initiative Addressed:

Key Pillars of EW4All	Please ✓ the related pillar(s)
Disaster risk knowledge and management	
Detection, observation, monitoring, analysis, and forecasting	
Warning dissemination and communication	
Preparedness and response capabilities	

[This part should indicate which “Pillars” of EW4All initiative are addressed in this project/activity. Please see the example of this template. Member can select more than one pillar if appropriate. Details of the four pillars are available from the link below: <https://public.wmo.int/en/earlywarningsforall>]

Contact Information:

Member: [Member]

Name of contact for this item: [Point of Contact]

Telephone: [Telephone Number]

Email: [Email Address]

EXAMPLE of reporting format for project/activity in Part II

1. Continuous development of the website of the Severe Weather Information Centre (SWIC 2.0) for Disaster Risk Reduction

Main Text:

In response to the WMO's initiative of the implementation of Global Multi-hazard Alert System (GMAS) framework as stipulated in Resolution 13 (Cg-18) to enhance disaster risk reduction in the global scale, HKO enhanced the WMO website of SWIC using technology of Geographical Information System (GIS) and adopting the latest WMO map. As in Sep 2020, 78 official data feeds of warnings and alerts from WMO Members in the format of Common Alerting Protocol (CAP) were incorporated into the SWIC 2.0 website, an increase of more than 20% from 2019. In addition, it also displays the tropical cyclone advisories and warnings from Regional Specialized Meteorological Centres, Tropical Cyclone Warning Centres, and National Meteorological Centres in the Typhoon Committee region in both map view and table view.

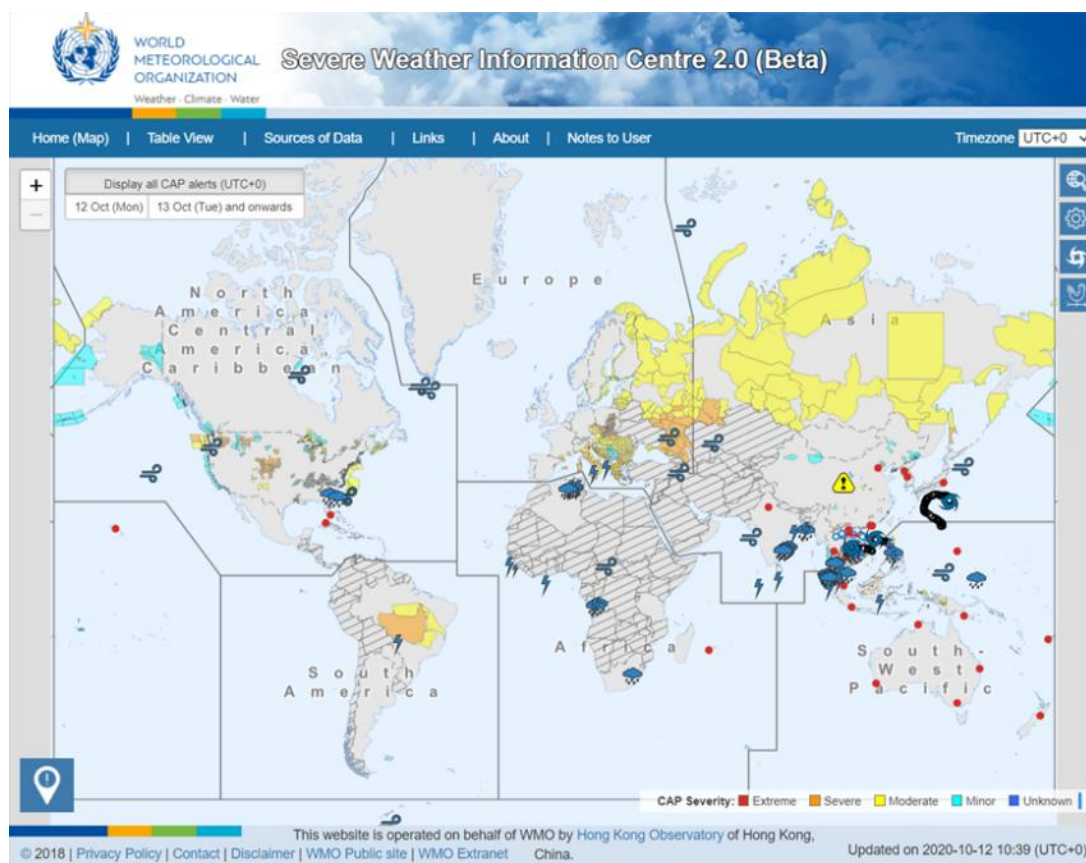


Figure XX – SWIC 2.0 website

Identified opportunities/challenges, if any, for further development or collaboration:

1. Tropical cyclone advisories and warnings should be made available in machine readable format, e.g. XML, JSON, etc., to facilitate the use of official forecast and warnings by websites and online media.
2. The use of CAP format in dissemination of weather warnings and alerts from WMO Members should be further promoted.

Priority Areas Addressed:

[Note: please indicate BOTH the “working group” and “priorities” here, preferably no more than five priorities for each project/activity]

Integrated

- Strengthen the cooperation between TRCG, WGM, WGH, and WGDRR to develop impact-based forecasts, decision-support and risk-based warning.
- Enhance collaborative activities with other regional/international frameworks/organizations, including technical cooperation between TC/AP-TCRC and TC/PTC cooperation mechanism.

Meteorology

- Promote communication among typhoon operational forecast and research communities in Typhoon Committee region.
- Enhance RSMC capacity to provide regional guidance including storm surge, responding to Member’s needs.

DRR

- Promote international cooperation of DRR implementation project.

Key Pillars of UN’s Early Warnings for All (EW4All) Initiative Addressed:

Key Pillars of EW4All	Please ✓ the related pillar(s)
Disaster risk knowledge and management	
Detection, observation, monitoring, analysis, and forecasting	✓
Warning dissemination and communication	✓
Preparedness and response capabilities	

Contact Information:

Member: Hong Kong, China

Name of contact for this item: Dr/Mr/Ms XXXXXXXXX

Telephone: +852 XXXXXXXXXXXX

Email: XXXXXXXXXXXXX

Appendix I - Priority Areas of Working Groups for the Strategic Plan 2022-2026

WG	Priorities
Integrated	1. Strengthen the cooperation between TRCG, WGM, WGH, and WGDRR to develop impact-based forecasts, decision-support and risk-based warning.
	2. Strengthen cross-cutting activities among working groups in the Committee.
	3. Enhance collaborative activities with other regional/international frameworks/organizations, including technical cooperation between TC/AP-TCRC and TC/PTC cooperation mechanism.
Meteorology	4. Enhance the capacity to monitor and forecast typhoon activities particularly in genesis, intensity and structure change.
	5. Develop and enhance typhoon analysis and forecast techniques from nowcast to medium-range, and seasonal to long-range prediction.
	6. Enhance and provide typhoon forecast guidance based on NWP including ensembles, weather radar and satellite related products, such as QPE/QPF.
	7. Promote communication among typhoon operational forecast and research communities in Typhoon Committee region.
	8. Enhance training activities with TRCG, WGH, and WGDRR in accordance with Typhoon Committee forecast competency, knowledge sharing, and exchange of latest development and new techniques.
	9. Enhance RSMC capacity to provide regional guidance including storm surge, in response to Member's needs.
Hydrology	10. Improve typhoon-related flood (including riverine flood, flash flood, urban flood, and coastal flood) monitoring, data collection and archiving, quality control, transmission, processing, and sharing framework.
	11. Enhance capacity in typhoon-related flood risk management (including land-use management, dam operation, etc.) and integrated water resources management and flood-water utilization.
	12. Strengthen capacity in effective flood forecasting and impact-based early warning, including hazard mapping and anticipated risk based on methodological and hydrological modelling, and operation system development.
	13. Develop capacity in projecting the impacts of climate change, urbanization and other human activities on typhoon-related flood disaster vulnerability and water resource availability.
	14. Increase capacity in utilization of advanced science and technology for typhoon-related flood forecasting, early warning, and management.
DRR	15. Provide reliable statistics of mortality and direct disaster economic loss caused by typhoon-related disasters for monitoring the targets of the Typhoon Committee.
	16. Enhance Members' disaster risk reduction techniques and management strategies.
	17. Evaluate socio-economic benefits of disaster risk reduction for typhoon-related disasters.
	18. Promote international cooperation of DRR implementation project.
	19. Share experience/knowhow of DRR activities including legal and policy framework, community-based DRR activities, methodology to collect disaster-related information.

