# World Meteorological Organization Space-Based Weather and Climate Extremes Monitoring Demonstration Project (WMO SEMDP) Workshop and Steering Group Meeting in Conjunction with 11th ASEAN Climate Outlook Forum (ASEANCOF-11)

## Kuala Lumpur, 29 October – 2 November 2018

| TIME | PROGRAMME |
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| **29 October 2018 (Monday) – ASEANCOF-11 (DAY 1)** | |
| 8.30 am | Registration |
| 9.30 am | • Welcome remarks/participant introductions<br>• **Opening talks (context-setting):**<br>     o *Regional developments in monitoring and outlook of extremes* (Mr. Raizan Rahmat, ASMC)<br>     o *Predictability of extreme events in Southeast Asia* (Dr. Charline Marzin, UKMO)<br>• Group photo-taking |
| 10.30 am | **Session 1: Regional outlook (DJF 2018-19) from Global Producing Centres/International Climate Centres (Chair: Mr. Raizan Rahmat)**<br><br>*Recommended presentation outline*<br><br>1. *Updates on modelling activities of WMO Global Producing Centres' (GPCs)/International Climate Centres of Long Range Forecasts.*<br>2. *Models' skill for Southeast Asia region based on verification of historical forecasts (hindcasts).* ***Model skill, if any, for prediction of extremes temperature/rainfall, e.g. upper/lower quintiles, or indices.***<br>3. ***Seasonal forecasts for temperature and rainfall for DJF 2018-2019 for Southeast Asia region***, *including the seasonal evolution of large-scale circulation features of importance to Southeast Asian climate, such as ENSO, IOD and monsoon circulation.*<br><br> ▪ 10.30 am: Beijing Climate Centre, BCC (Dr. Bing Zhou)<br> ▪ 10.50 am: Bureau of Meteorology Australia, BoM (Dr. Yuriy Kuleshov)<br> ▪ 11.10 am: Met Office, UKMO (Dr. Charline Marzin)<br> ▪ 11.30 am: Break (30 mins)<br> ▪ 12.00 am: WMO LC-LRFMME (Ms. Hyun-Ju Lee)<br> ▪ 12.20 am: Tokyo Climate Centre, TCC (Mr. Atsushi Minami *via SYKPE*) |

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| 12.40 am | **Session 2a: National outlook (DJF 2018-19) from ASEAN National Meteorological and Hydrological (NMHSs) (Chair: Dr. Bing Zhou)**<br><br>_Recommended presentation outline_<br><br>1. _Basis/techniques/model used by ASEAN National Meteorological and Hydrological Services' (NMHSs) to make seasonal predictions._<br>2. _Climate drivers/features of importance for the respective countries._<br>3. **_Monitoring and/or outlook of extremes weather/climate variables, if any._**<br>4. **_Country-level seasonal forecasts for temperature and rainfall for DJF 2018-2019_**.<br><br>    ▪ 12:40 am: Brunei Darussalam Meteorological Department, BDMD (Mrs Marzeti binti Haji Mahadi) |
| 1.00 pm | Lunch |
| 2.00 pm | **Session 2a: (continued) National outlook (DJF 2018-19) from ASEAN National Meteorological and Hydrological (NMHSs) (Chair: Dr. Bing Zhou)**<br><br>    ▪ 2:00 pm: Indonesian Agency for Meteorological, Climatological and Geophysics, BMKG (Dr. Dadang Msbahudin)<br>    ▪ 2:20 pm: Lao PDR (Ms. Khaemeuy Chao, DMH Lao)<br>    ▪ 2:40 pm: European Centre for Medium Range Weather Forecasts, ECMWF (Dr. Laura Ferranti _via SKYPE_)<br>    ▪ 3:00 pm: Malaysian Meteorological Department, MMD (Dr. Ahmad Fairudz B Jamaluddin)<br>    ▪ 3:20 pm: Department of Meteorology and Hydrology Myanmar, DMH (Dr. Myint Myint Aye) |
| 3.40 pm | Break |
| 4.10 pm | **Session 2b: (continued) National outlook (DJF 2018-19) from ASEAN National Meteorological and Hydrological (NMHSs) (Chair: Dr. Yuriy Kuleshov)**<br><br>    ▪ 4:10 pm: Philippine Atmospheric, Geophysical & Astronomical Services Administration, PAGASA (Mr. Junie Ruiz)<br>    ▪ 4:30 pm: Meteorological Service Singapore, MSS (Mr. Tan Wee Leng)<br>    ▪ 4:50 pm: Thai Meteorological Department, TMD (Mr. Chaowat Siwapornchai) |

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| | ▪ 5:10 pm: National Hydro-Meteorological Service of Viet Nam, NHMS (Mr. Nguyen Van Huong) |
| 5.30 pm | Quick Summary/Discussions |
| **30 October 2018 (Tuesday) – ASEANCOF-11 (DAY 2)** | |
| 9.30 am | **Session 3: End-user talks on requirements for seasonal forecasts in applications and requirements for monitoring of extremes (Chair: Dr. Charline Marzin)**<br><br>_Recommended presentation outline_<br><br>1. _Introduction to sectors'/organisations' activities_<br>2. _Requirements for seasonal **outlook and monitoring of extreme weather and climate**_<br>3. _Specific outlook and monitoring products and services that end-users consider useful at the national or regional level_<br>4. _Collaborations with national/regional agencies that provide climate outlook and related information._<br><br>▪ 9:30 am: Hydro and Agro Informatics Institute, HAII (Dr. Surajate Boonya-aroonnet)<br>▪ 10:00 am: International Rice Research Institute, IRRI (Dr. Sridhar Gummadi)<br>▪ 10:30 am: Mekong River Commission (Dr. Cong Nguyen Dinh) |
| 11.00 am | Break |
| 11.30 am | **Session 4: Discussions on/gathering requirements of end-users for monitoring of extremes (Chair: Mr. Raizan Rahmat)** |
| 1.00 pm | Lunch |
| 2.00 pm | Science/activities talk I: _WMO climate monitoring activities including extremes_ (Mr. Peer Hechler, Data Management Applications Division, WMO) |
| 2.30 pm | Science/activities talk II: _SEMDP Objectives and Activities_ (Dr. Toshiyuki Kurino, Space-based Observing System Division, WMO) |
| 3.00 pm | Draft outlook and consensus discussions (NMHSs & GPCs only) (Chair: MMD and ASMC representatives) |
| 4.00 pm | Break |

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| 4.30 pm | Presentation of Consensus Outlook (Chair: MMD and ASMC representatives) |
| 5.00 pm | Summary/Discussions |
| **31 October 2018 (Wednesday) – WMO SEMDP TRAINING (DAY 1)** | |
| 9.30 am<br><br>9.35 am<br><br><br><br><br><br><br><br><br>9.50 am | **Opening Ceremony Session**<br><br>Doa Recitation<br><br>Welcoming Remarks<br>- Mr. Alui Bahari<br>  Director General<br>  Malaysian Meteorological Department<br><br>- Representative<br>  ASEAN Specialised Meteorological Centre<br><br>- Representative<br>  World Meteorological Organization<br><br>Opening Address<br>- Secretary General<br>  Ministry of Energy, Science, Technology, Environment and Climate Change, Malaysia |
| 10.05 am | Group Photo Session followed by Coffee/Tea Break |
| 10.30 am | Introduction to space-based rainfall monitoring and products |
| 11.00 am | Lecture and Practicals: CMORPH by NOAA/NWS/CPC |
| 12.15 am | Lecture and Practicals: GSMaP by JAXA |
| 1.00 pm | Lunch |
| 2.00 pm | Demonstration/exercises: Case Study on "Persistent Heavy Rainfall"<br><br>CASE 1 (2014/Nov-Dec: Singapore, Malaysia, Thailand) |
| 4.00 pm | Break |
| 4.30 pm | (continued) Demonstration/exercises: Case Study on "Persistent Heavy Rainfall"<br><br>CASE 2(2016/Aug: LAO People Democratic Republic) |

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| 6.30 pm | End |
| 8.00 pm | Welcoming Dinner |
| **1 November 2018 (Thursday) – WMO SEMDP TRAINING (DAY 2)** | |
| 9.00 am | General discussions on how to use satellite-derived rainfall estimations for extremes monitoring in operation at national and regional levels/ users requirements for monitoring of extremes |
| 10.45 am | Break |
| 11.15 am | Demonstration/exercises: Case Study on "Drought" <br> CASE3 (2014/JAN-MAR: Singapore, Malaysia, Indonesia) |
| 1.00 pm | Lunch |
| 2.00 pm | Demonstration/exercises: Case Study on "Drought" (cont.) <br> CASE3 (2014/JAN-MAR: Singapore, Malaysia, Indonesia) |
| 3.30 pm - 5.30 pm | Technical Tour |
| **2 November 2018 (Friday) – SG-SEMDP MEETING** | |
| 9.00 am | Reviewing the performance of the SEMDP products |
| 10.30 am | Break |
| 11.00 am | Discussions on possible developments for SEMDP |
| 12.30 pm | Lunch |
| 3.00 pm | Finalising the SEMDP implementation plan |
| 4.30 pm | End |