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What Works Well (www) during COVID19: Shifting to virtual

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Expert Areas

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* Metamaterials

* Electromagnetic Wave & Propagation * Antenna & Wireless Applicationion * Electromagnetic Radiation



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Expert Areas * Astrobiology

- * Organic Geochemically
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MALAYSIA'S NEW OPPORTUNITY

COVID-19 AND THE NEW NORMAL

IT'S TIME TO ADAPT AND EMBRACE THE NEW LANDSCAPE THROUGH STRATEGIC COMMUNICATION

MALAYSIA VS COVID-19



Source: Malaysia Healthcare Travel Council







The public are advised to:

Always adhere to the Movement Control Order (MCO)



Stay at home except for those working in the sectors that are allowed to operate



3

Only leave their homes for important matters (e.g. buying essential items, getting medical treatment) which is allowed during the MCO

Continue practising good personal hygiene habits at all times

5

Continue practising safe social distancing

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Covid-19: Education-TnL (University)

MCO*

- online class after semester start
- university still operate but all staff is WFH (not physically)

CMCO*

- 30% staff at office physically
- class fully online
- all meetings online
- equipment at university can be maintain/repair.

RMCO*

- University can fully operate with 100% capacity
- most of the class still online
- student can come to the university
- viva student online

MODE :

0

- using online platform : GoogleMeet, Microsoft
 - Teams, Zoom
- Discussion via email, Whatsapps, Telegram
- Video call on Whatsapps
- Share content on OneDrive

ADVANTAGES:

- classroom engagement
- students can ask the lecturer via chat
- dynamic learning
- interactive learning
- hybrid seminar, webinar

DISADVANTAGES:

- lecturer and students need to have computer and good internet connection to learn.
- not all region in Malaysia have a good internet connection especially at rural area.
 hybrid seminar, webinar

UKM NETWORK – GISTM AND GPS

GPS Ionospheric Scintillation and TEC Monitor (GISTM) and GPS network

UKM GPS receiver-2003

Geofrequency with geodetic antenna

GISTM - 20101 GISTM owned by UTHM



Magnetic Data Acquisition System (MAGDAS)

Overview

- A global magnetometer network constructed by Kyushu University in collaboration with more than 30 international organizations.
- Observation data are intended for studies on long-term variations, ULF waves, transient and impulsive phenomena (Yumoto & MAGDAS, 2007).

MAGDAS @ Malaysia

 7 stations - Langkawi (LKW, 2006), Sabah (RAN, 2017), Pasir Gudang (JOH, 2017), Banting (BTG, 2016), Kuala Terengganu (TRE, 2017), dan Perak (PER, 2016), Penang (PEN, 2019).



Lightning Measurement System-"Malaysia

Overview

- A setup to capture and identify fast (radiation, MF/LF/VLF) and slow (quasistatic) electromagnetic field emitted by lightning flashes in and surrounding Peninsular Antarctica and Malaysia (Melaka).
- Data is observed to characterize the electrical and occurrence of Cloud-to-Ground (CG), Intra-Cloud (IC) and Narrow Bipolar Event (NBE)
- Measurement system in Malaysia
 UTeM Melaka Station 2.3138°N, 102.3211°E





Covid-19: Research on Space Weather (University)

SWx Equipments over Malaysia



Covid-19: Research and Operation on Space Weather (University & MySA) [RESEARCH]







Data uploaded continuously & processed locally

Data acquired/shared online





Discussion done online





Limited interactivity, productivity reduce

Limited trained people for repairment Disruption on timeline



Incompatible computer for processing at site

Conferences postponed/ moved online - AOSWA



LESSON LEARNED

Shifting to virtual

PIC training

A Internet connection

Data

sharing

Software compatibility



Help from others

- series seminar on space weather between AOSWA members –knowledge, data processing
- student attachment at university outside of Malaysia? Can be guided online?
- how to transfer data near real time to the server in University
- data sharing online, easy to be access between the applicants and data owner

Acknowledgment

#AOSWA team #TEAM MAGDAS UKM #TEAM LMS UKM+UTEM #MYSA



THANK YOU



