

HISTORY & FUTURE: REMOTE SENSING & TELEMETRY IN MALAYSIA

Remote sensing (RS) begins with photography, in which the origin can be traced to World War II with the development of radar, sonar and thermal infrared detection systems.

In Malaysia, there is a ministry department established in August 1988 which is responsible for remote sensing under the Malaysian Ministry of Science, Technology and Innovation. That is, the Malaysian Remote Sensing Agency (Agensi Remote Sensing Malaysia), MRSA. On 20 February 2019, Malaysian cabinet has approved the merging of MRSA and National Space Agency (ANGKASA). With this approval, the Malaysian Space Agency (MYSA) is established.

MRSA offer two main programme that is, the Research & Development (R&D) programme which involves research on remote sensing, GIS and related technology applications in the field of agriculture, natural resources, environment, disaster and national security. It includes also the application in the management of land development. R&D of MRSA focuses on spatial data analysis and GIS modelling, computer system and sensors and provide technical advice on the use of remote sensing technology in the country. Another programme in MRSA is the technical services programme which focused on maintaining the operation and services of MRSA as a one stop center in the remote sensing technology.

Generally, the R&D activities of remote sensing in Malaysia has started in the late 1980's. The R&D activities were undertaken by universities, research institutes and government departments. Most of the R&D works are focusing on land and sea applications.

A Malaysia Space Exploration (Malaysia Space-X) 2030 blueprint under the Ministry of Science, Technology and Innovation (Mosti) is currently under development. This blueprint is to drive the growth and create a sustainable national space sector ecosystem. This blueprint outlines a 10-year strategy which have four major initiatives including the remote sensing satellite development programme. It is also expected that as of 2022, the Malaysian remote sensing satellite will be launched within next two years.

Although the Technology Development of Remote Sensing Space Technology in Malaysia can be considered successful, it must be noted that the future of Space Remote Sensing is seriously threatened until a clear way is figured out to incorporate RS into the economy. As of today, a lot of private industry has emerged to bring this Remote Sensing technology into Malaysia, for example, Sky-Shine Corporation, Aerodyne and Redtone Berhad, which one of their focuses are on precision agriculture to modernize Malaysian farming sector. Apart from the main industry, RS and GIS are gaining increasing prominence in academia with the geospatial subjects are to be offered as part of the curriculum in agriculture engineering, economy, forestry and environmental science, to name a few. The state governments in Malaysia also are to use this technology for environmental monitoring, illegal logging and et cetera which is a sign of a greater use in the future.