1st Quarterly Report

Geological and Hydrogeological Investigations in West Malaysia

Investigation No. 29830

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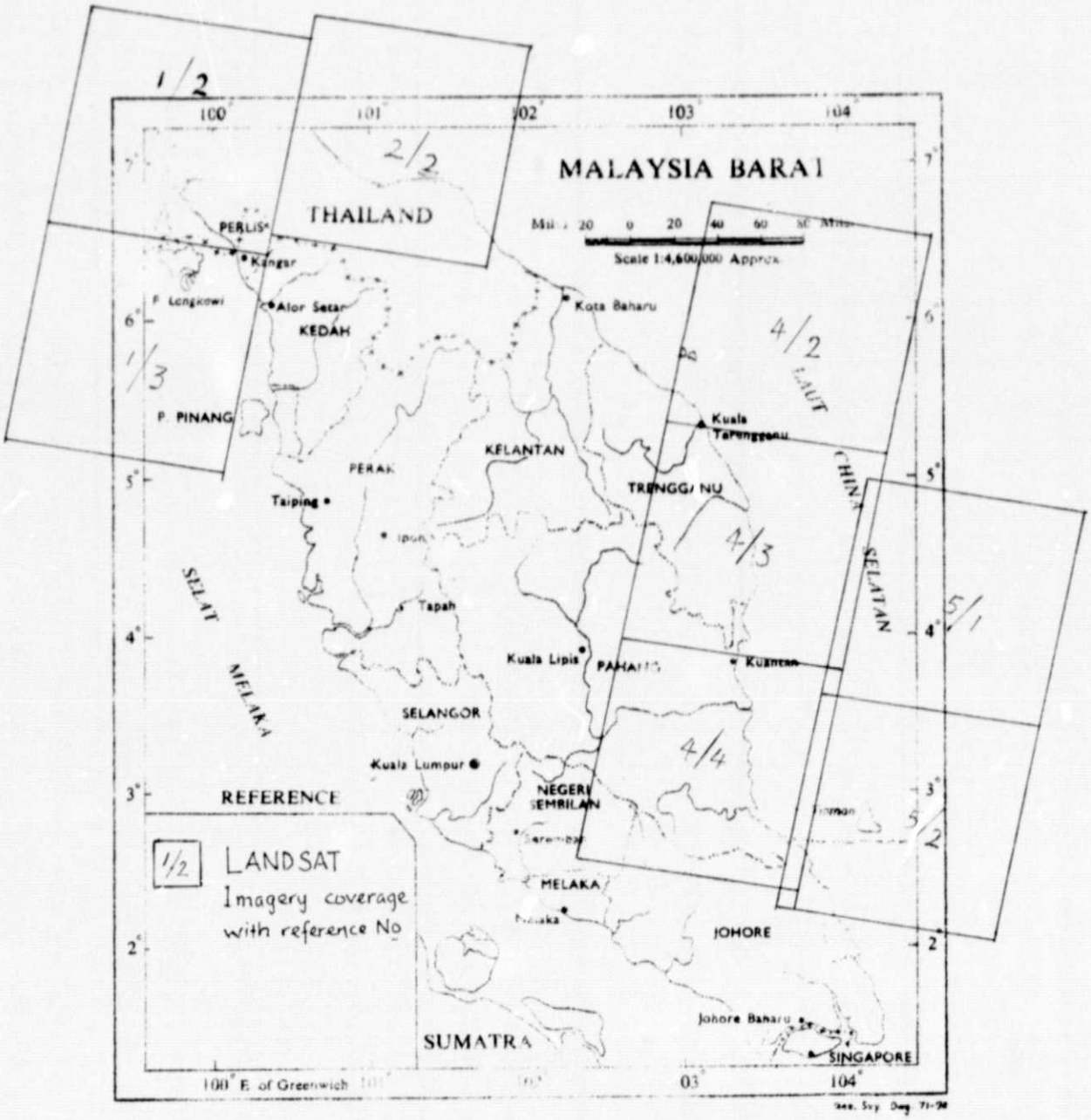
Figure 1 LANDSAT-2 COVERAGE



Imagery Received

Within the period covering the months of April, May and June, 1976, three batches of LANDSAT-2 data products were received. Till the date of writing this report, no new data was received.

In all 9 sets of imagery covering 8 scenes were received. Each set of imagery consists of 9 x 9 inches black & white positive print and 2.2 x 2.2 inches positive transparency of bands 4, 5, 6 and 7.

The following are details of the MSS products received:-

Fig. 1 Scene No.	Photo ID No.	Date received	Area	Products
1/2	824330252450000	4.6.76	Hatyai, Southern Thailand.	MSS band 4, 5, 6 & 7 9" x 9" positive print, 2.2" x 2.2"positive transparency
1/3	824330253150000	4.6.76	Langkawi Islands Malaysia	"
2/2	824320247050000	17.6.76	Pattani, Southern Thailand.	"
4/2	824300236050000 824480235350000	17.6.76 17.6.76	Northeast Trengganu Malaysia	"
4/3	824480235550000	17.6.76	Southern Trengganu Malaysia	"
4/4	824480236250000	17.6.76	Southeast Pahang Malaysia	"
5/1	824110231250000	23.4.76	South China Sea	"
5/2	824110231450000	23.4.76	Tioman Island Malaysia	"

First Look Evaluation

Scene No. 1/2 : This is an excellent imagery with less than 10% cloud cover of the Hatyai area of Southern Thailand. Only a small portion of Northern Perlis State of Malaysia is included. Because the area is outside Malaysia the imagery commands the lowest priority for evaluation.

Scene No. 1/3 : This is a good imagery of the Langkawi Islands of Malaysia. The geology is complex and of mainly lower Palaeozoic rocks. It is unfortunate that only the islands are covered which are of limited areal extent and subsequently large scale features are absent.

Scene No. 2/2 : This is another excellent imagery with less than 10% cloud cover of the Pattani area of Southern Thailand. Since there is no Malaysian territory involved the imagery commands the lowest priority for evaluation.

Scene No. 4/2 : This scene was covered twice, once in 27.3.76 and another in 14.4.76. In the earlier take high cloud cover obscure most of the land features while the following one is almost cloud free and is excellent for geologic interpretation. The scene covers a small portion of Northeastern Trengganu State around the state capital, Kuala Trengganu, and the Redang Island offshore.

Scene No. 4/3 : This scene covers most of southern Trengganu State and a small portion of Pahang State. Cloud cover is about 15% but resolution over most of Trengganu is good. Band 6 and 7 are excellent for geologic interpretation.

Scene No. 4/4 : This scene covers the whole of southeast Pahang State, the location of the largest and most ambitious land development scheme. With 40% cloud cover only part of the geology is seen. It is also possible to delineate the coastal belt where the raised beaches are located. Some of the larger faults are discernible.

Scene No. 5/1 : This scene is entirely in the South China Sea.

Scene No. 5/2 : This scene covers the northeast coastline of the Johor State including the Tioman Island offshore. Unfortunately the land area has very high cloud cover, up to 70%. As such the imagery is unsuitable for interpretation.

Techniques

The imagery products used for interpretation are MSS band 4, 5, 6 & 7 in the form of 9 x 9" black and white prints and 70 mm positive transparencies.

To analyse the 9 x 9" prints simple aerial photo interpretation techniques will be followed. These include using stereoscope, zoom microscope and ronchi grating. A zoom transfer scope will be used to transfer information from photo to data base.

With the 70 mm products a multi-band additive viewer will be purchased next year for false colour analysis. This equipment should increase tremendously the scope of the investigation.

Accomplishment

Structural analysis of some of the imagery has begun and it is hoped that some tangible results will be forthcoming in the 2nd Quarterly Report.