[Press Release]

Announcing Research to Improve Paddy Field Management in Indonesia alongside Indonesia's National Space Agency (LAPAN)

On October 16th last year, PASCO CORPORATION (Tokyo, President and CEO: Dr. Hideki Shimamura; hereinafter "PASCO") and Indonesia's National Space Agency (LAPAN: Lambaga Penerbangan dan Antariksa Nasional)※1 agreed to cooperation for the development of a national satellite data platform system (ReDaNo System)※2 for Indonesia. As a part of this agreement, PASCO and LAPAN begin research for the usage of satellite data to improve paddy field management.

Indonesia is highly keen to improve the efficiency and accuracy of data concerning paddy field ownership and taxable land. Indonesian paddy fields, of which over 60% are located in the mountainous regions, and inland aquacultures have made it difficult to manage paddy fields using traditional surveying techniques.

(left) Indonesian paddy fields / (right) Aquacultures in Indonesia

By utilizing higher resolution satellite imagery and PASCO's Artificial Intelligence (AI) technology, it is possible to extract the locations of paddy fields automatically and perform accurate estimations. This application of AI and satellite imagery usage will aim at periodic monitoring of the paddy fields. PASCO will adapt its AI technology that has demonstrated significant results in Japan to the Indonesian environment.
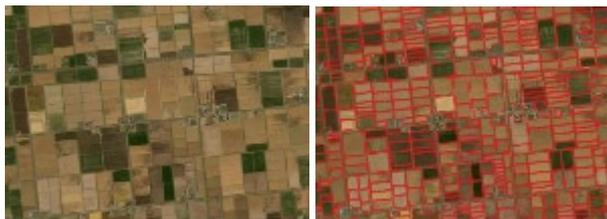
AI extraction of paddy fields
・(left) Satellite imagery
・(right) Extraction of paddy fields utilizing AI in red

The results of the current research will be utilized in updating Indonesian paddy field maps, planning waterways, and performing paddy field management more efficiently.

（※1）LAPAN, established in 1963, provides data obtained from the satellites to various governmental and non-governmental entities within Indonesia

A cooperative workshop was organized between PASCO and LAPAN concerning the utilization of Japanese satellite imagery
(10th October 2019, Jakarta)

（※2）Regional Data Node (ReDaNo) system is a data platform system that LAPAN has begun developing which provides Indonesian and other Southeast Asian governments with data from satellites at near real-time, concerning natural hazards, sea level rise and illegal maritime activity

■Related information

October 17, 2018

PASCO and LAPAN signed cooperation agreement to promote the utilization of Earth Observation Satellite Data in ASEAN Region

https://www.pasco.co.jp/eng/newsrelease/PPR20181017E.html

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