

■ Opening ceremony held for VHF radar installed in Chumphon, Thailand

The NICT Space Environment Laboratory installed a VHF radar in Chumphon City, Thailand under joint research with King Mongkut's Institute of Technology Ladkrabang (KMITL) in Thailand, and held the opening ceremony on January 17, 2020.

This radar was installed to observe a phenomenon called plasma bubble that occurs in the electrically charged atmosphere (ionosphere) located at an altitude of 60-1000 km. Plasma bubbles occur near the equator of the magnetic field (magnetic equator) after sunset, and have the property of moving eastward while rapidly growing in the north-south direction. The northern end of a large-scale plasma bubble may reach Japan. Radio waves passing near the plasma bubble are delayed or disturbed. Then, the accuracy of satellite positioning may decrease, or satellite communication/positioning may not be available. Therefore, continuous observation of plasma bubbles and prediction of their occurrence have been required. It is expected that the installation of this radar will enable continuous observation of plasma bubbles and contribute to the expansion of the use of high-precision satellite positioning in the fields of agriculture and construction.

At the ceremony, Mr. Wattanachai Pongnak, Vice President of KMITL, made a welcome speech, followed by a congratulatory speech by President NICT Tokuda. In addition, congratulations were received from Mayor Wiboon Rattanapornwong, Chumphon, and Secretary Ueno of the Embassy of Japan in Thailand. After that, with the introduction of Researcher Hozumi of the NICT Space Environment Laboratory, we projected a making video of the completion of the radar. Finally, a guest was cut off by a guest of honor and related parties, followed by a tour of the radar site to close the event.

Many media from Thailand and abroad attended the ceremony, and was interviewed by NHK Asia and Jiji Press. It was broadcast on NHK WORLD English.



Tape cut



Group photo



Pongnak, Vice President of KMITL



Tokuda, NICT President



Rattanapornwong, Chumphon mayor



Ueno, Embassy of Japan



Ms Hozumi, NICT



Radar site visit



VHF radar