## Kyoto and Carbon Project - Kyoto and Carbon Initiative project - wall to wall monitoring of the global forest using the ALOS/PALSAR

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JAXA's forest monitoring project, "Kyoto and Carbon Initiatives," intends to observe the forest cover and cover change using the Spaceborne Synthetic aperture radar globally, densely, and high-temporally. JAXA started the project around the year 2000 collaborating with the world 20-forest research institutes with the mission goals of understanding the forest distribution and its annual change, wetland distribution and its annual change, desert and its change from the analysis of the L-band SAR.

In this project, we will use the L-band synthetic aperture radar (PALSAR) of the Advanced Land Observing satellite (ALOS), which is a high resolution imaging radar operating with L band frequency signal and which is now in operational from May 2006. PALSAR is sensitive to the signal reflection from the forest and non-forest area. Signal difference between two seasons and its annual will be utilized to detect the change of the forest and the related target. The target area will be the three big rain forests in Amazon, South East Asia, Central Africa, and the boreal forest of the North Canada, Alaska, and Eurasian continent. The monitoring results will be open to the public.