

Synthetic Aperture Radar (SAR) generates a variety of radar images. SAR is the future of the geospatial industry, especially for environmental monitoring.

Unlike optical sensors on satellites, SAR can generate images at night, as well as through clouds, rain, fog, and dust. Longer radar frequencies used for SAR allow the sensor to penetrate features that optical sensors cannot "see through." Thus SAR can penetrate vegetation, snow, and even dirt to image features otherwise hidden and unobservable with optical technology.

SAR is the perfect technology to monitor tropical biomass because clouds, rain and night-time darkness are not issues. SAR now is the primary tool for monitoring reforestation and deforestation. SAR is also the best tool for the audit and assurance of biomass carbon-trading markets.