



(GOSAT "IBUKI" launched
on January 23, 2009)

Science-based methodologies for MRV System

⇒ Constellation of ground-based, ship-borne, air-borne, and satellite-based measurements

Satellite measurements for MRV

Measuring

- ✓ Carbon Stock Estimation
e.g.) LANDSAT (TM, OLI, TIRS),
ALOS (PALSAR)

Reporting

Verification

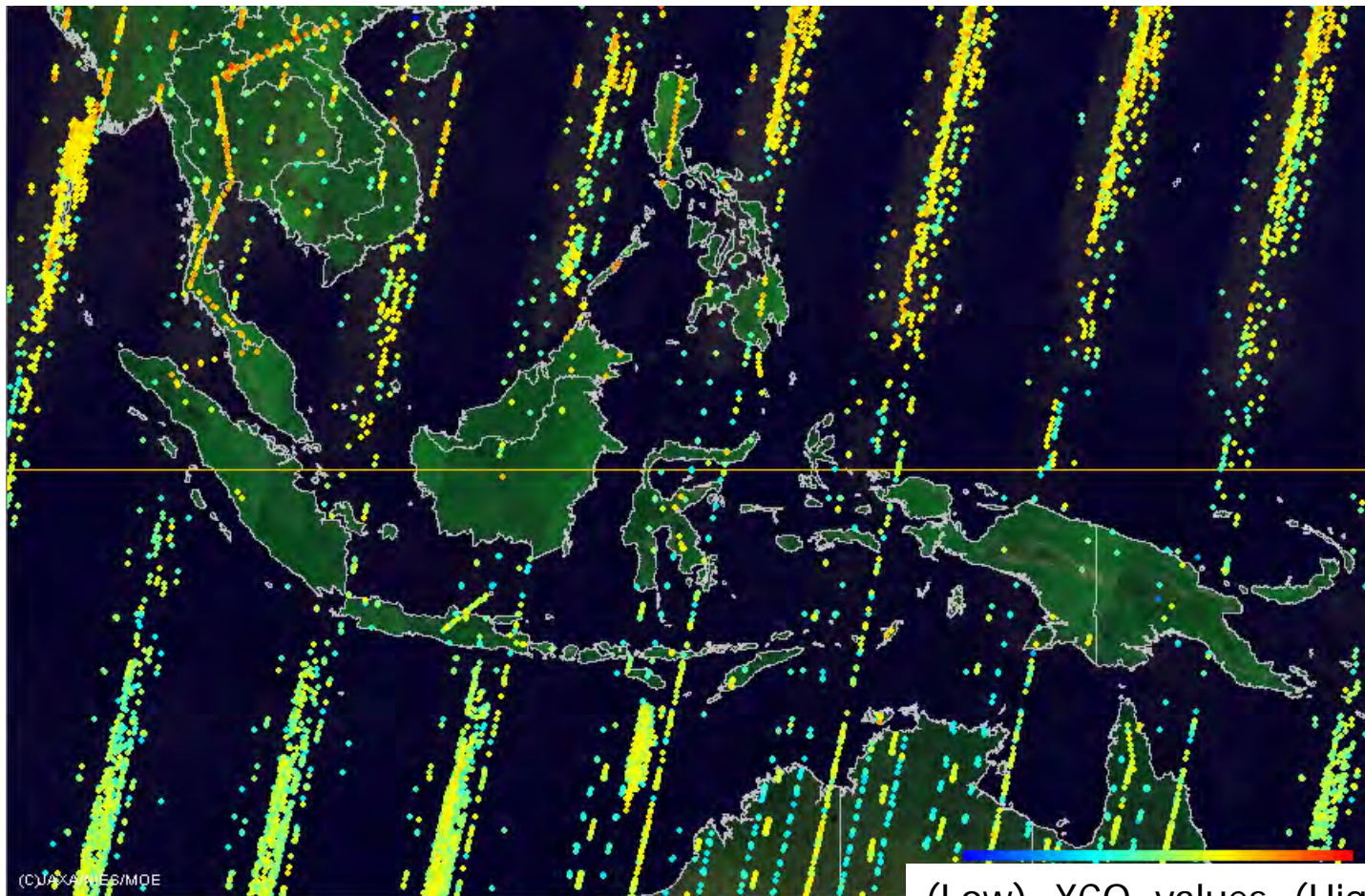
- ✓ GHG concentration, variation, and Large-Point-Source Estimation
e.g.) GOSAT (TANSO-FTS): $x\text{CO}_2$, $x\text{CH}_4$

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GOSAT Observation Results

Over Tropical South-East Asia

(GOSAT measurement locations over Tropical SE Asia during 2009.6-2015.5)

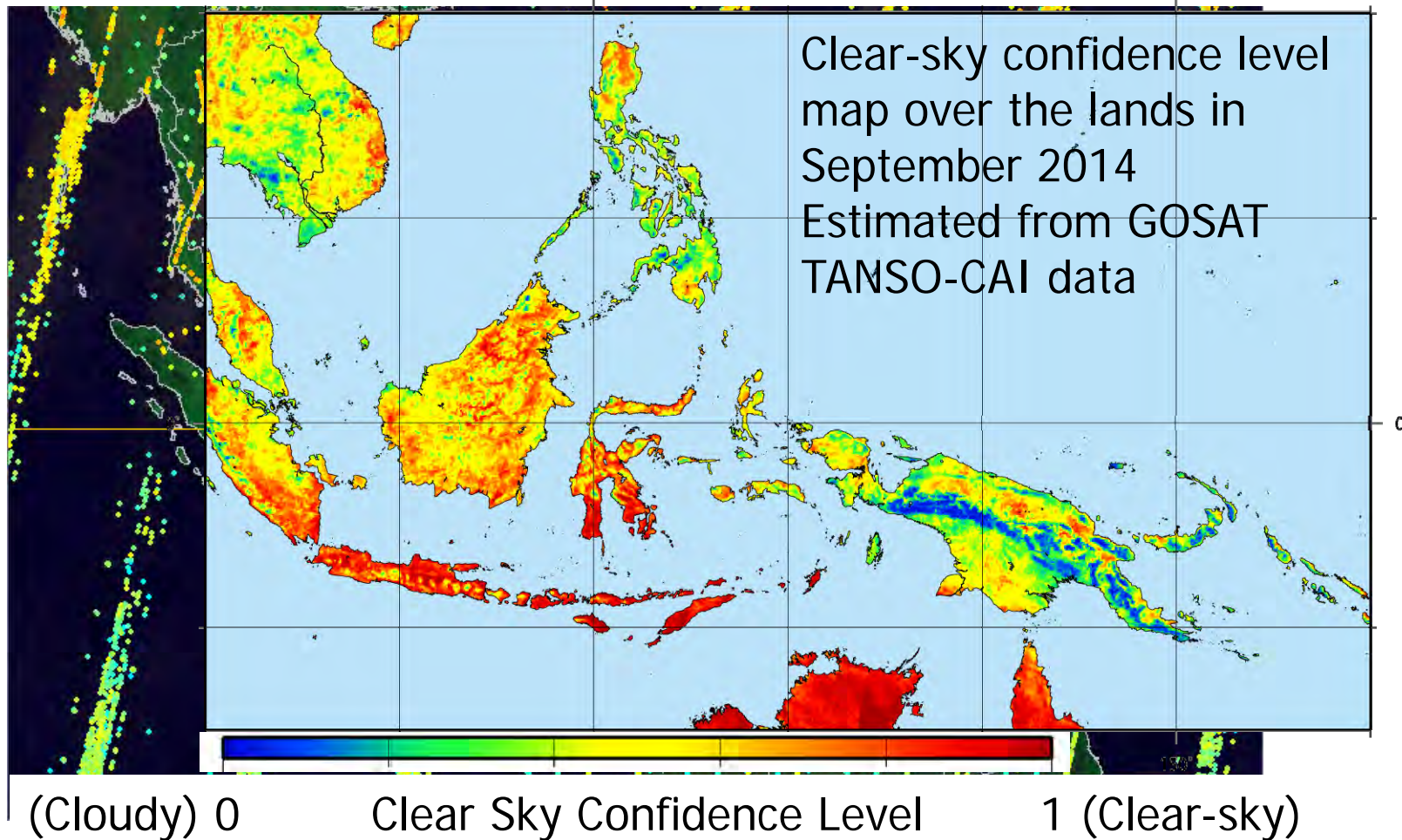


(Low) XCO₂ values (High)

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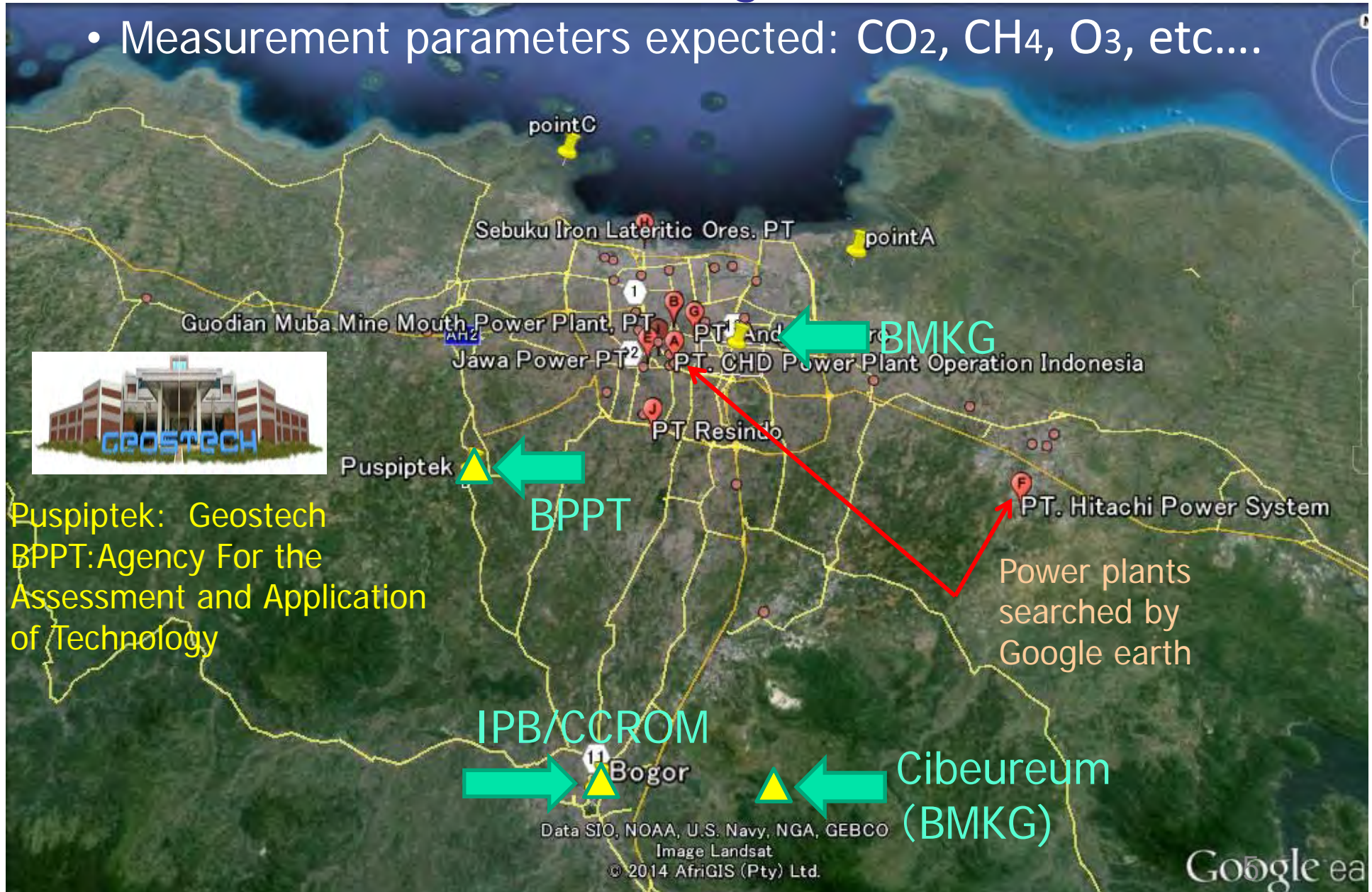


Test Case : Application of GOSAT Data - Outputs from 50-km Resolution Model Optimized by GOSAT data –

- Anomaly of CO₂ uptake among the years can be detected by a flux estimation model (BEAMS) of 50 km resolution with optimized regional biomass estimates using GOSAT data

Plan of Ground-based Measurements: 3 sites in/around Bogor, Indonesia

- Measurement parameters expected: CO₂, CH₄, O₃, etc....



Puspiptek: Geostech
BPPT: Agency For the
Assessment and Application
of Technology