1.244 NICT priorities for observing the anthropocene from space .

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Abstract:

 Air quality in the atmosphere is strongly related with human health. The aim of NICT project is to provide a robust prediction system of air quality over Japan with km-class spatial resolution using satellite-based spectroscopic observation for atmospheric compositions, such as short-lived climate pollutant (SLCP), and NO2. The system is assumed to use for health care, such as health tourism, by company and policy makers. Currently, we are developing 1. a forecasting modeling system including PM2.5, oxidants (tropospheric ozone), NOx, SOx and so on with multi-modal area systems to realize both high- spatial resolution over Japan and wide coverage of Asian/global scales, since significant pollutions are coming from cross-border transport from the continent. 2. Health impact estimation using hospital data and air-quality data. 3. Feasibility study for satellite senser to observe these air quality species with 1 or 2 km order spatial resolution. I will introduce overview, target, current status in detail in the presentation.