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Greenhouse Gas Analyzing Platform using Ground Sites, Aircraft, Ships, and Satellite-based Data: Japan's Contribution to the Paris Agreement

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Asia, as one of the world's largest greenhouse gas (GHG) emitters, has a responsibility to play an important role to turn the goals of Paris Agreement into reality. Urgent needs in Earth observations for GHGs are to reduce uncertainties in their source and sink estimations and to identify current knowledge gaps and requirement for further international collaboration. Estimating anthropogenic and natural emissions based on observations for GHGs has a great potential for providing additional sources of information that can support estimating the impacts of mitigation actions. Discussions will be focused on current status and challenges from Japan's relevant GHG observation and analysis to improve up-to-date analysis systems and data coverage particularly in Asia–Oceania for better estimation of the distribution of anthropogenic and natural sinks and sources with sufficient accuracy.