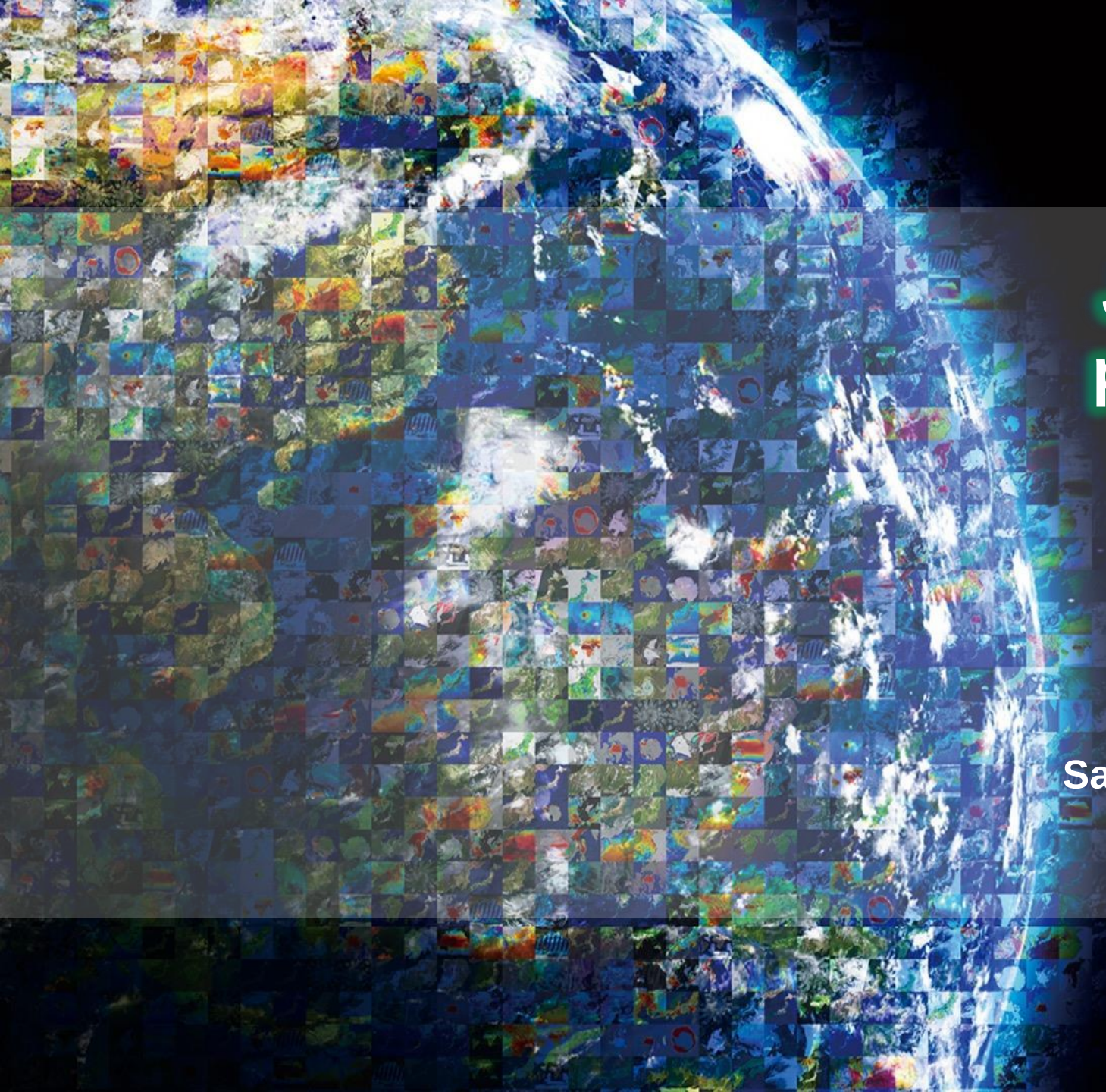


Japan’s experiences of producing SDG indicator 15.4.2

Osamu Ochiai

Satellite Applications and Operation Center

JAXA

Co-chair of GEO EO4SDG Initiative

Earth Observation's Role in SDGs

The 2030 Agenda for Sustainable Development stressed the importance of Geospatial Information and Earth Observations (including satellite observations) to assess the progress of SDG implementation.

Transforming our world: the 2030 Agenda for Sustainable Development, 2015

Follow-up and review

76. We will support developing countries, particularly African countries, LDCs, SIDS and LLDCs, in strengthening the capacity of national statistical offices and data systems to ensure access to high-quality, timely, reliable and disaggregated data. We will promote transparent and accountable scaling-up of appropriate public-private cooperation to exploit the contribution to be made by a wide range of data, including earth observation and geo-spatial information, while ensuring national ownership in supporting and tracking progress.

History of EO contribution to the Roadmap

2015

Transforming our world: the 2030 Agenda for Sustainable Development, 2015

The Group on Earth Observation (GEO) set a priority of engaging with SDGs

2016

JAXA, together NASA and ESA, participate the WGGI as Earth Observation and Geospatial Data experts

Government of Japan (GOJ) established "SDGs Promotion Headquarters"

2017

Japan(JAXA), together with US(NASA) and Mexico(INEGI), co-lead EO4SDG Initiative in GEO

⋮

2020

Provide EO4SDG consolidated inputs to the WGGI Roadmap development

Ministry of Internal Affairs and Comm. (MIC: Japan NSO) forms a Working Group to validate SDG Indicators – 15.4.2 (MGCI) indicator to compute and validate with EO and GI data in Japan (as initial step)

2021

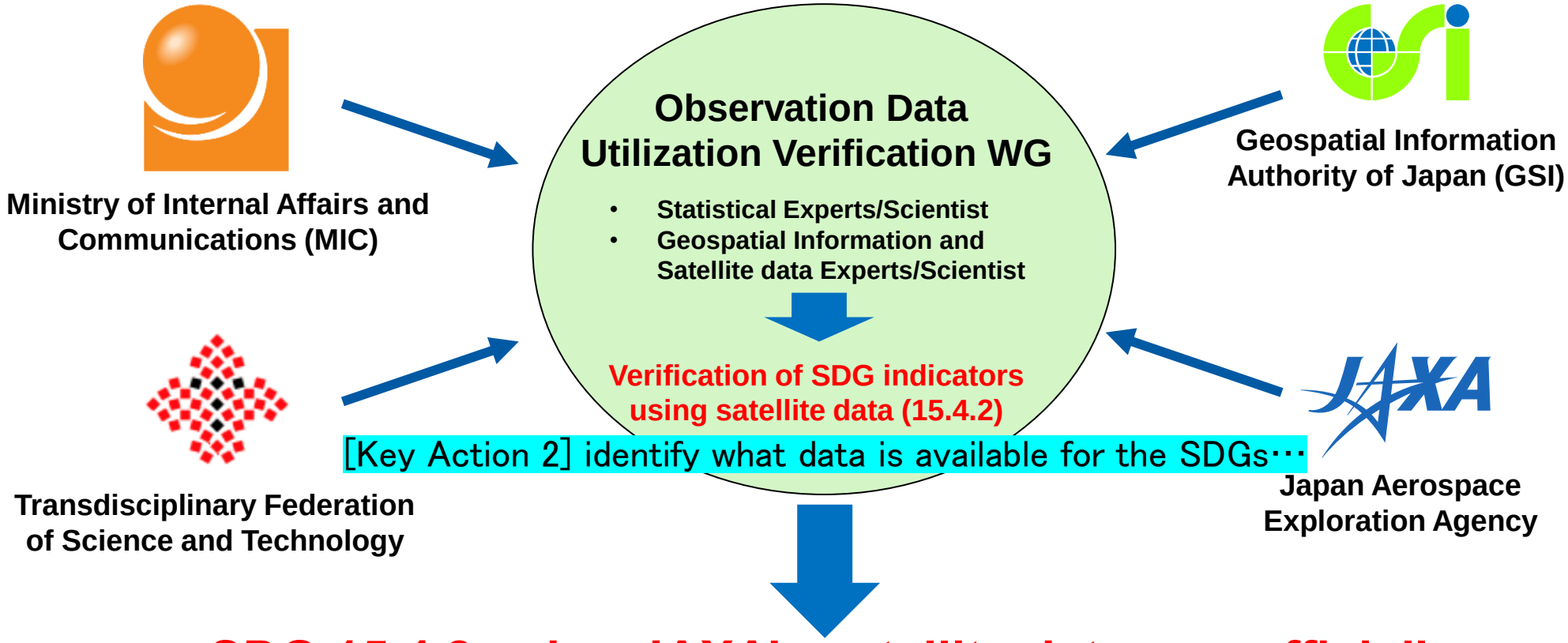
Launch of the "Earth Observation Toolkit for Sustainable Cities and Human Settlements"

National validation result of 15.4.2 published both detail report and StoryMap

Roadmap Phase 1 “Prepare and Plan”

[Key Action 1] form a National SDGs Committee to help coordinate the production of the SDGs.

“Industry-Government-Academia Partnership Meeting for Promotion of the Use of Big Data”, Ministry of Internal Affairs and Communications (MIC)



[Key Action 2] identify what data is available for the SDGs…

SDG 15.4.2 using JAXA’s satellite data was officially published as Japanese SDG national indicator

[Key Action 3,4] To be assessed in future

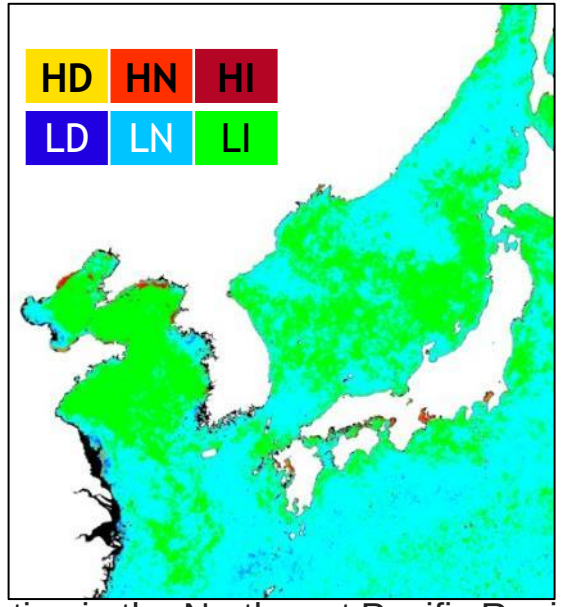
Roadmap Phase 2 “Design, Development and Testing”

[Key Action 1,2]
1. Identify key sources to prioritize data needs.
2. Prioritise Focus Indicators based on national circumstances and priorities.

JAXA has assessed the use of Earth observation data for SDG Indicators based on availabilities of data and methodology;

6.6.1 Spatial extent of water-related ecosystems
9.1.1 Rural population within 2km distance from all-season roads
11.3.1 Land consumption per population growth
11.7.1 Share of built-up area of cities that is open space for public uses
14.1.1 Coastal eutrophication
15.1.1 Forest areas as a proportion of total land area
15.3.1 Proportion of degraded land per total land
15.4.2 Mountain Green Cover Index

SDG6.6.1 platform by UNEP showing Bangladesh mangrove data



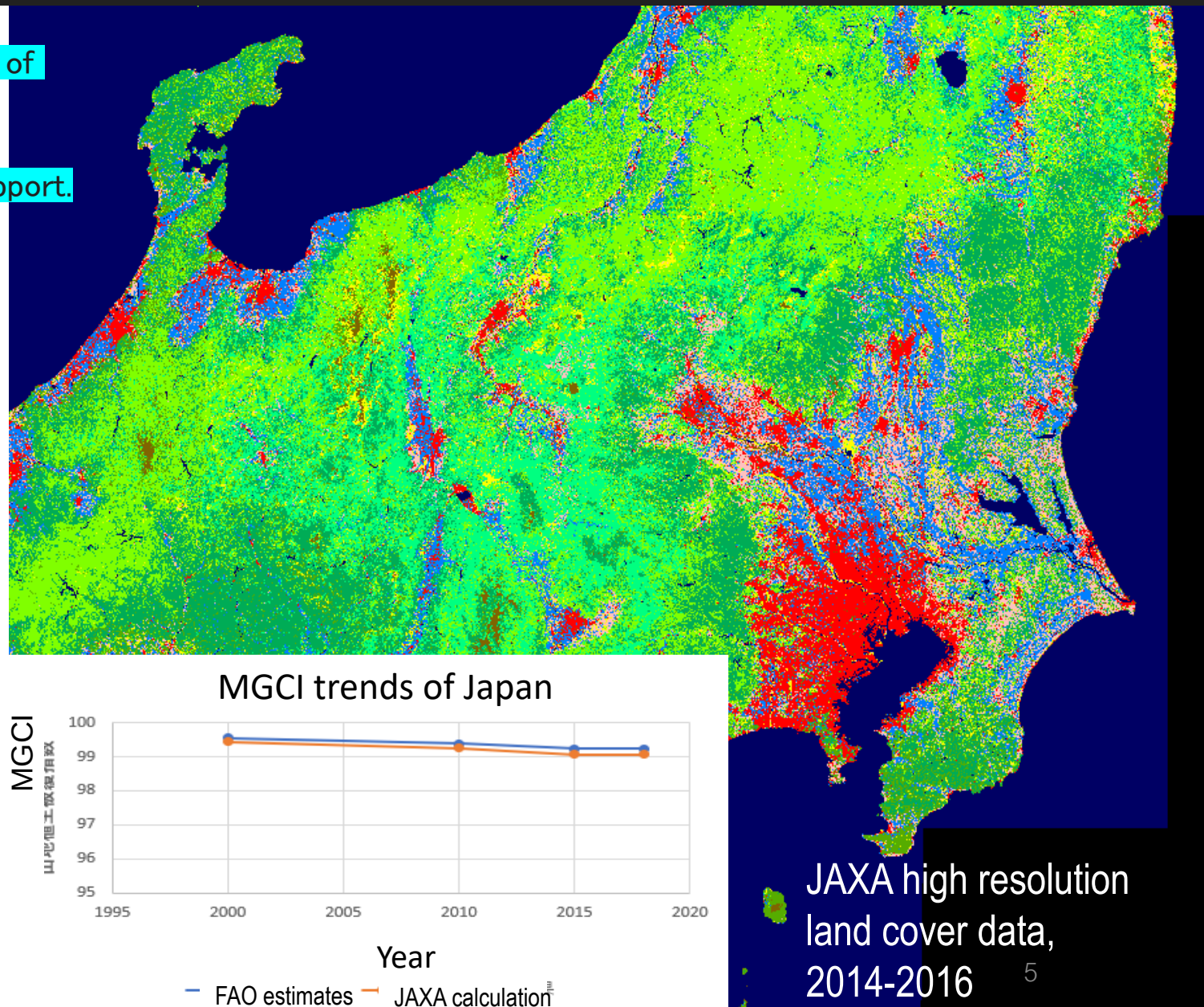
SDG14.1.1
Assessment of eutrophication in the Northwest Pacific Region
Terauchi et al 2018

Roadmap Phase 2 “Design, Development and Testing”

[Key Action 3,4]
3. Commit to convening workshops to promote the sharing of knowledge and experiences.
4. Convene workshops with SDG Custodians to confirm appropriate data, methods and coordinate development support.

15.4.2 Validation Results:

- ✓ The higher resolution and locally optimized national datasets are valuable for verification of SDG 15.4.2 MGCI in Japan, which has small geographic area and complex land use and topography.
- ✓ Reflection to the metadata revision of categorizing e.g., wetland into Green.
- ✓ Japan participates to the FAO Task Team on 15.4.2 indicator refinement



Roadmap Phase 2 “Design, Development and Testing”

[Key Action 5]. Collaborate with regional and global entities to leverage available capacity.

1. **Introduction** by co-chairs
2. **Presentation #1**: The latest discussion of SDG Indicators and the expectation for EO (MIC/Japan)
3. **Presentation #2**: SDGs progress report by Asia Pacific countries (ESCAP)
4. **Presentation #3**: The latest activities of EO4SDG Initiative (EO4SDG)
5. **Q&A** on the 3 presentations
6. **Panel Discussion** on country cases (Malaysia, Mongol and Fiji) in applying EO data, moderated by the co-chairs
7. **Wrap-up and closing** by co-chairs

Roadmap Phase 3 “Producing, measuring, monitoring and reporting geospatially enabled SDG indicators”

Japan SDGs Action Platform

Validation Report

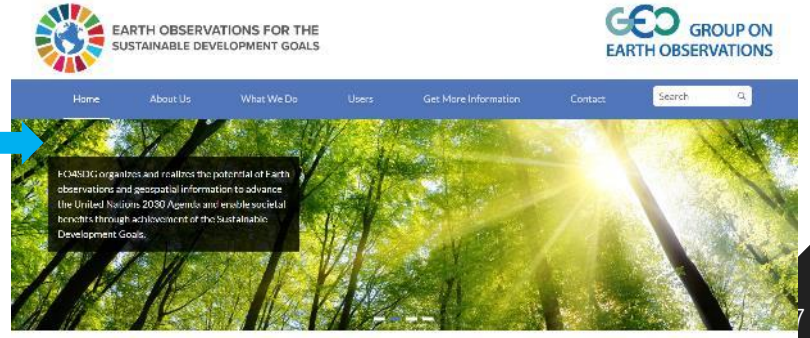
MGCI

StoryMap – Japan’s Experiences 15.4.2

SDGs GEOSPATIAL ROADMAP

StoryMap – FAO15.4.2

EO4SDG Website



Why satellite data utilization for SDGs indicators?

United Nations

- Data innovation
  (Combination use of geospatial information and satellite data)
- Promotion and progress management of SDGs
- Validation and accuracy improvement of global statistics

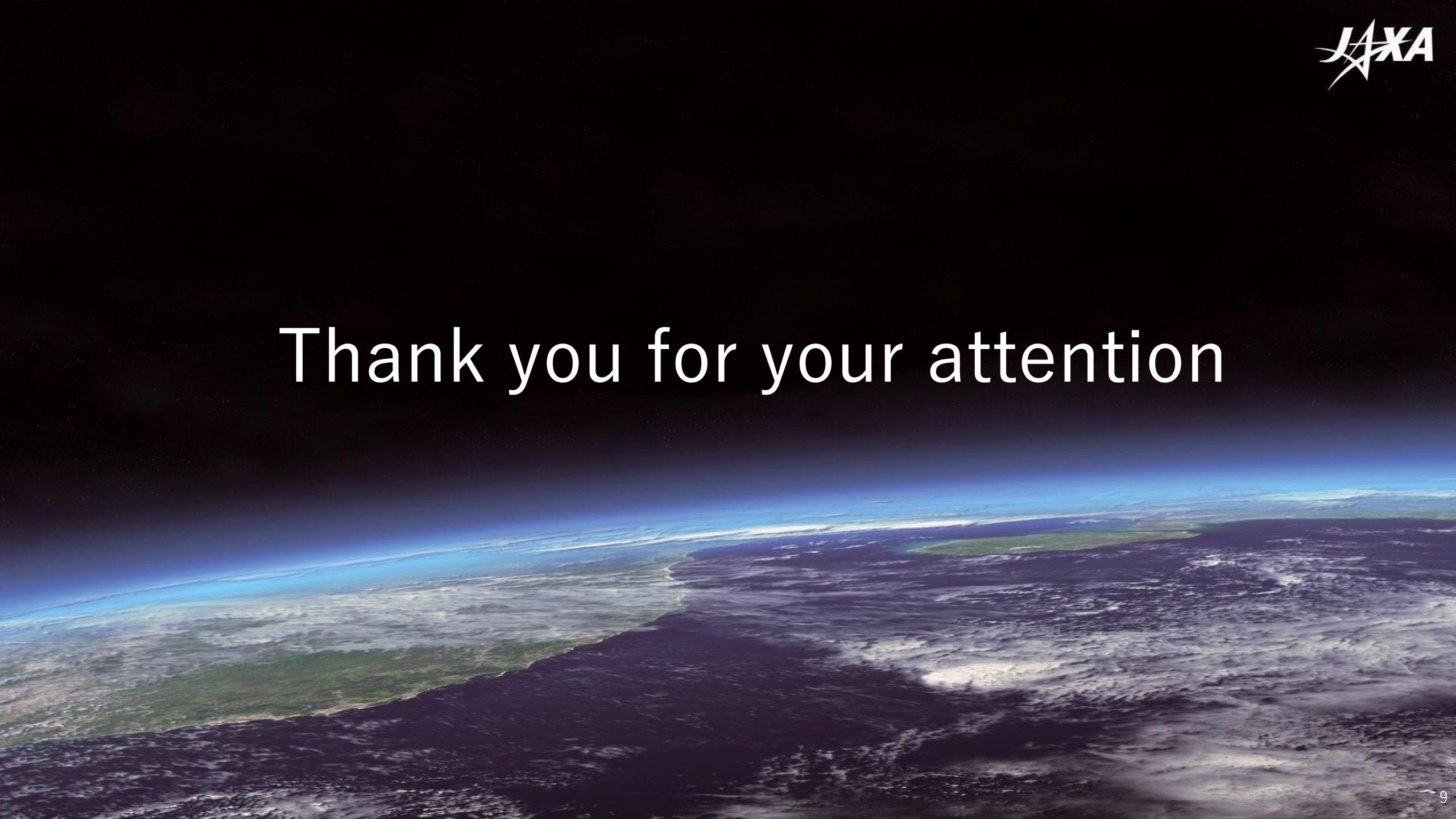
National Statistics Office (NSO)

- Production and report of SDG national indicators
- Update of national statistical information system
- Improving the efficiency of national statistical data production
  (shortening the statistical update cycle and reducing costs)

Space Agency

- Expansion of satellite data application fields (satellite data for statistics)
- Cooperation with the United Nations and national statistical offices
- Validation and accuracy improvement of satellite data

SDGs are opportunities for integrating statistical information, geospatial information and earth observation data


Thank you for your attention