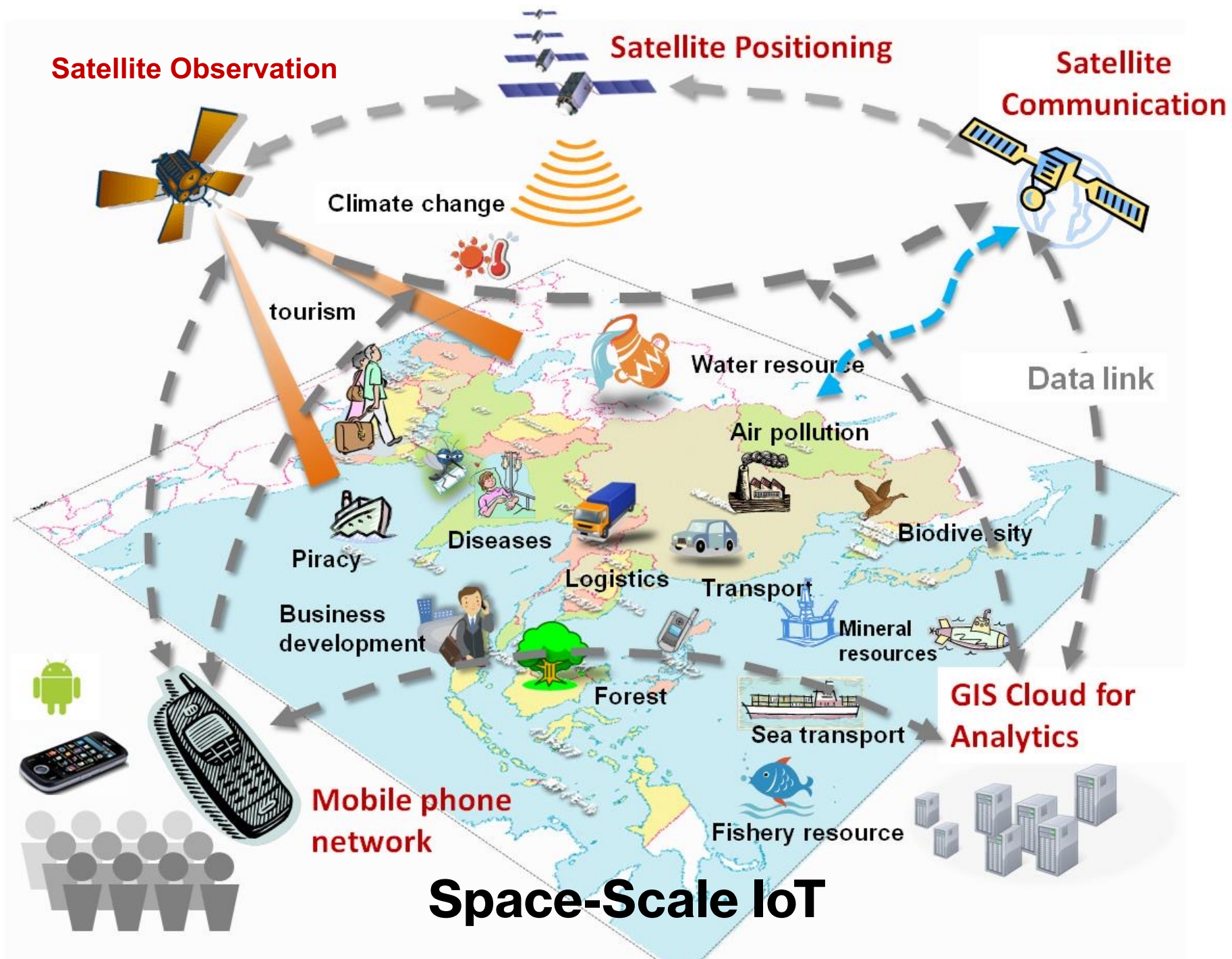

Naohiko KOHTAKE, Ph.D. PMP.

Professor, Graduate School of System Design and Management, Keio University
President, Space Service Innovation Laboratory Inc.







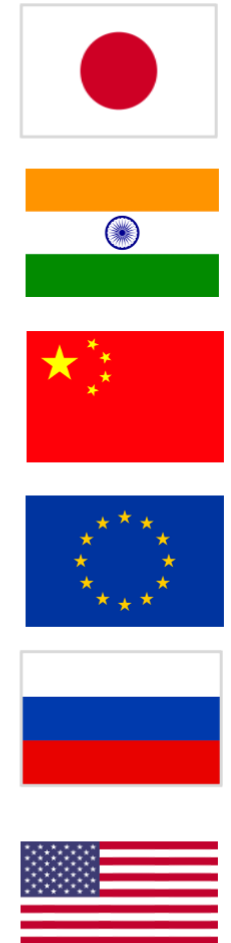
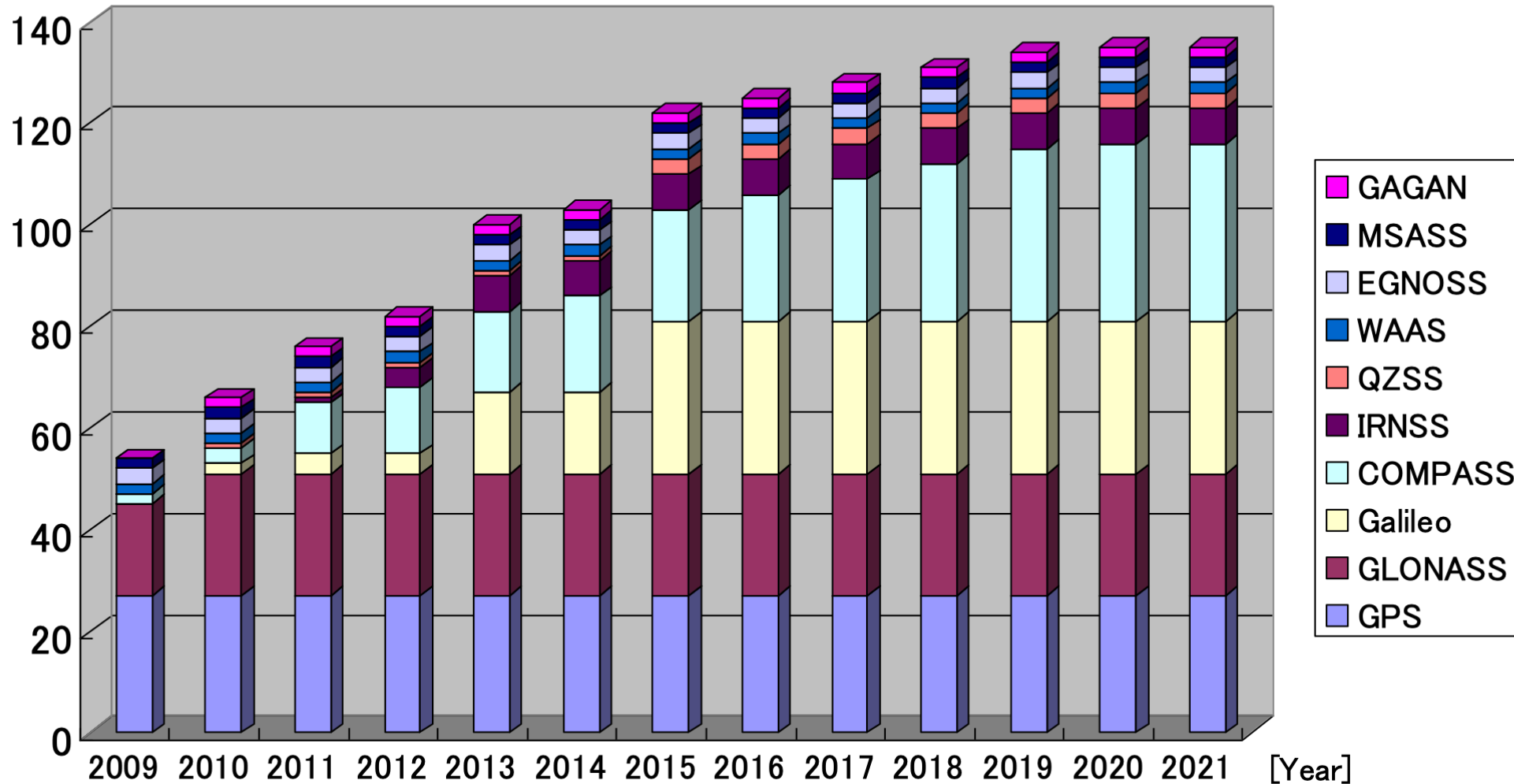


Digitalyst



GPS to Multi-GNSS

[Number of Positioning Satellites]





2020/11/23 13:55:00



14:25:28.800

- 1:4.84
- 3:9.03
- 5:14.14
- 6:9.31
- 8:6.76
- 9:2.34
- 10:4.47
- 11:4.20
- 12:3.15
- 13:3.15
- 14:1.15
- 15:12.94



軌跡

Save

Player

Tag

検索範囲 (分)

00:00:00 - 02:30:00 ▼

タグ1

Opposition ▼ +

Opposition Attack I ▼

Search

Display

- ☐ 全選択
- ☐ 00:00:30~00:01:07
Opposition Attack
From:General Kick
Reception #1
- ☐ 00:18:22~00:19:17
Opposition Attack
From:General Kick
Reception #2
- ☐ 00:29:08~00:29:16
Opposition Attack
From:General Kick
Reception #3
- ☐ 00:32:29~00:32:42
Opposition Attack
From:General Kick
Reception #4
- ☐ 00:36:15~00:36:54
Opposition Attack
From:General Kick
Reception #5

Benefits of GNSS Data in Sports Training

1. Facilitating Communication among Players, Coaches, and Managers
2. Preventing Injury Accidents
3. Achieving Appropriate Condition Management.
4. Delivering Effective Personal Coaching
5. Strategy Development, Implementation and Evaluation

Japan to APAC





Sports Training to Sports Education



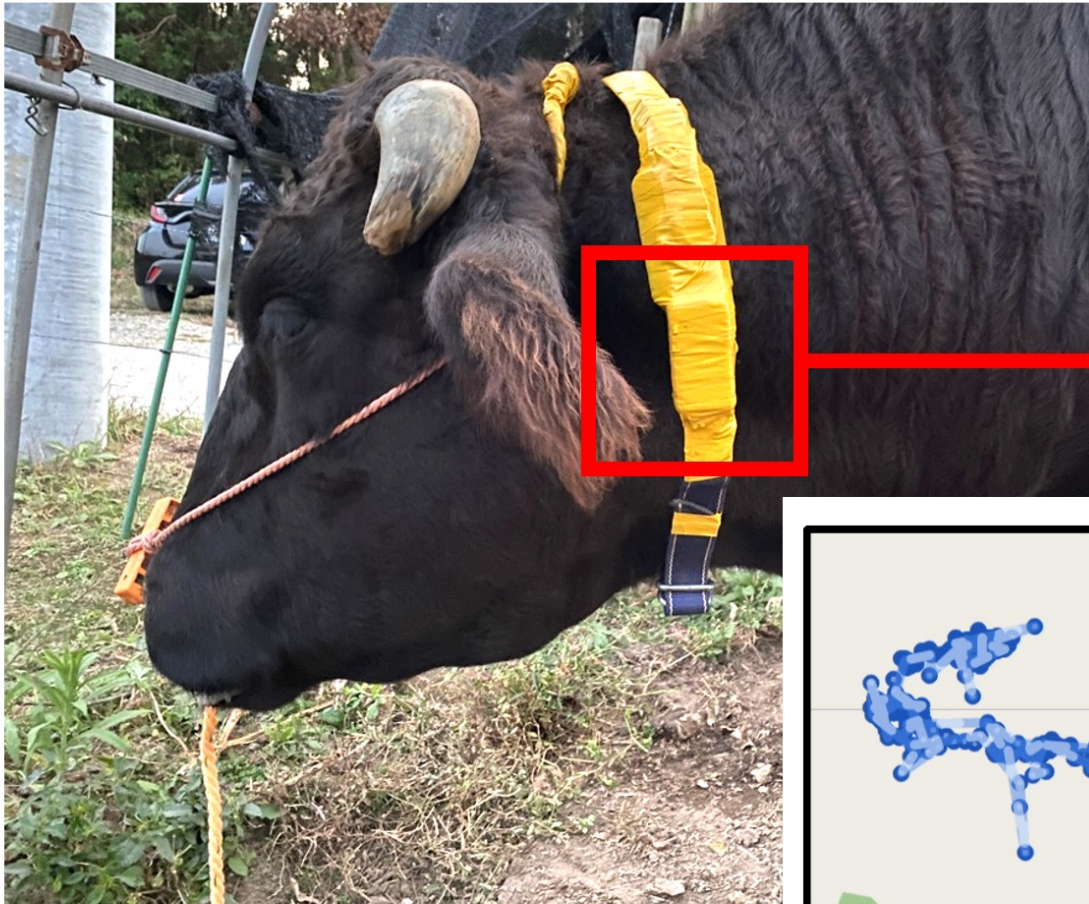
Benefits of GNSS Data in Sports Education

1. Improving Children's Self-Objectivity and Self-Esteem
2. Facilitating Communication among Students, Coaches, and Families
3. Preventing Injury Accidents
4. Achieving Appropriate Condition Management.
5. Delivering Effective Personal Education

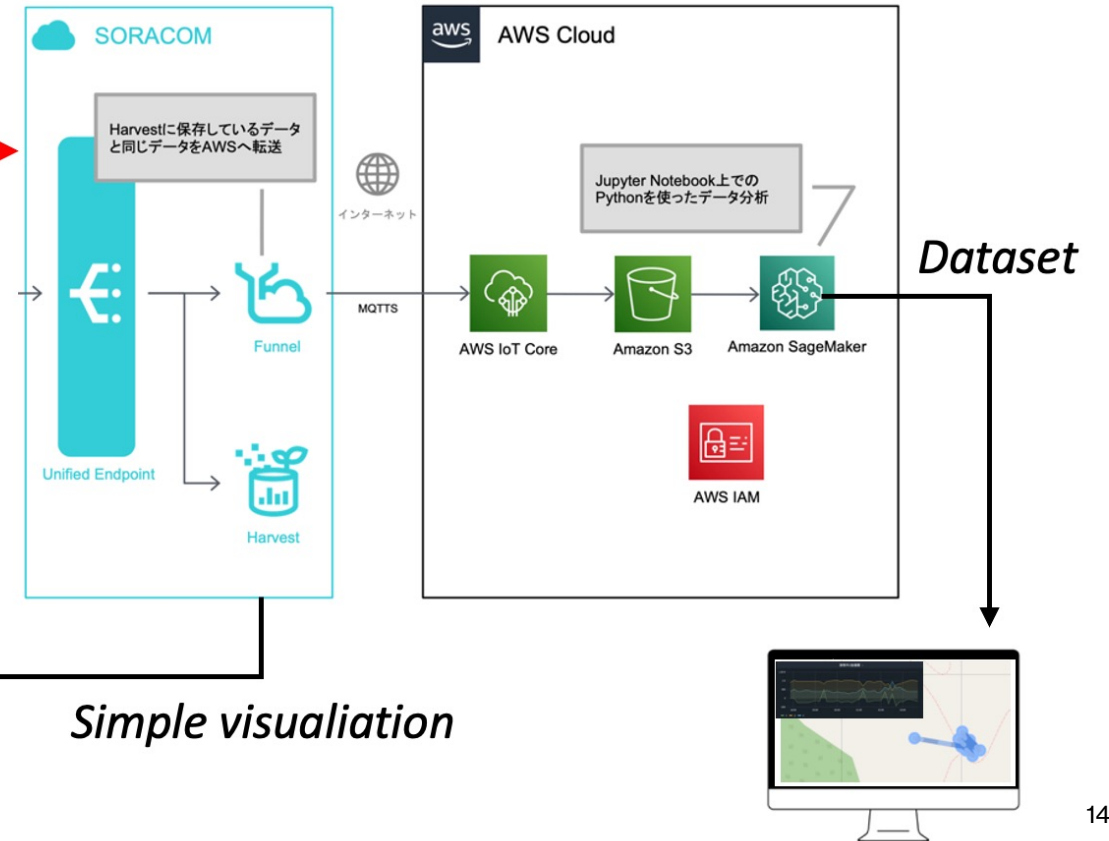




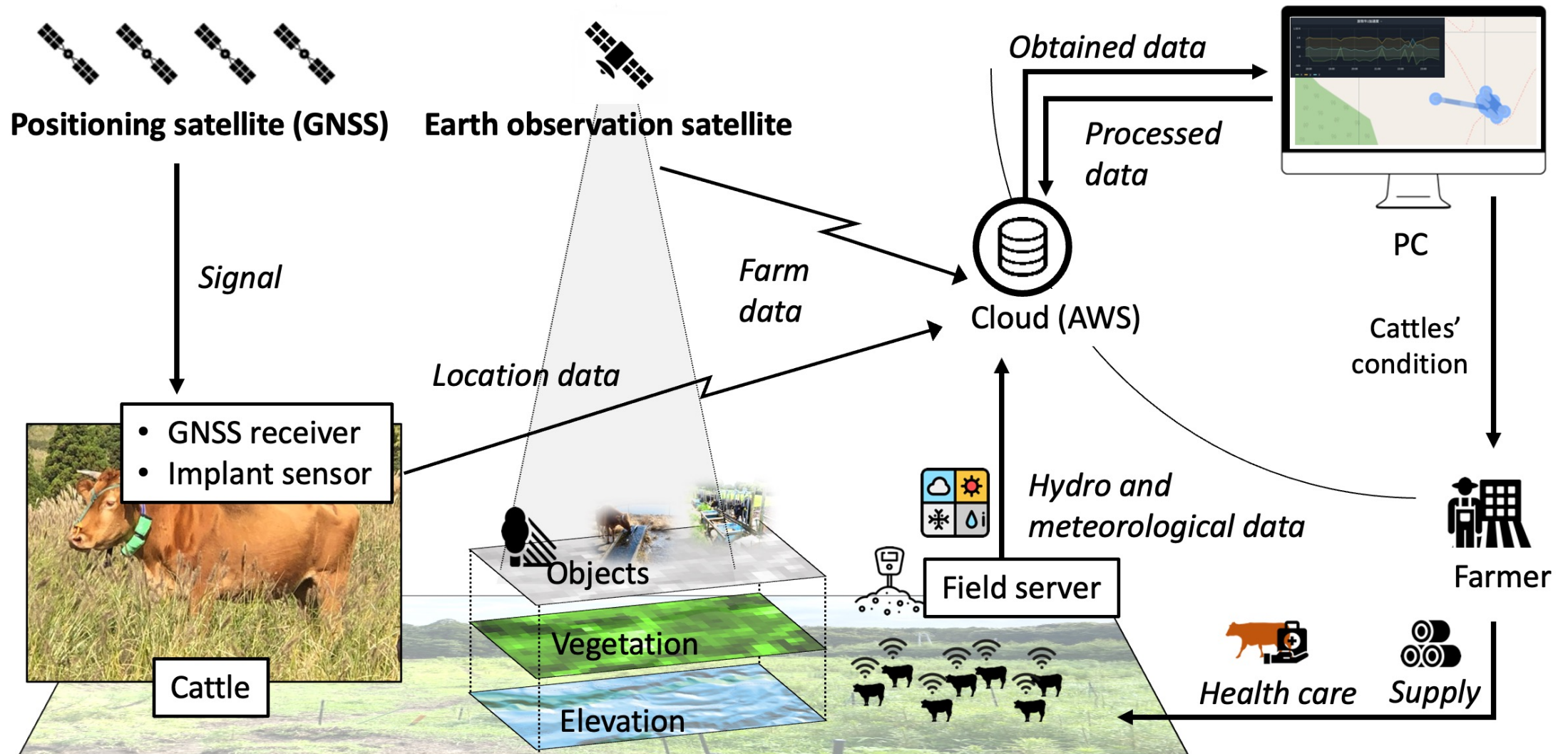
Athletes to Livestock Cattle



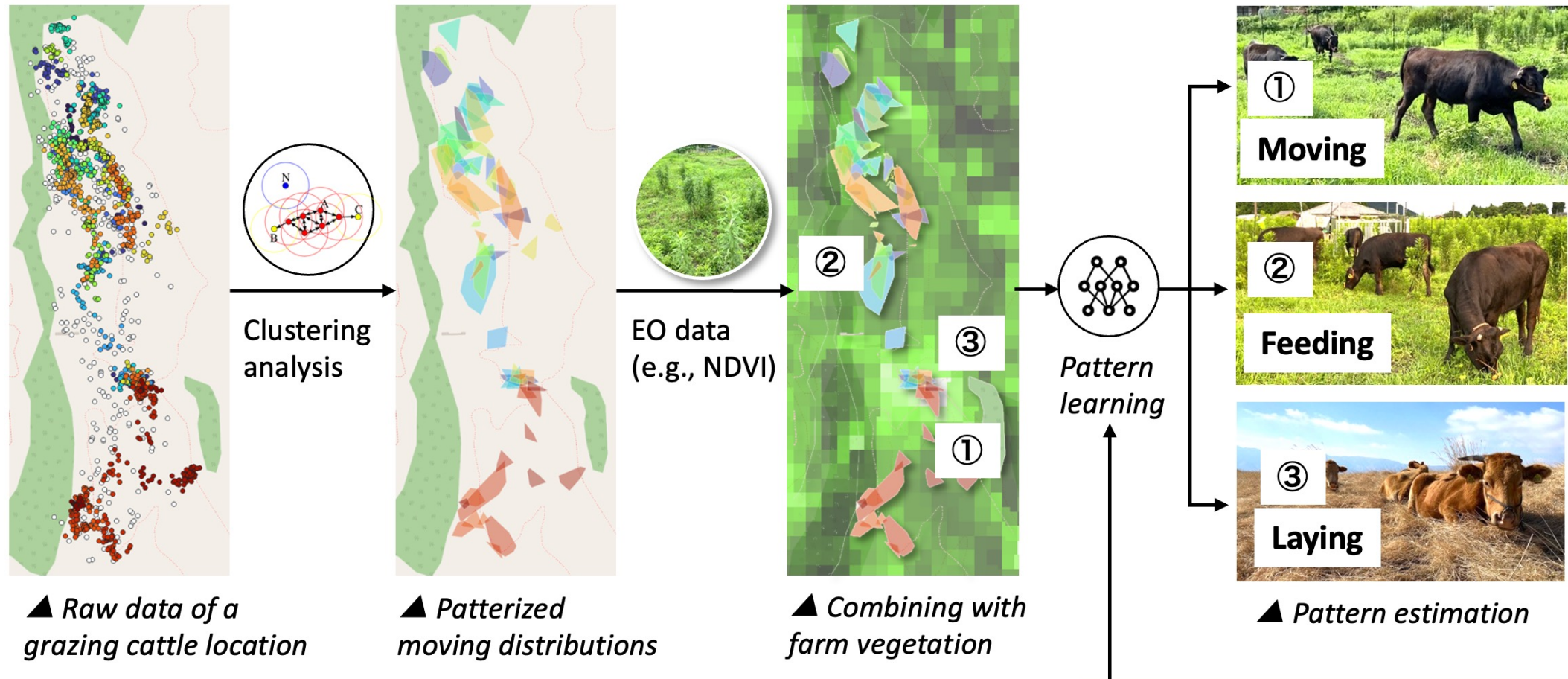
▲ A grazing cattle with GNSS device installed



Smart Livestock Farming with GNSS, EO and AI



Smart Livestock Farming with GNSS, EO and AI



Satellite-based alternative data rather than attaching various sensors on a grazing cattle as in previous studies

Conclusion

- 1. Space technology/data is becoming commoditized. For today's digital native youth like Generation Z, space technology / data are not special.**
- 2. To create a large number of diverse space-applications**
 - a. People in space domain understands possibilities and challenges in non-space domain.**
 - b. People in non-space domain understands possibilities and challenges in space domain.**
 - c. To develop people who understand both space and non-space domain and who can create value by integrating them.**
- 3. Create national and regional cooperation through space technologies / data, realize world-class human resource development programs and programs that contribute to the realization of a sustainable society.**

HR Development and Program Creation Initiatives from Japan

1. Asia-Pacific Regional Space Agency Forum (APRSAF)



2. Consortium for Satellite Earth Observation (CONSEO)



3. Multi-GNSS Asia (MGA)

a. Rapid Prototype Development Challenge (RPD Challenge)



4. JICA's Space Cooperation with Emerging Nations

a. JAXA-JICA collaboration

b. JICA-JAXA Network for Utilization of Space Technology (JJNeST)

c. Technical cooperation for space agencies



5. Japan Space Strategic Fund

etc.

