
Global Watch Center
To enable a sustainable society on the planet Earth
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SPACE INNOVATION FORUM
4 - 5 September 2019

BUSINESS DOMAINS

SSC PROVIDES ADVANCED SPACE SERVICES ON A GLOBAL MARKET

Science & Launch Services

Satellite Ground Network Services

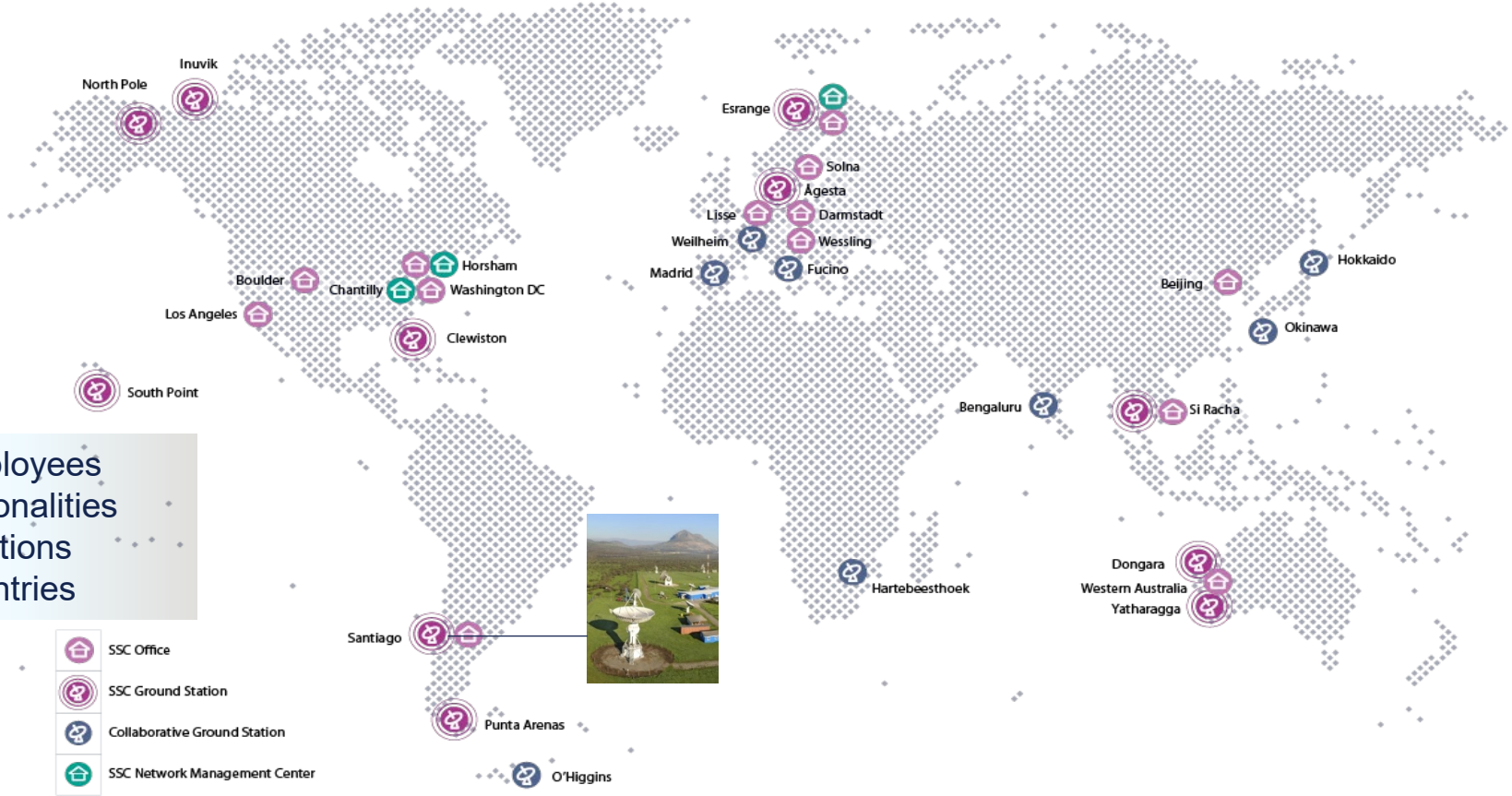
Spacecraft Operations & Engineering Services

SSC's public mission

SSC's commercial mission

GLOBAL FOOTPRINT – AND COVERAGE

CUSTOMERS FROM ALL PARTS OF THE WORLD – MOST LARGE SPACE ACTORS



600 employees
25 nationalities
22 locations
12 countries

A GLOBAL GAME CHANGE THROUGH SPACE

SPACE TO PROVIDE GLOBAL TRANSPARENCY, CONNECTIVITY AND POSITIONING

Earth observation

Multisensor constellations:
Close to real time information of the planet`s land, oceans and atmosphere.
Intense global collaboration

Positioning & Navigation

Global GPS - systems compete to provide societal functions with accuracy and resilience

Communication

Satellite Constellations:
Global access to internet, enabling a sustainable big world on our small planet.

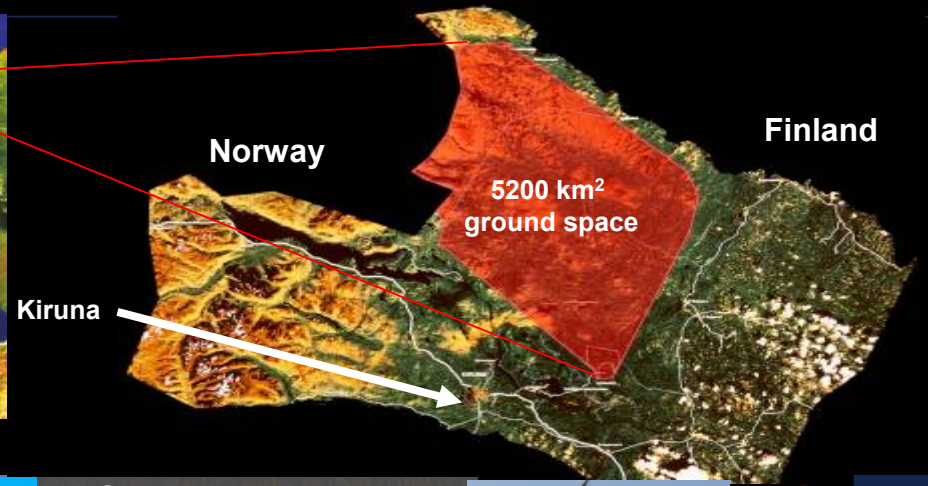
Exploration

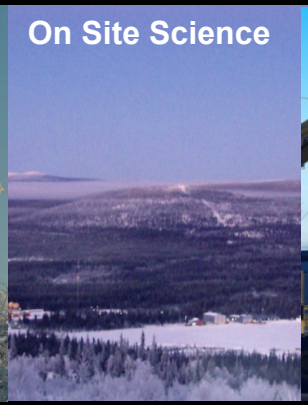
New cost effective technology provide new opportunities to use and explore Space for the benefit of earth

Enabling a more sustainable development of our planet

ESRANGE –

PROBABLY THE MOST VERSATILE SPACE RANGE IN THE WORLD



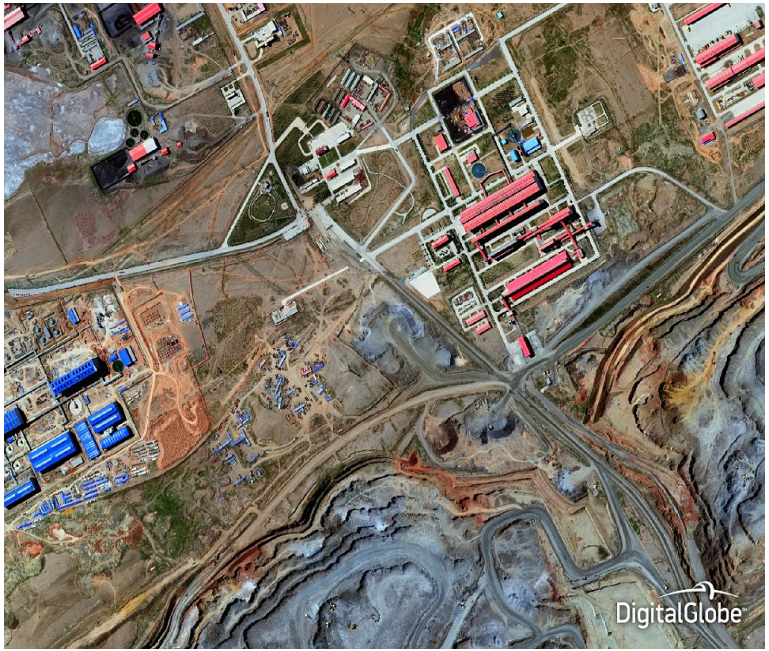


UN GLOBAL SUSTAINABILITY GOALS – AGENDA 2030

SPACE CRUCIAL FOR ALL 17 + REFUGEE RESCUING & CRISES MANAGEMENT

EXAMPLE MINING

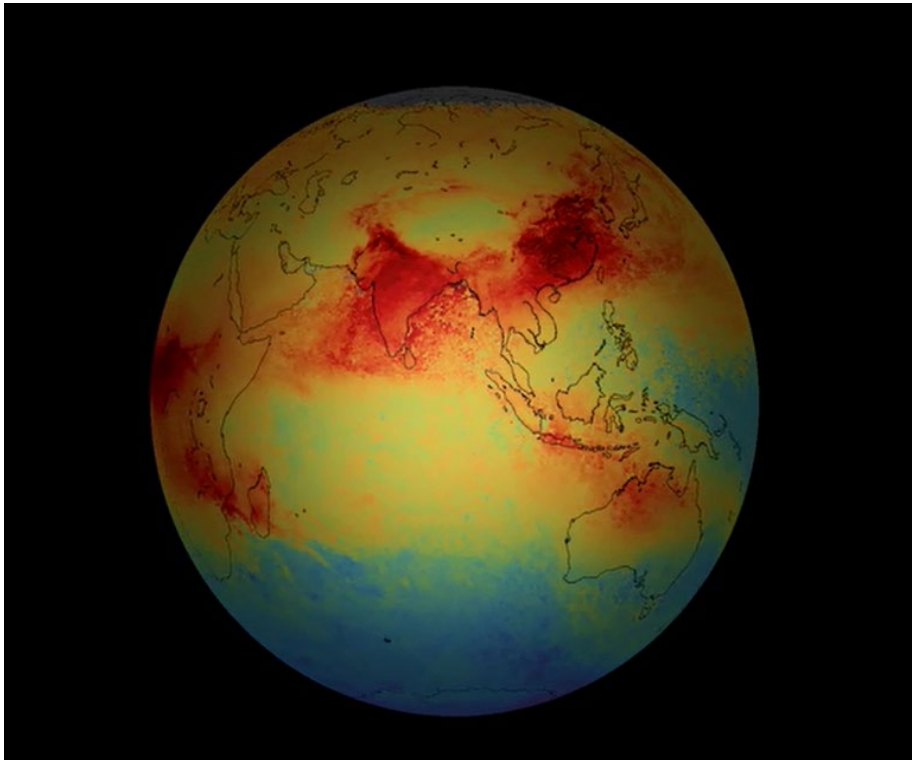
Satellite imagery of operational mines, such as The Diavikk Diamond Mine in Canada, (pictured) allows for environmental impact assessment



The progress of mining can be monitored over time. Above, Bayan Obo Mining District, western Inner Mongolia, China

EXAMPLE CO2

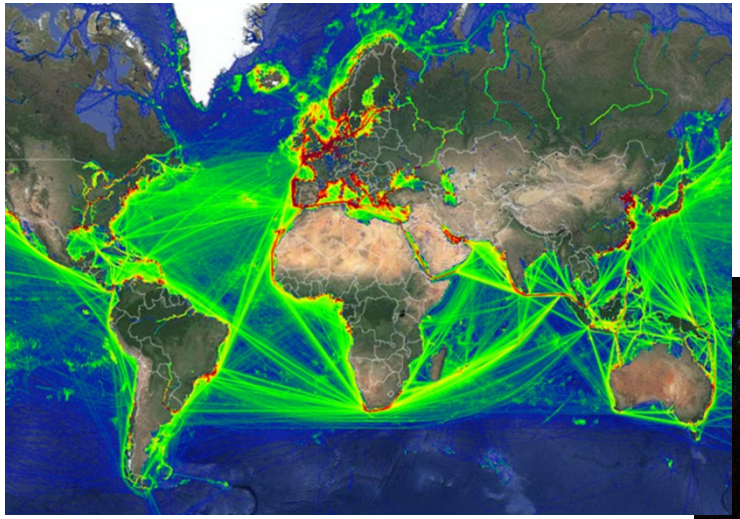
The Henan Coal Mine and power plant in China. Satellite shots can indicate the plant's emission and fuel



Carbodioxide streams followed and measured from space

MARITIME SECURITY – HUMAN TRAFFICKING & ILLEGAL FISHERY

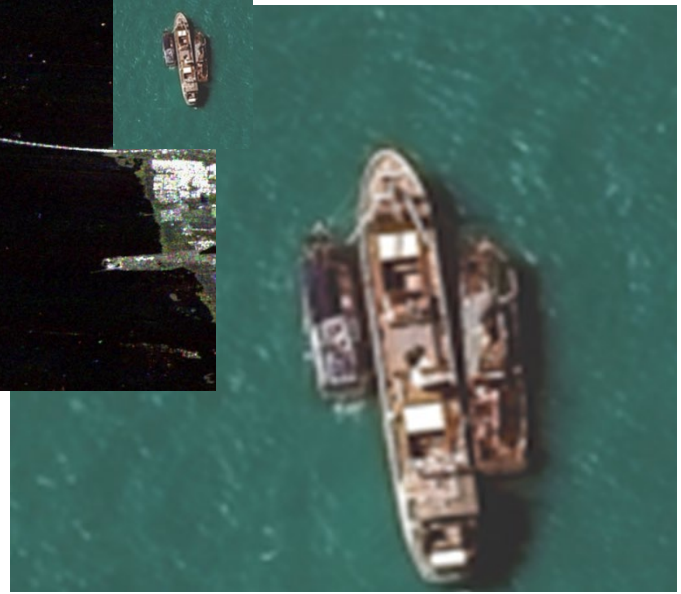
Saved 2500 slave workers
Stopped illegal fishing and human trafficking



AIS – Global Shipping

Satellite radar

Satellite images



REVOLUTIONARY APPLICATIONS

3 D mapping from space, centimeter accuracy in all levels, commercially available today

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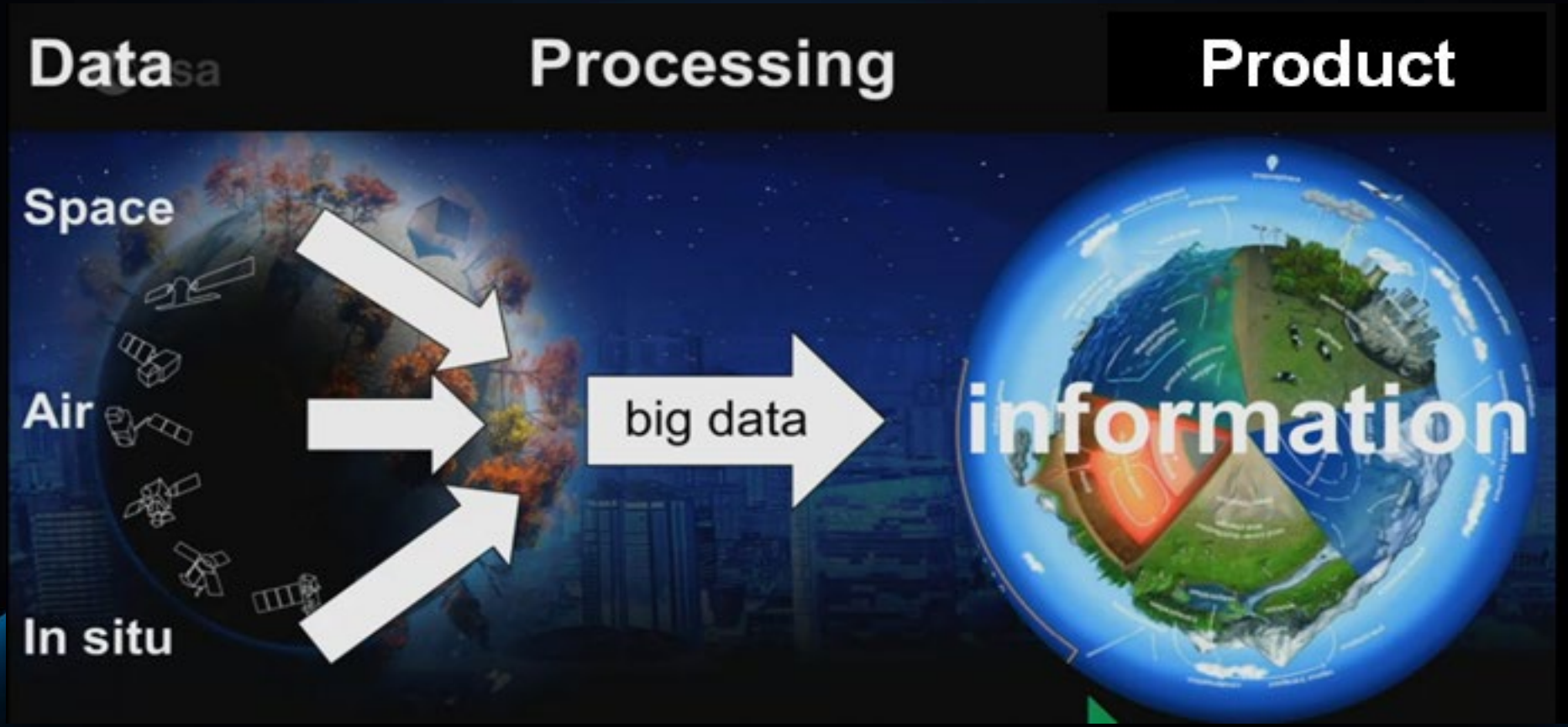
IT IS ALL ABOUT THE DATA



UN GLOBAL SUSTAINABILITY GOALS – AGENDA 2030

SPACE CRUCIAL FOR ALL 17 + REFUGEE RESCUING & CRISES MANAGEMENT

”GLOBAL WATCH” - A PLANETARY EYE

It is all about the data

Examples:

- Global Sustainability; *Supports All 17 UN sustainability goals*
- Managing Climate Change
- Regional & Global Development
- Forestry
- Agriculture
- Maritime & Fishery
- Maritime Secuurity
- Ocean Ecology
- Carboxide Emissions
- Draughts, Water Supply
- Crises Management
- Societal Planning
- Migration
- Nature & Environment
- Ecological Diversity
- Security & Defence
- Health
- Transportation
- Energy
- Resarch & Technology
- Ice etc etc

UN SUSTAINABILITY GOALS

The sustainability wedding cake

Graphics by Jerker Lokrantz/Azote

NEW TECHNOLOGIES IN THE FULL CHAIN SERVICES

FROM SATELLITES TO ENDUSERS

EO satellite captures data, transmits to ground station

Pixel selection using metadata
Data Cube

Smart Databases / Archives

Once at the ground station, there are multiple possible paths

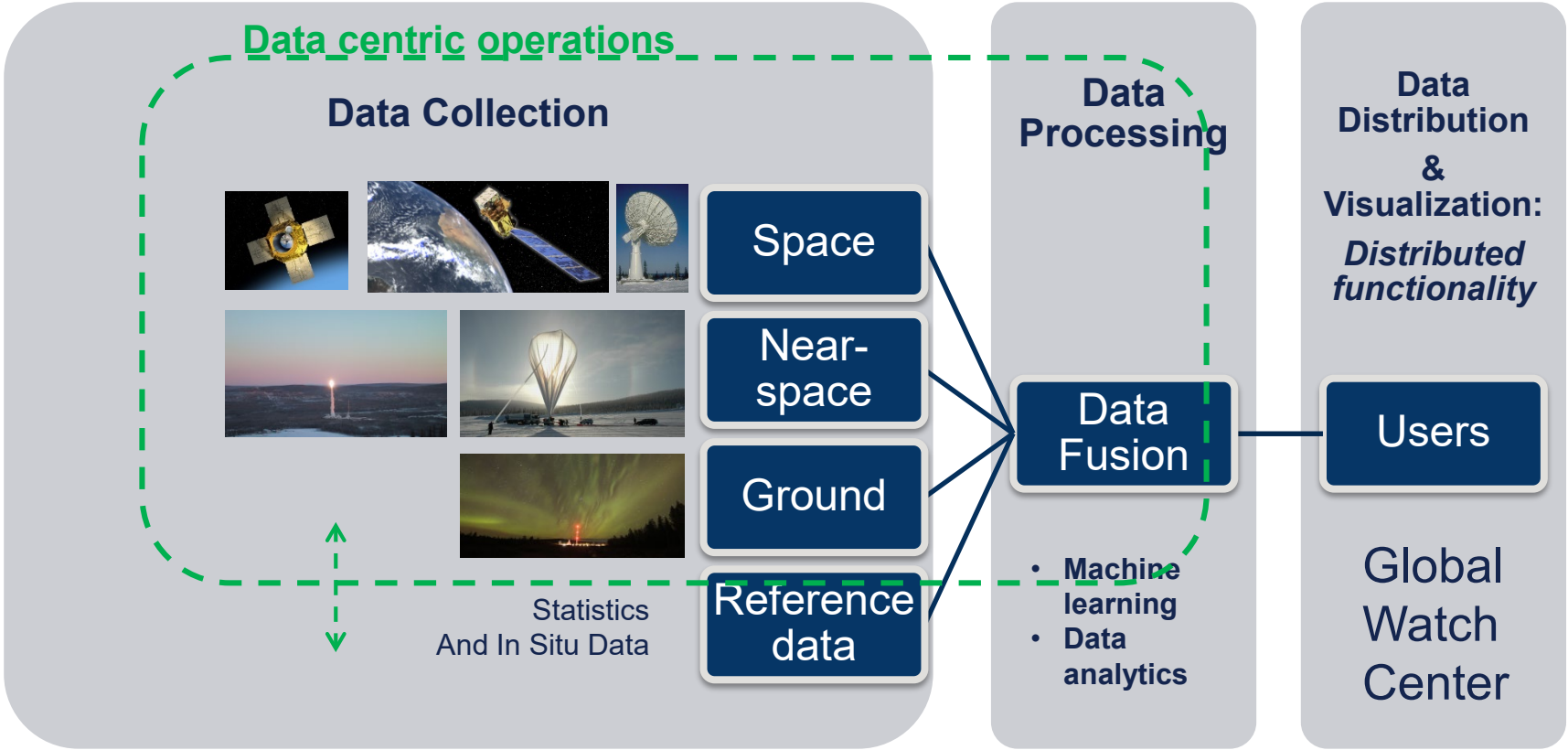
Cross-customer data sharing and integration

Cloud-edge processing / Hosted processing Direct to end user

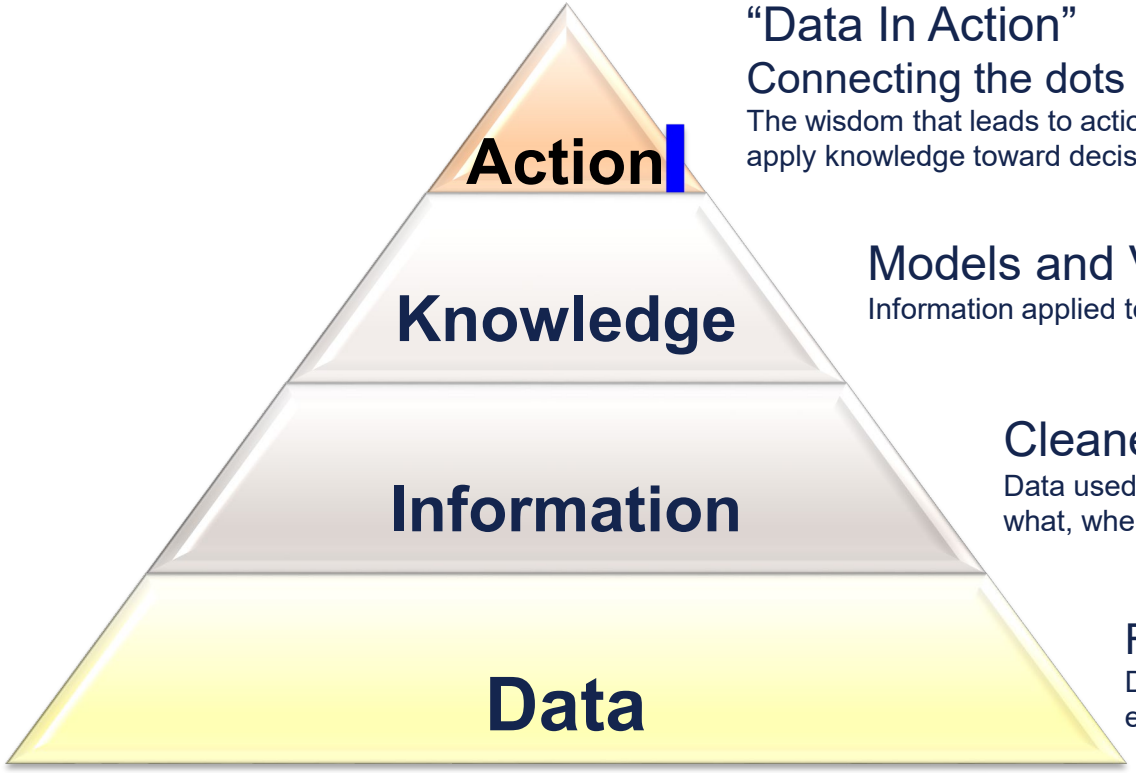
Customer & End users

CONCEPTUALIZATION

For effective data-management from space on customer needs



INCREASING THE VALUE OF DATA



“Data In Action”

Connecting the dots for humanity

The wisdom that leads to action. From the ability to apply knowledge toward decisions on specific goals.

Models and Visualisations

Information applied to answer “why” questions.

Cleaned/Processed Data

Data used in a context as answers to “who, what, where and when” questions.

Raw data

Discrete objective facts from sensors, experiments or surveys.


THANK YOU
SPACE INNOVATION GROWTH COOPERATION