

Trends for the Geomatic Industry

Mundo Geo 2011

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2011-06-16

- Focus on Optical Data and related Services/Solutions
- Viewpoint of a newcomer in the market
- Just a few thoughts, no attempt to be exhaustive

Significant growth during the next decade

- **Growing population**
 - Increasing demand for food
 - Available farmland
 - Productivity
 - Increasing need for infrastructure
- **Environmental changes and challenges**
 - Need for monitoring
 - Need for sustainability
- **Increasing number of emergencies**
 - Natural catastrophies
 - Local and regional conflicts
- **Increasing “geo-awareness”**

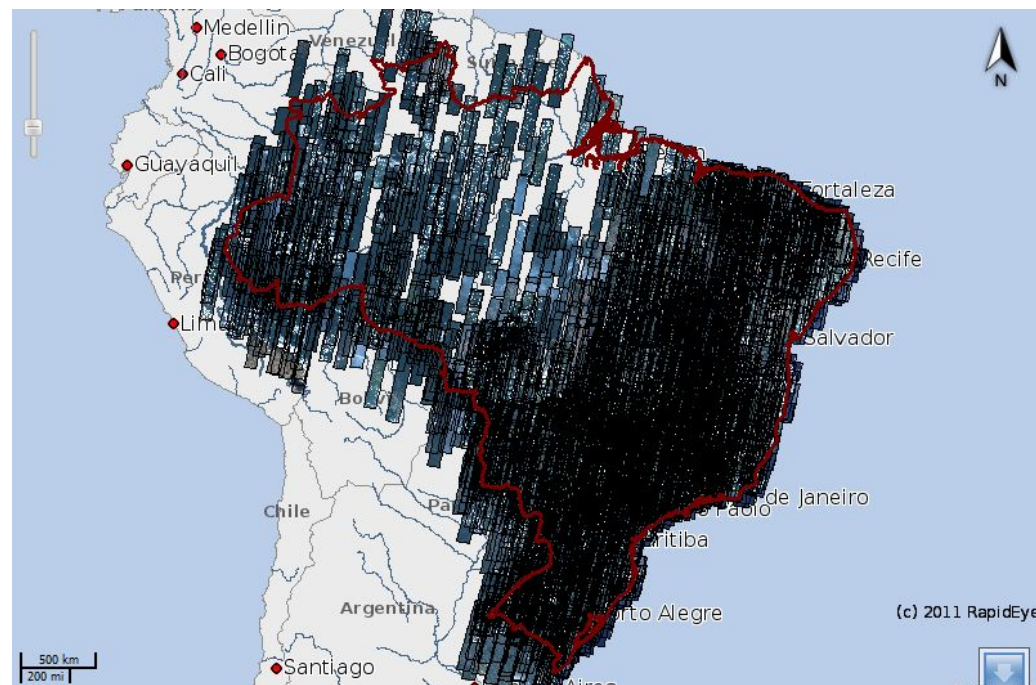
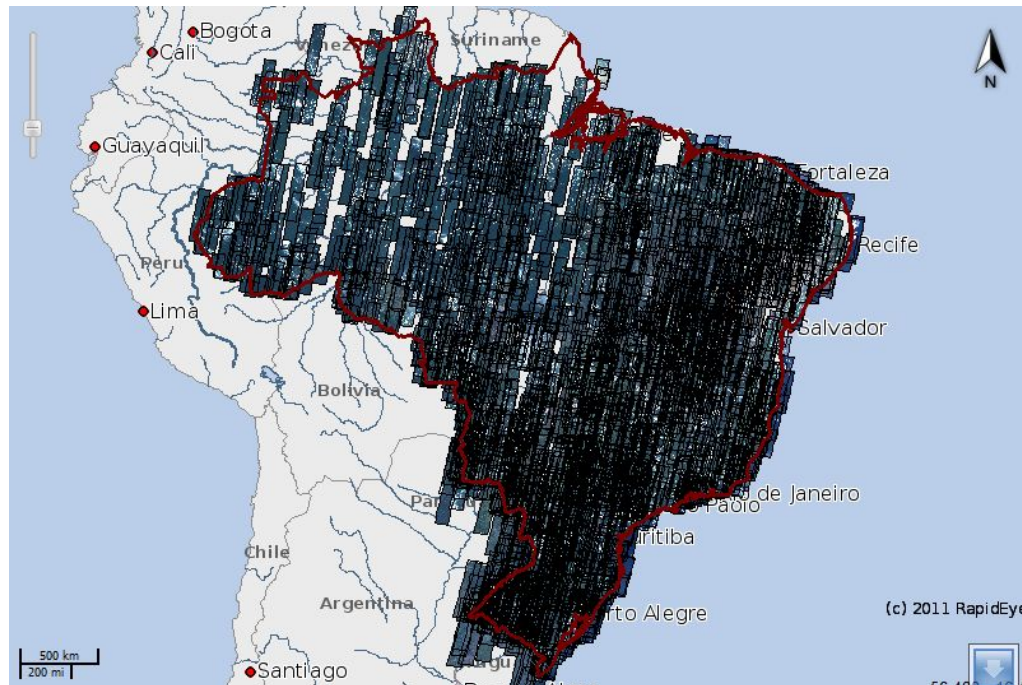
- Past: “Can I get data”
 - Future: “Can I get the RIGHT DATA at the RIGHT TIME”
 - Diversification and specialization of data supply
 - Spatial resolution
 - Temporal resolution
 - Spectral resolution
- ==> More + more diverse sensors**

“Right Time” – Temporal Resolution

RapidEye's Coverage of Brazil (< 10% cloud cover)

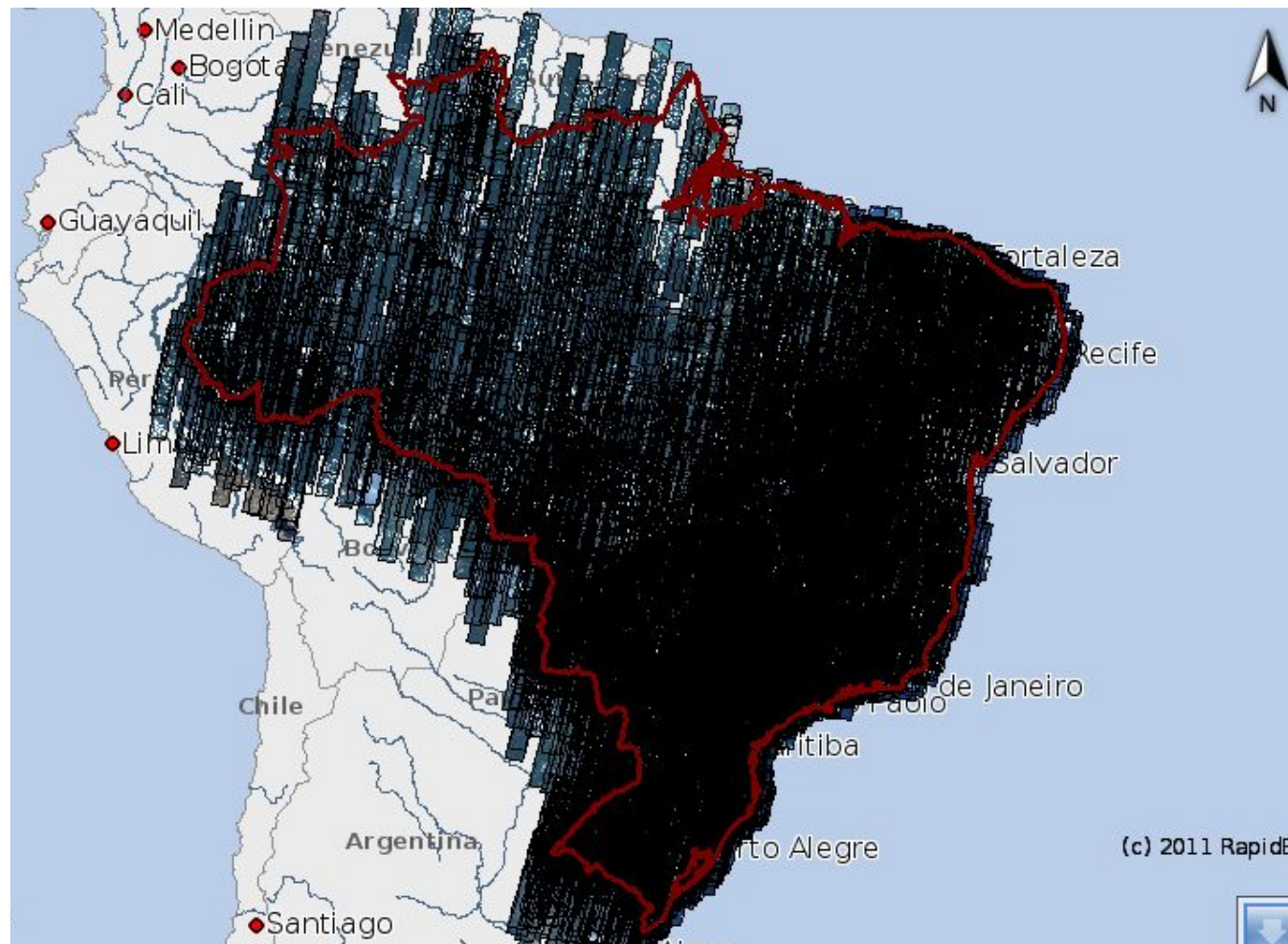
2009

2010



RapidEye Coverage of Brazil

- In 2 years almost full coverage
- Most areas with multiple coverage (several times per year)



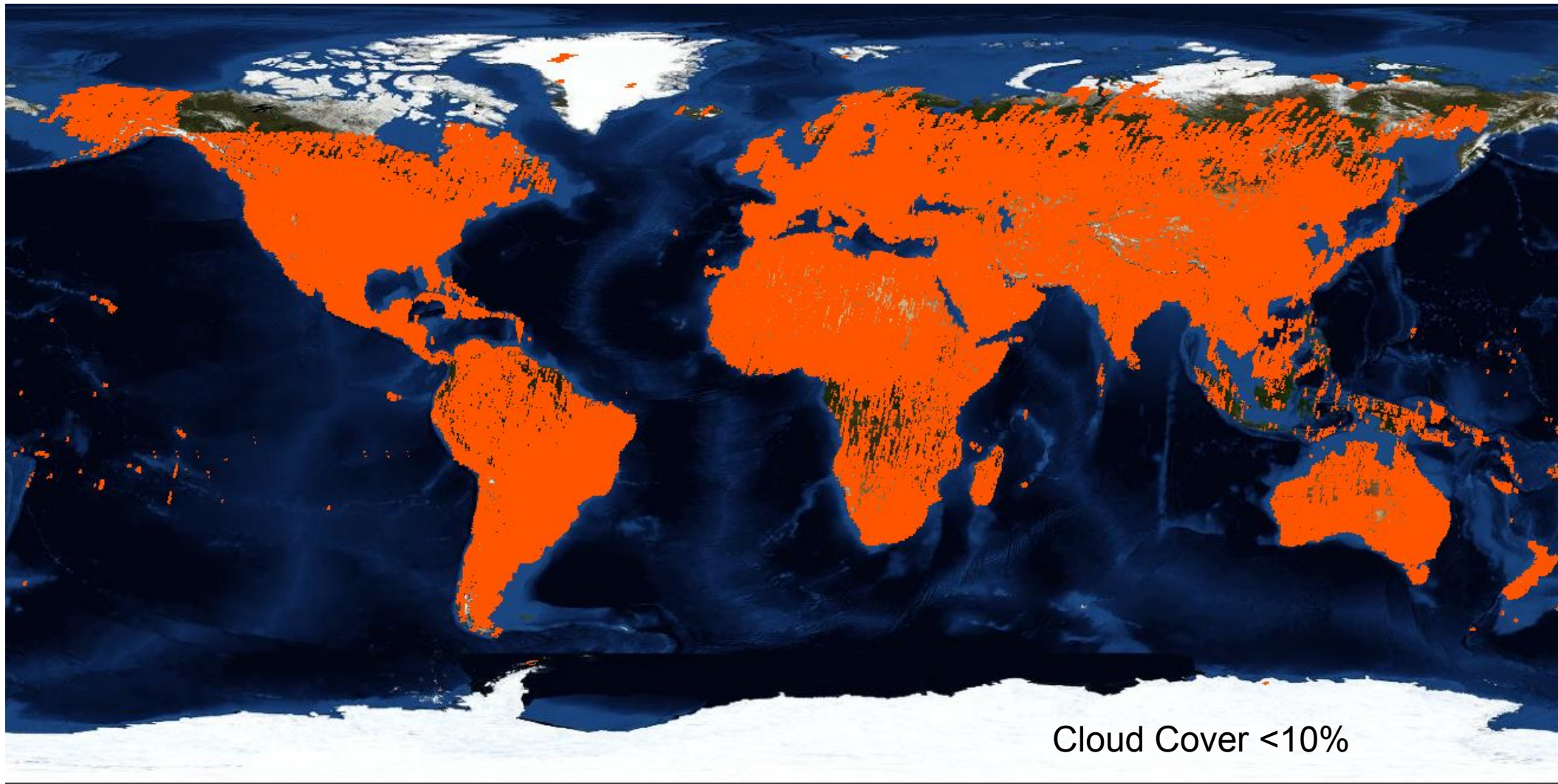
We know a lot about
your country ...

... and it is available
to you

- **Temporal Resolution allows for**
 - Repeat coverages in a short period of time
==> Detection of changes
 - Timely coverage when needed
==> Quick response to urgent matters
(emergencies, etc.)
 - Fast coverage of large areas
==> Complete facts not samples

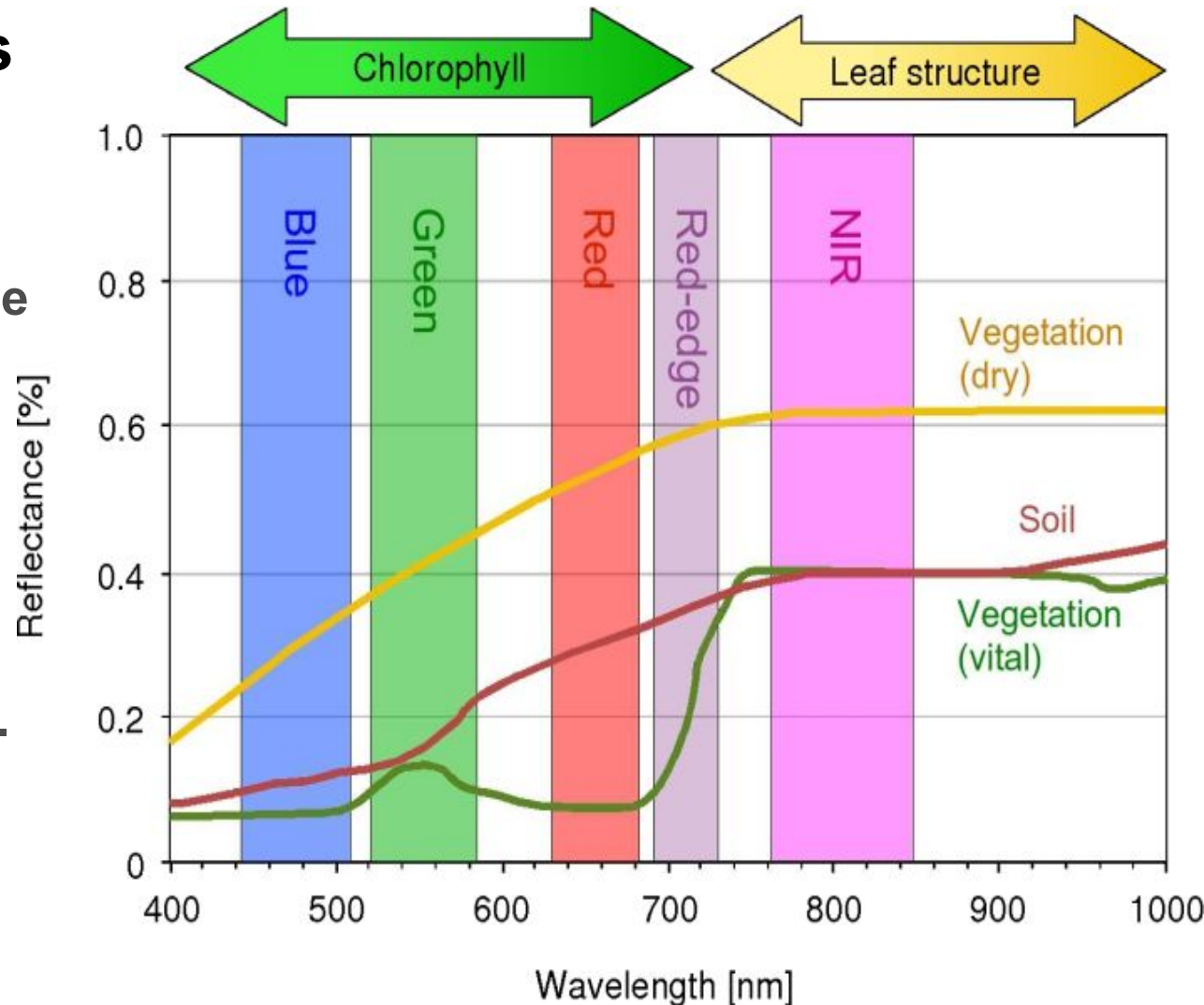
“Right Time” – Temporal Resolution

RapidEye's Global Coverage since Feb. 2009



RapidEye system optimized for analysis of biomass

- **FIVE spectral bands**
 - Plants have spectral signatures which can be identified with those 5 bands
- **RapidEye first commercial system with Red-Edge band**
 - Useful to monitor vegetation health, improve species separation and measure Chlorophyll, Protein and Nitrogen content



“Right Data at the Right Time”

Earthquake in Japan



Matsushima Bay – Miyagi Prefecture
September 10, 2010



March 13, 2011

- With increasing supply and growing competition "Customer Service" a key differentiator in the data market
 - Accessibility
 - Cost of data
 - Cost of "value-adding"
 - Responsiveness (understanding of needs, speed of delivery)
 - Customer care

- "Customer Service" as key differentiator:
RapidEye answers
 - Accessibility ==> Online catalog ("EyeFind")
 - Cost of data ==> Aol, not fixed "scenes" (you buy what you need)
 - Cost of "value-adding" ==> Level 3A at no extra cost
 - Responsiveness } ==> Strong partner:
■ Customer care } Santiago e Cintra
Consultoria
Own presence

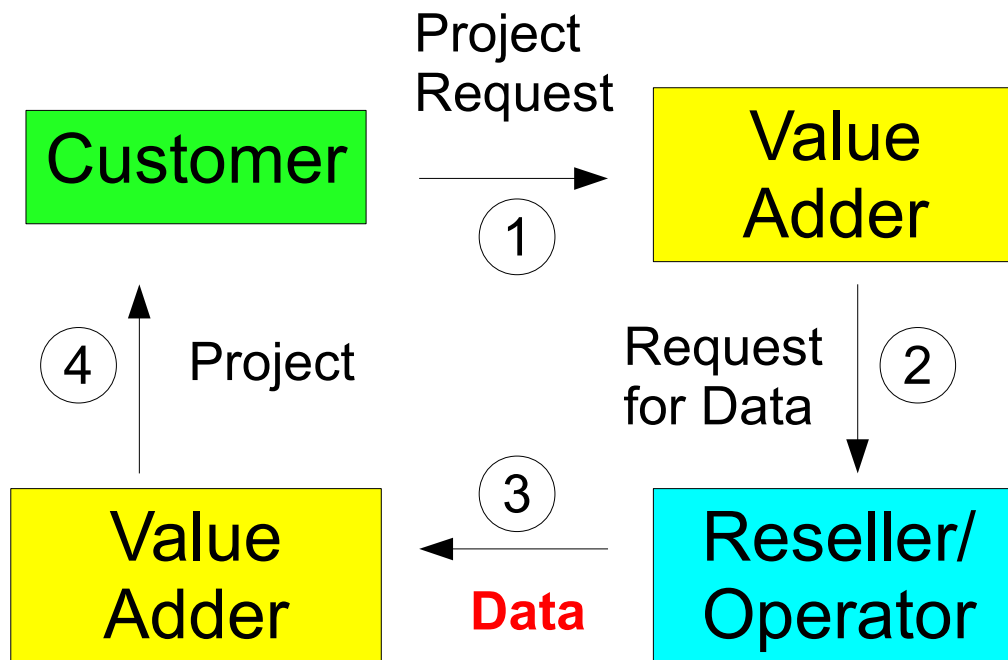
Data ==> Solutions

- Customers increasingly asking for solutions to business problems
 - Data issues (technical issues, acquisition strategy and problems, etc.) less relevant
 - Usefulness of solutions critical
 - “How can remote sensing help to solve my (business) problem?”
 - “What is the value of your solution to me?”
- Increasing complexity of solutions

Solutions ==> Services

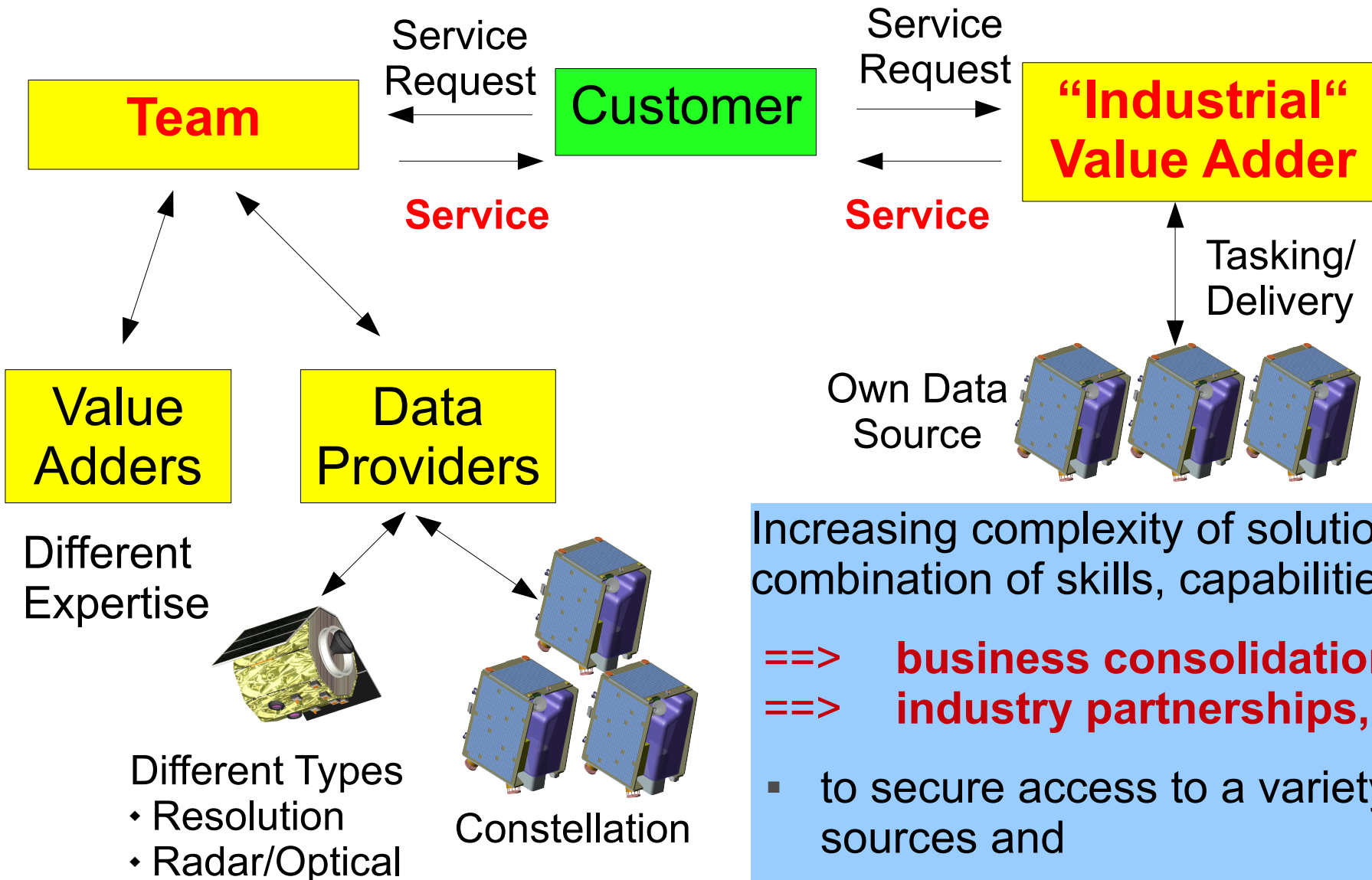
- Increasing demand for sustainable services to support business processes and management decisions
 - Reliability
 - Data availability
 - Quality, “fit”
 - Data
 - Processing
 - Usefulness
 - Customization

Traditional Business Model



- **Focus on specific (one-time) issues ==> Projects**
- **Availability and cost of data critical**
- **Manual analysis work dominant**

Trend No. 4: Business Transformation



Increasing complexity of solutions requires combination of skills, capabilities

==> business consolidation
==> industry partnerships, teaming

- to secure access to a variety of data sources and
- to combine know-how and expertise to offer complex solutions

- **Unique data source**
 - Frequent and reliable supply of optical data (==> constellation)
 - Fast, repetitive scanning of large areas at high resolution
(> 4 million km², 5 m pixel size, multi-spectral)
- **Large team of experts**
 - Integrated solutions/services: Focus on agricultural, forestry, environmental and change detection issues
 - Strong partners with local knowledge and expertise
==> Brazil: **Santiago e Cintra Consultoria**

An aerial satellite photograph of a coastal city, likely San Francisco, showing the city grid, the bay, and several islands. The water is a deep blue, and the land is a mix of green and urban grey.

THANK YOU!

Wolfgang G. Biedermann

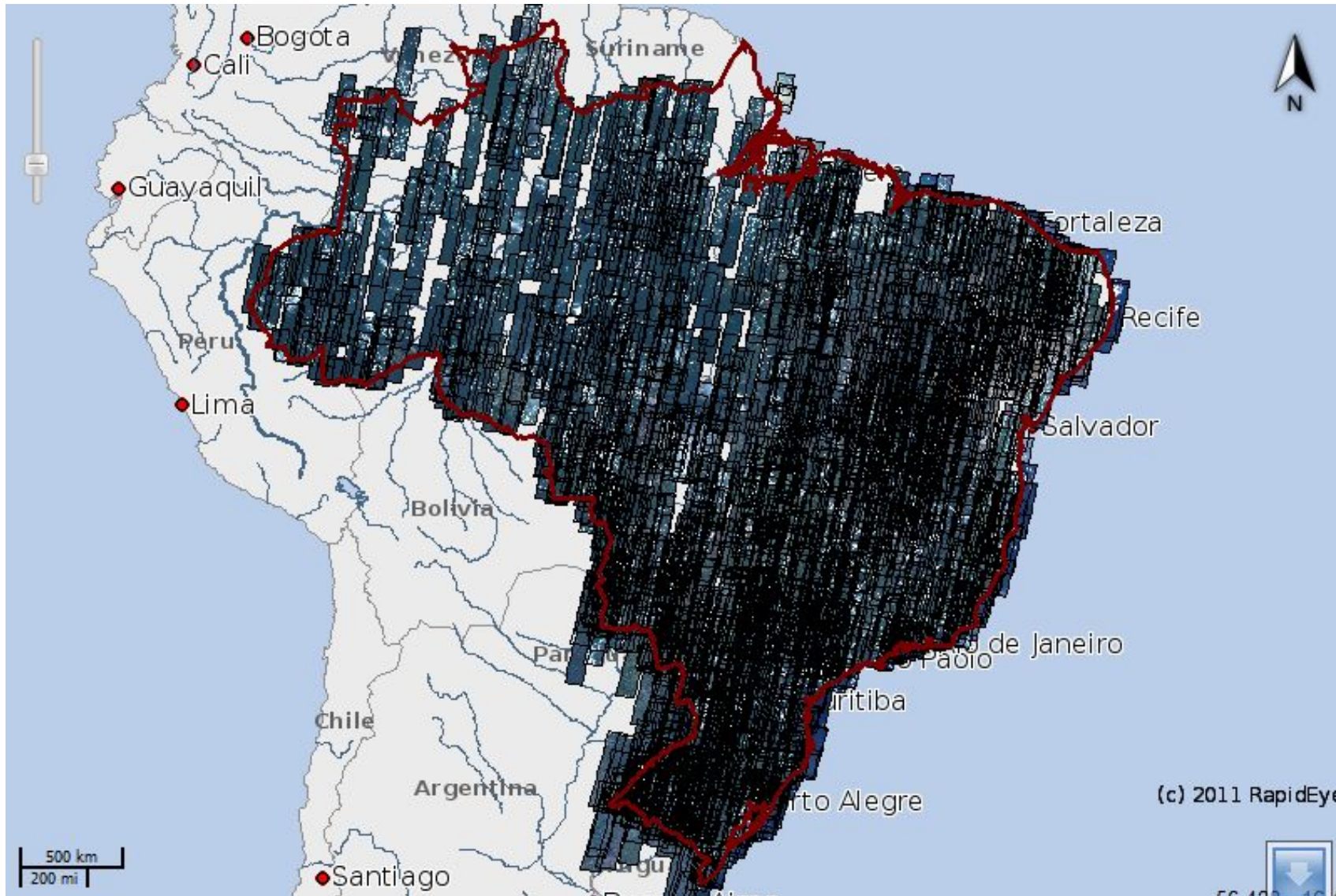
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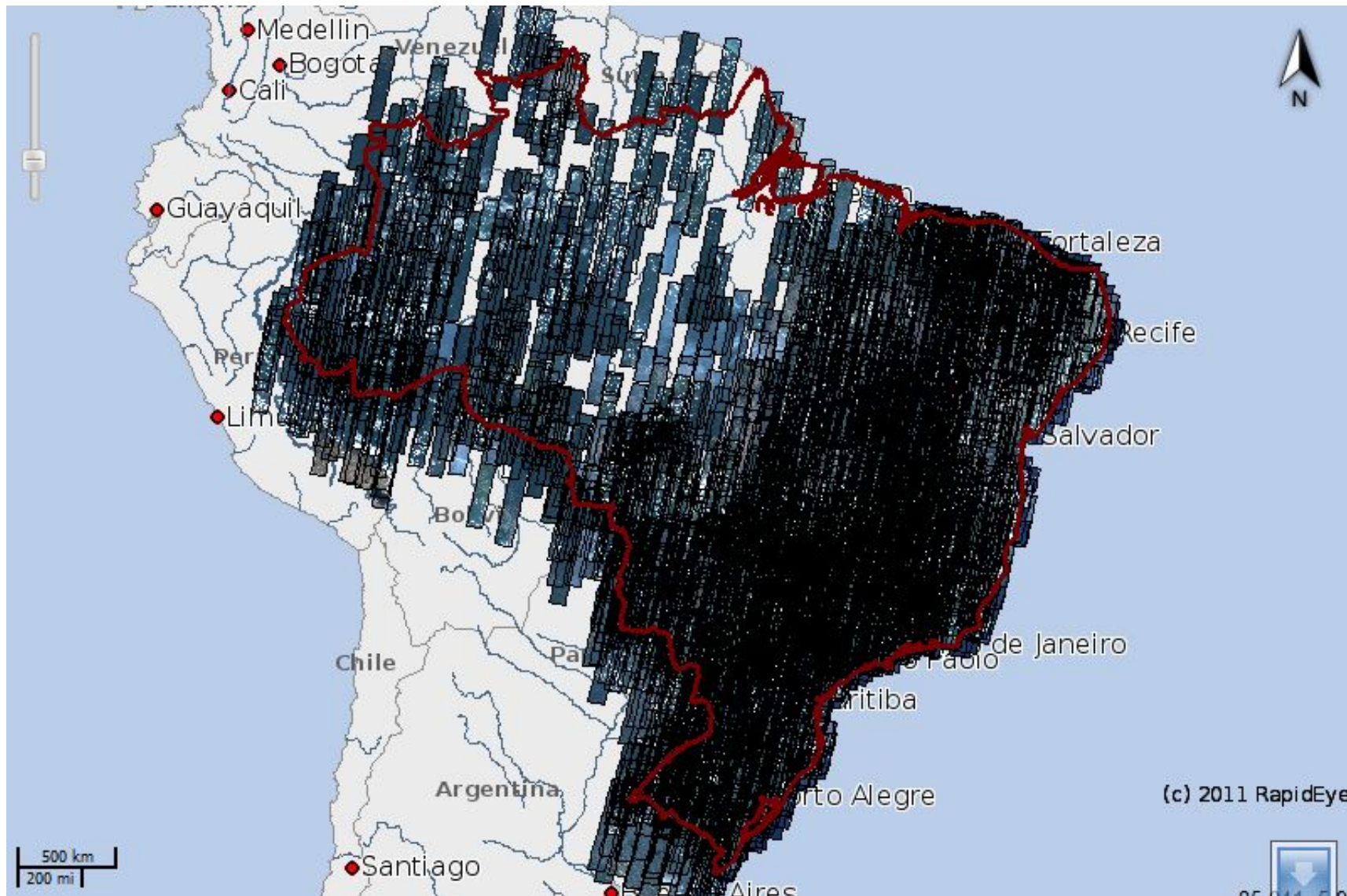
“Right Time” – Temporal Resolution



**RapidEye
Coverage
of Brazil
2009**

($<10\%$
cloud cover)

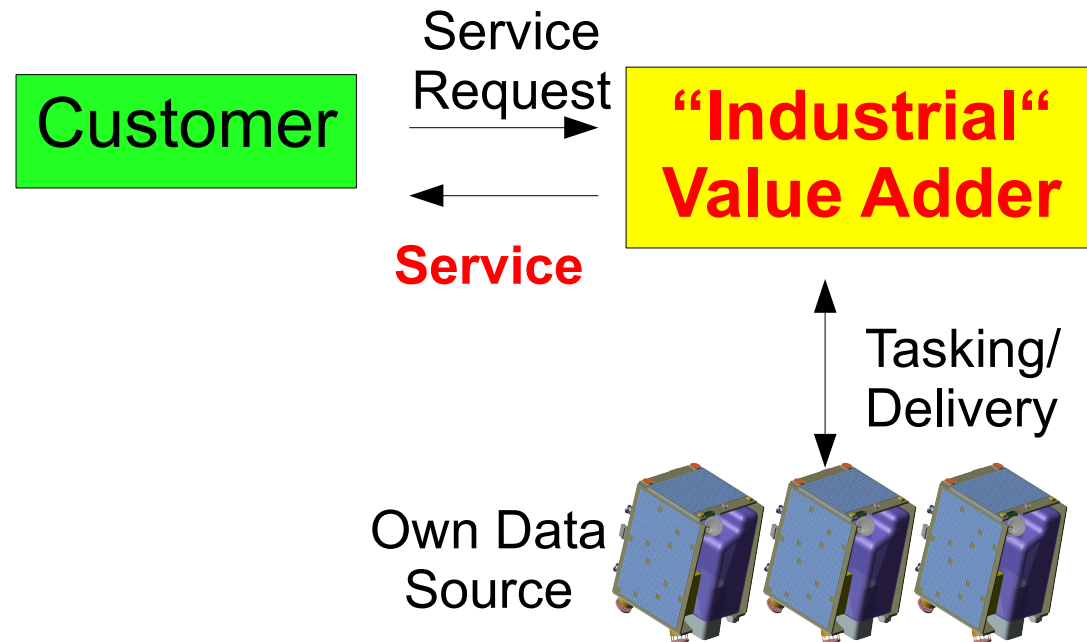
“Right Time” – Temporal Resolution



**RapidEye
Coverage
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($<10\%$
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... may be replaced by "industrial"
Solutions Provider ...



- Customers require strong, professional partners
 - Control of **reliable** data source
 - Development of **customized** solutions (modular approach)
 - **Highly automated** generation of services

... or a Team Approach

Increasing complexity of solutions requires combination of skills and capabilities

==> **business consolidation**

==> **industry partnerships**

- to secure access to a variety of data sources and
- to combine know-how and expertise to offer complex solutions

