Role of the Private Sector in Providing Satellite Remote Sensing Information

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SeaSpace Corporate Focus:

Lowering the barriers that stand between users and the environmental satellite data they need for their applications

The Two Main Barriers:

I. Ready *access* to the data sources

II. Having gained data access, the necessary hardware & software *tools* to process, manipulate, analyze, and archive the resulting data
SeaSpace TeraScan systems operate in 30+ countries and at more than 500 user-sites...

User base:

- 50% Science & research  50% operational
...including many academic & gov’t labs as well as civilian and military operational organizations across the U.S.
San Diego Coastal Ocean Observing System

Oceansat’s Ocean Color Monitor
Total Suspended Matter (mg/l)
CODAR Surface Currents

http://sdcos.ucsd.edu
Environmental remote sensing satellites may be divided into two distinct classes:

**Freely accessible** (or nearly so) – operated by U.S. and non-U.S. gov’t organizations (e.g. NOAA/AVHRR; Terra & Aqua MODIS; India’s Oceansat-1/OCM; China’s FY-1)

and

**Access limited** via expensive user fees – operated by U.S. and non-U.S. gov’t organizations, as well as private companies (e.g. LANDSAT, RADARSAT, Ikonos)

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*Freely accessible* data typically at >250m resolution with ~1 day repeat coverage

*Limited access* data typically at <30m resolution with 10+ day repeat coverage

For most IOOS purposes, the great cost and long periods between repeat coverage makes the Limited Access data relatively less useful

So let’s concentrate on the freely accessible government satellite data sources...

**What is the appropriate role of the private sector here?**

**What is the appropriate role of the government?**
Government organizations often attempt to assume too much of the Private Sector Role

This limits or entirely eliminates the Private Sector, in what would otherwise be an end-user, market-responsive activity

It also reduces the available Government funds for operating the various freely available environmental satellites
Leveraging an existing network of satellite acquisition and processing systems to encourage data sharing among a much larger end-user community
Encourages sharing of data and methodologies
Builds system redundancy
Eliminates satellite tracking time-conflicts
Conclusions:

With regard to private sector involvement in satellite remote sensing aspects of IOOS

There are multiple useful roles -

Data acquisition, processing, dissemination

Integrated data management

But these useful roles for the private sector can be swiftly eliminated by policy and funding choices within various branches of government