

# PROGYSAT SEMINAR

## *In Paramaribo*



## *SEAS Guyane*

### *Tutorial*



Collectivité  
Territoriale  
de Guyane

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seas  
G U Y A N E





# PARTNERSHIP

**Seventeen years of a very close institutional partnership  
between :**

**CTG** : Territorial Collectivity of French Guiana (Project Leader since 2013)  
*with a strong financial support of European (FEDER) & CNES Funds*



**ÉTAT** : French States services in French Guiana  
**IRD** : French Institute for Research and Development  
**CNES** : National Center for Space Studies  
**UG** : University of French Guiana



# HISTORICAL



## Stage 1 (2006) :

- Lead : French Institute for Research and Development
- Satellites : DRS sized for Spot 2, Spot 4, Spot 5 and Envisat direct receptions
- Appropriation of data, tools and methods of satellite imagery exploitation to support public policies.

## Stage 2 (2013) :

Lead : Regional Collectivity of French Guiana

- End of missions Spot 2 (2009), Envisat (2012), Spot 4 (2013). **Spot 5** still running until march 2015.
- Reflections on SEAS Guyane model evolution and Spot 6/7 - Pleiades technical evaluation in the perspective of a technological upgrade of the Direct Receiving Station (DRS).

## Stage 3 (2020)

- Lead : Territorial Collectivity of French Guiana
- Satellites : DRS sized for **Spot 6/7 & Pleiades 1A/1B Direct Reception**, and **Pleiades Neo Virtual Reception**.



2006

2013

2015

2020

2026

# OBJECTIVES



**Stimulate, support and develop** the uses of Earth observation

Respond more efficiently to the **challenges** of **knowledge, planning and development** of Caribbean and Amazonian territories.

**Enrich and sustain** the achievements thanks to:

- new observations skills,
- tools for sharing and pooling current and future uses of the system,
- the development of thematic chains and products to support public policies,
- a support program for the SEAS user community
- the expansion of the University of French Guiana higher education offer to support thematic research and prepare for the future.



**SEAS**  
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# MEANS :

**Spot 6/7, Pleiades 1a/1b & Pléiades Néo**  
constellations with **daily revisit capacity**



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# MEANS :

## Direct Receiving Station



One platform, two sites...



← Optical Fiber →

CNES/CSG

IRD





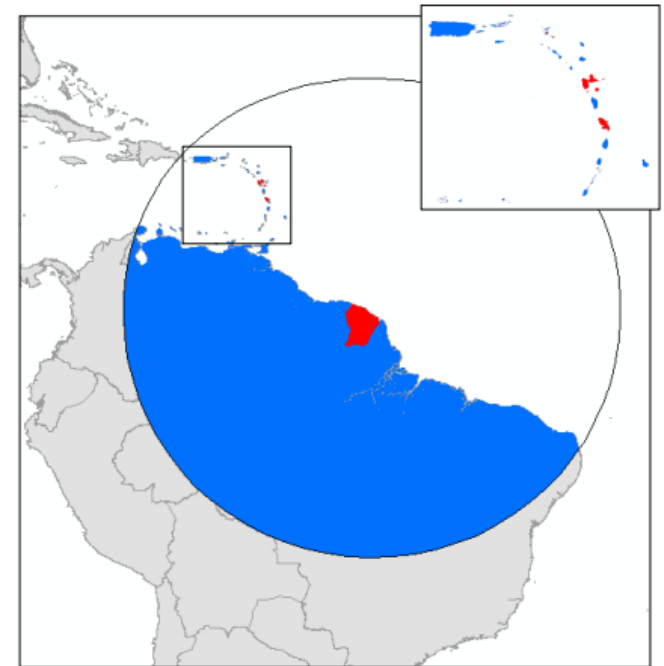
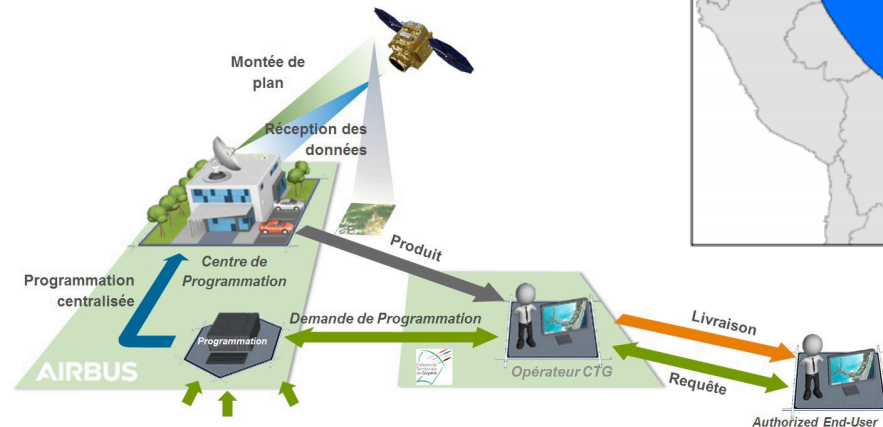


# MEANS :

## VHR Acquisitions Capacity

Virtualized access to Pleiades Neo products (quota) accessible on the entire visibility circle (subject to data provider final user licence and cooperation agreement with the interested territories).

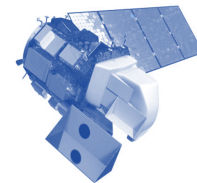
In that case, data will not be directly received by our ground station but downloaded in Toulouse (France) then transmitted to our services via the internet



# MEANS :

## Additional sensors database

- Sentinel
  - Landsat
  - SWH
  - Satellite-based Synthetic Aperture Radar
- No direct reception



## Landsat 8

1986	1991	1996
1987	1992	1997
1988	1993	1998
1989	1994	1999
1990	1995	2000

**Spot  
World  
Heritage**



2001	2006	2011
2002	2007	2012
2003	2008	2013
2004	2009	2014
2005	2010	2015

# MEANS :

## Strategic partnerships



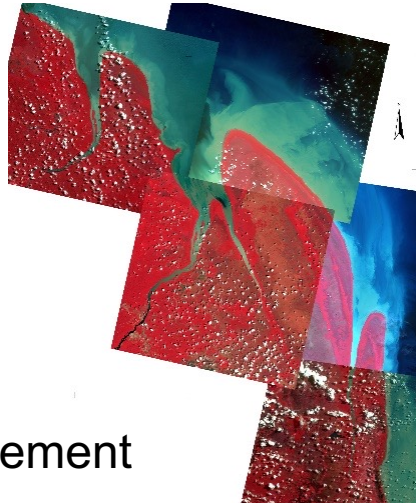
- National and European strategic partnerships for the import of technological advances in terms of products, services and processing methods derived from geographic information
- Adapt these products and services to the Amazonian & Caribbean contexts and make them available to the public community through dedicated interfaces
- Develop new processing chains when non-existent on the market



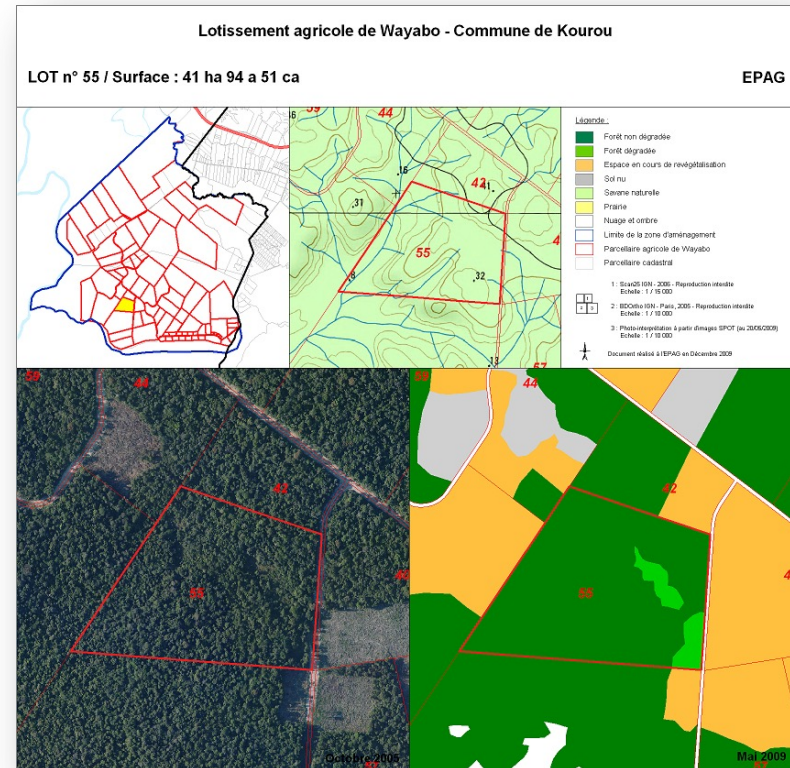
# MEANS :

## Local thematic expertise

- Littoral
- Health
- Urban
- Agriculture
- Deforestation
- Mining
- Fish resource management



So many subjects for which an assessment of the contribution of satellites has been carried out over the past 15 years, taking up from year to year the challenges associated with the efficient exploitation of satellite resources.



# HOW TO :

## Terms of access to SEAS Guyane data



Authorized End Users are the public and/or private entities that will be authorized to use the Spot 6/7, Pleiades and Pleiades Neo products ordered by Territorial Collectivity of French Guiana. They are grouped according to the 3 categories of users previously defined:

- **1<sup>st</sup> Category** : All French institutional users (Metropolis and French overseas departments and territories),
- **2<sup>nd</sup> Category** : Private service providers, intervening at the request of cat.1 rights holders, for the specific needs of a project,
- **3<sup>rd</sup> Category** : Scientific Authorized Users of foreign public entities (on a case-by-case basis with prior agreement from Airbus). Access to products for download (no production or specific programming). Access to products subject to the prior signature of a specific cooperation agreement between cat.1 rights holders and the user.



**Thank you for your attention !**

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