

SPOT6 and SPOT7 Constellation

A New Generation... Valuing the Earth

High level agility

Nominal +/- 30° & Extended up to +/- 45

Same CMG as Pléiades 30° in 10s

On board Memory

On-board memory: 1Tbits EOL

X band Downlink: QPSK 300 Mbps

750 images
3M+ sq.km

Outstanding daily acquisition capacity

Double capacity with SPOT 6 & 7

Daily revisit

With SPOT 6 & SPOT 7



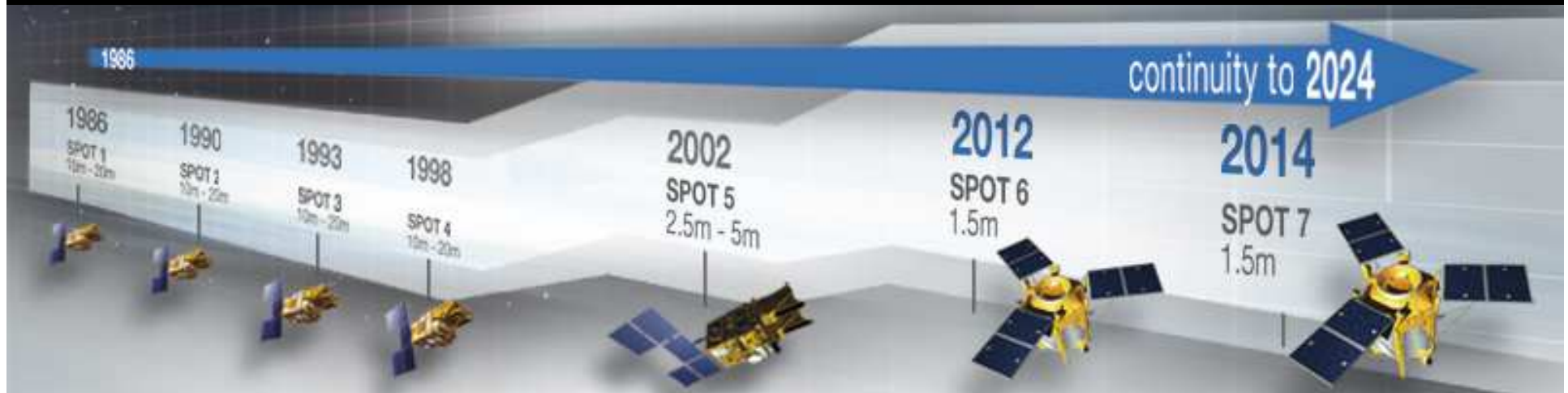
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Chernobyl, May 1986 – SPOT 1

SPOT series

29 Years of experience, +100b sq.km archive



- SPOT 1 to 5: supported by French Space Agency (CNES)
- SPOT 6 and SPOT 7: a private program **fully funded** by Astrium Services

Space segment | Ground segment

Confidential



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SPOT 6 – September 9th, 2012

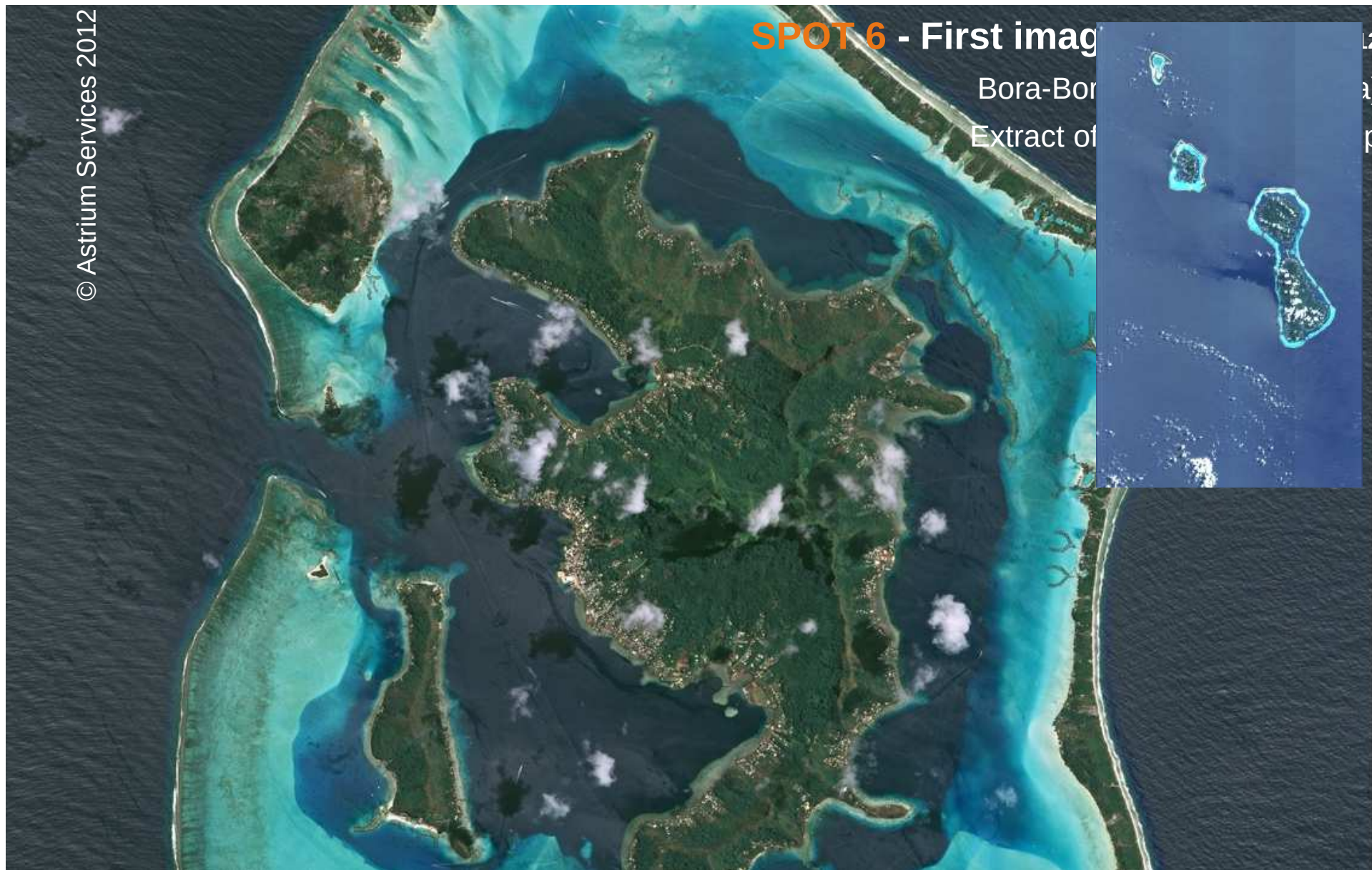
SPOT 7 – June 30th, 2014

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SPOT 6 - First image

Bora-Bora

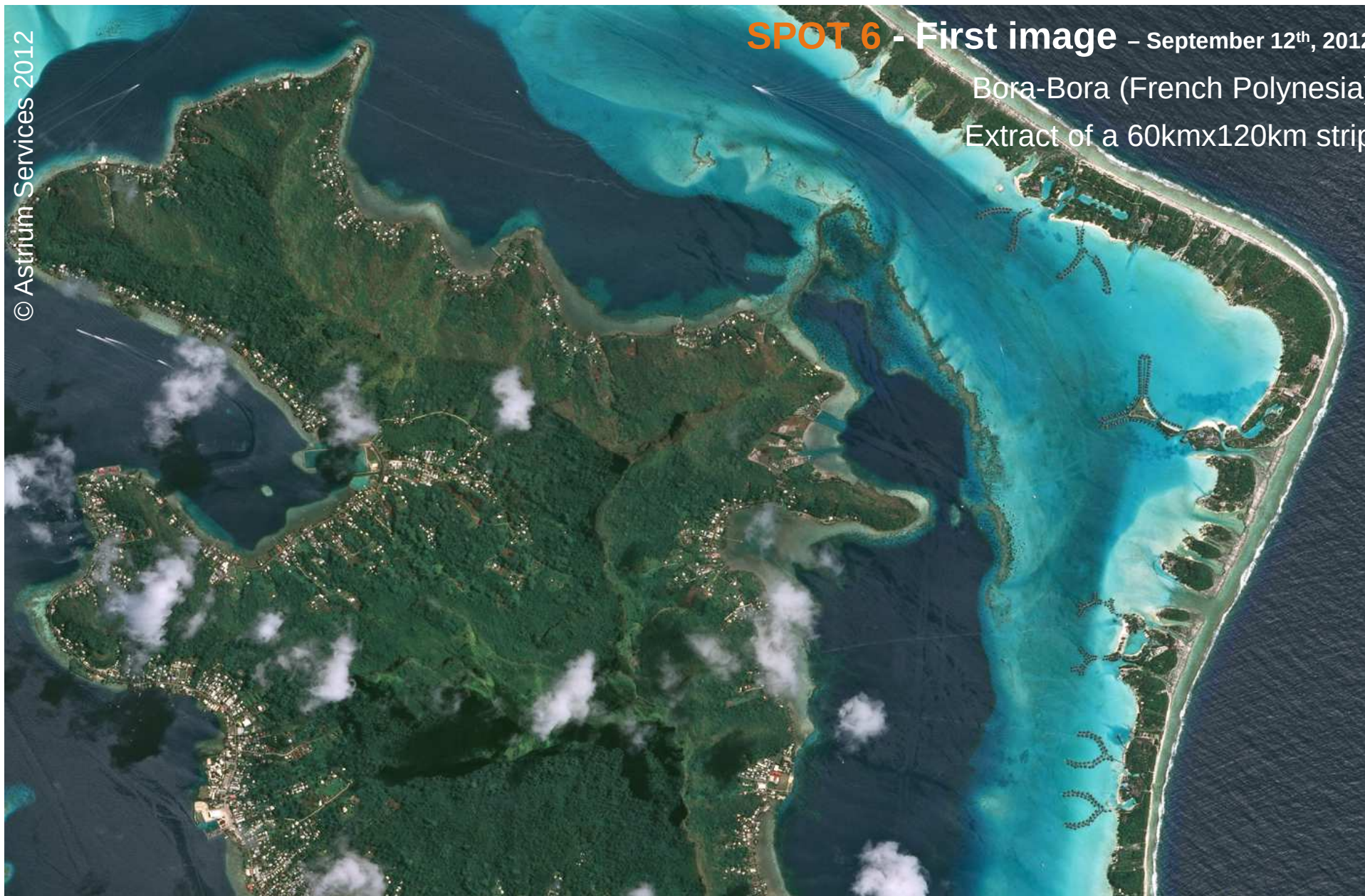
Extract of



SPOT 6 - First image – September 12th, 2012

Bora-Bora (French Polynesia)

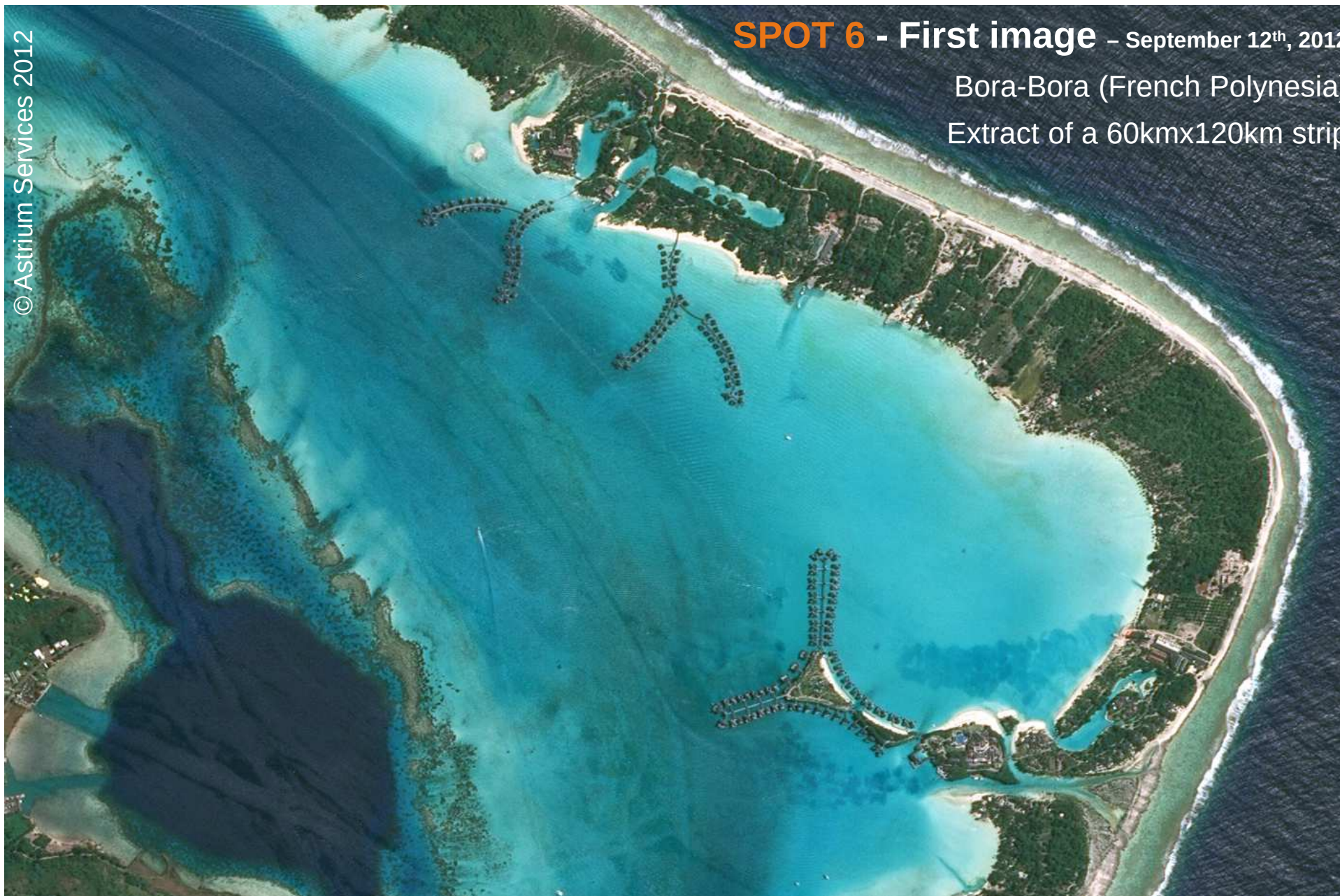
Extract of a 60kmx120km strip

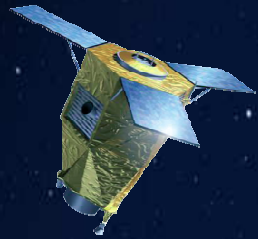


SPOT 6 - First image – September 12th, 2012

Bora-Bora (French Polynesia)

Extract of a 60kmx120km strip





2011

Pléiades 1A
50cm



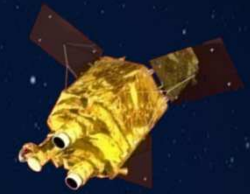
2012

SPOT 6
1.5m



2012

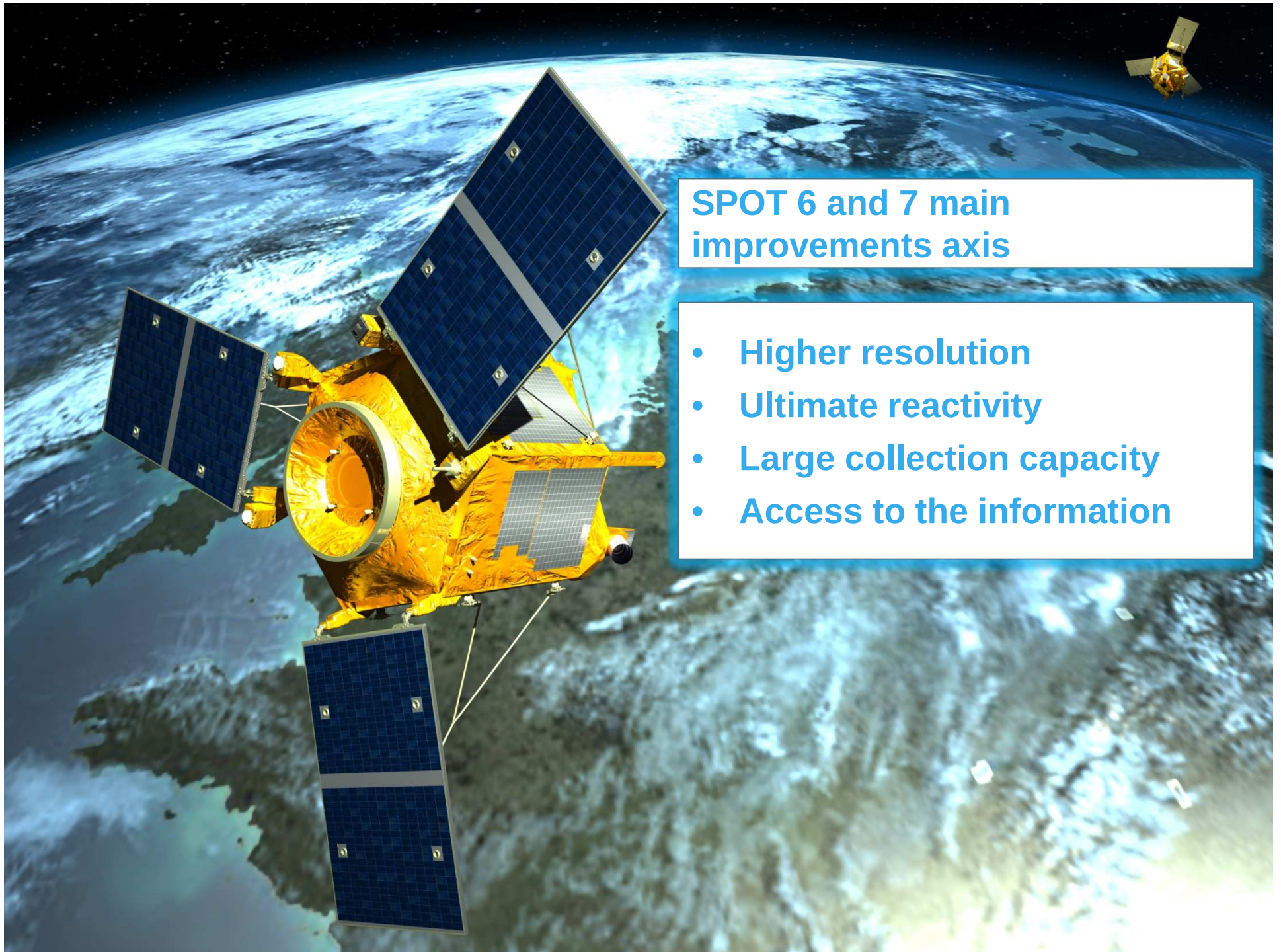
Pléiades 1B
50cm



2014

SPOT 7
1.5m

A continuity of service guaranteed until 2024



SPOT 6 and 7 main improvements axis

- Higher resolution
- Ultimate reactivity
- Large collection capacity
- Access to the information

SPOT 6 Vancouver (Canada)
Full swath (60 km)



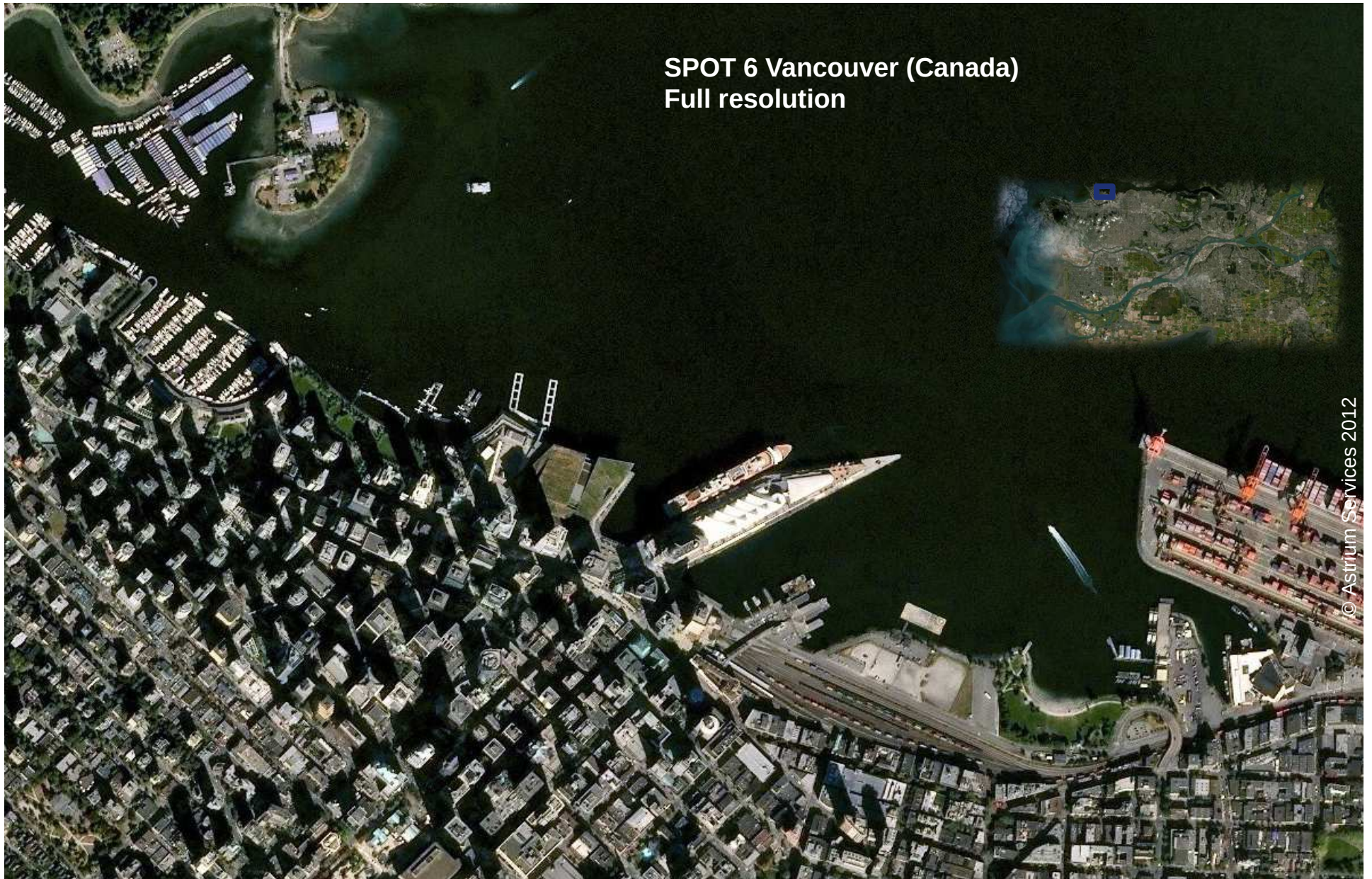
© Astrium Services 2012

SPOT 6 Vancouver (Canada)
Focus over the urban area



© Astrium Services 2012

SPOT 6 Vancouver (Canada)
Full resolution



© Astrium Services 2012

Reactivity

Reactive tasking

→ Uplink every 4 hours to take new requests into account
Online 24/7 ordering

Agility

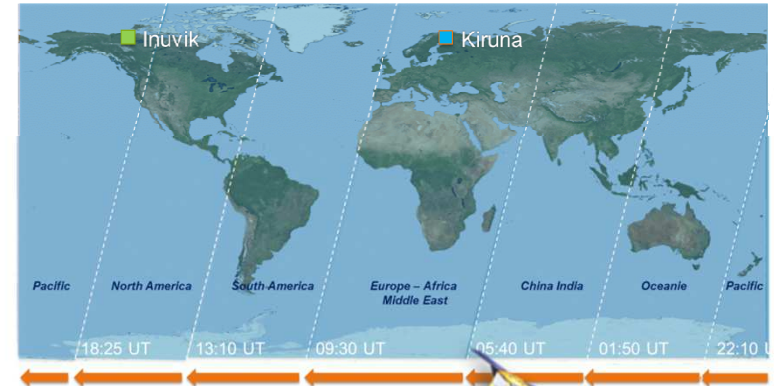
From a **target** to another in record time (30° in 14s, including stabilization time) **Multistrip** acquisition to cover wider areas in a single pass
Corridor collection (any direction –e.g. to cover borders, coastlines, rivers...)

New generation image processor

→ <40 minutes
→ Automatic orthorectification
→ Rush delivery

SPOT 6/7 constellation + extended viewing angle

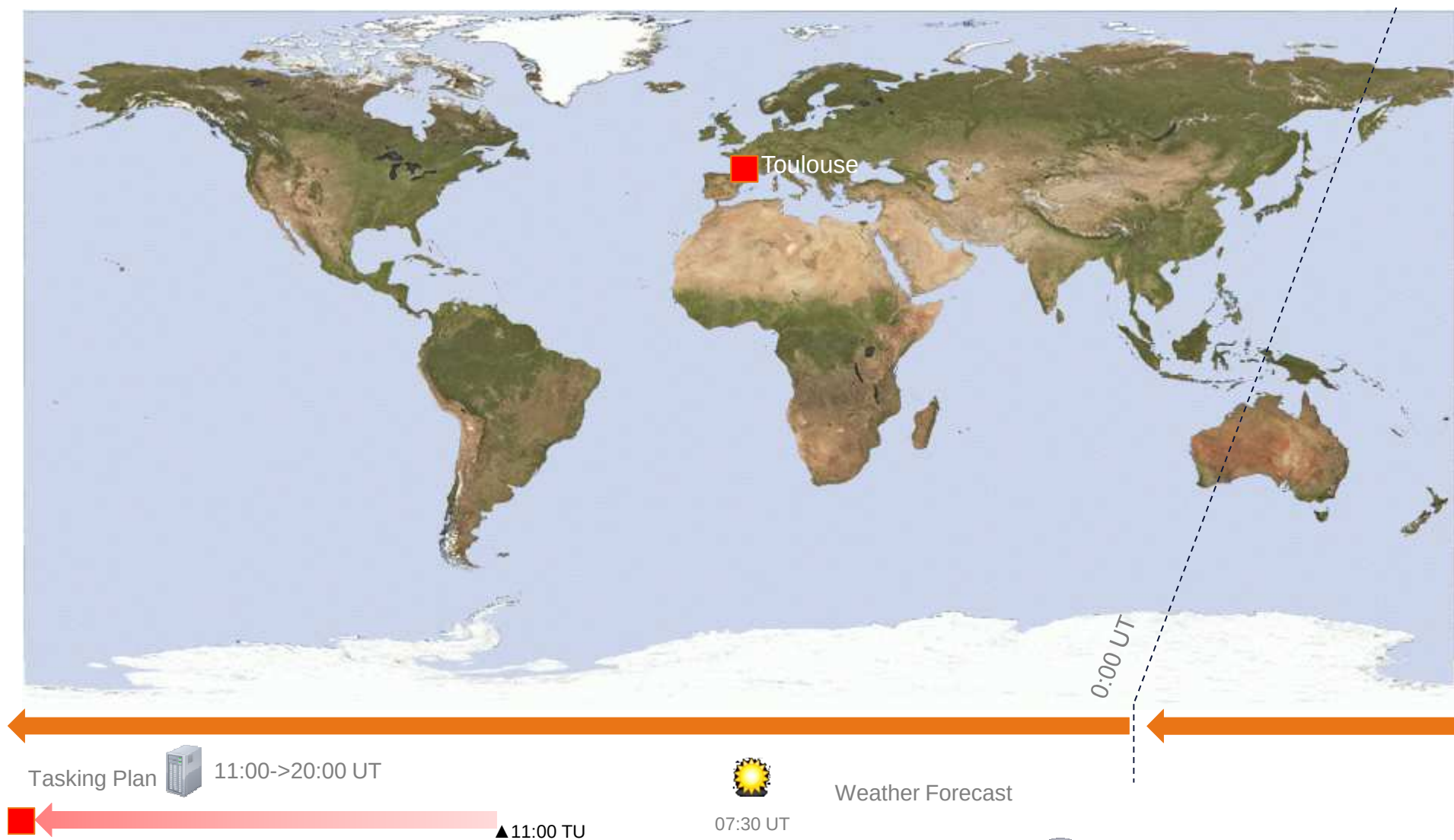
→ Daily everywhere (Twice a day with Pléiades)



SPOT 6, SPOT 7, Pléiades 1A and Pléiades 1B
are 90-degree-phased on sun-synchronous orbit

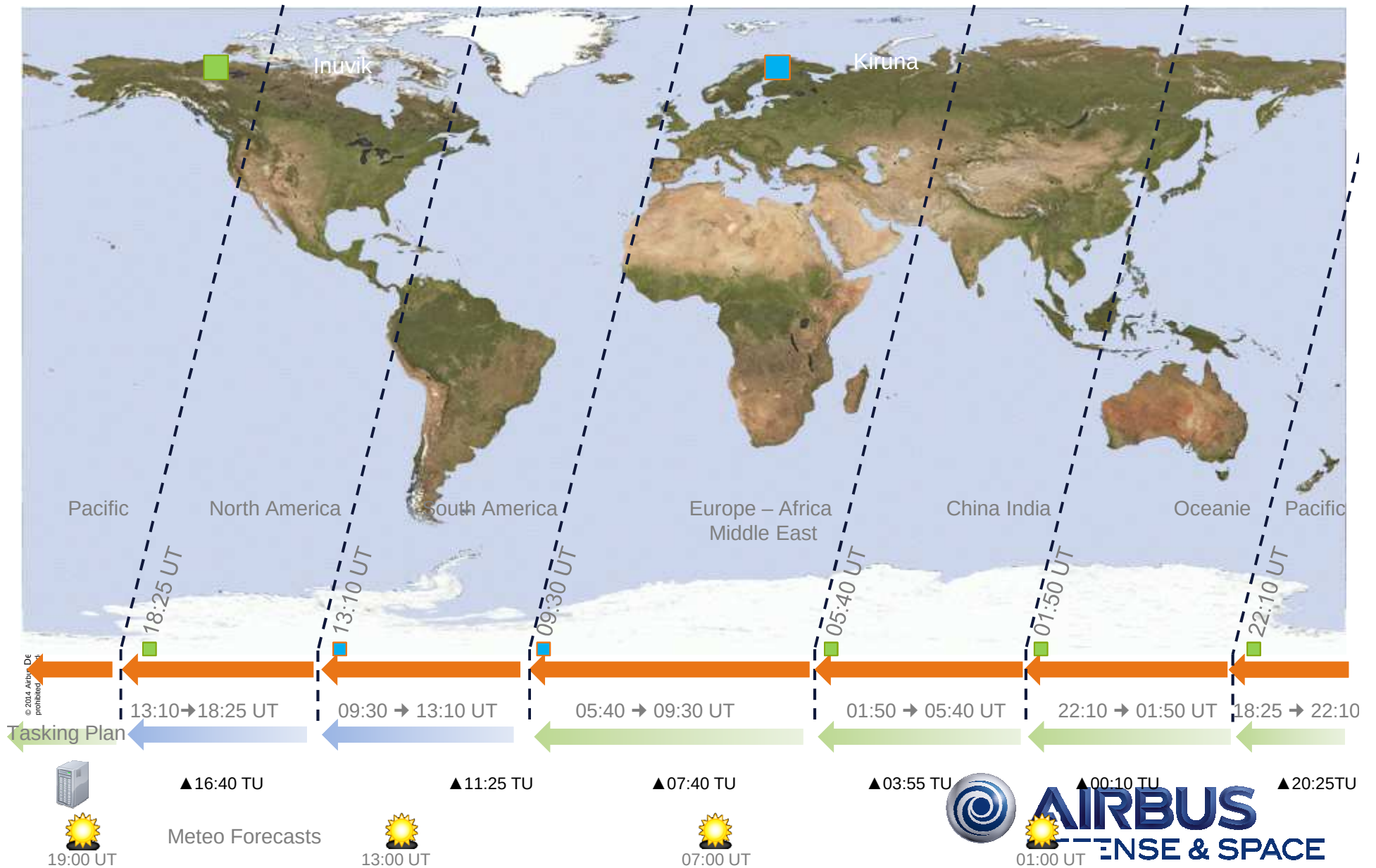
SPOT 5 tasking

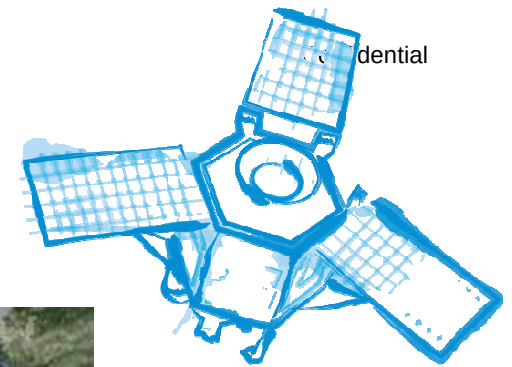
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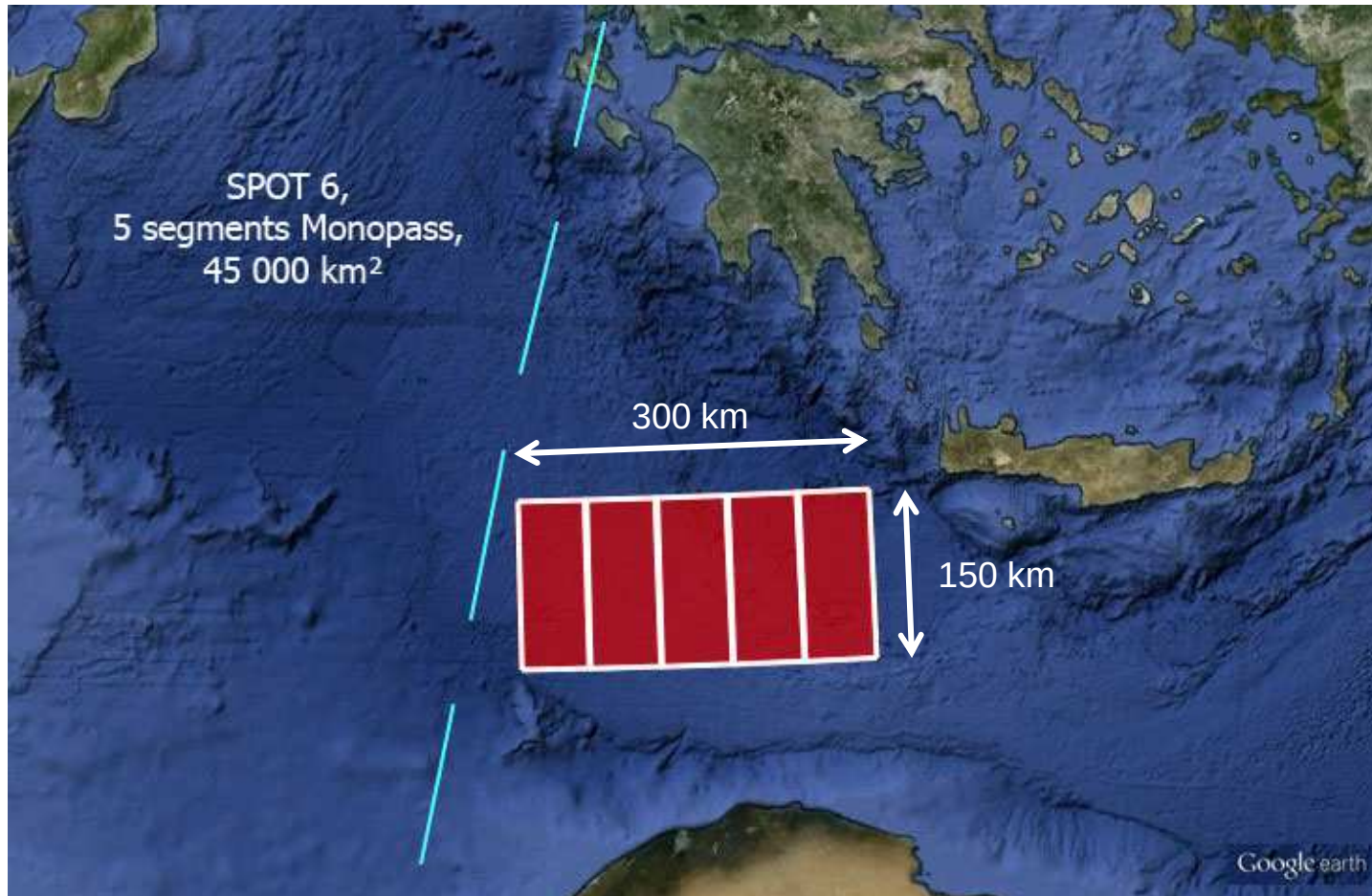
Satellite tasking : with SPOT 6&7

Confidential

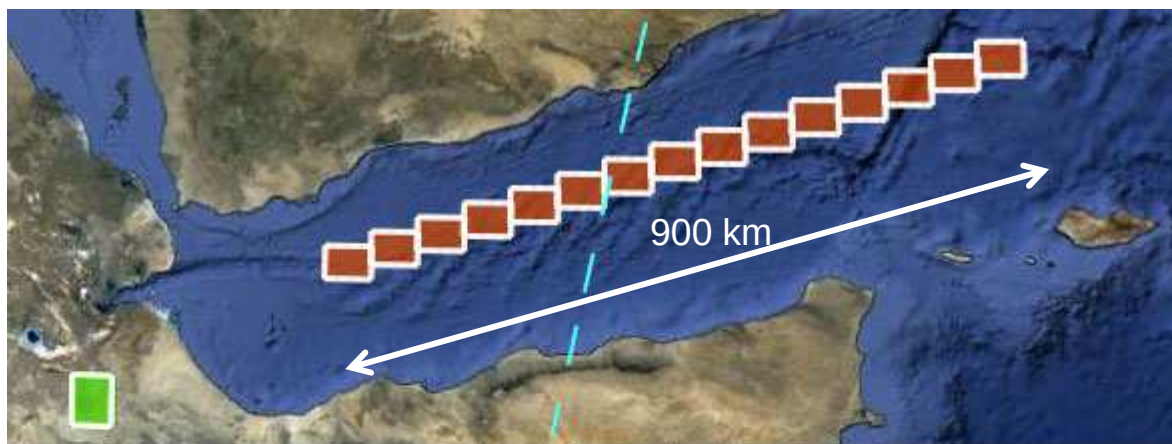




Multistrip in monopass



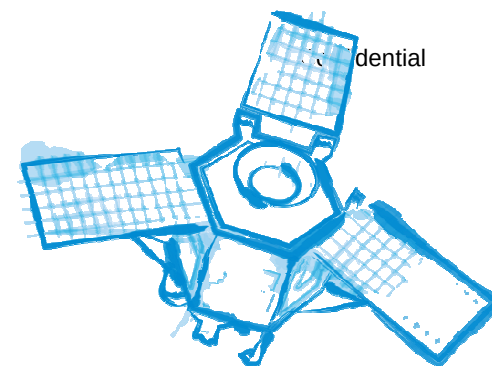
E-W acquisition



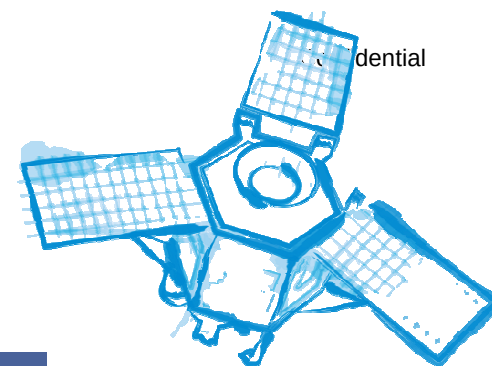
15 images N/S and 900 km long in E/W



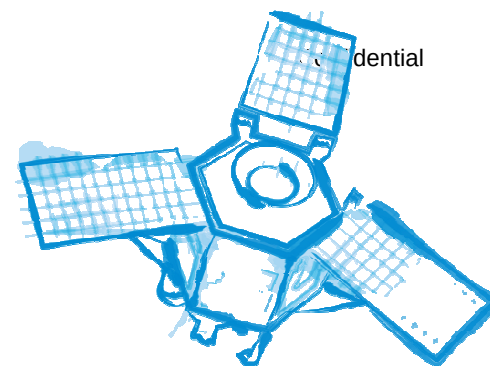
Two corridor segments 600 km long and 60 km wide



Targets

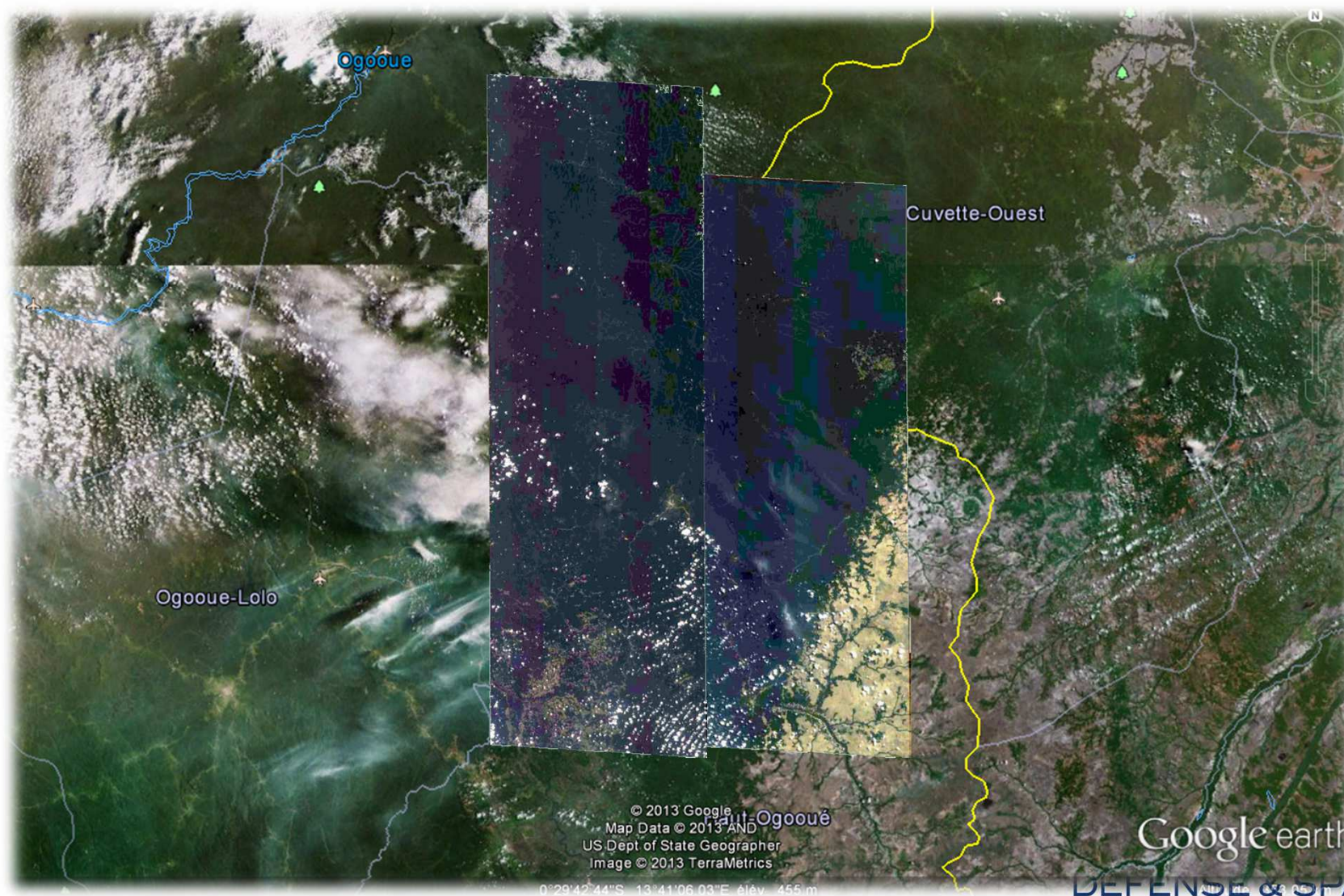


Multizones



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In complex weather conditions...



Collection capacity

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System fully designed and configured to cover broad areas

SPOT 6 & SPOT 7 constellation

→ 6M sq. km / day

4 weather forecasts per day taken into account

→ Optimization of the resource

→ Increase ratio of successful attempts

Huge onboard storage capacity

Agility

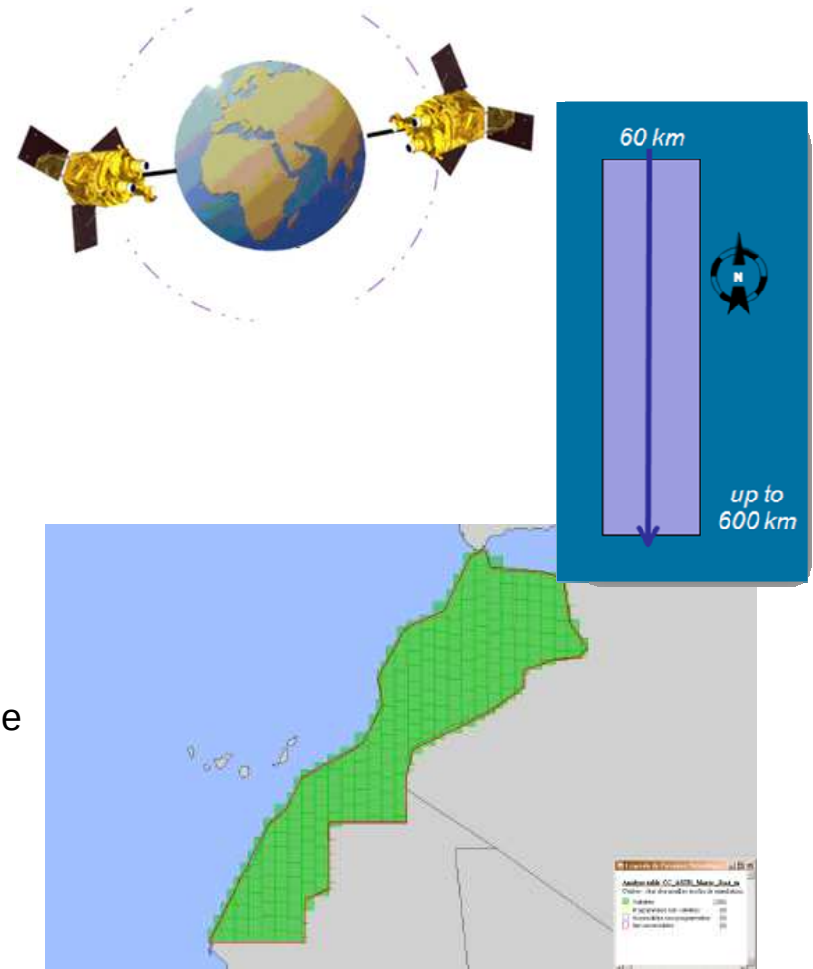
→ Faster access to the next area to be covered

→ Conflicts avoidance

Automatic ortho production

- 10m CE90 geoloc accuracy with Ref3D where available
- 35m elsewhere (technical specification)

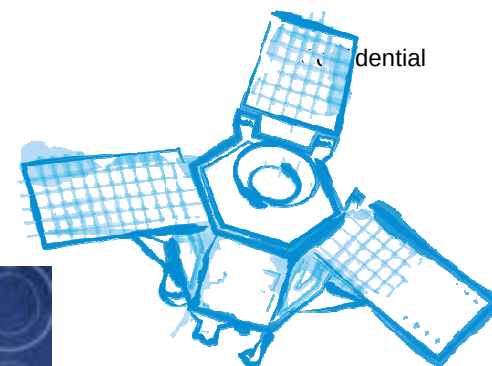
High delivery capacity

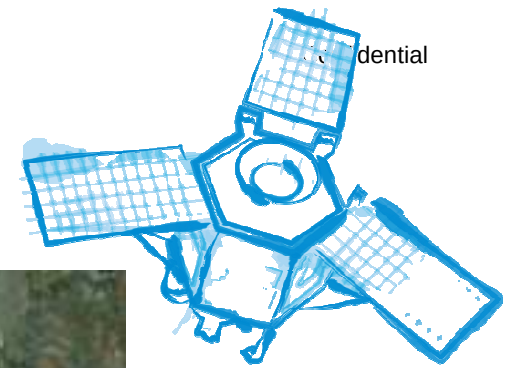


Simulation of coverage over Morocco:
completion in less than 6 weeks.

ACE

Standard acquisition mode





Long strip



Mali

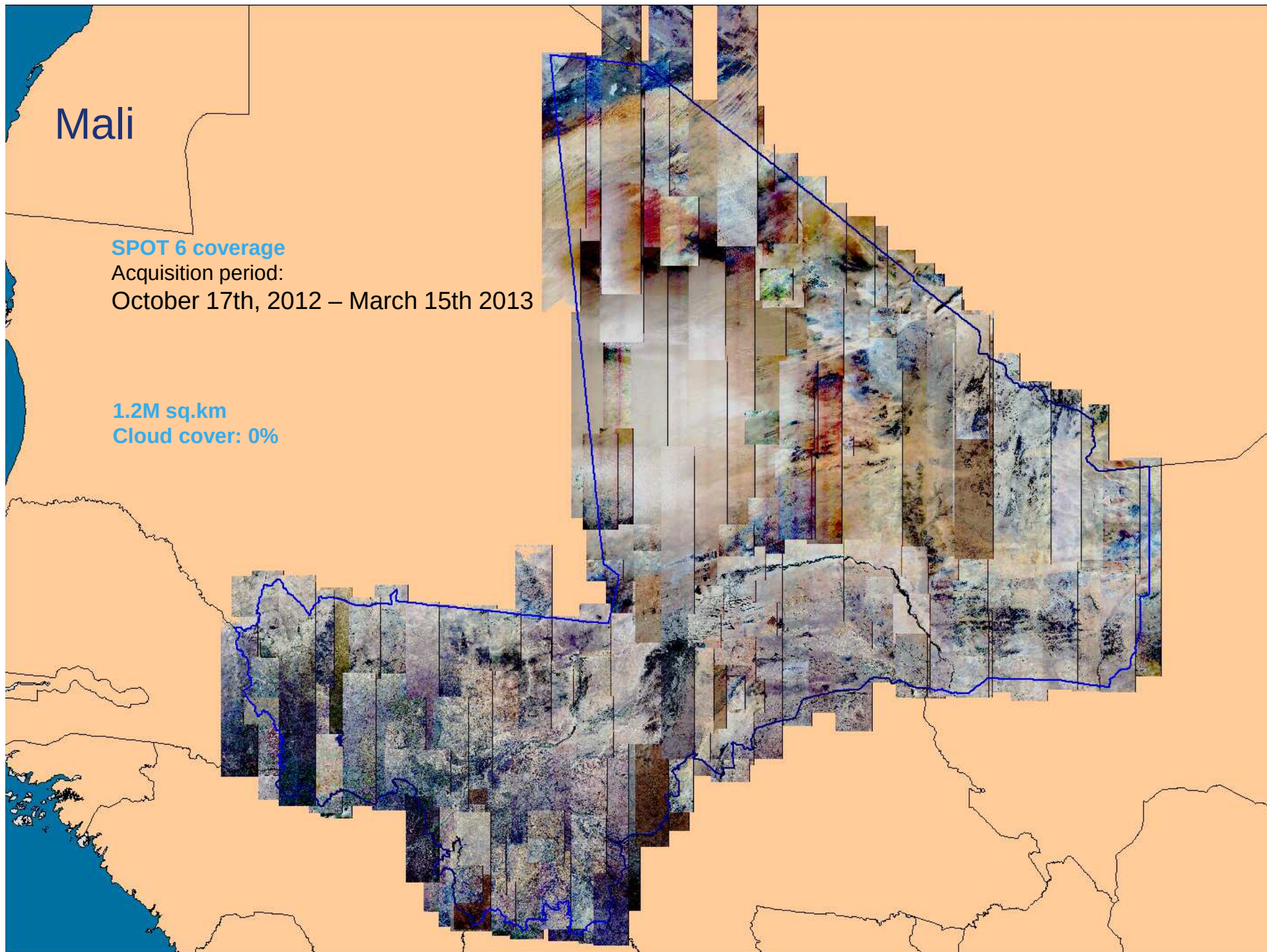
SPOT 6 coverage

Acquisition period:

October 17th, 2012 – March 15th 2013

1.2M sq.km

Cloud cover: 0%



Access to the information

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Products easier to handle

- North / South acquisitions
- Ortho products as a standard
- Ordering per AOI
- Natural color products
- Harmonized SPOT product line with Pléiades offer

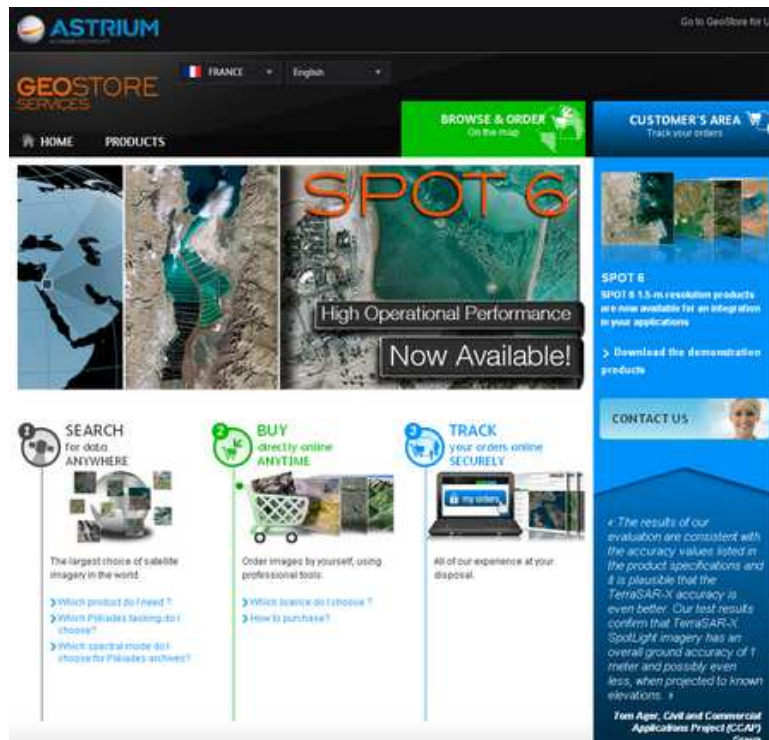
Enlarged tasking services

Tailored Tasking

Complex AOI, feasibility study, full leverage of GEO tasking knowhow, any options possible, Priority, Emergency management...

Instant tasking*

Autonomous 24/7 availability, ultimate reactivity, max. priority over 50kmx100km limited AOI.



*Availability Q2 2013



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GEOSTORE SERVICES FRANCE English

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On the map

CUSTOMER'S AREA
Track your orders

HOME **PRODUCTS**

Discovery Annotate Projects

Find Content at Location ☐ **Zoom To** **Advanced** **Pan** **Zoom to AOI** **Layers** **Measure** **Draw** **Upload** **Scene IDs** **Edit** **Clear** **Criteria**

Search Results

Scenes (53) Mosaics (0)

Results Found: 53

Basket	Info	Product	Resolution (m)	Cloud	Date	Incidence Angle
☐	☒	SPOT 1.5-m	1.5	12.4	09 Feb 2013	22.8
☐	☒	SPOT 1.5-m	1.5	22.6	09 Feb 2013	33
☐	☒	SPOT 1.5-m	1.5	15.6	09 Feb 2013	32.4
☐	☒	SPOT 1.5-m	1.5	7.3	14 Jan 2013	23.8
☐	☒	SPOT 1.5-m	1.5	4.7	21 Dec 2012	26.9
☐	☒	SPOT 1.5-m	1.5	19.7	16 Dec 2012	12.4
☐	☒	SPOT 1.5-m	1.5	14.6	09 Dec 2012	5.7
☐	☒	SPOT 1.5-m	1.5	24	02 Dec 2012	30.6
☐	☒	SPOT 1.5-m	1.5	14.8	18 Nov 2012	29.6

SPOT 1.5-m DS_SPOT6_201212210204429_FR1_FR1_FR1_E121N18_04502 1.5 21 Dec 2012

Selected Scenes (0) **Filter Scenes**

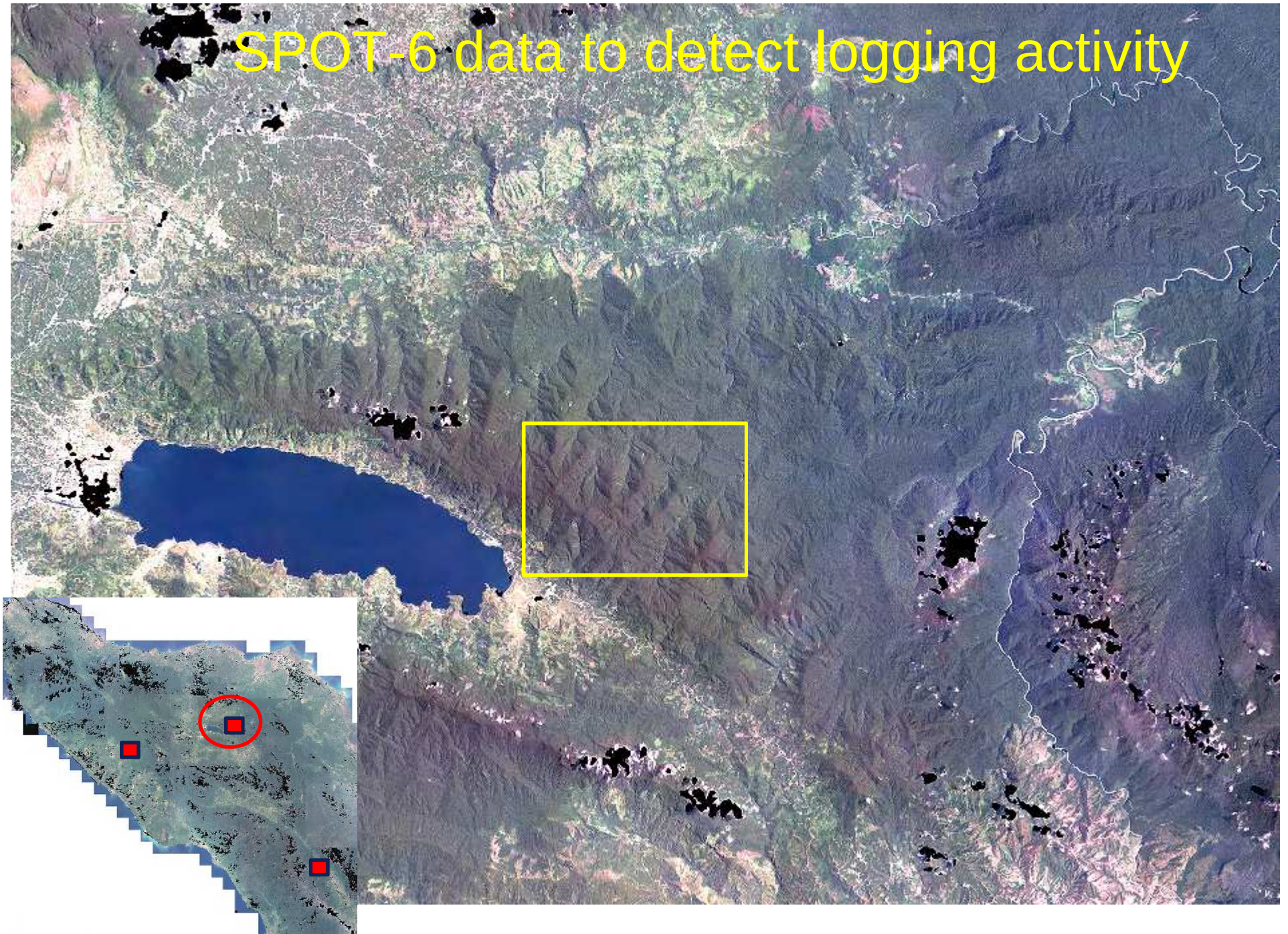
Remove	Product	Scene ID	Resolution (m)	Cloud	Date	Info	Up	Down
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Metadata

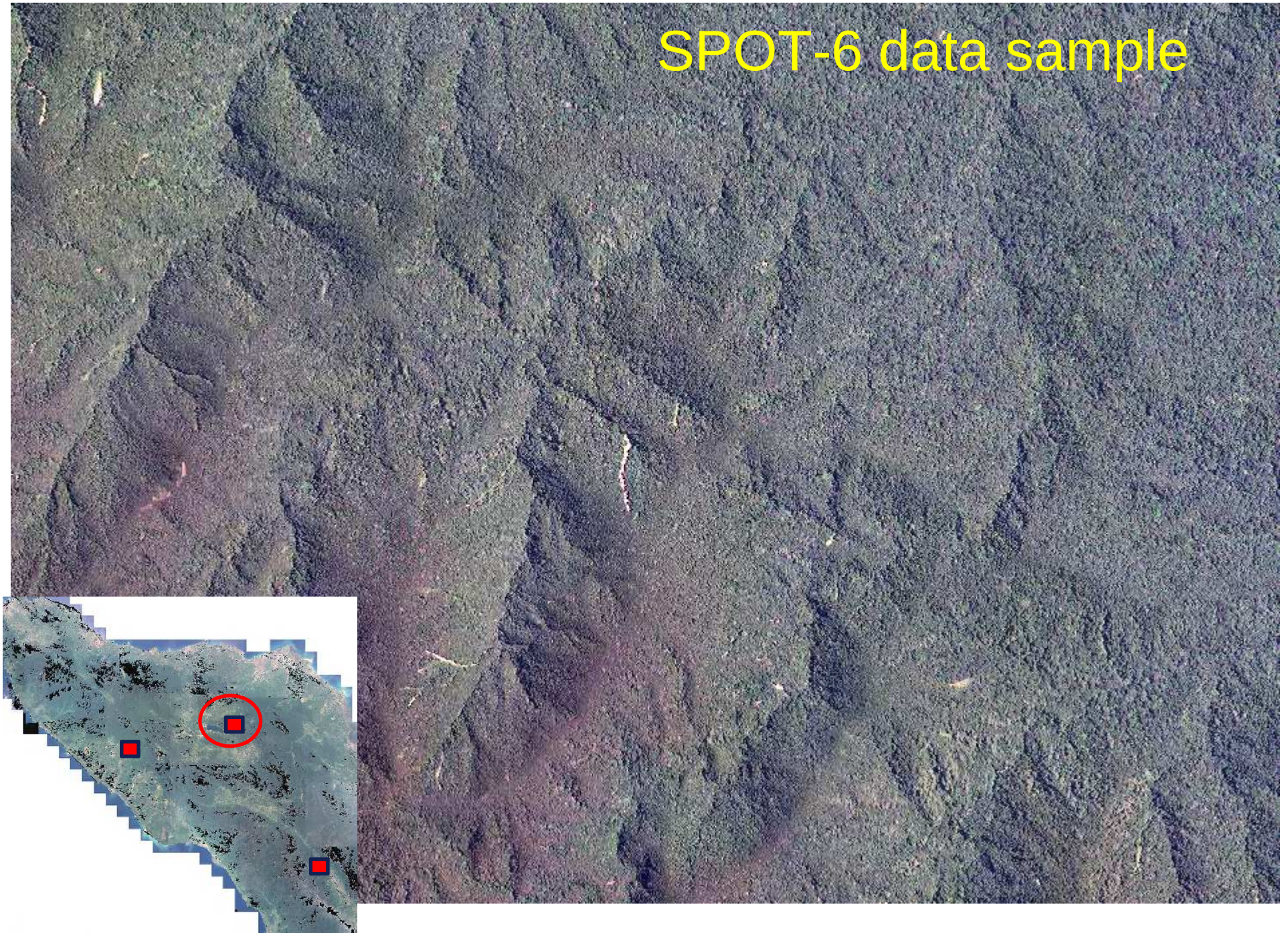
Scene ID DS_SPOT6_201212210204429_FR1_FR1_FR1_E121N18_04502
Product SPOT 1.5-m
Date 21 Dec 2012
Resolution 1.5m
Cloud Cover 4.7%

200km

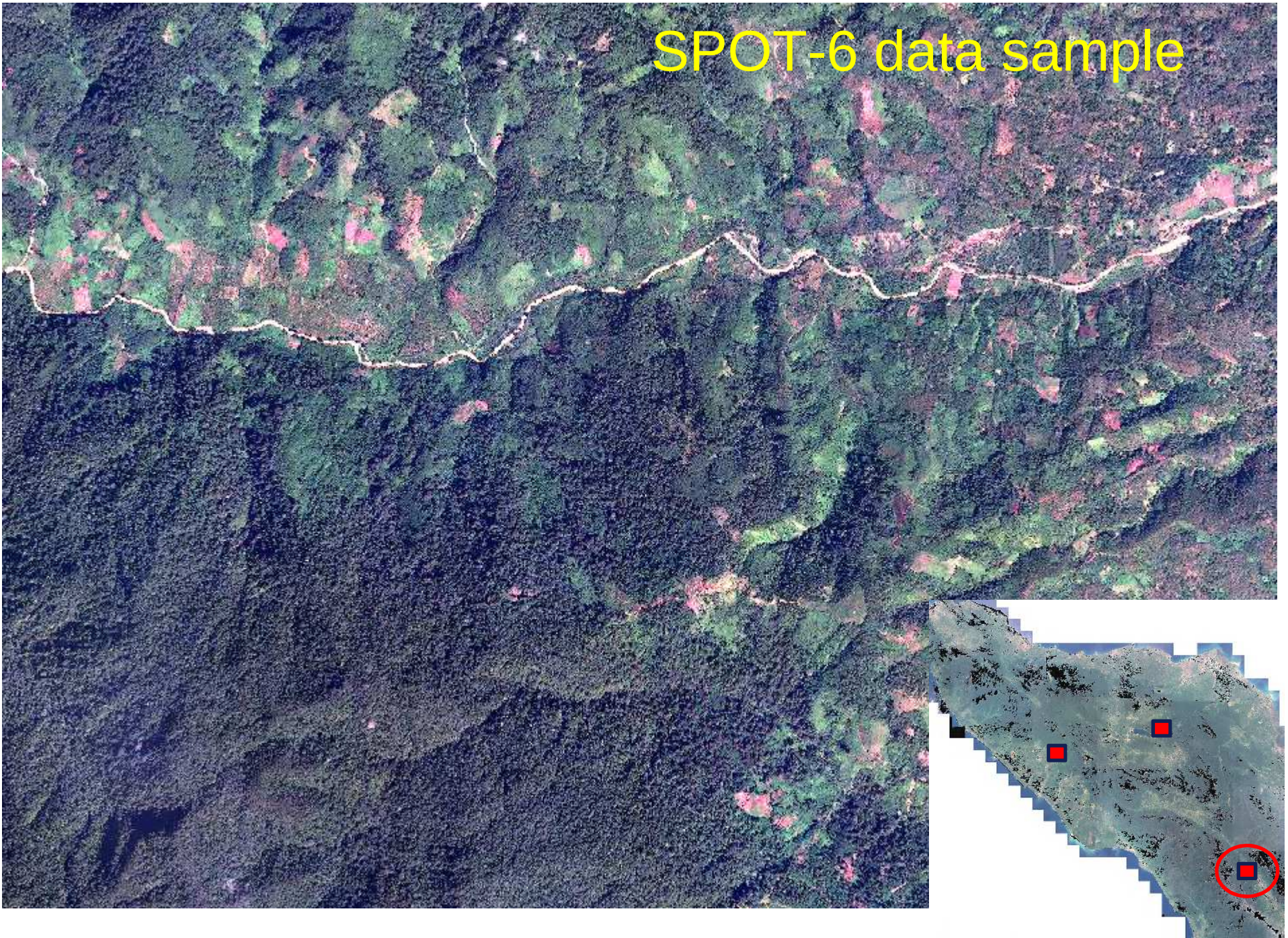
SPOT-6 data to detect logging activity

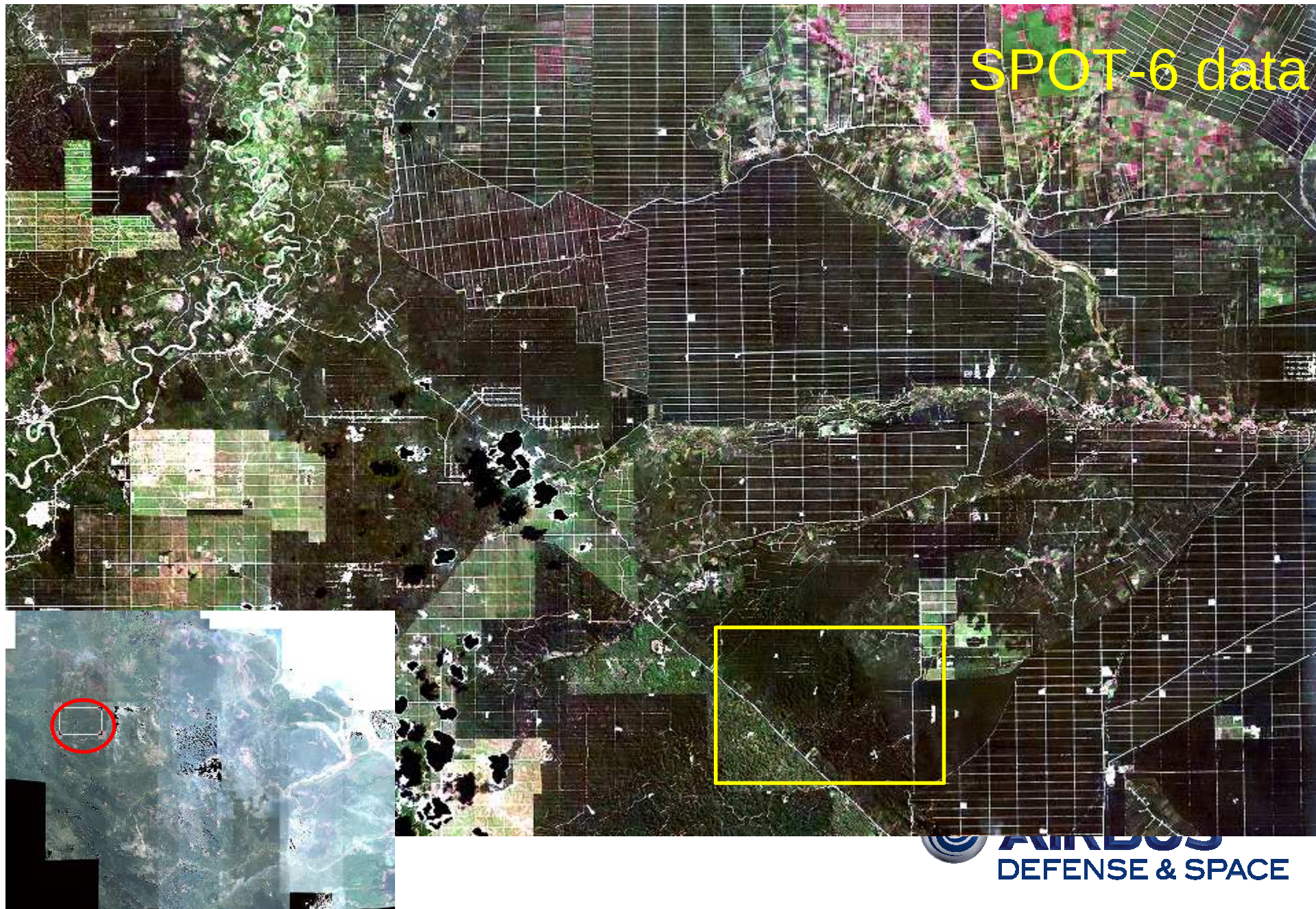


SPOT-6 data sample

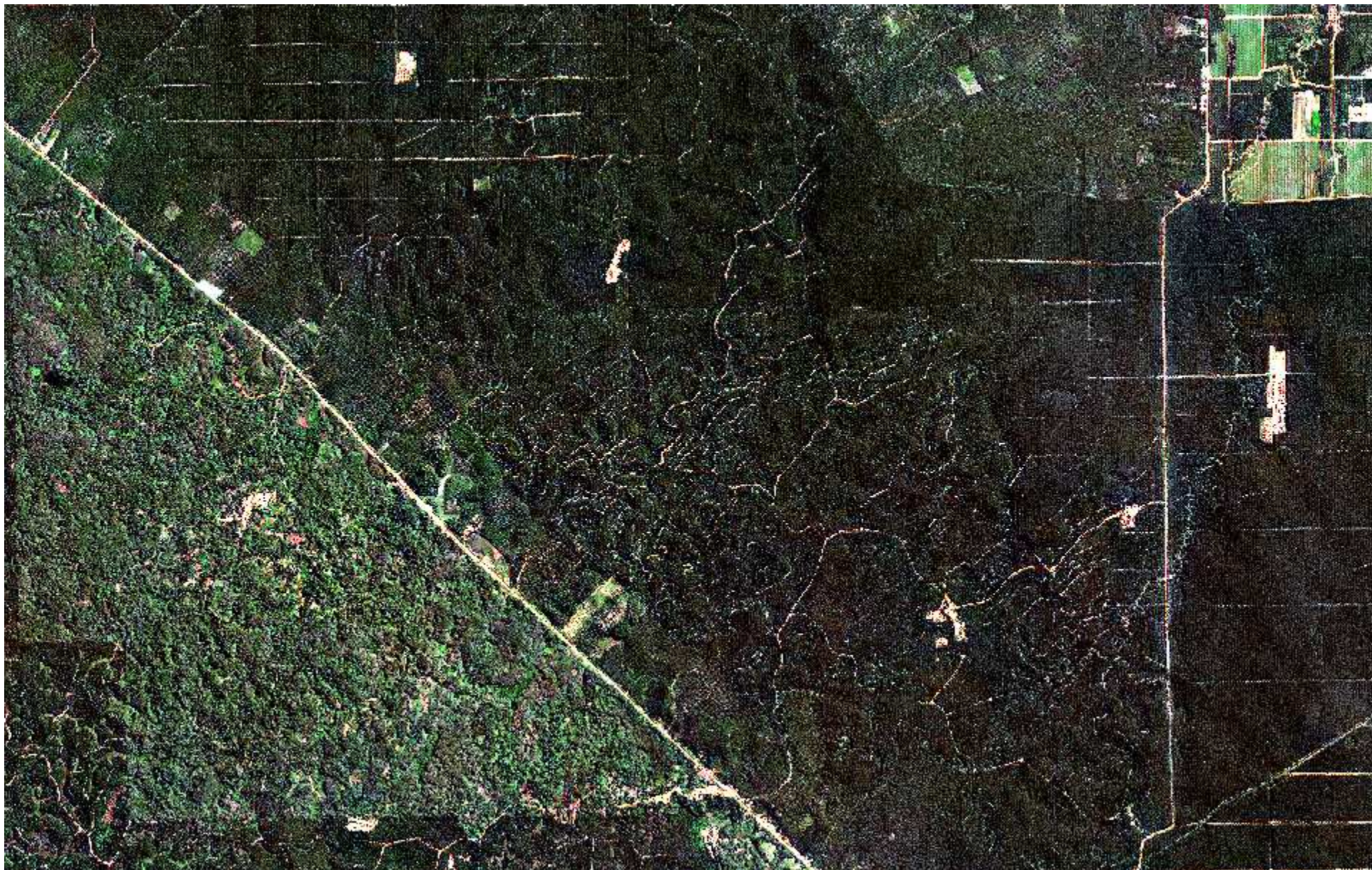


SPOT-6 data sample

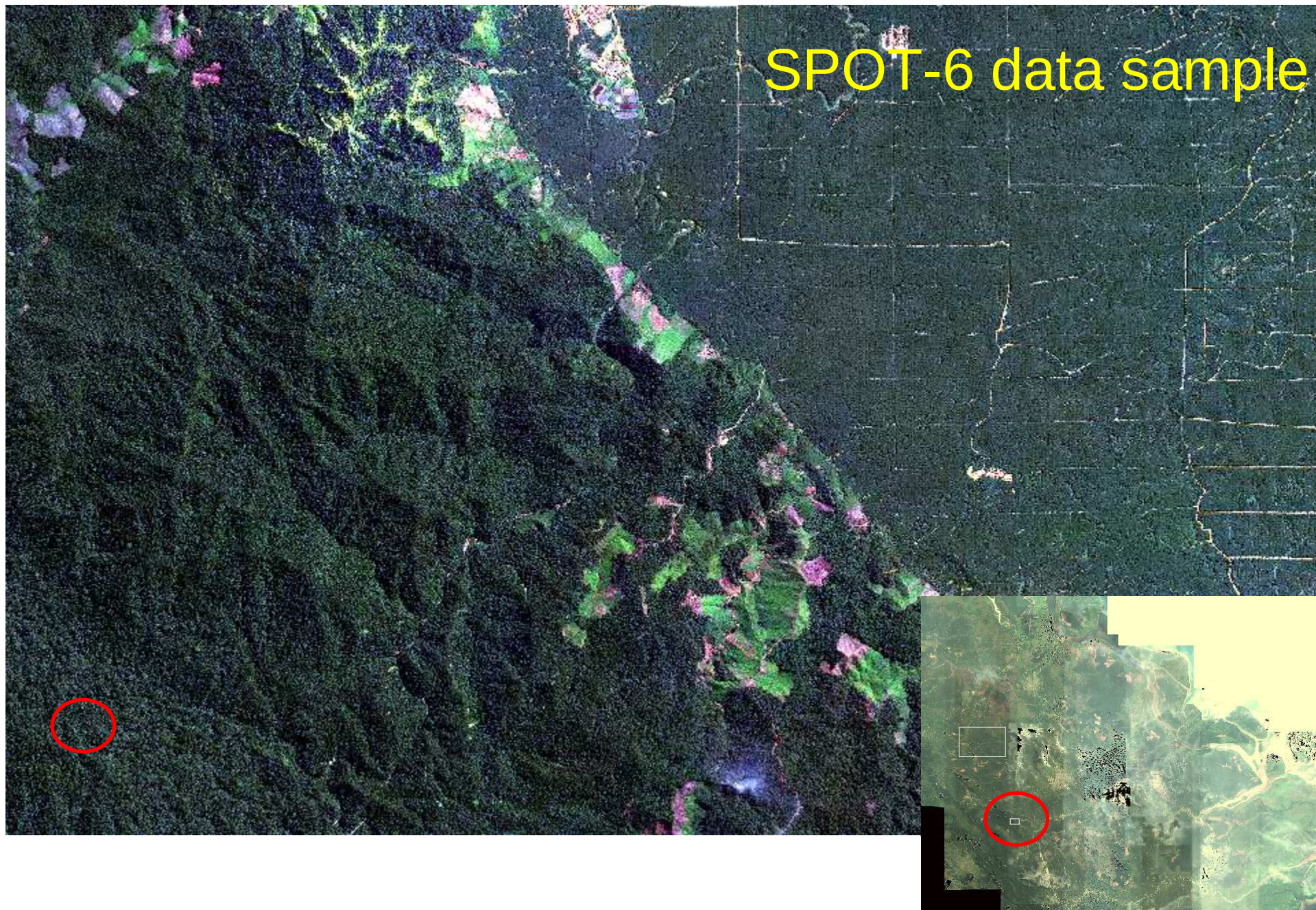




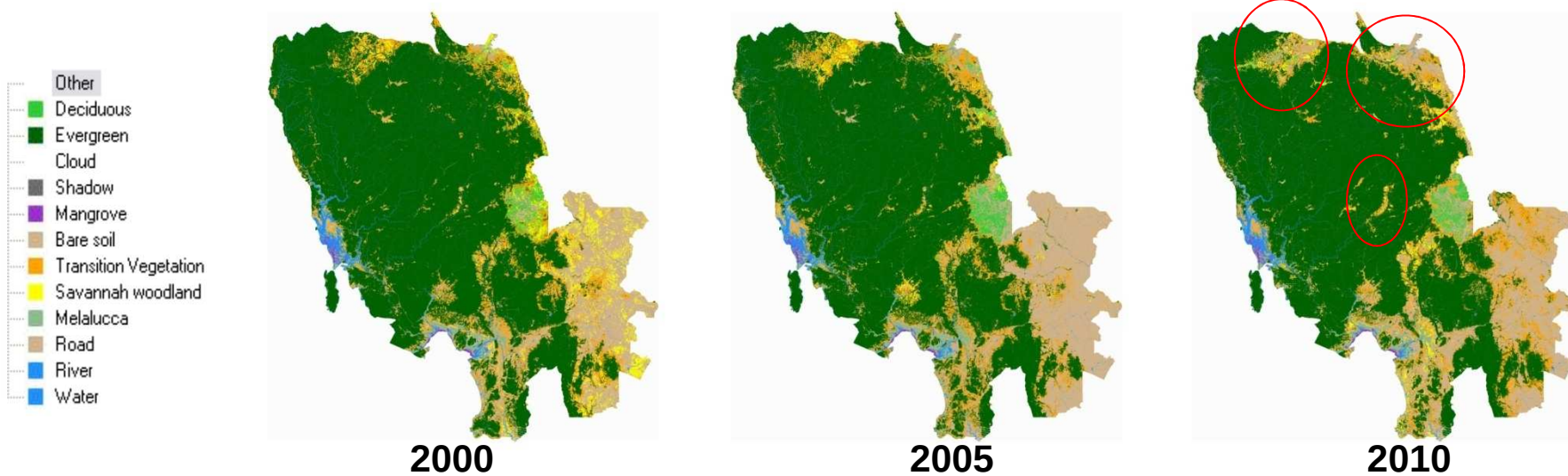
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SPOT-6 data sample



Complementarity of data sources to solve complex situations



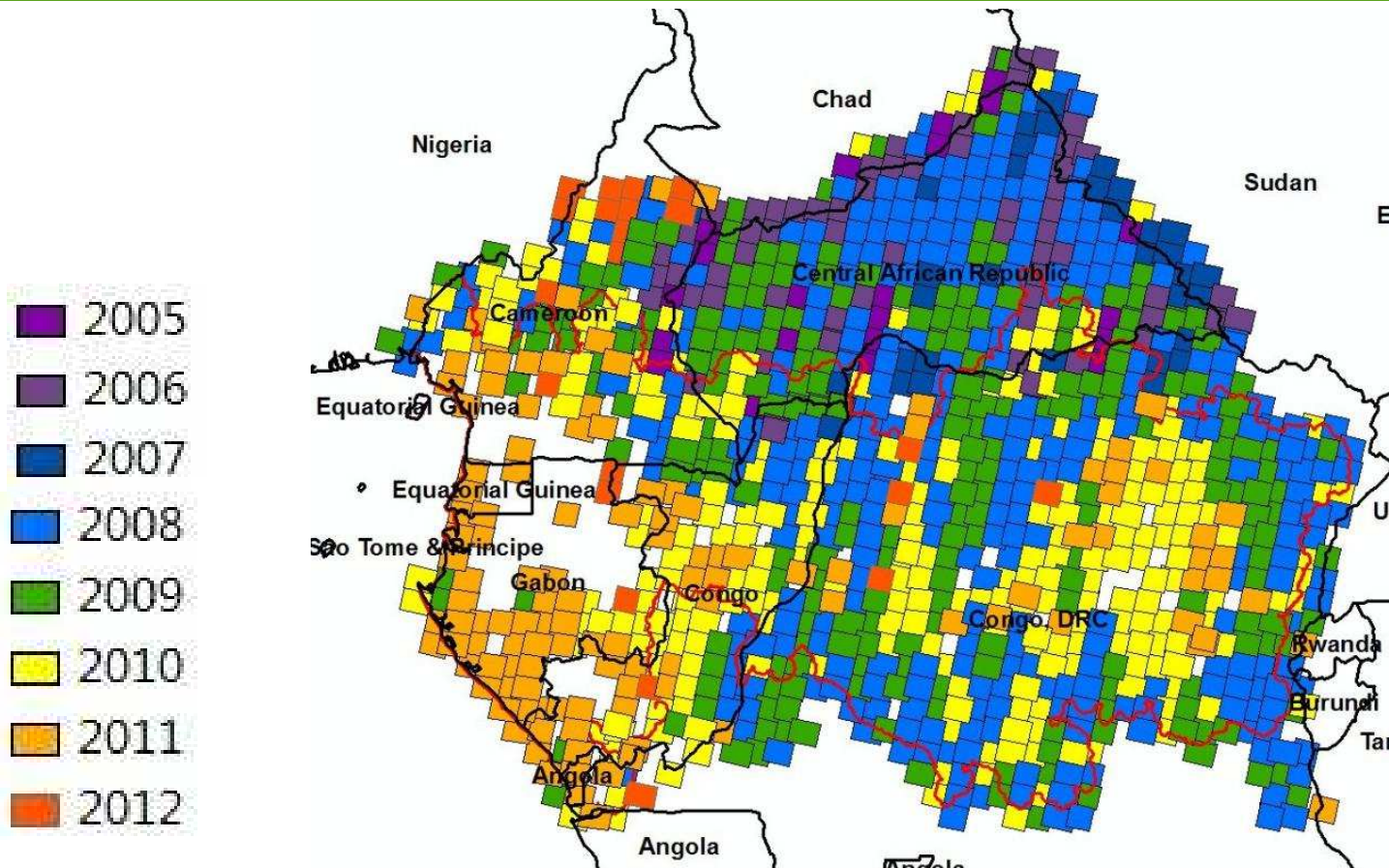
Cardamon forest region (Cambodia)

Historical forest area change maps and benchmark map produced with SPOT Imagery : use of TSX data locally to discriminate deciduous forest, confused with bare soil in optical images (acquisition during the dry season).

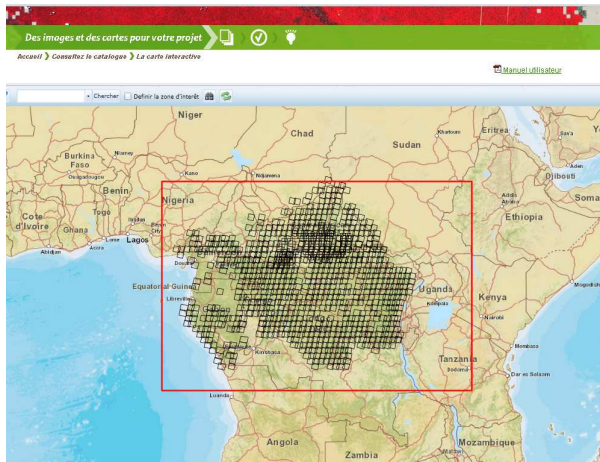
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Delivery of large bulks of archive & new data

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Reference Emission Level : delivery of large archives of data



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