



The slide features a blue background with several satellite imagery thumbnails on the left: a satellite dish, a city street view, a green agricultural field, a mountain range, and two people working at a computer. The word 'astroterra' is written in a stylized font across the top, with a globe icon replacing the letter 'o'. The main text on the right side of the slide reads: 'Astroterra programme A continuity of the SPOT mission', 'Bruno Montfort Spot Image', and 'ORFEO Pléiades Information Day Toulouse, 10 June 2008'. The Spot Image logo and website URL 'www.spotimage.com' are located in the bottom right corner.

astroterra

Astroterra programme  
A continuity of the SPOT mission

Bruno Montfort  
Spot Image

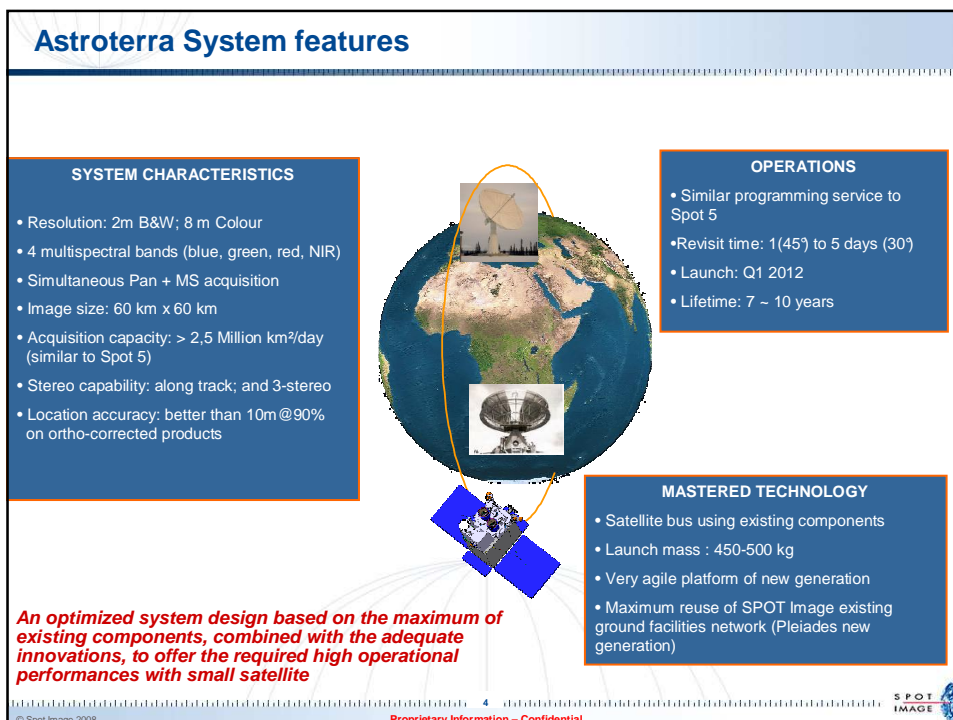
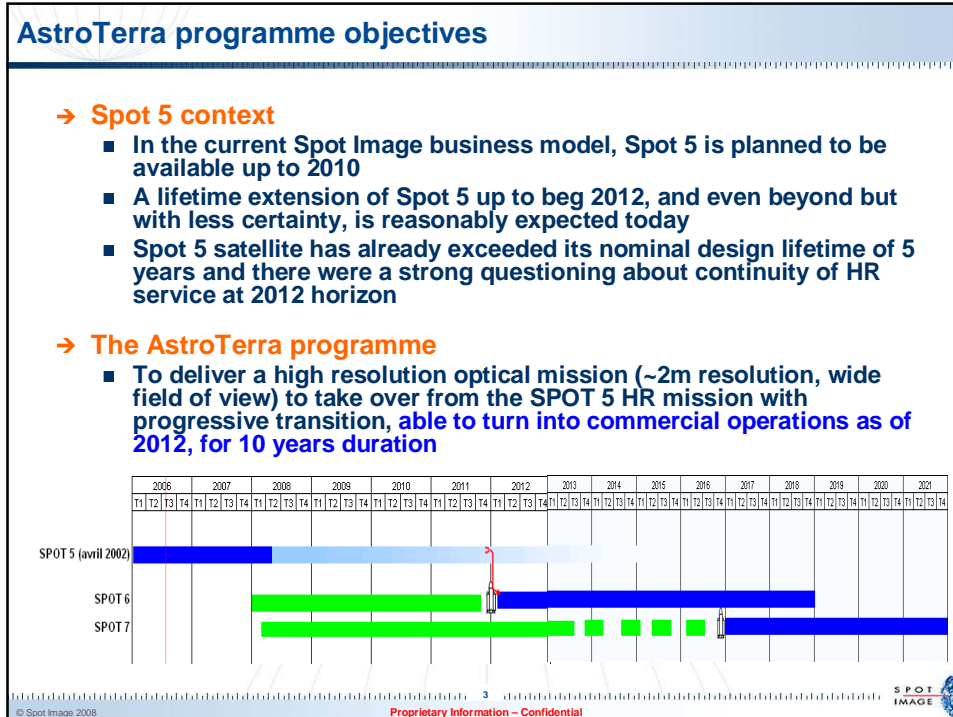
ORFEO  
Pléiades Information Day  
Toulouse, 10 June 2008

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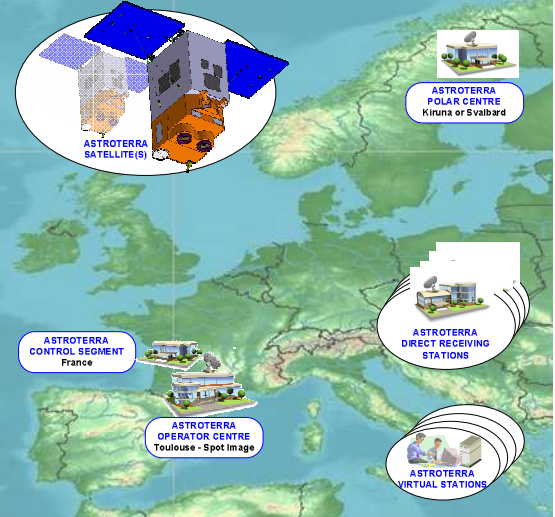
## Astroterra programme objectives

- A program to ensure a SPOT 5 continuity mission
- Decided by EADS Astrium Services and Spot Image and funded through a Private Public Partnership scheme (PPP)
- ⇒ To deliver SPOT 6 and SPOT 7
- Guarantee a sustainable operational service to end users
- Maintain a mission continuity without interruption




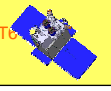
### Architecture

- **Operator Segment:**
  - **Operator Centre (SI-Tlse)**
    - Programming Centre
    - Image Reception (*Pleiades Antenna*)
    - Inventory-Cataloguing-Archiving
    - Image Production
  - **Polar Centre**
    - Image Reception
    - Inventory-Cataloguing-Archiving
    - Production of Archive products for dissemination
- **Space Segment**
  - Satellites (up to 3)
  - Satellite Control Centre (Tlse)
    - + required TM/TC communications
  - Image Quality office (Tlse)
- **Direct Receiving stations**
  - Image Reception
  - Inventory-Cataloguing-Archiving
  - Image Production
  - Connection to central programming centre for mission ordering & priority setting up
- **Astroterra Virtual Stations**
  - Cataloguing-Archiving
  - Image Production (reduced capabilities)
  - Connection to central programming centre for mission ordering & priority setting up



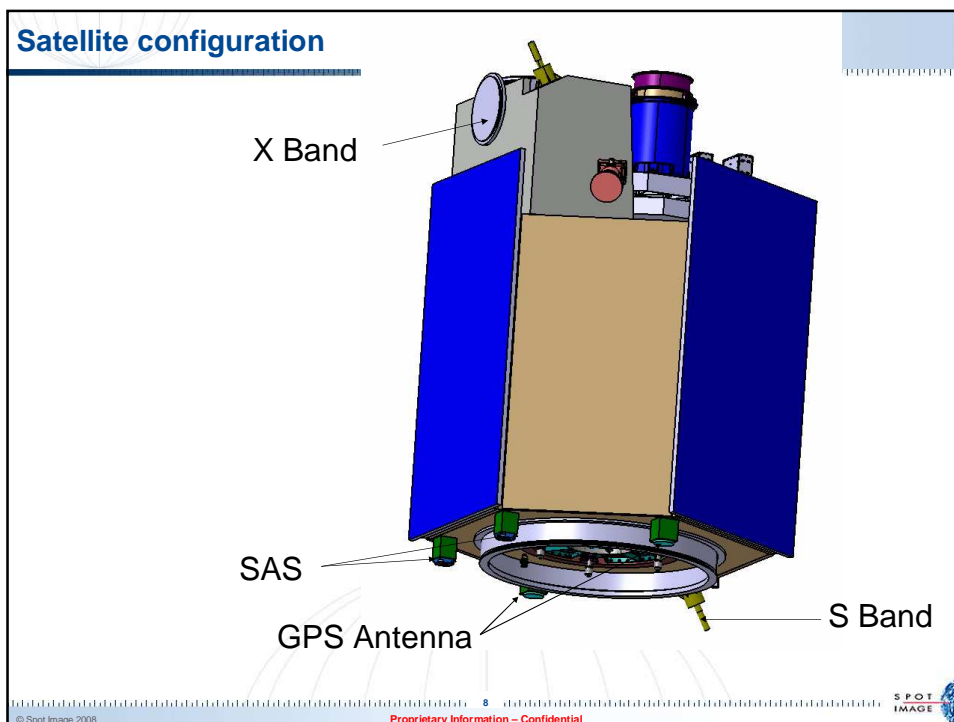
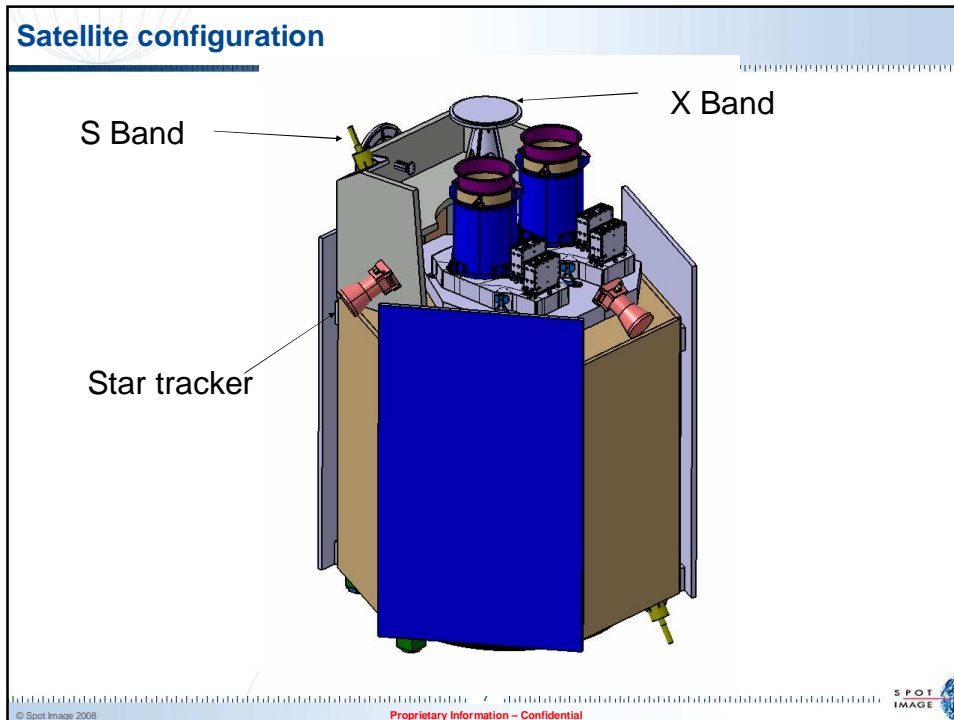
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### AstroTerra/SPOT6 versus Spot 5

	Spot 5 	AstroTerra/SPOT6 
Launch mass	3 000 kg	450 kg
Size	Body: 3.1 x 3.1 x 5.7 m Solar array wingspan 8 m	Body: ~ 1.1 x 1.4 x 2.5 m Solar array Wingspan <3.5m
Design Lifetime	5 years	7 to 10 years
Resolution / swath	2.5 m / 2 x 60 km	2 m / 60 km
Daily image acquisition capability in HR mode	up to 3 Mkm <sup>2</sup> / day in operation 2 Mkm <sup>2</sup> / day average	Target >2.5 Mkm <sup>2</sup> / day
Agility	Roll only (mirrors), 30° in 8 s	All axes (platform), 30° in 12 s
Single pass stereo capability	Only through HRS	Single pass stereo and tri-stereo
Geolocation	50 m w/o GCP	35 m w/o GCP; 10 m with Ref3D
Just-in-time tasking	No	Yes
Additional payloads	HRS, Vegetation 2, Doris	No

→ **AstroTerra: a small satellite fully dedicated to the HR mission, offering same capacities as Spot 5 for cartography over regional areas thanks to a very high platform agility**

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## Conclusion

### AstroTerra Program → SPOT 6 & SPOT 7

- ☑ **Private** initiative, **PPP** funding , guaranteed competitiveness
- ☑ Space industry **enables to invest** in EO mission
- ☑ **Guarantee** SPOT EO mission **continuity and service, securing** data access
- ☑ SPOT 6 & 7 satellites **suitable** to fulfil users products and services requirements
  - ☑ High acquisition capacity : coverage, targeted sites (high agility)
  - ☑ Resolution compatible with applications services requirements
  - ☑ Geometric and location accuracies
- ☑ **Compatibility** with Pléiades



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