Pléiades Neo, a Solution for your Urban Challenges

Precise detail, massive data and timeliness are more and more crucial in our constantly changing world. Pléiades Neo with four identical 30 cm resolution satellites and optimum reactivity will enable you to address real urban challenges.

Pléiades Neo a Support to Land Administration

Pléiades Neo, with its 30 cm resolution images, allows you to make a detailed cadastral database in order to define property values and anticipate land revenues.

- Feature type differentiation
  Boundary walls, light structures and buildings
- Assess the quality of infrastructure maintenance
  Transport and buildings
- Detect building changes
  Especially illegal construction by analysing stereoscopic imagery and comparing with official building permit record

Airbus can assist you in extracting valuable information from Pléiades Neo images, by offering a dedicated business-oriented Information System to estimate property values on a citywide scale.

Urban Indicators

Task Pléiades Neo at the frequency you need to monitor your city and its evolution, and use tailored indicators to evaluate your urban environmental challenges:

- Climate change and pollution
- Uncontrolled urban sprawl
- Safety and emergency
- Natural hazard risk
  Analysis and damage assessment
- Soil sealing
- Density of habitable dwellings
- Public services access
- Densification potential of city centres
- Urban heat island
  Urban Climate Zone/ Local Climate Zone classification

The 30 cm VHR and agility of Pléiades Neo enable you to represent a whole city in detail, achieved by multiple acquisitions in one single pass and delivering:

- Better building shape definition
- 3D mapping, including Level Of Detail 2 building models

Quickly create a precise urban 3D database, thanks to Pléiades Neo’s unmatched acquisition capacity, and extract the information you need to develop a sustainable city.

- Index/classify existing green and solar panel roofs
- Define the best places for new green roof and solar panel implementation

Sustainable City to Meet Future Requirements
Key Features

- **Number of satellites**: 4 identical satellites in constellation
- **Revisit frequency**:
  - Daily, anywhere (30° off-Nadir)
  - Twice daily, anywhere (46° off-Nadir)
- **Launch**: 2020
- **Product resolution**: 30 cm (GSD)
- **Geolocation accuracy**: <5 m CE90
- **Spectral bands**: Deep Blue, Blue, Green, Red, Red Edge, Near-infrared, Panchromatic
- **Dynamic range at acquisition**: 12 bits
- **Acquisition capacity**: Up to 2 million km² per day
- **Swath**: 14 km at Nadir
- **Orbit**: Sun-synchronous, 10:30 am
  Descending node, 620 km altitude
- **Mission lifetime**: 10 years

Customer Profiles

- National to local governments
- Mapping institutes

Main Application

- Land administration/Cadastre
- City mapping (very large-scale)
- Monitoring and alert of changes
- Smart cities
- Land use/land cover mapping
- Urban planning
- Monitoring of project progress