DigitalGlobe

High resolution imagery for accurate information

Luca Perletta
Manager, Sales Engineer, EMEAR

Resolution

$$\text{Resolution} = \frac{\text{Distance}}{\text{Focal Length}} \times \text{Detector Size}$$

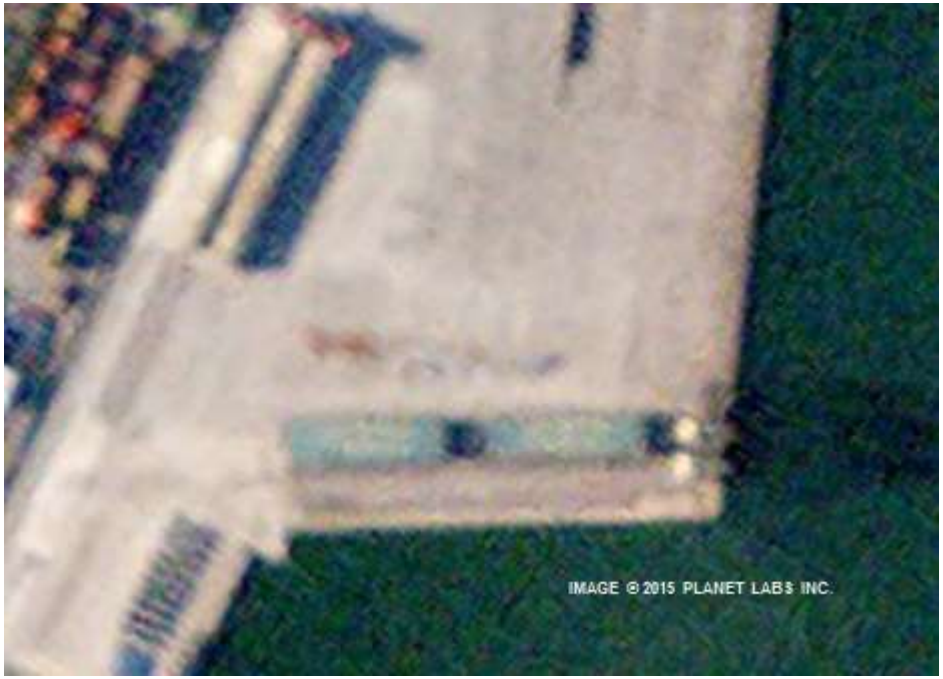
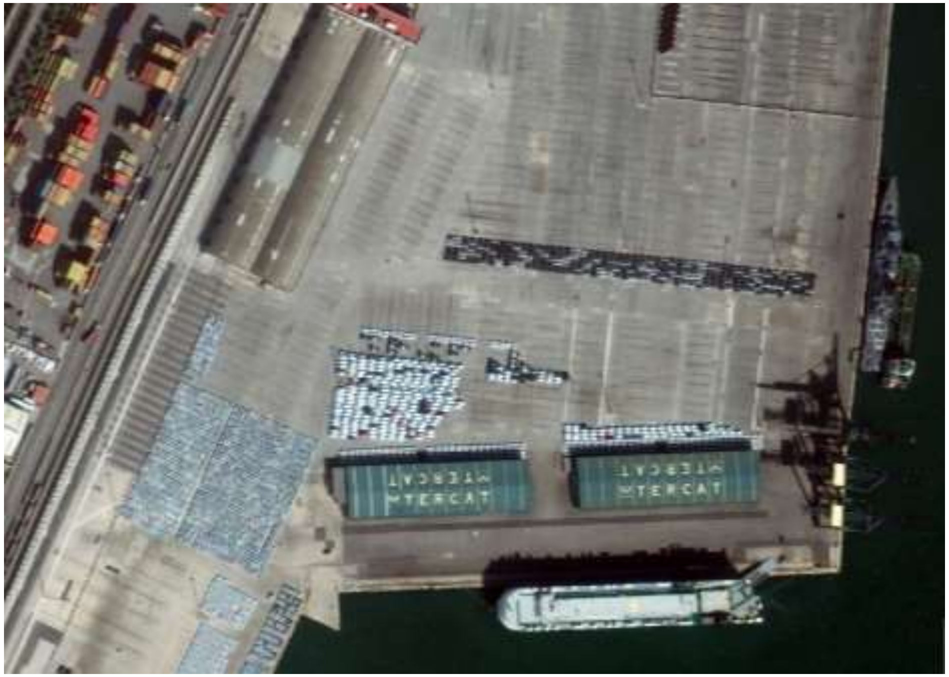


IMAGE © 2015 PLANET LABS INC.



Focal length

f=.055m

f=.400m

f=1.1m

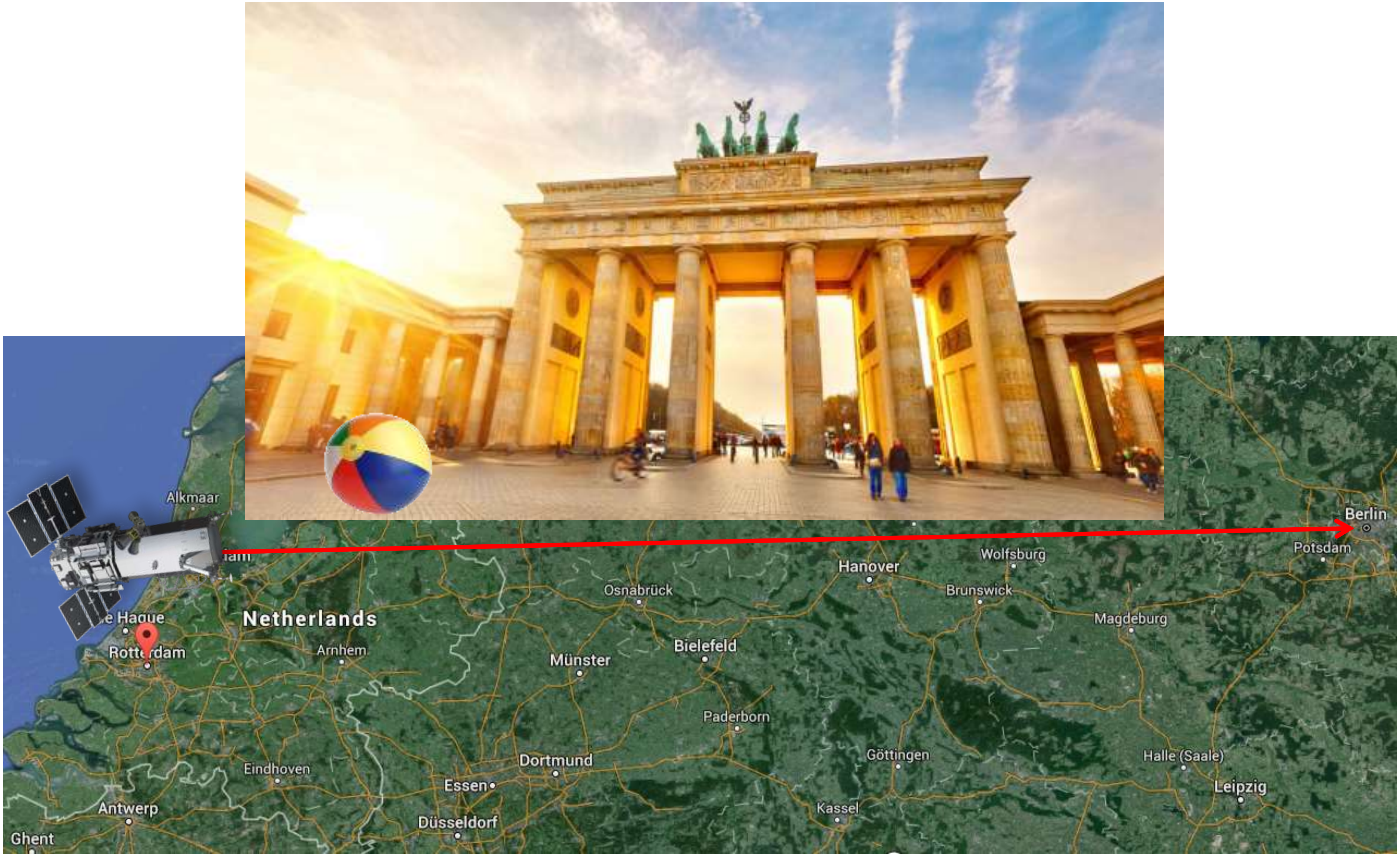
f=1.75m

f=13.3m

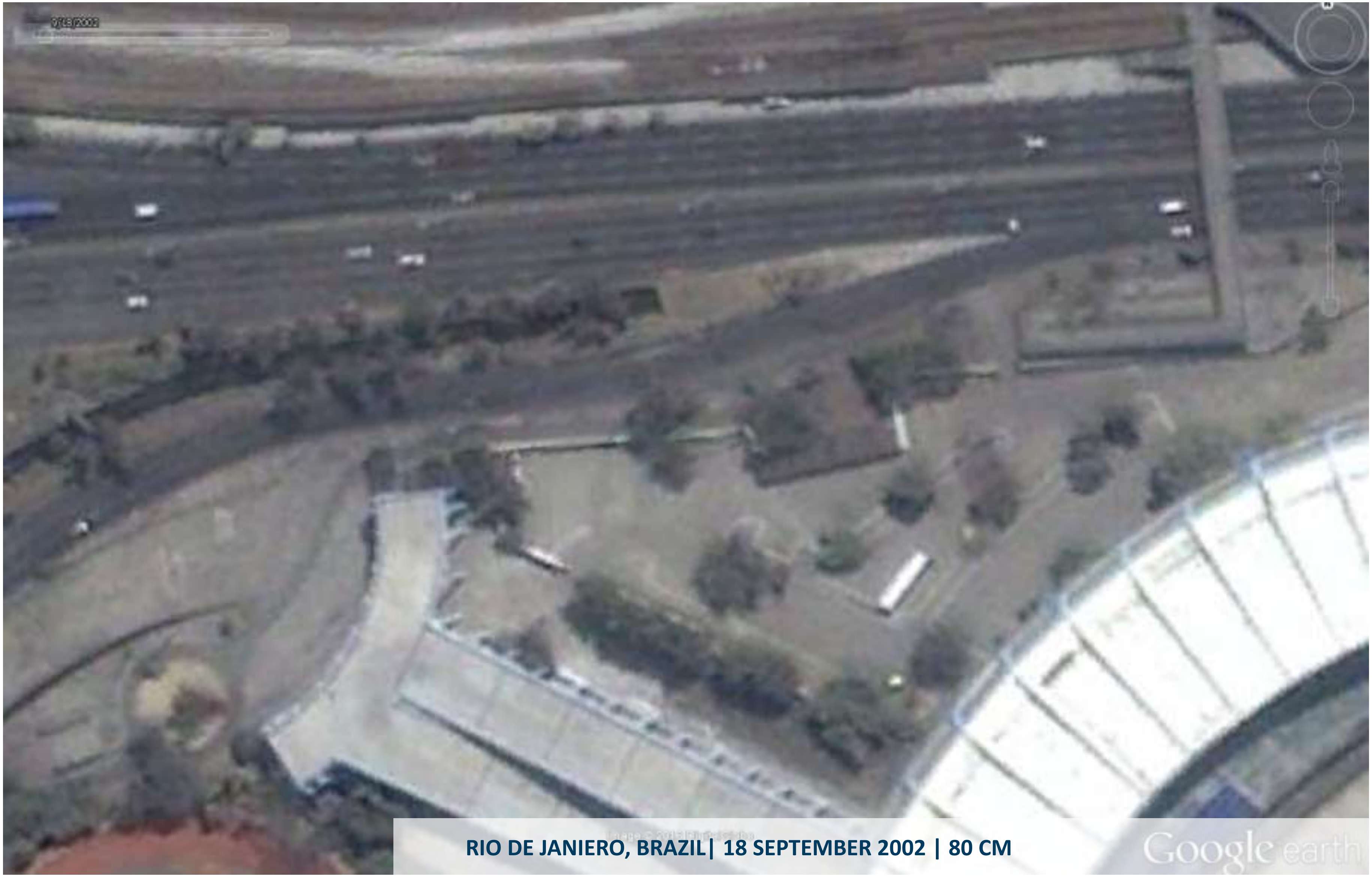
f=16m

*not to scale

30 cm resolution

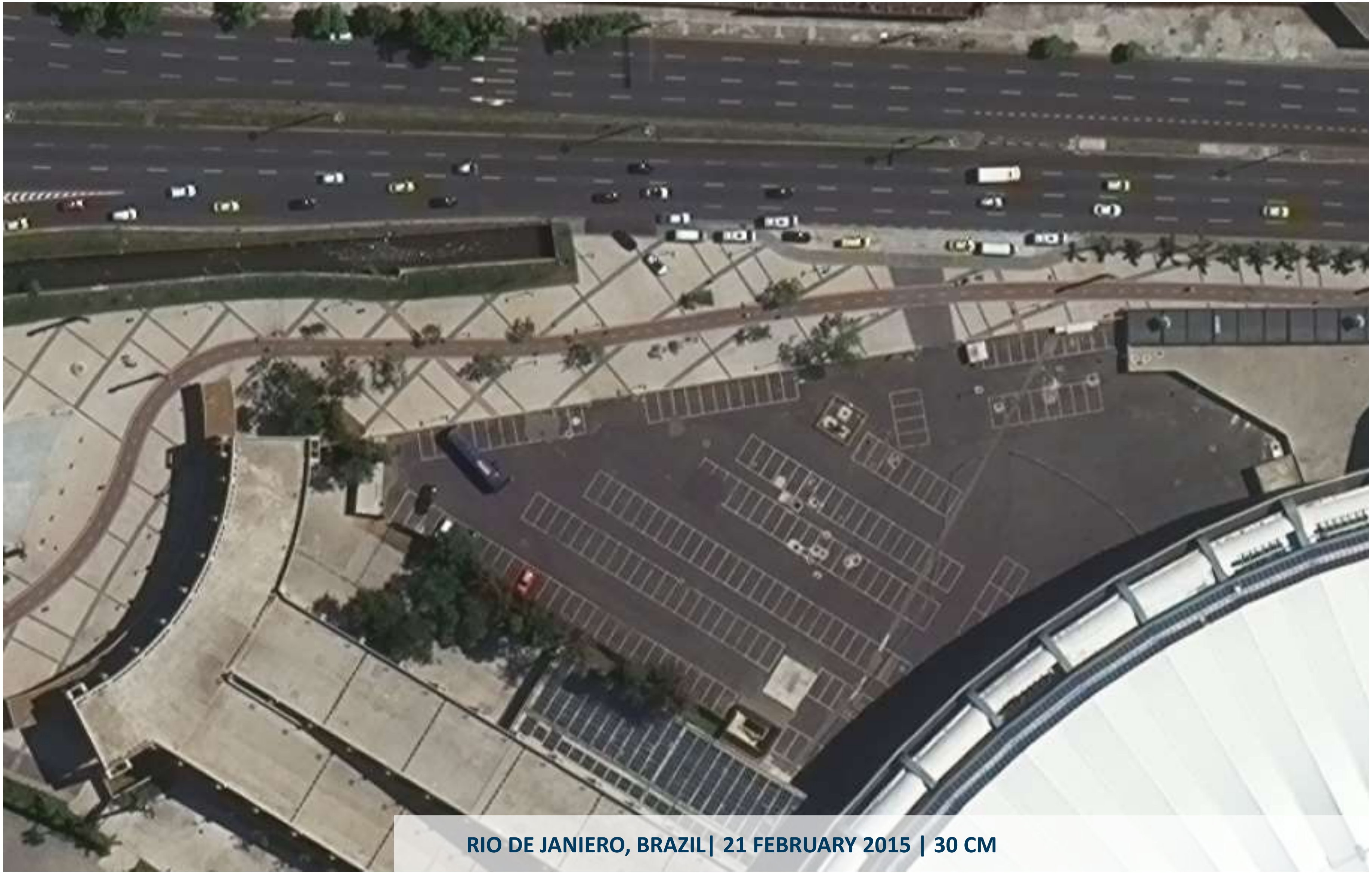

Alkmaar
am
e Hague
Rott rdam
Netherlands
Arnhem
Eindhoven
Antwerp
Ghent
Osnabrück
Münster
Bielefeld
Paderborn
Dortmund
Essen
Düsseldorf
Hanover
Wolfsburg
Brunswick
Göttingen
Kassel
Magdeburg
Halle (Saale)
Leipzig
Berlin
Potsdam

VHR - 2002


9/18/2002
Google earth

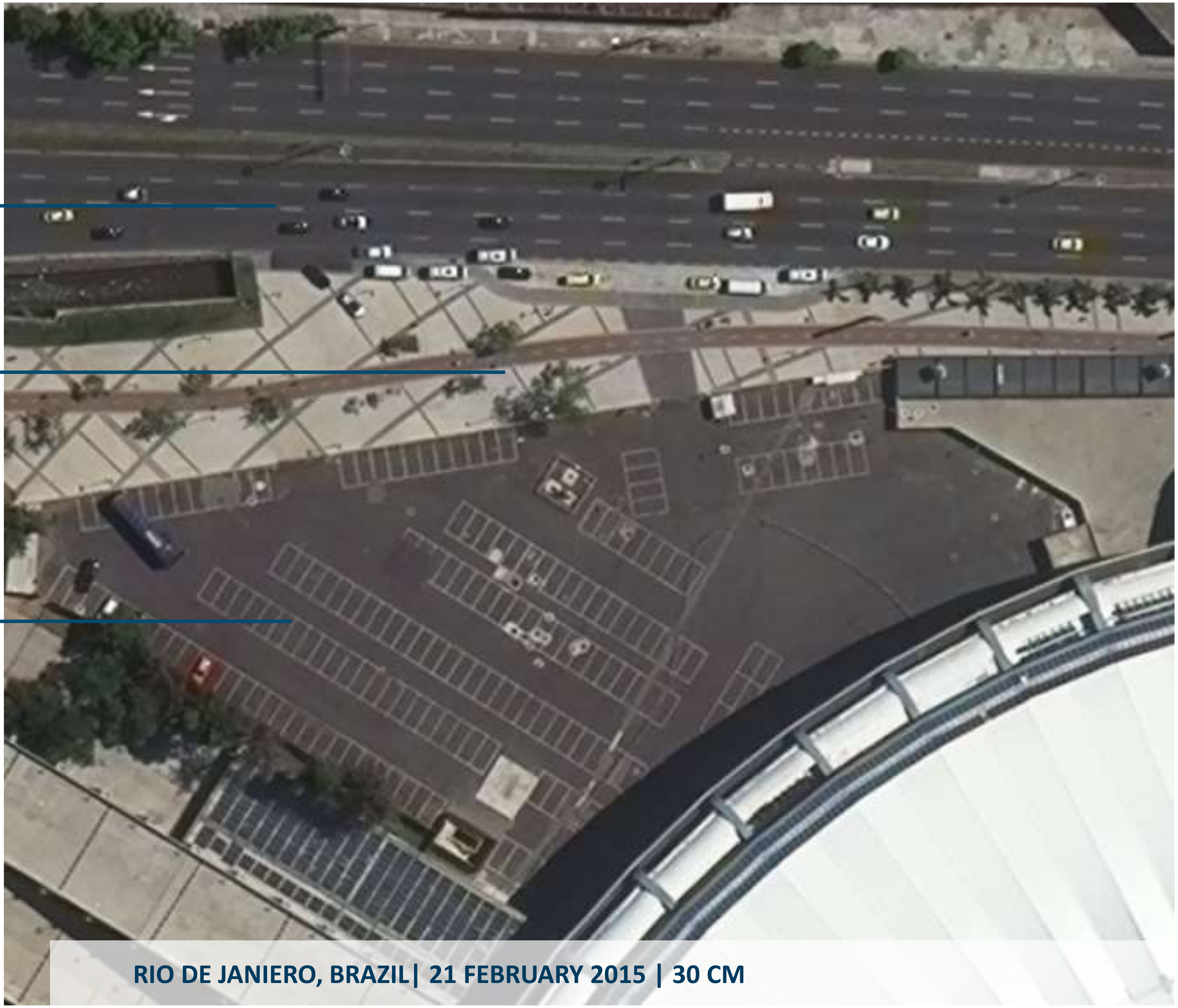
RIO DE JANIERO, BRAZIL| 18 SEPTEMBER 2002 | 80 CM

VHR - 2016



RIO DE JANIERO, BRAZIL| 21 FEBRUARY 2015 | 30 CM

Map Analytics



Traffic flows, volume and direction

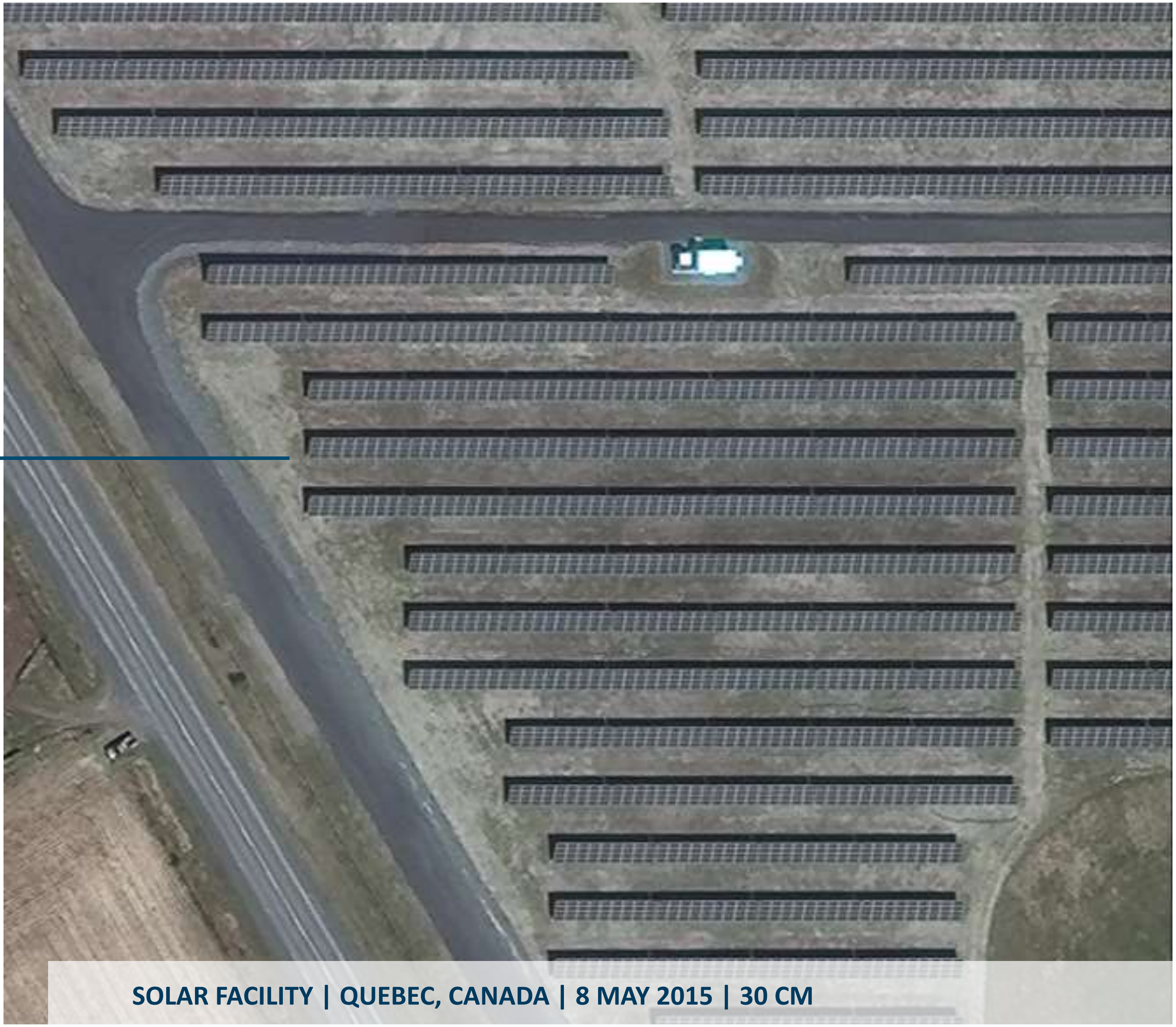
Identify pedestrian and bike traffic

Determine number of parking spaces, full or empty

RIO DE JANIERO, BRAZIL| 21 FEBRUARY 2015 | 30 CM

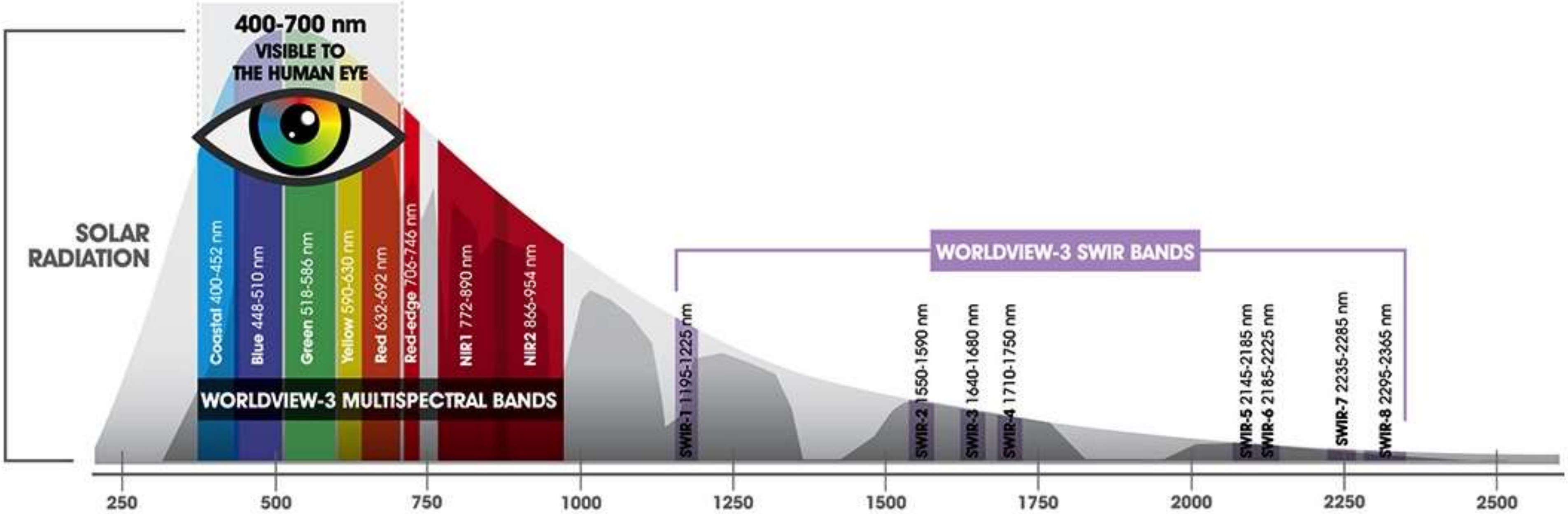
Energy Development

Individual panels visible for calculation of energy output and system monitoring

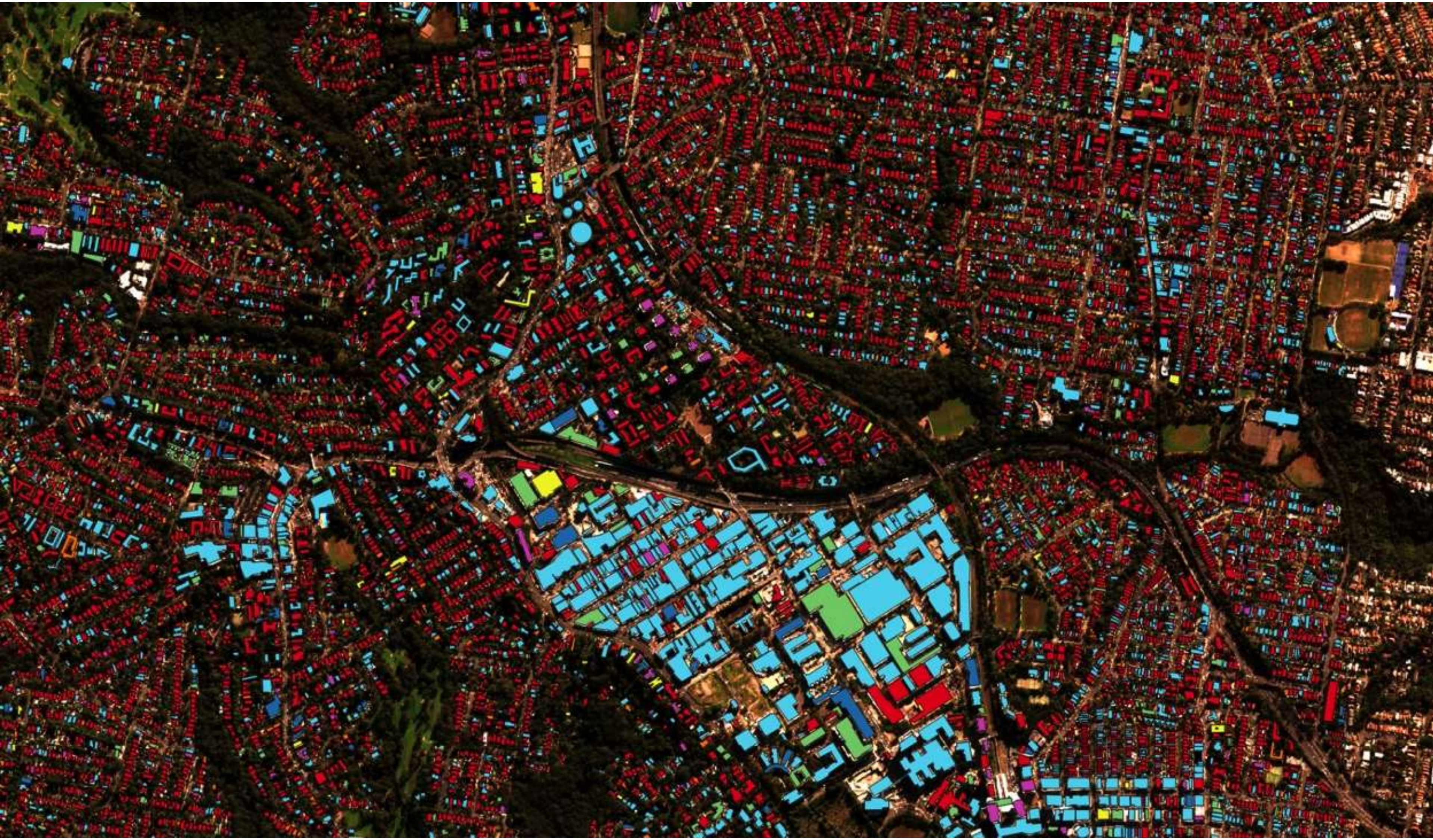


SOLAR FACILITY | QUEBEC, CANADA | 8 MAY 2015 | 30 CM

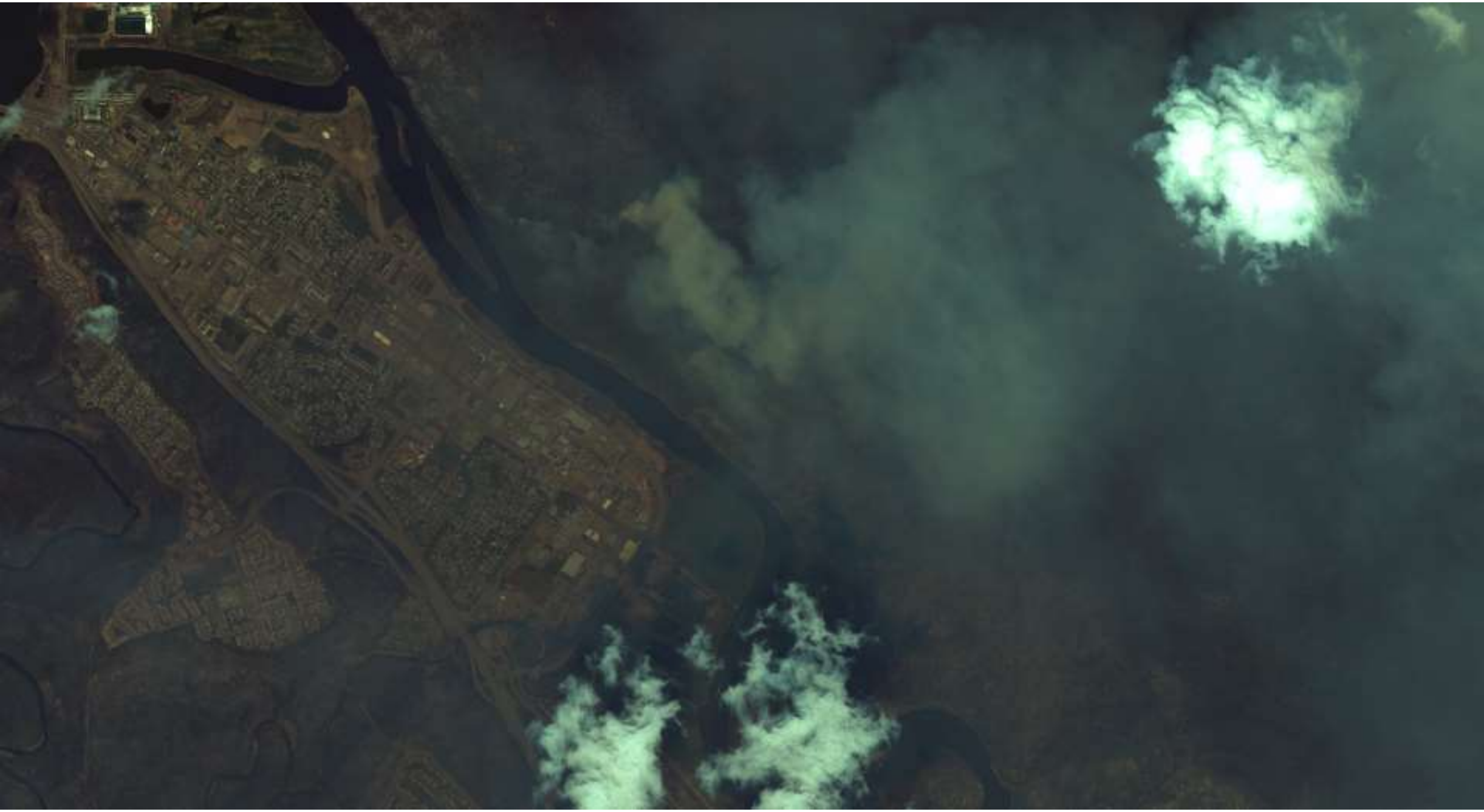
Spectral Diversity



Roof types using WV-3 SWIR

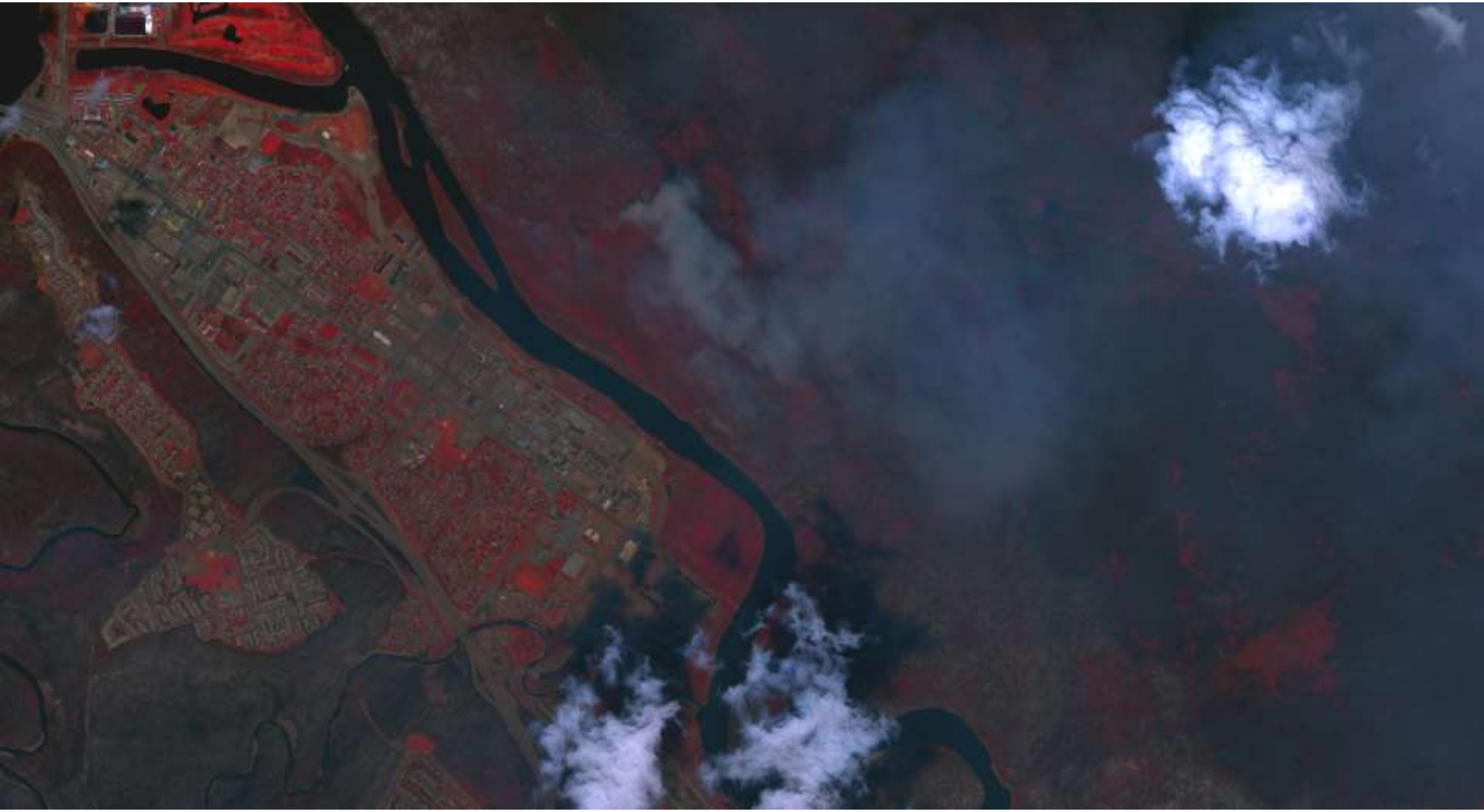


Multispectral Images – Fort McMurray



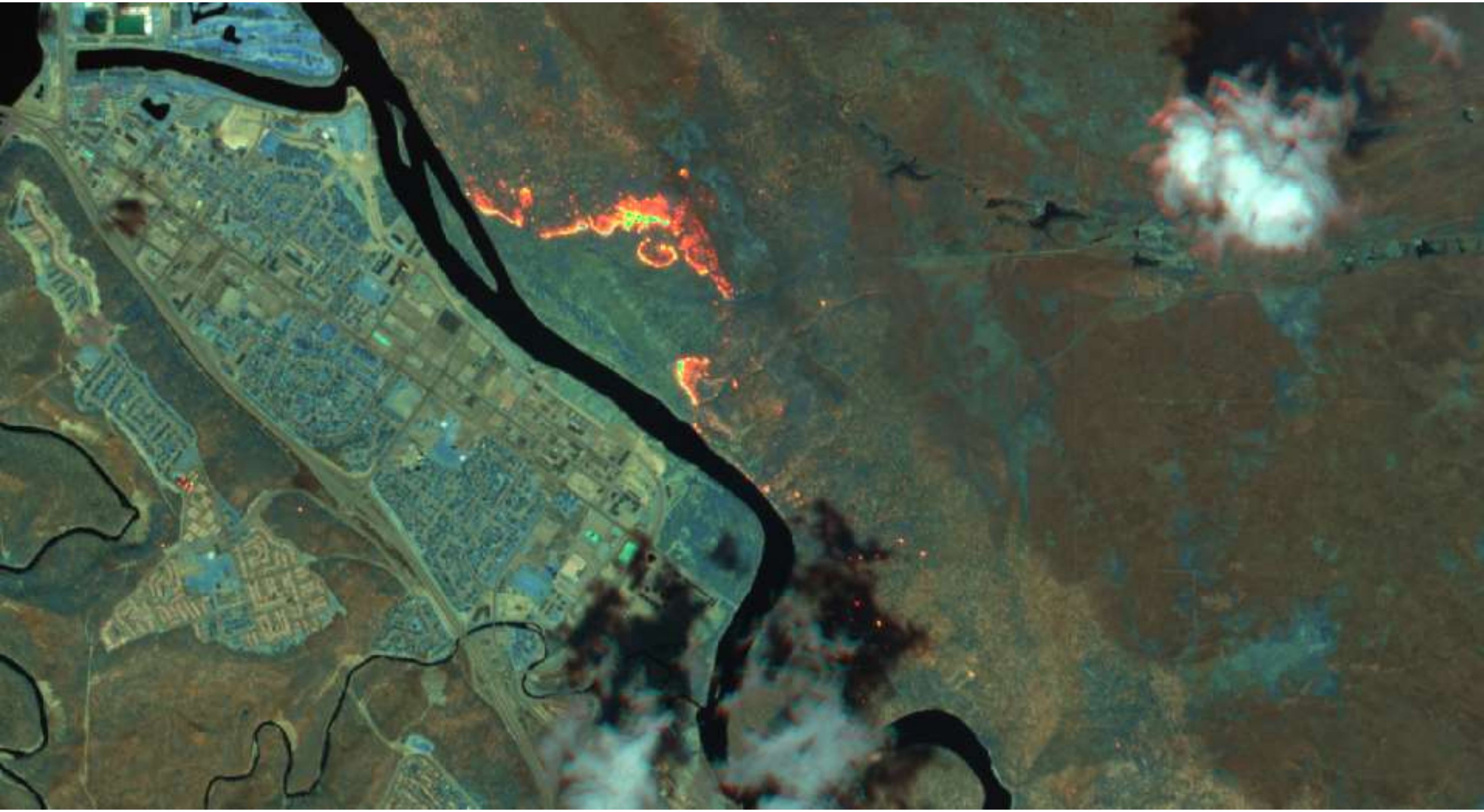
Fort McMurray, Alberta, Canada – WV3 – 6th May 2016 – True Colour Image

Multispectral Images – Fort McMurray



Fort McMurray, Alberta, Canada – WV3 – 6th May 2016 – Colour Infrared Image

Multispectral Images – Fort McMurray



Fort McMurray, Alberta, Canada – WV3 – 6th May 2016 – SWIR

Agility

Agility

BigSat

High Resolution

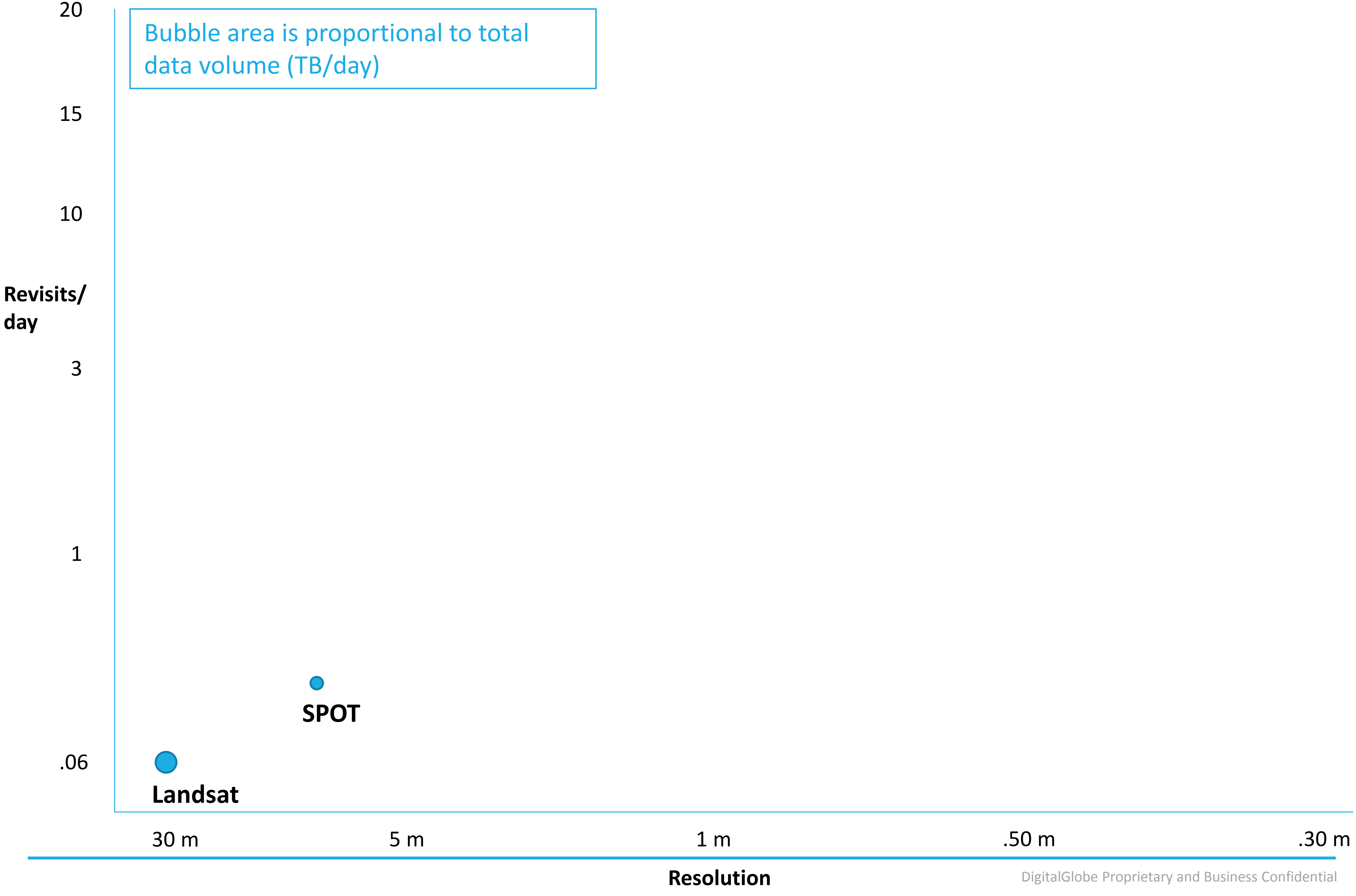
Accuracy

New ways to see the World

Agility

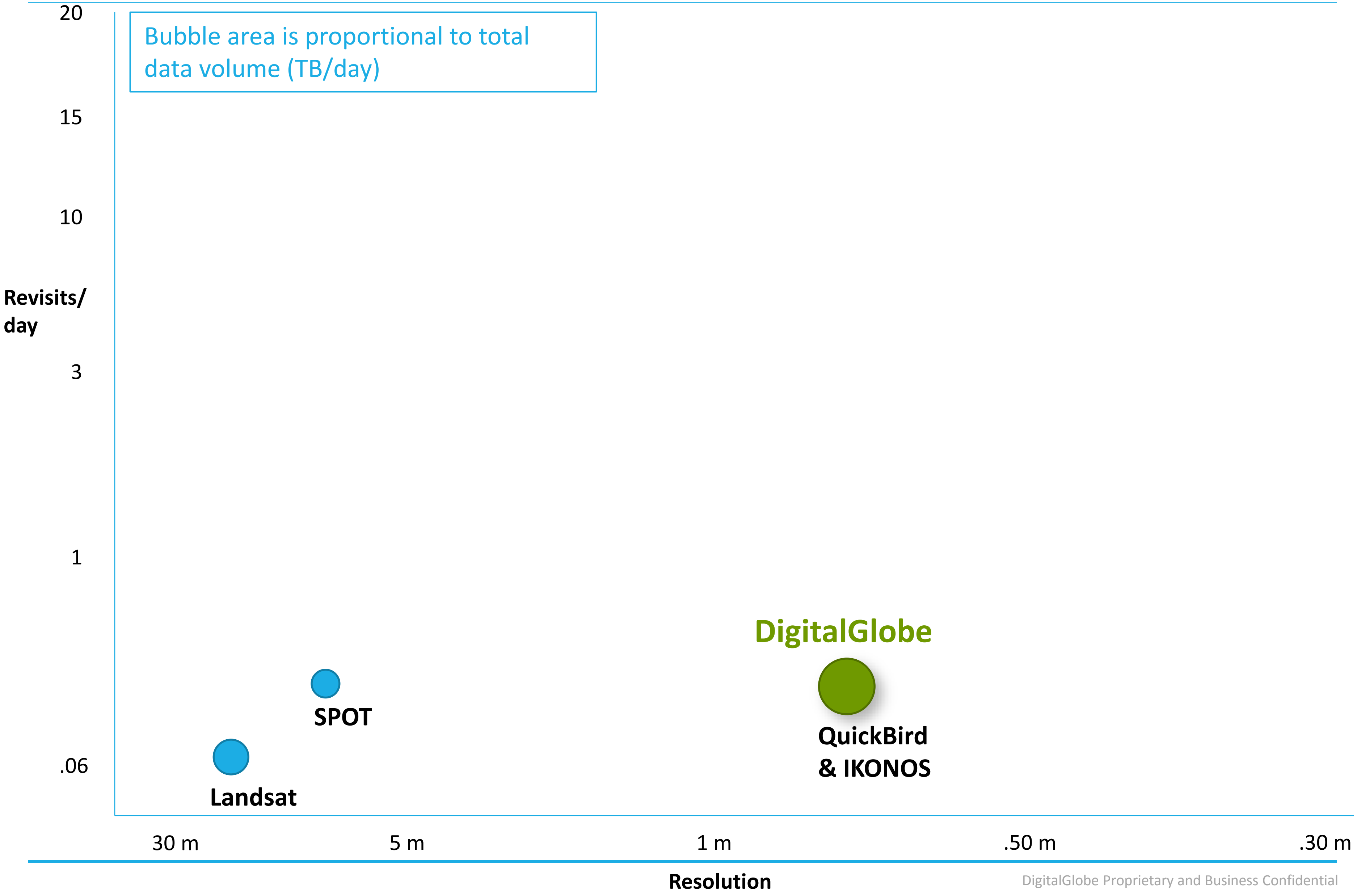
Collection: equivalent size of France – daily!

The remote sensing industry is evolving: 1986

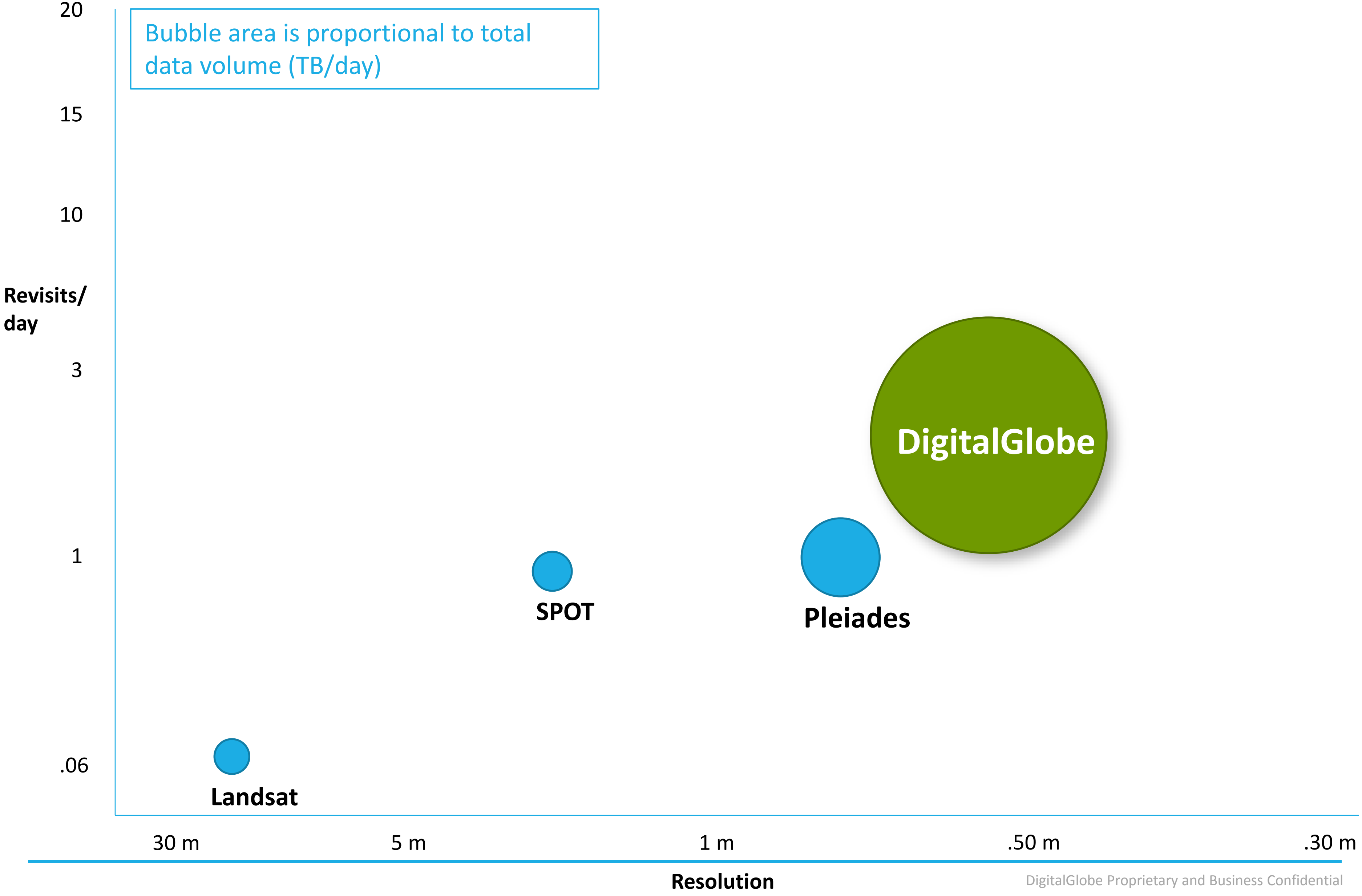


Bubble area is proportional to total data volume (TB/day)

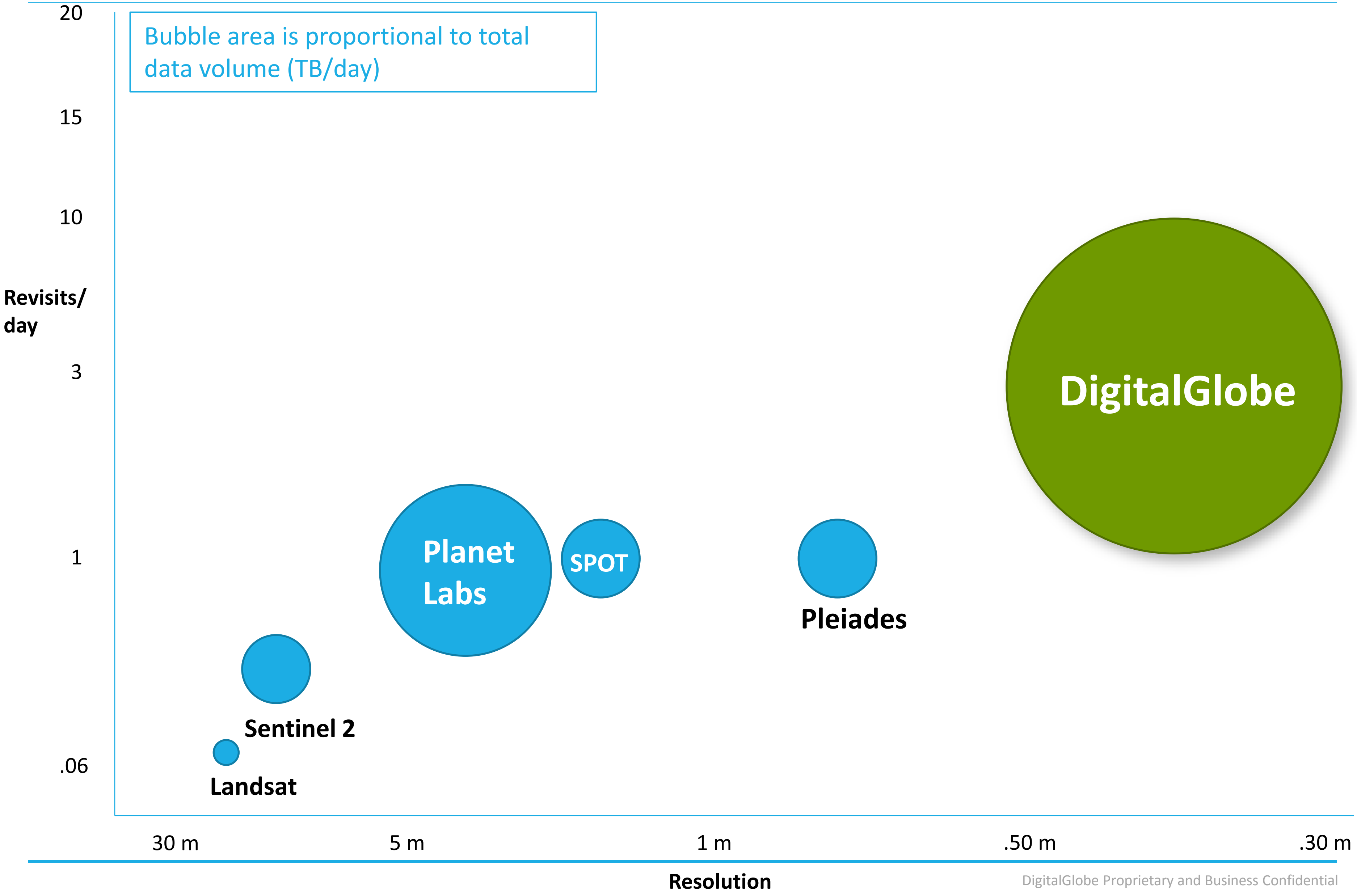
The remote sensing industry is evolving: 2001



The remote sensing industry is evolving: 2012

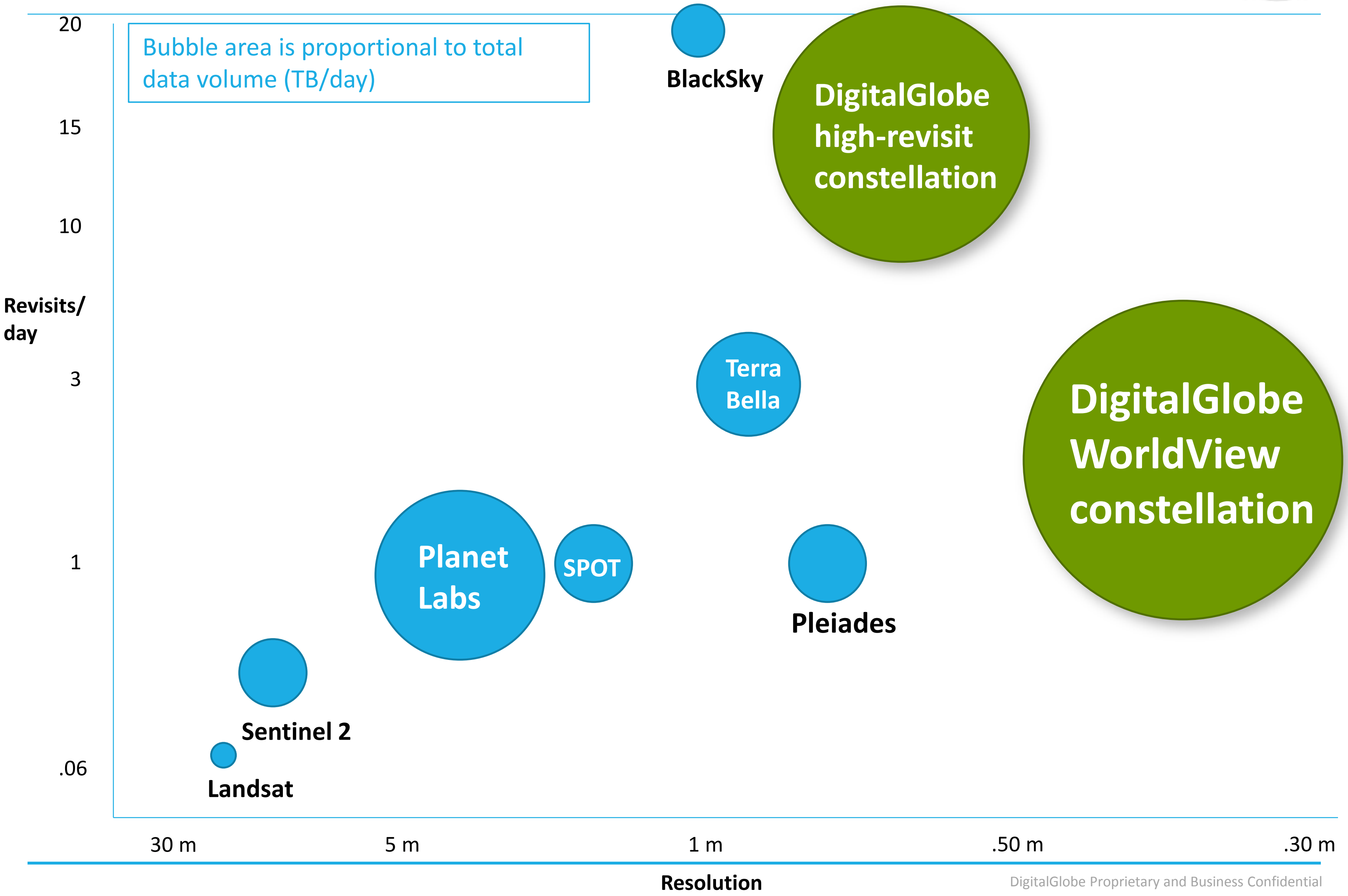


The remote sensing industry is evolving: 2017

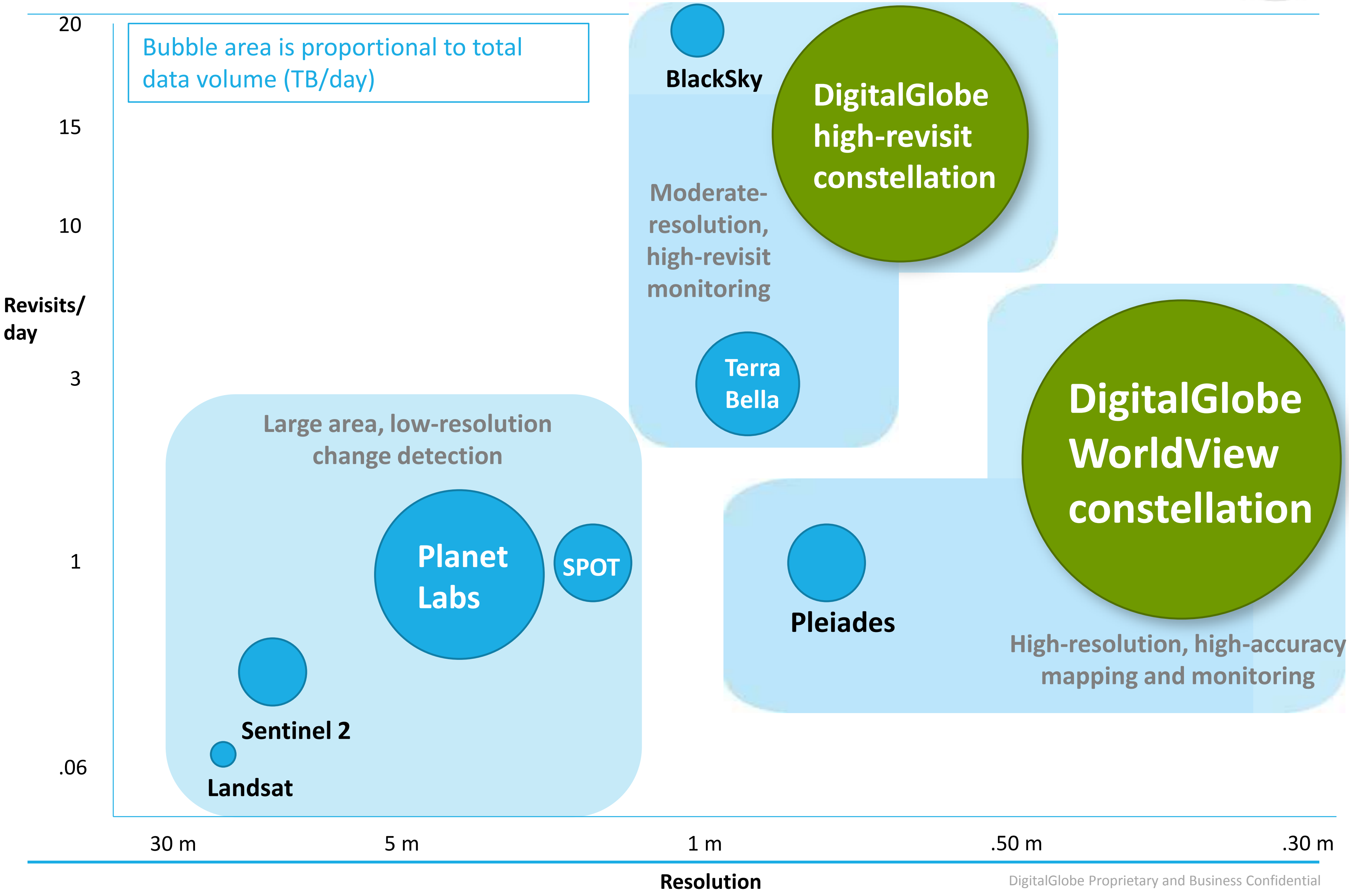


Bubble area is proportional to total data volume (TB/day)

The remote sensing industry is evolving: 2020



The remote sensing industry is evolving: 2020



Different satellite classes are complementary

Tipping and Cueing

Find areas of interest

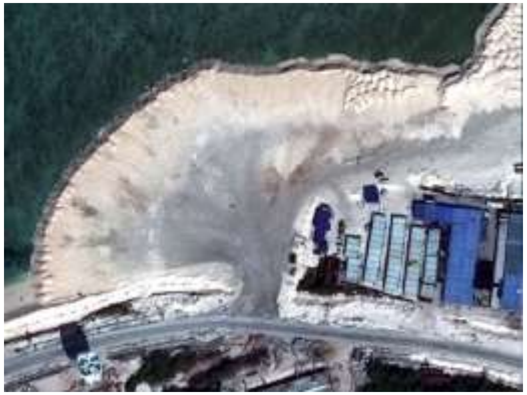
Broad area
High resolution

Different satellite classes are complementary

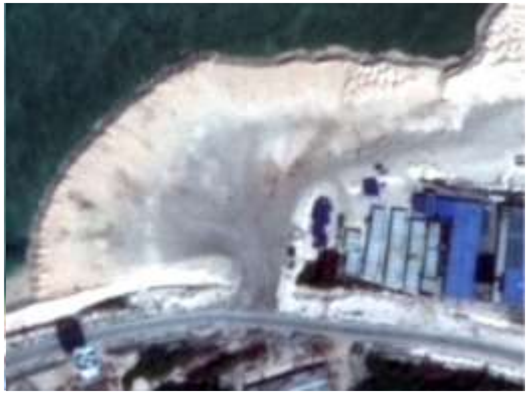
Tipping and Cueing

Find areas of interest

Monitor to detect change



Broad area
High resolution



Rapid revisit
Moderate resolution

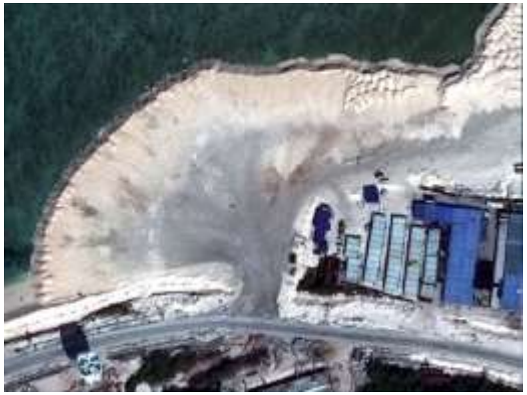
Different satellite classes are complementary

Tipping and Cueing

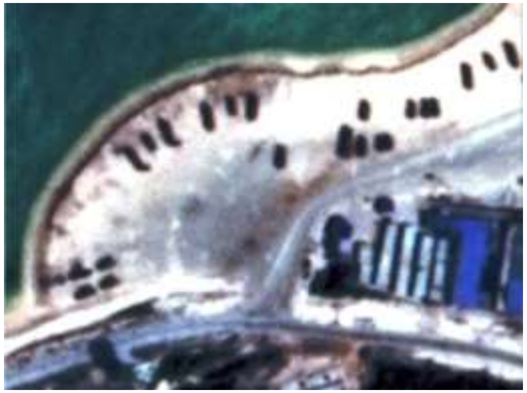
Find areas of interest

Monitor to detect change

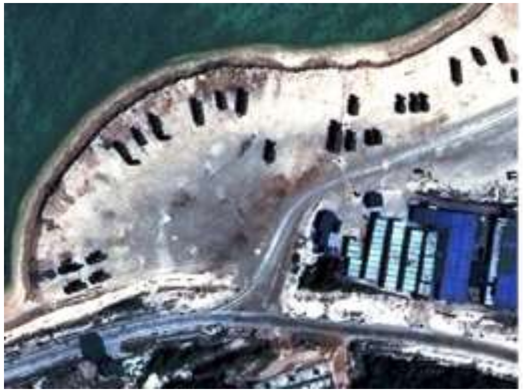
Determine if change is significant



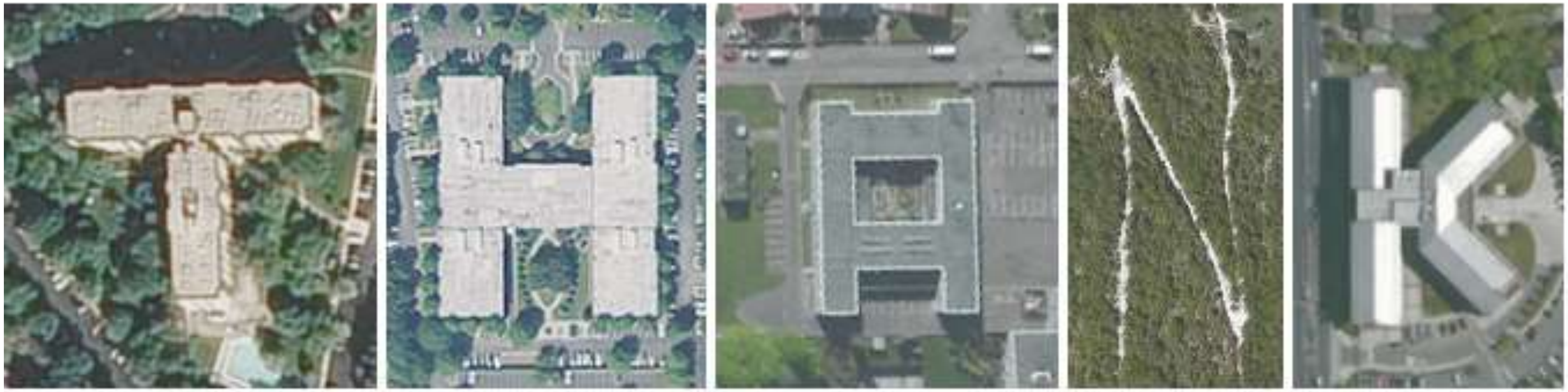
Broad area
High resolution



Rapid revisit
Moderate resolution



Agile, retaskable
High resolution

Different satellite classes are complementary