



New cartography capabilities based on DigitalGlobe imagery

ILYA YUDIN | SALES LEAD RUSSIA & CIS | DIGITALGLOBE



See a better world.™

DigitalGlobe is...



The market leader in remote sensing



IKONOS®

.82 meter resolution
9 m CE90



QuickBird®

.65 meter resolution
23 m CE90



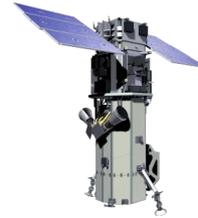
WorldView-1®

.50 meter resolution
<4 m CE90



GeoEye-1®

.46 meter resolution
<3.5 m CE90



WorldView-2®

.46 meter resolution
<3.5 m CE90



WorldView-3®

.30 meter resolution
<3.0 m CE90



WorldView-4®

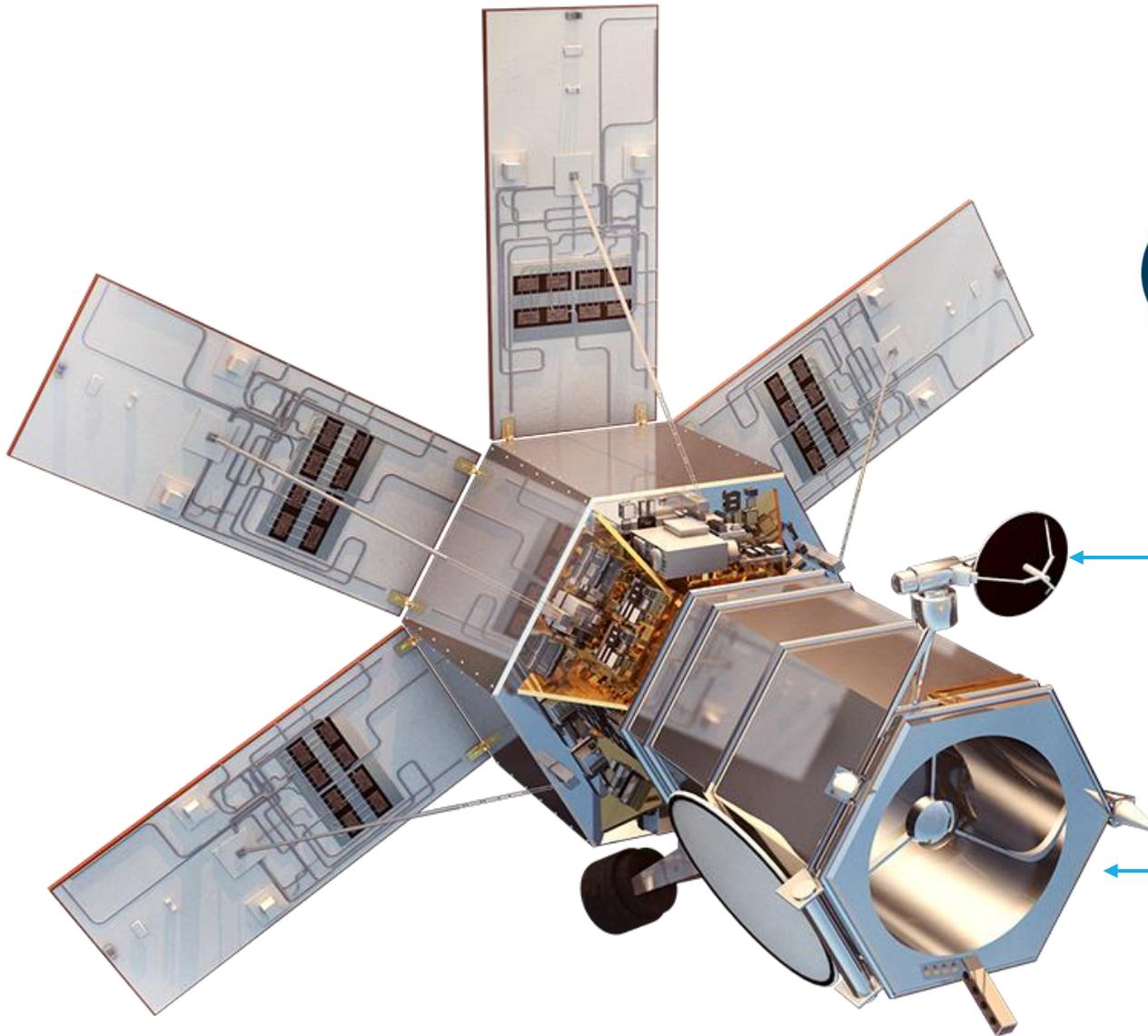
.30 meter resolution

CURRENTLY IMAGING IN ORBIT

AVAILABLE VIA DIGITALGLOBE ARCHIVE



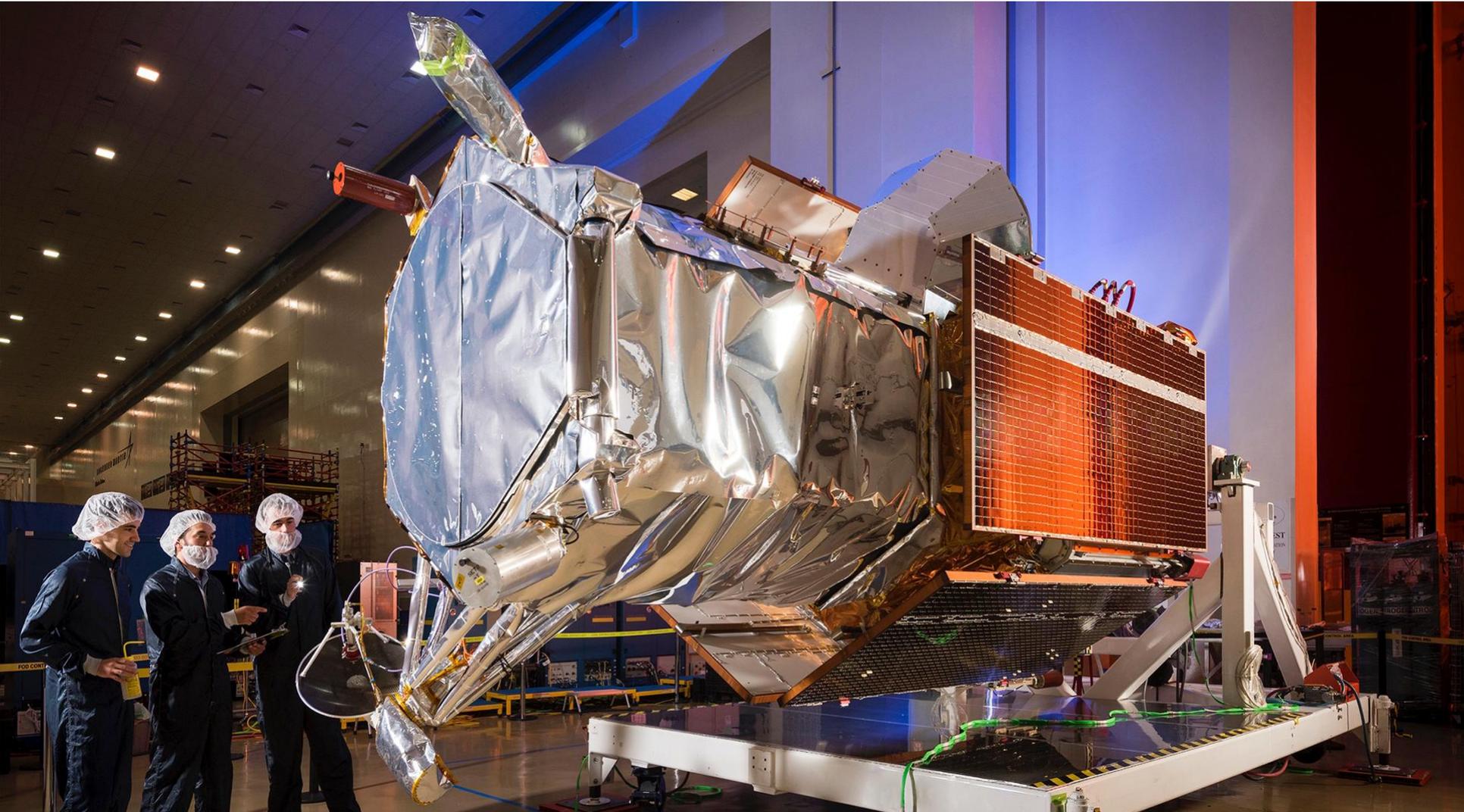
WorldView-4



← Wideband gimbal

← Telescope

WorldView-4





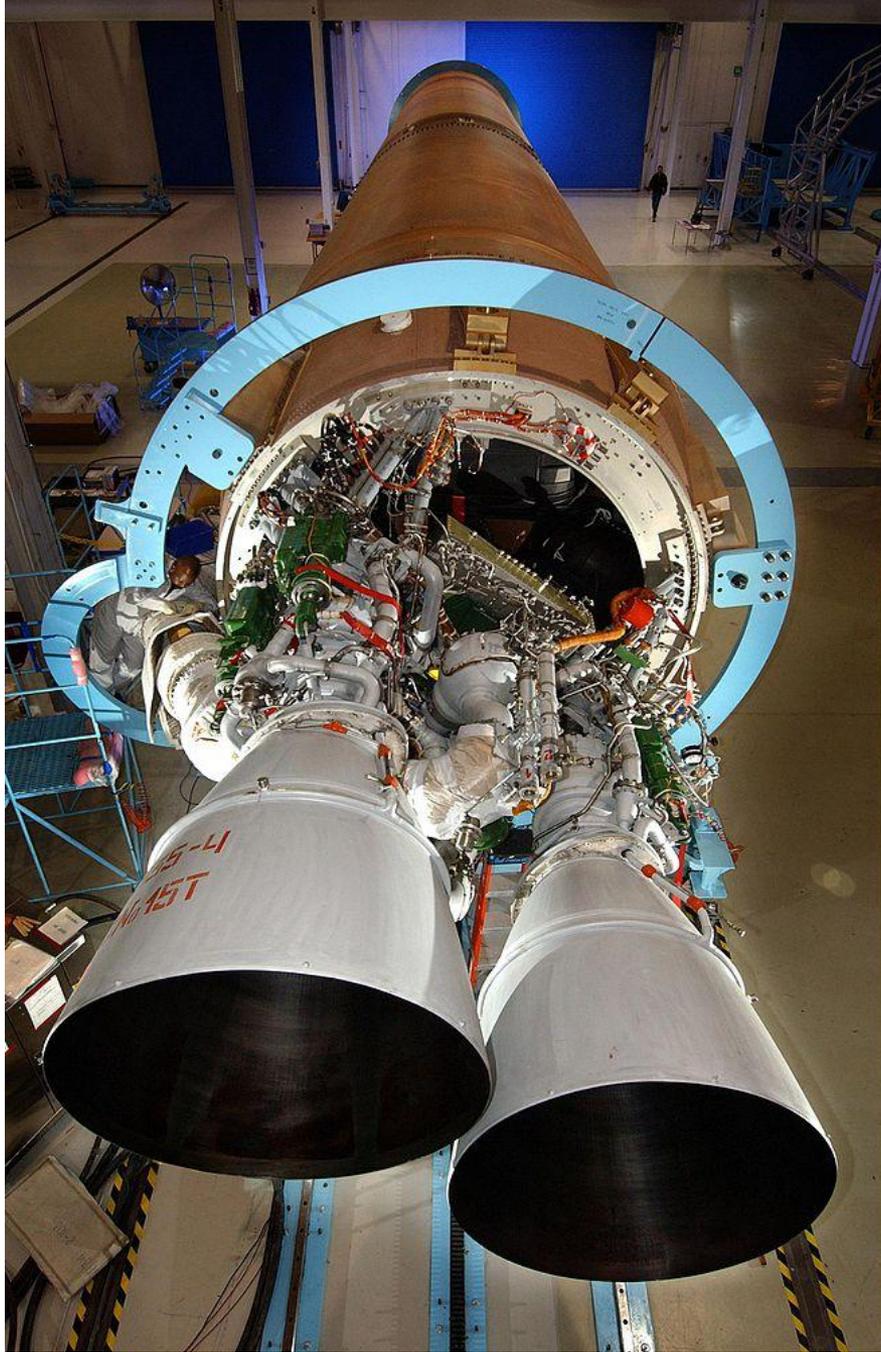














Tasking – Yes you can decide on what's collected



Capable of collecting:

More collection:

Greater agility:

Faster revisit:

Over 1,000,000,000 sq km per year

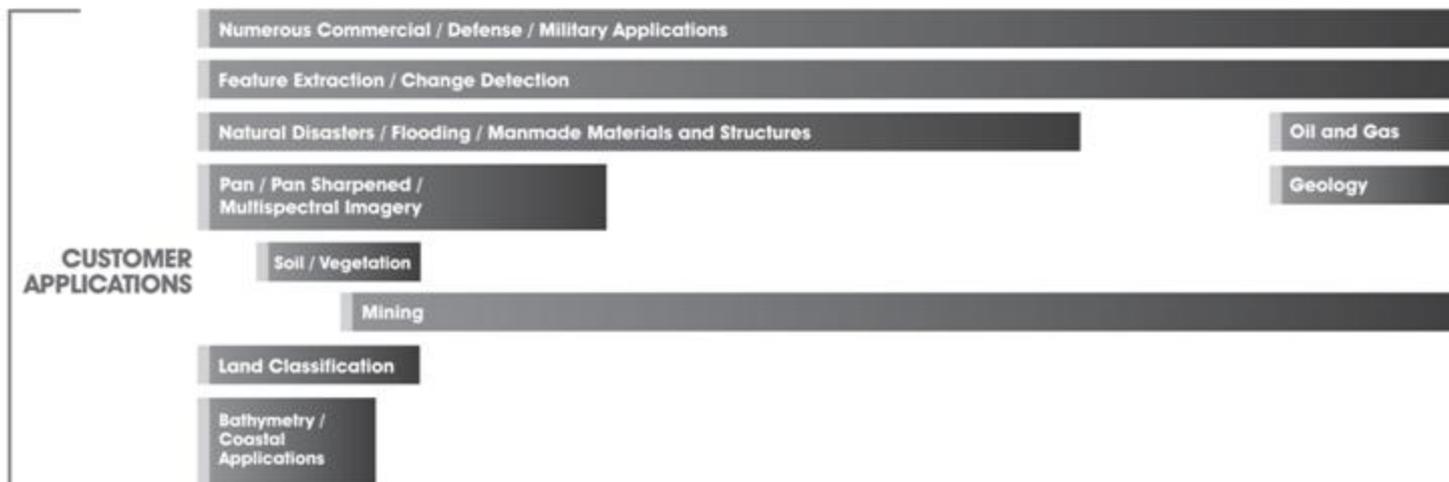
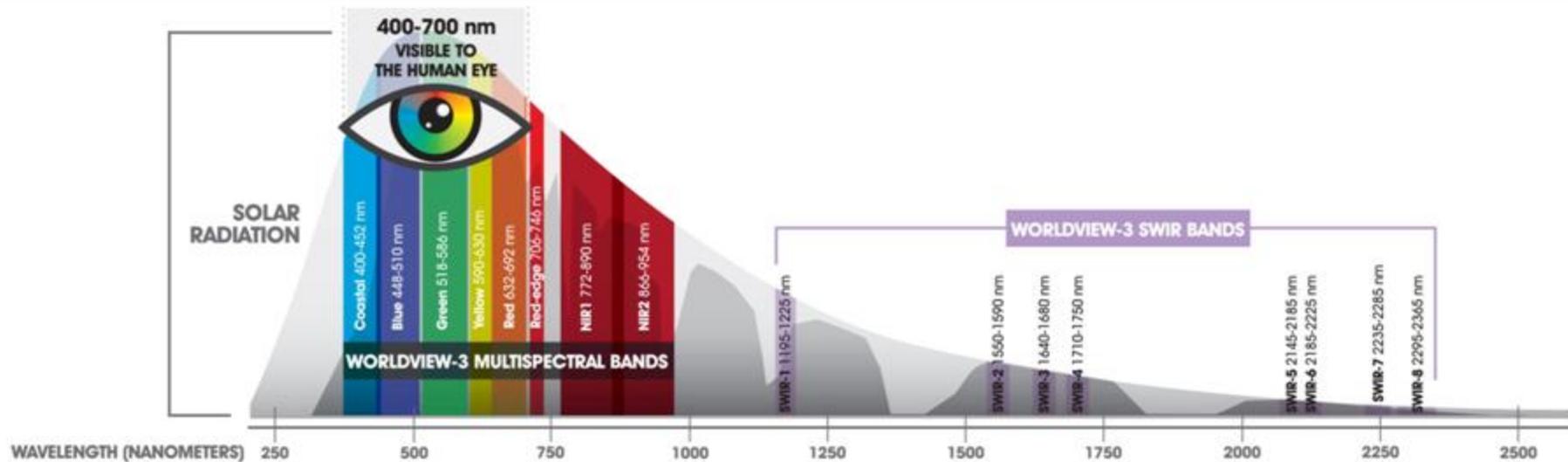
App. 3,000,000 sq. km+ per day

60% of Earth's surface monthly

200 km target spacing

Intraday revisits

More Bands, More Information



WV-2 & WV-3 Comparison



Landsat 8
(30 m)

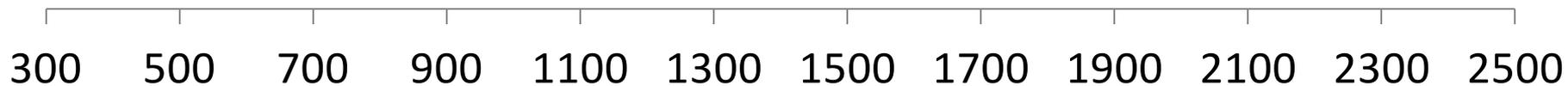
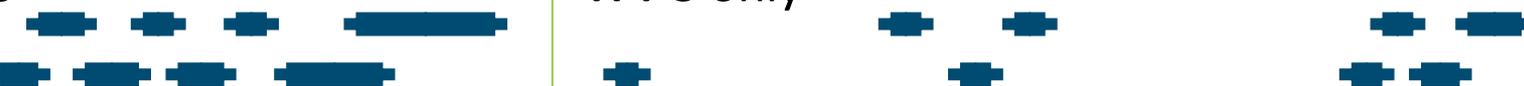


ASTER
(15/30 m)



WV 2 - 3
(1.2 / 3.7)

WV 3 only









DigitalGlobe Constellation Basic

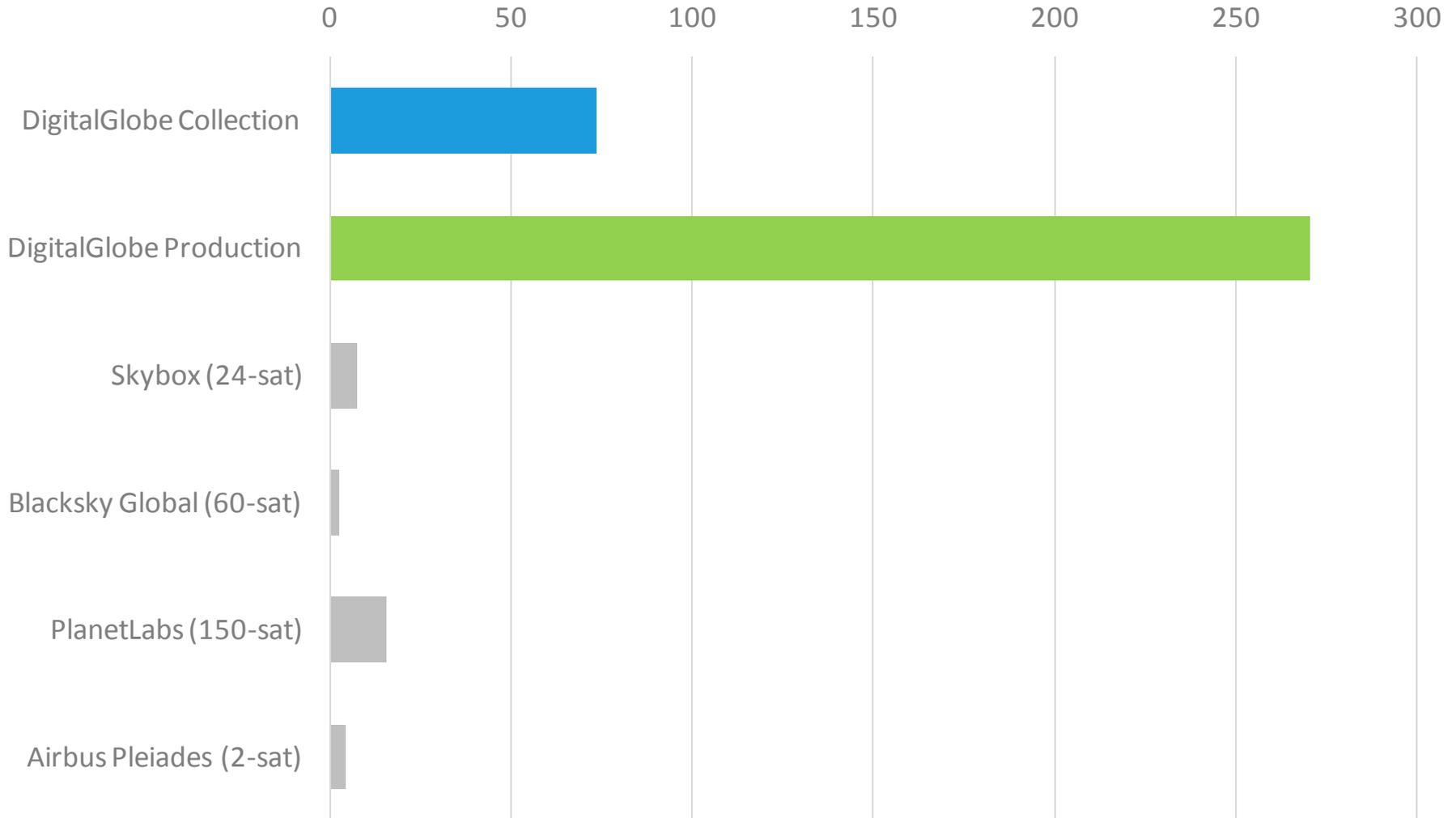


Feature	WorldView-1	GeoEye-1	WorldView-2	WorldView-3	WorldView-4
Spectral characteristics	Pan	Pan + 4 MS	Pan + 8 MS	Pan + 8 MS + 8 SWIR + 12 CAVIS	Pan + 4 MS
Panchromatic resolution (nadir)	0.50 m	0.41 m	0.46 m	0.31 m	0.31 m
Multispectral resolution (nadir)	N/A	1.64 m	1.84 m	1.24 m SWIR 3.7 m CAVIS 30 m	1.24 m
Accuracy specification (nadir)	4 m CE90	3 m CE90	3.5 m CE90	3.5 m CE90	3.5 m CE90
SWATH (nadir)	17.7 km	15.3 km	16.4 km	13.1 km SWIR 10.8 km	13.1 km
Onboard storage	2199 Gbits	1000 Gbits	2199 Gbits	2199 Gbits	3000 Gbits
Collection capacity	1,500,000 km ² /day	350,000 km ² /day	1,200,000 km ² /day	680,000 km ² /day	680,000 km ² /day
Launch timing	2007	2008	2009	2014	expected late 2016

Our constellation collects a LOT of data



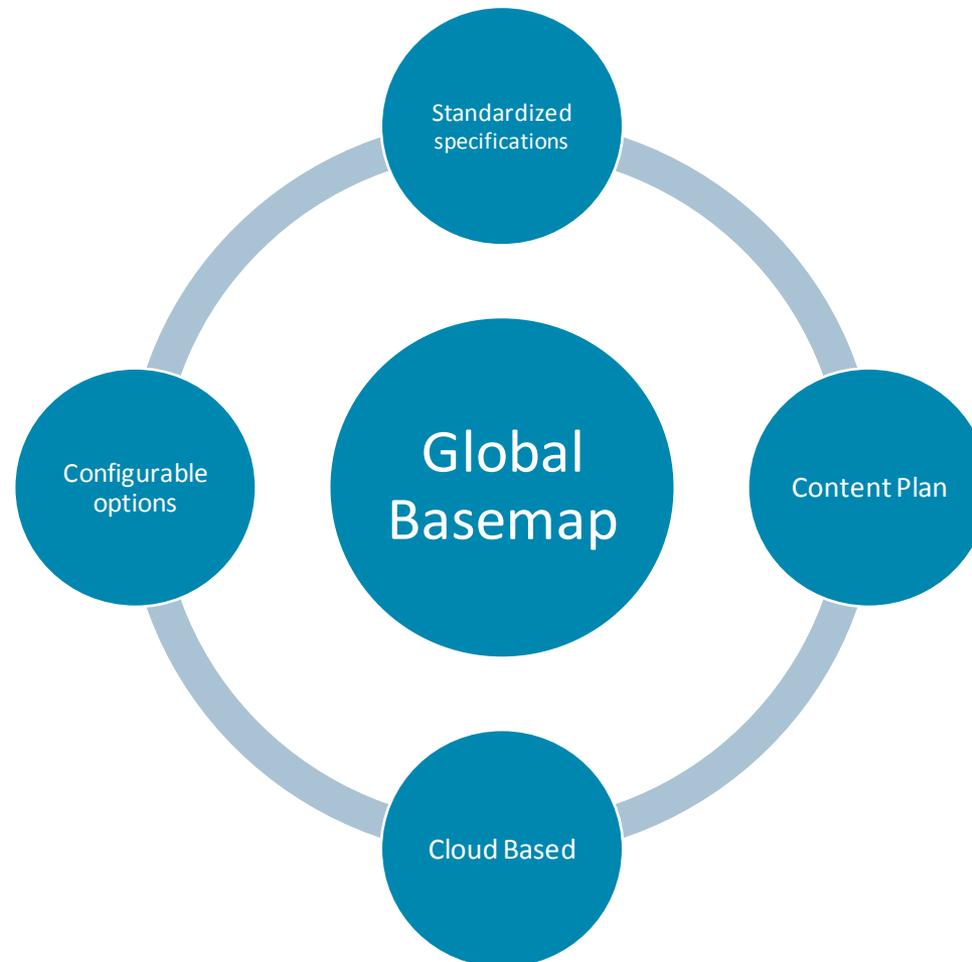
TBytes/day



What is a Basemap?



Basemap is a product line that aggregates imagery to provide a digital basemap of the Earth as a service.



What is a Basemap?



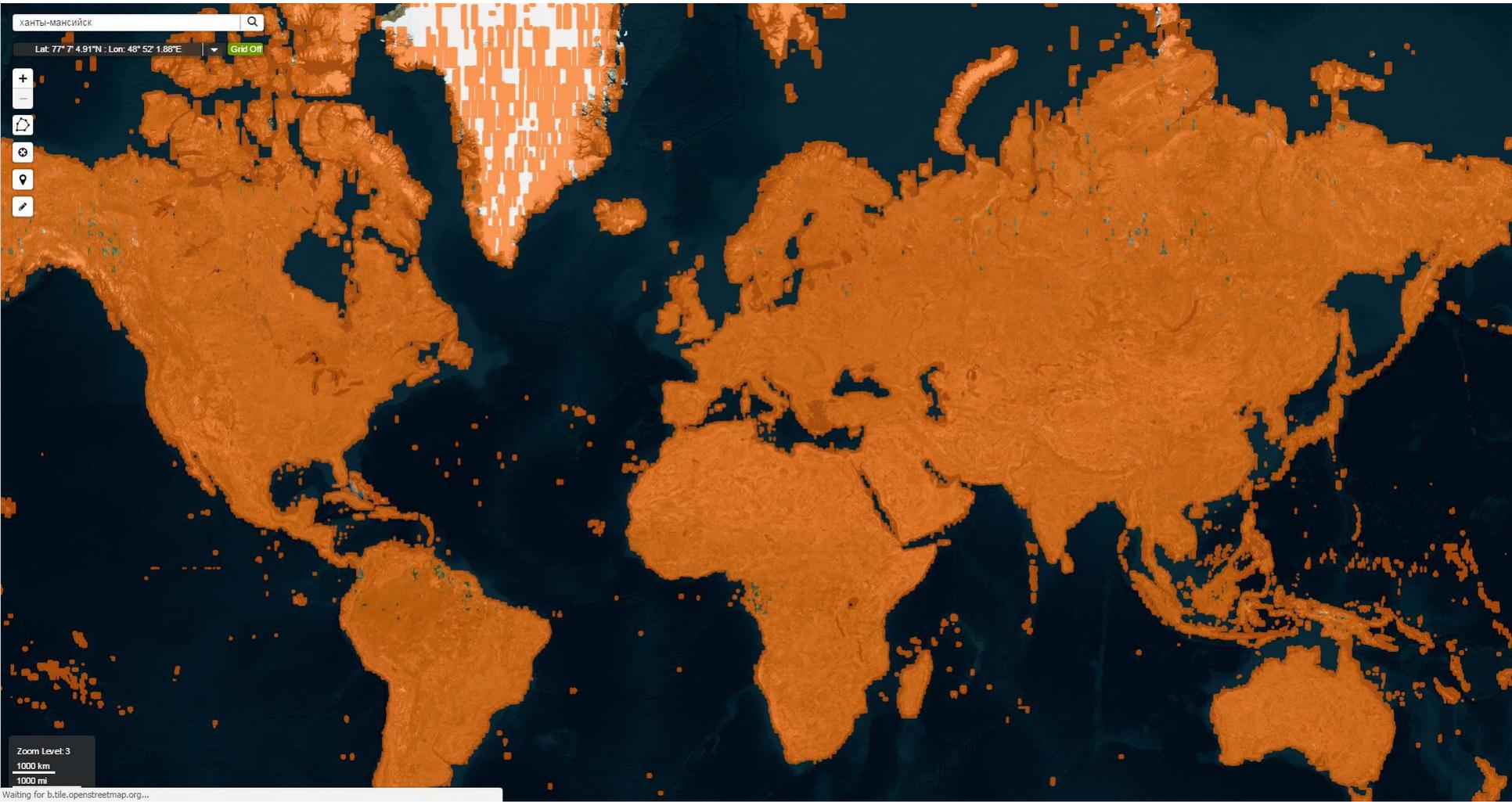
- DigitalGlobe Basemap is imagery made easy
- DigitalGlobe Basemap
- 30-60cm global coverage
- Updates to areas of interest
- 1:12,000 or better accuracies
- Infrastructure mapping
- Data validation
- Geology & structural interpretation



Coverage - Global

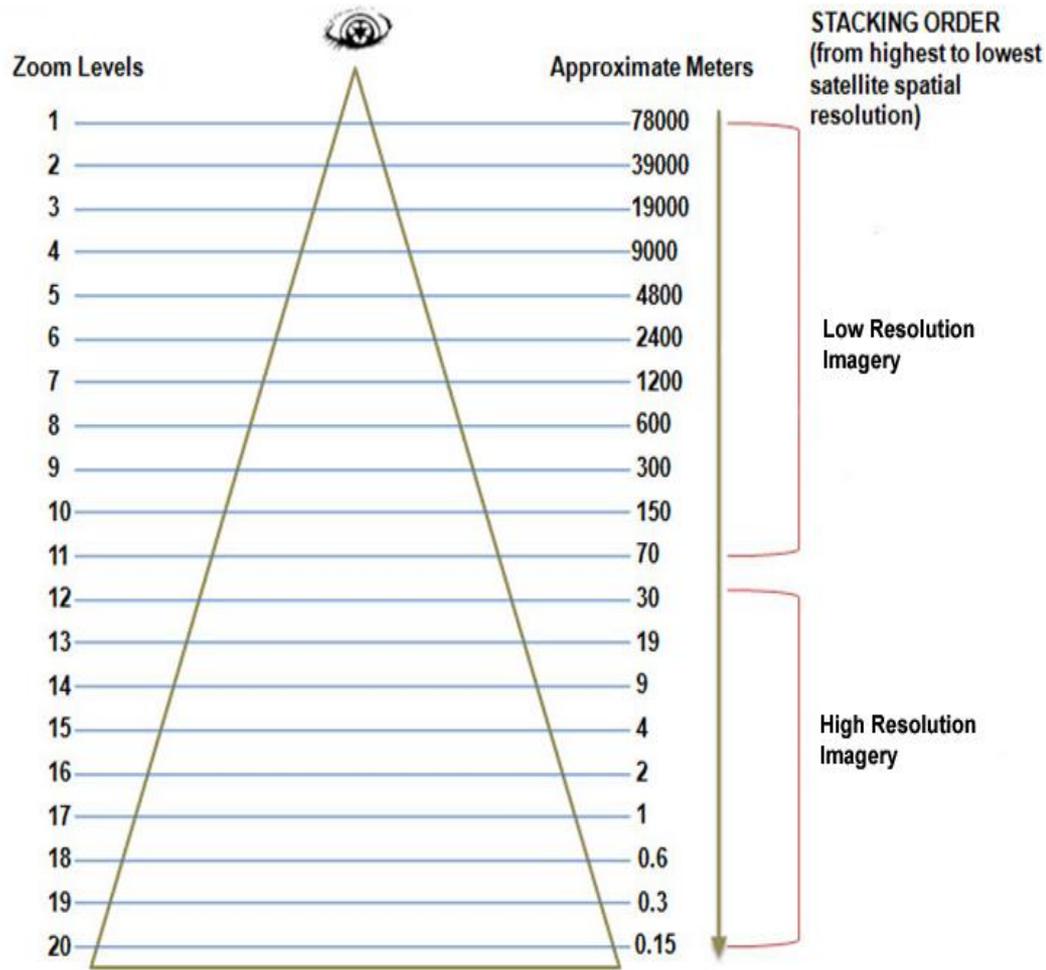


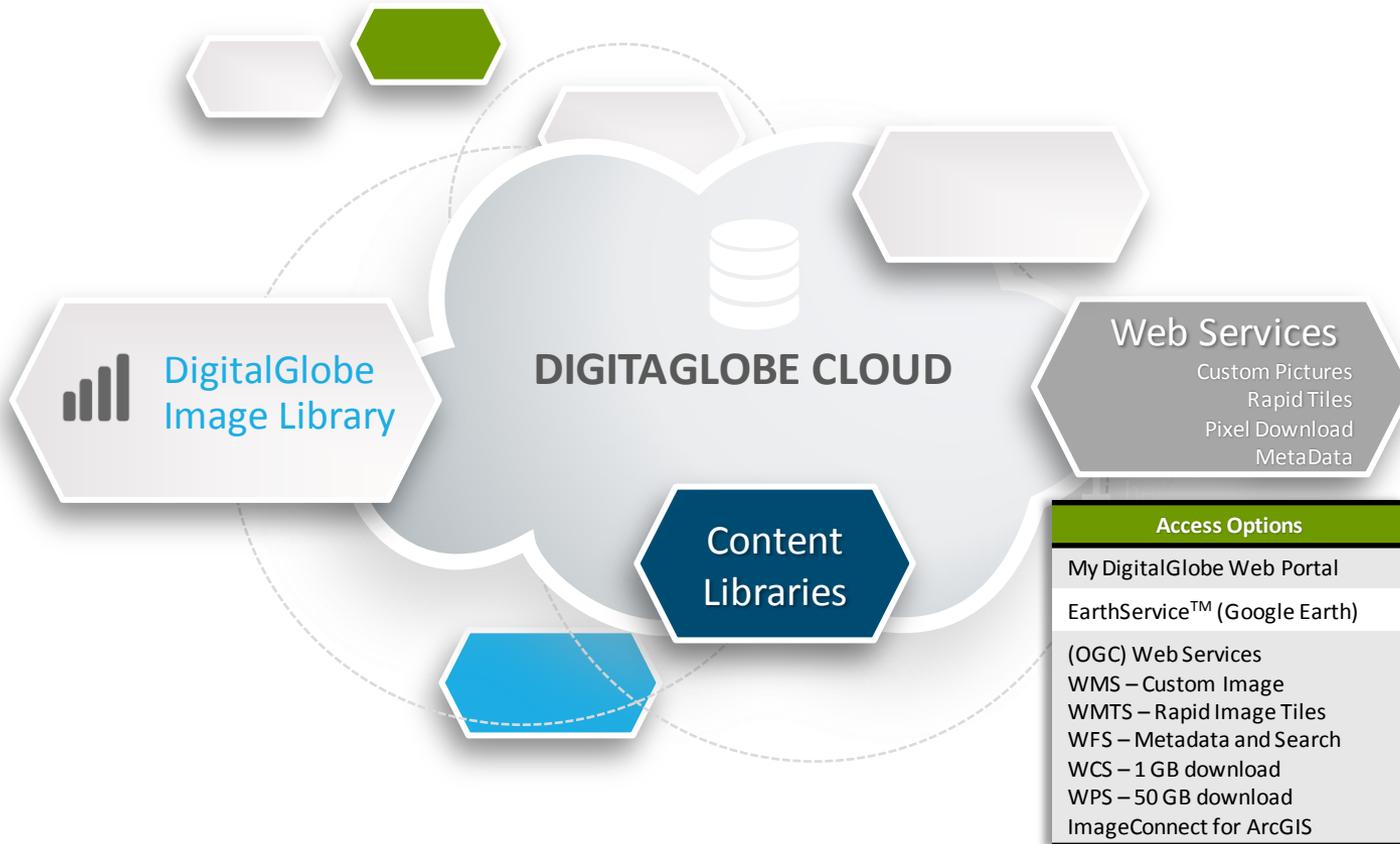
Coverage - Global



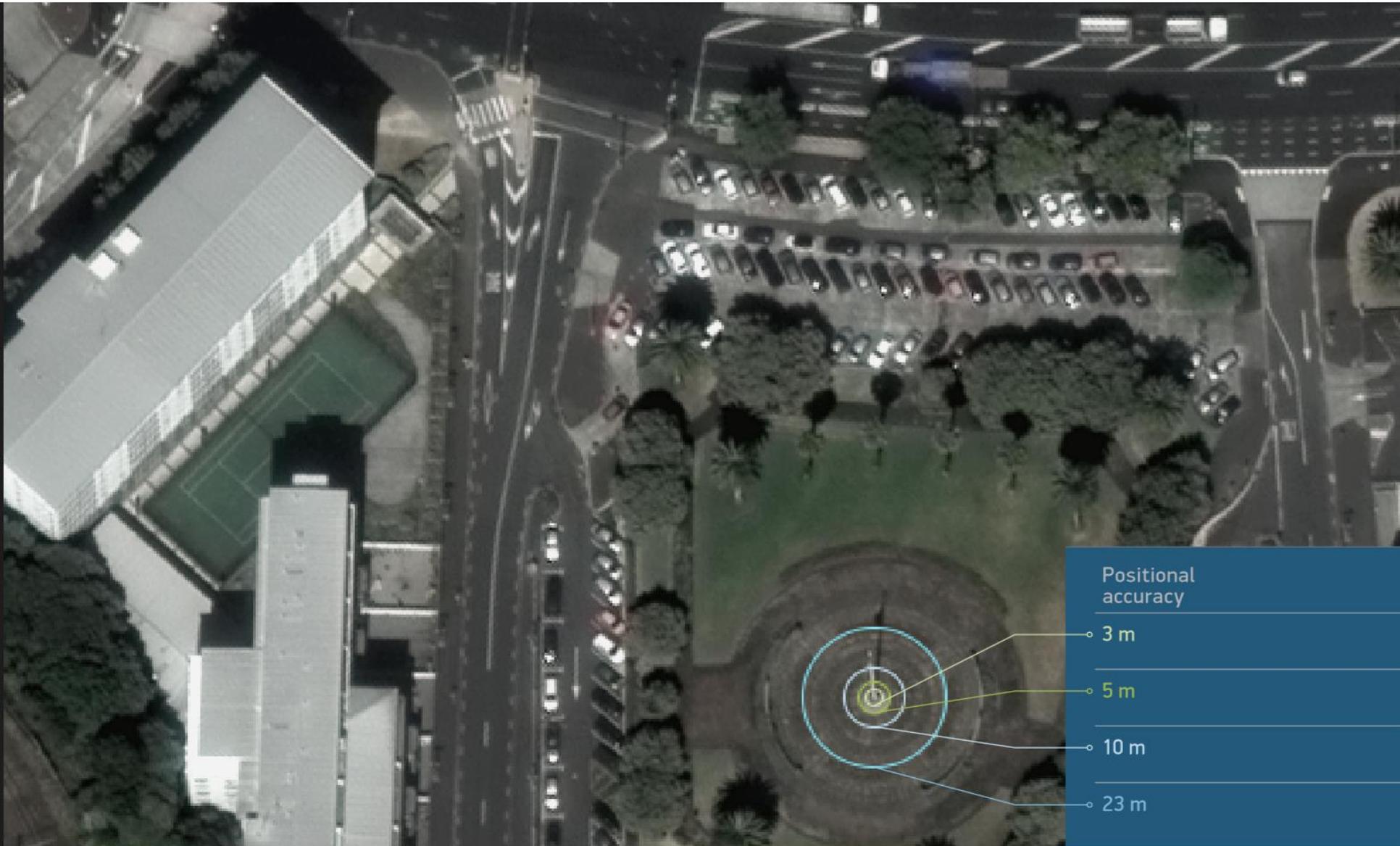
We got you covered

Imagery Organized “Vertically” in Zoom Levels





Accuracy



Positional accuracy

3 m

5 m

10 m

23 m

MetaData



Collection date & time



Collection sensor



Horizontal accuracy



Ground sample distance



Cloud cover percentage



Collection angle



Sun elevation

Example of metadata in professional-grade basemap

Metadata	
Product Type	Pan Sharpened Natural Color
Source	WV03_VNIR
Source Unit	Strip
Product Class	30 cm
NiRS	5.70
Acquisition Date	2015-06-27 08:06 UTC
Ingest Date	2015-06-27 14:17 UTC
Age in Days	97
Cloud Cover	0.73%
Has Cloudless	Yes
Geometry	
▼ Show Browse image	
Off Nadir Angle	4.6580°
Sun Elevation	57.2914°
Sun Azimuth	39.8408°
Feature Id	1e5e9e1f5de1d0f7d2b1c4a0f75d775
Legacy Identifier	104001000C905400
Feature Order Number	054489705_10

Nyayo Sports Complex, Nairobi | 27 June 2015

Basemap offers configurable options to meet varying customer requirements



- Configurable options have associated cost implications and can be chosen according to the top user priorities in order to maximize cost-effectiveness

	Coverage	Display Resolution	Updates	Users	Usage	Profile
Online	<ul style="list-style-type: none"> City Country Global 	<ul style="list-style-type: none"> 240 cm 120 cm 60 cm 30 cm 	<ul style="list-style-type: none"> Annual Semi-Annual Quarterly Continuous None 	<ul style="list-style-type: none"> 1 2-5 6-10 11-20 21-50 51-100 101-250 251-500 500+ 	<ul style="list-style-type: none"> View only View and download 	<ul style="list-style-type: none"> Consumer Color Cloud Cover Currency Accuracy
Offline	<ul style="list-style-type: none"> Country Global 	<ul style="list-style-type: none"> 120 cm 30 cm 	<ul style="list-style-type: none"> Annual Semi-Annual Quarterly 	<ul style="list-style-type: none"> 1 2-5 6-10 11-20 21-50 51-100 101-250 251-500 500+ 	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Consumer Color

Currency, Consistency, Refresh & Coverage



Basemap

Best images, strips & mosaics - Temporal



+Refresh

Guaranteed wall-to-wall update, on a regular basis



+Daily

Today's collections, auto-loaded



+Vivid

Seamless, cloudless, crystal-clear aesthetics



+Metro

Mosaic of more than 2,600 metropolitan areas, updated yearly



Extended Coverage

Adds +Daily images >90 days old



Case studies

- **CARTOGRAPHY**
- **MONITORING**
- **EMERGENCY TASKING**
- **ENVIRONMENTAL MAPPING**
- **SECURITY RESPONSE**

See a better world.™

Cartography



Cartography



Search by location name or coordinates...

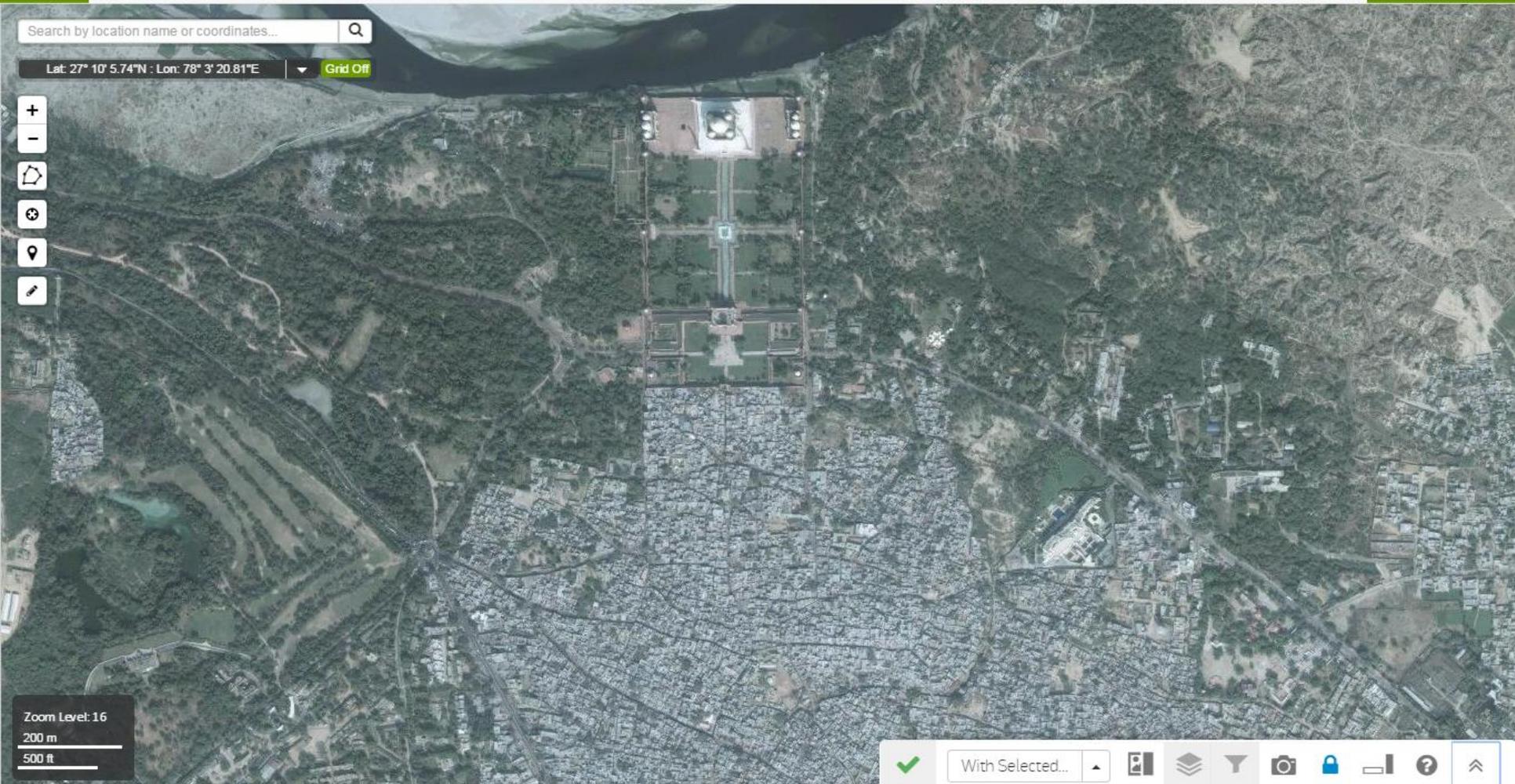
Lat: 27° 10' 37.42"N : Lon: 78° 1' 46.63"E

Zoom Level: 16
200 m
500 ft

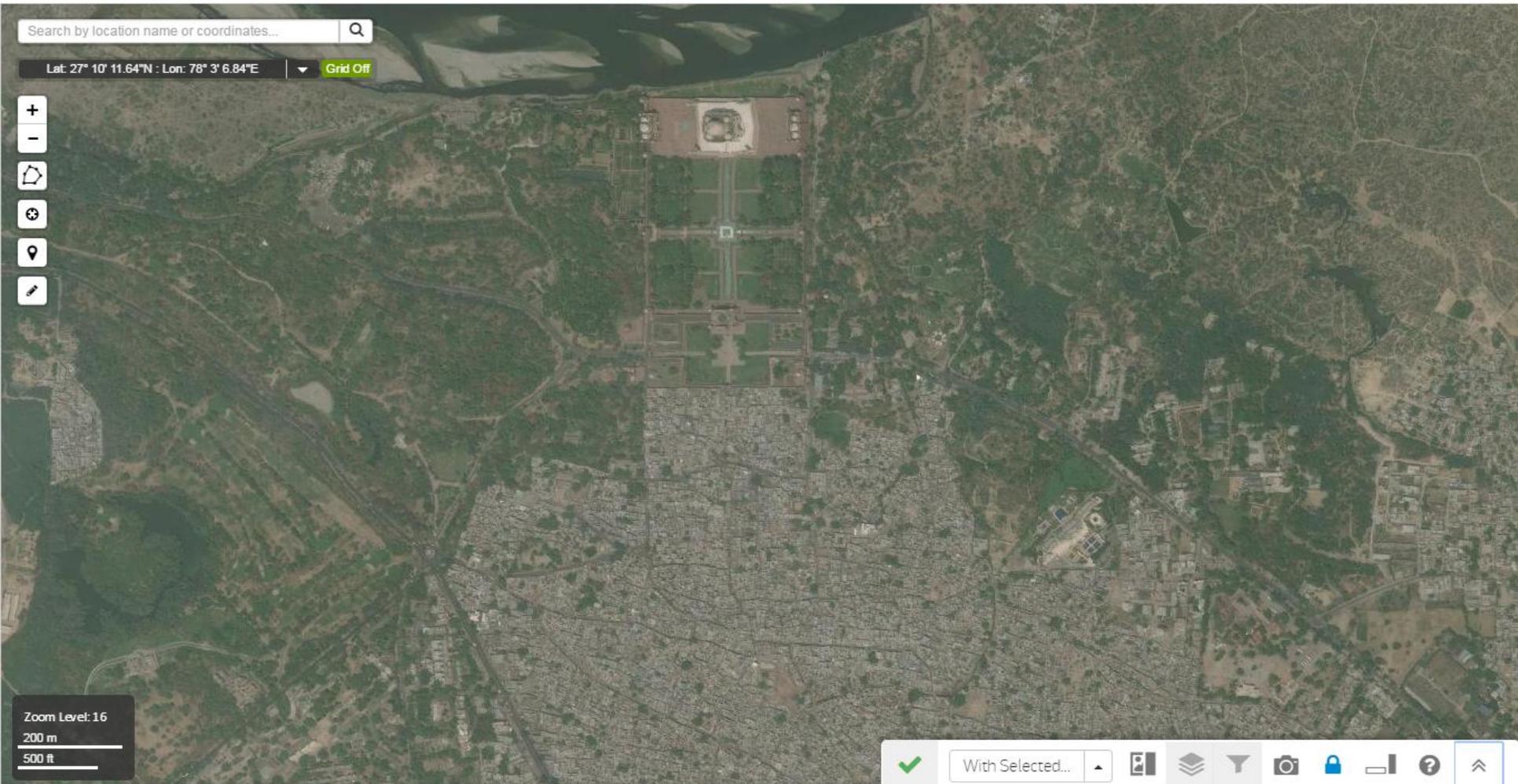
<https://services.digitalglobe.com/myDigitalGlobe/#>

With Selected...

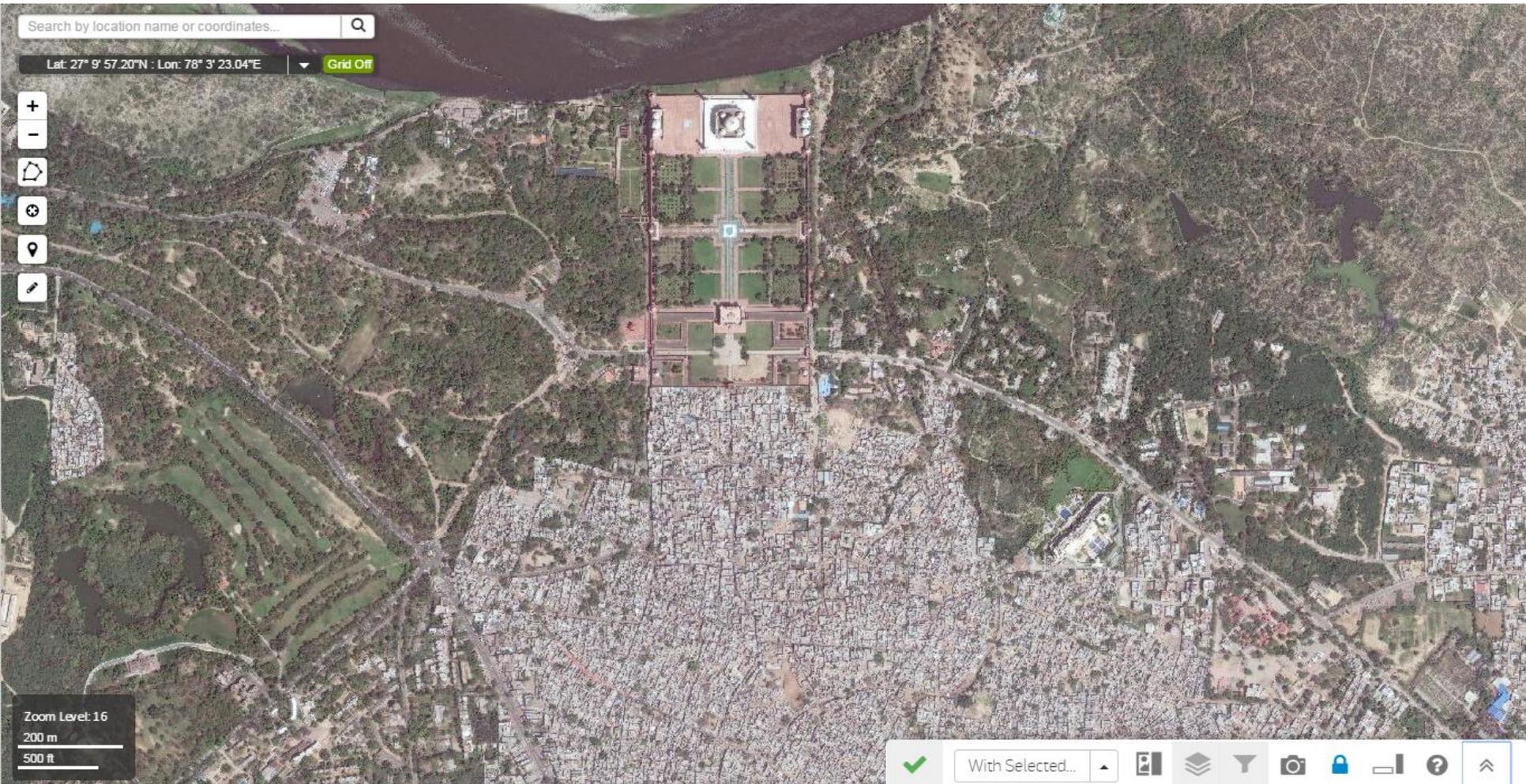
Monitoring. Agra 2011



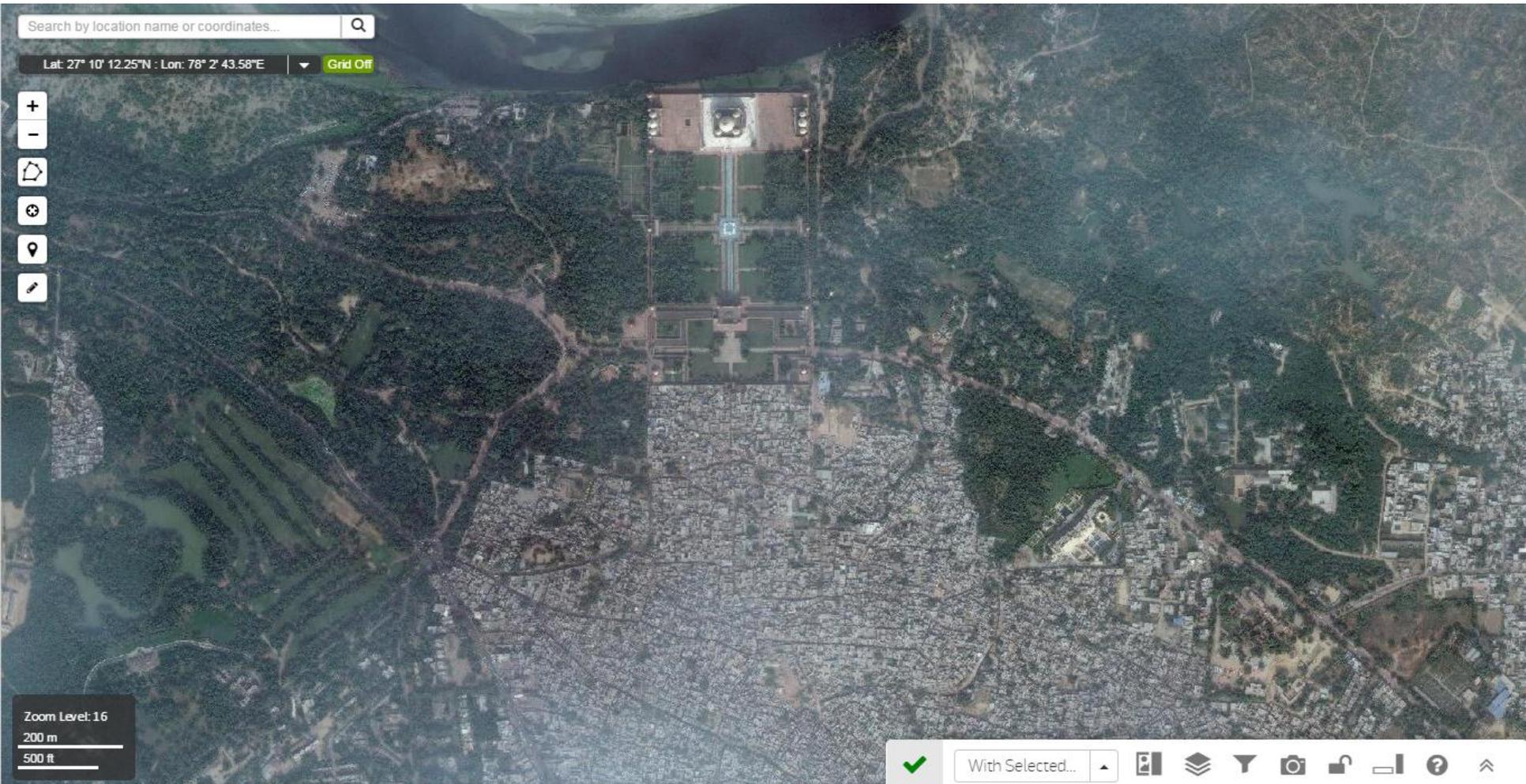
Monitoring. Agra 2013



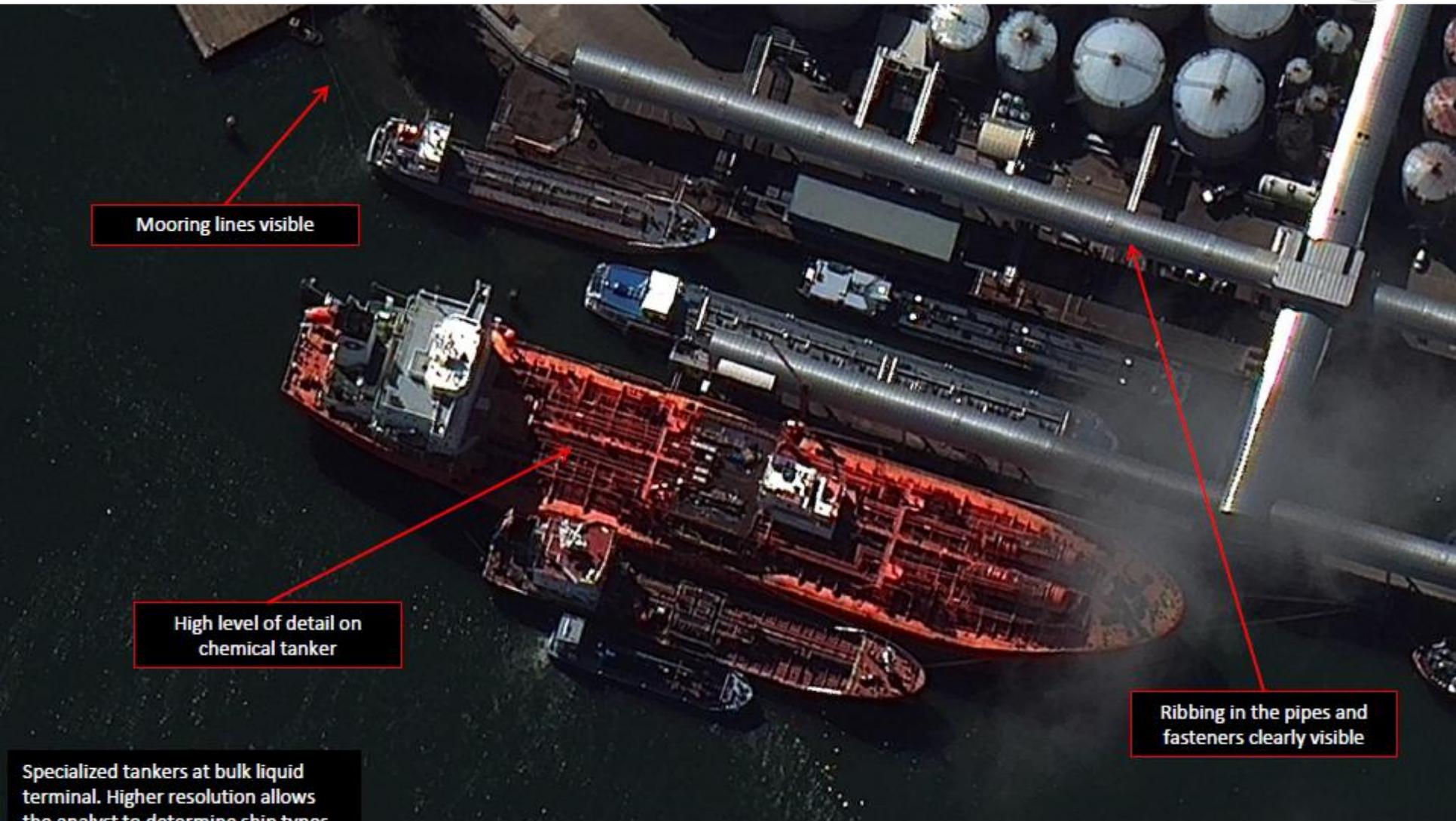
Monitoring. Agra 2015



Monitoring. Agra 2016



Monitoring



Mooring lines visible

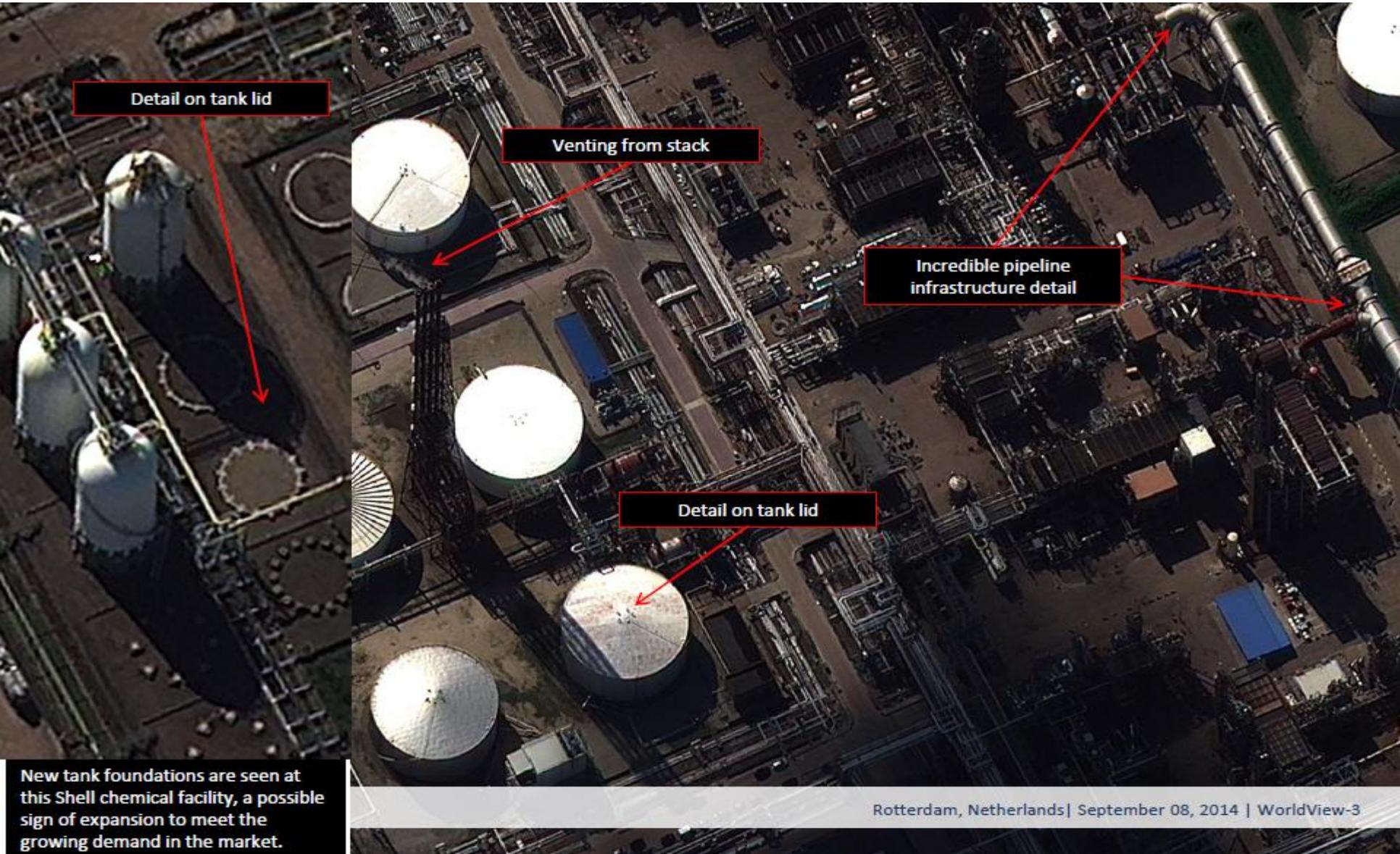
High level of detail on chemical tanker

Ribbing in the pipes and fasteners clearly visible

Specialized tankers at bulk liquid terminal. Higher resolution allows the analyst to determine ship types and uses, as well as activity at the terminal

Rotterdam, Netherlands | September 08, 2014 | WorldView-3

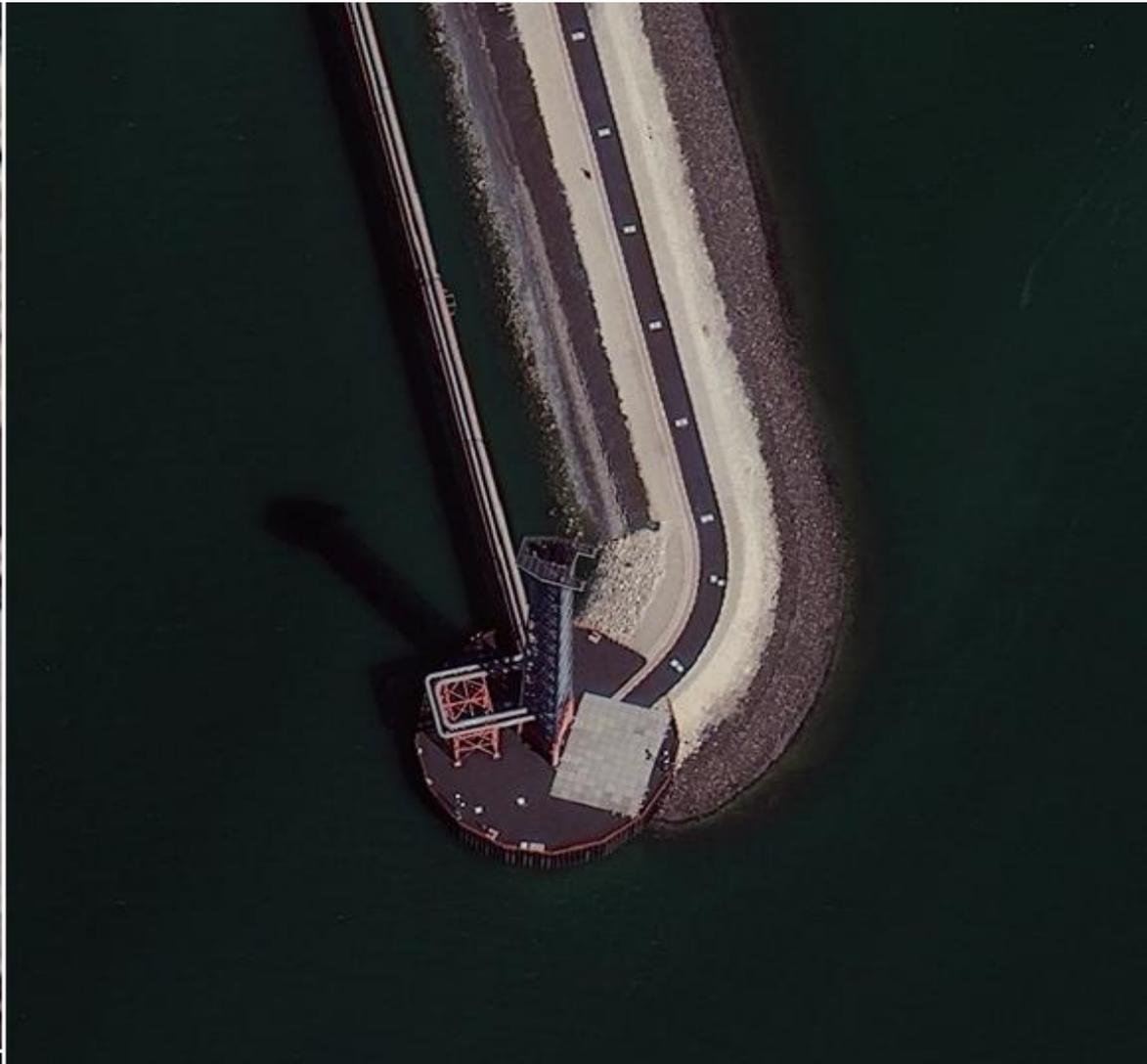
Monitoring



Monitoring

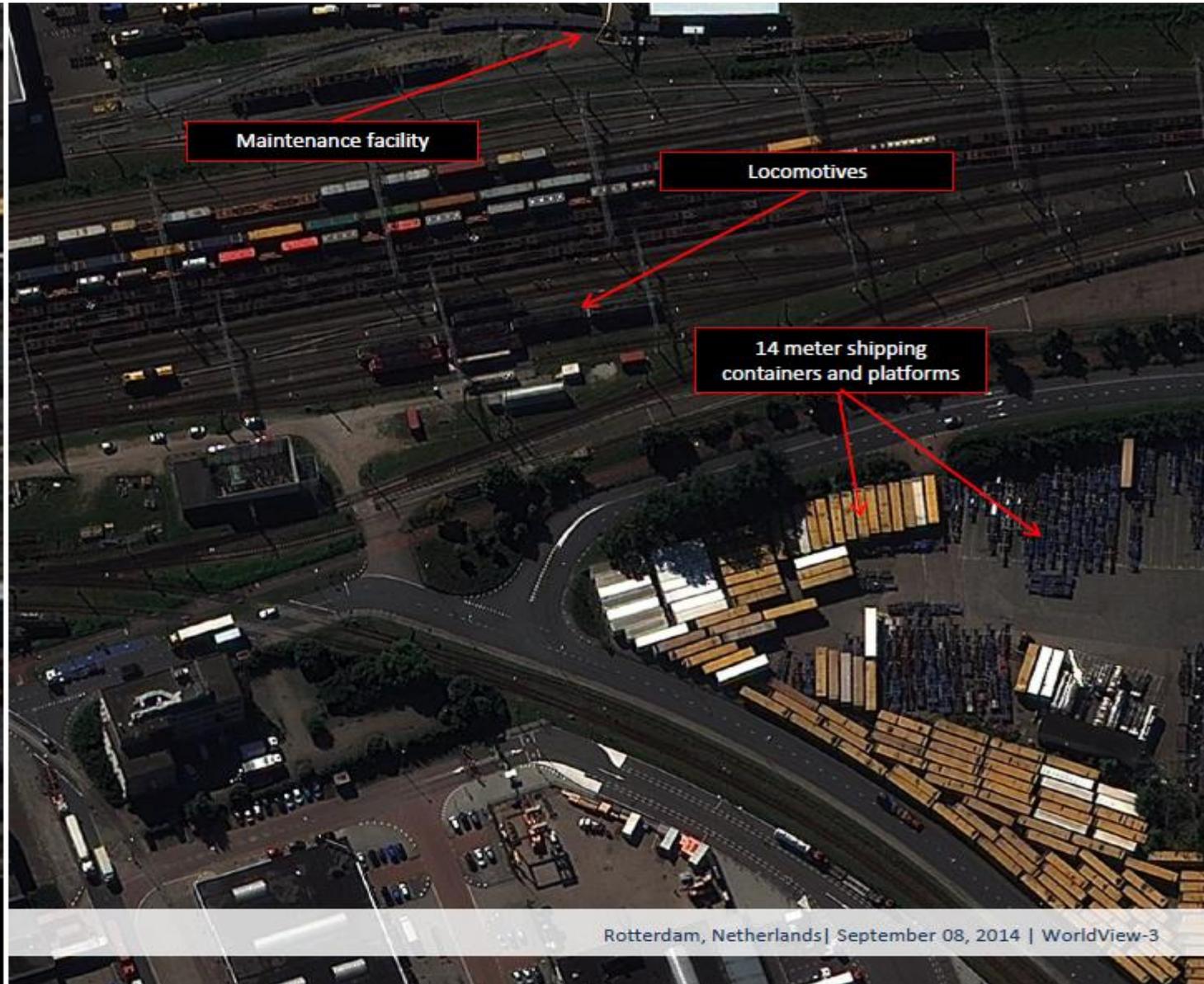


The lattice work and individual stairways are visible on the natural gas burn-off tower. Also, the individual concrete pads comprising the parking are clearly delineated.



Kashagan Oil Facility, Caspian Sea, Kazakhstan | September, 2014 | WorldView-3

Monitoring



Security response





Great capabilities

- **OBLIQUE IMAGERY**











