

Monitoring & Management of Forests in India

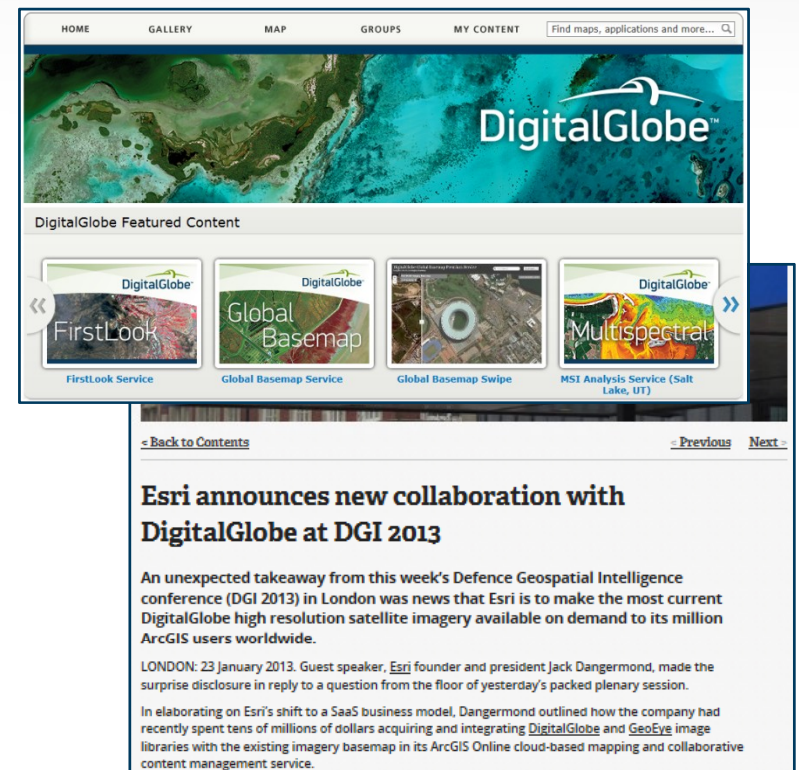


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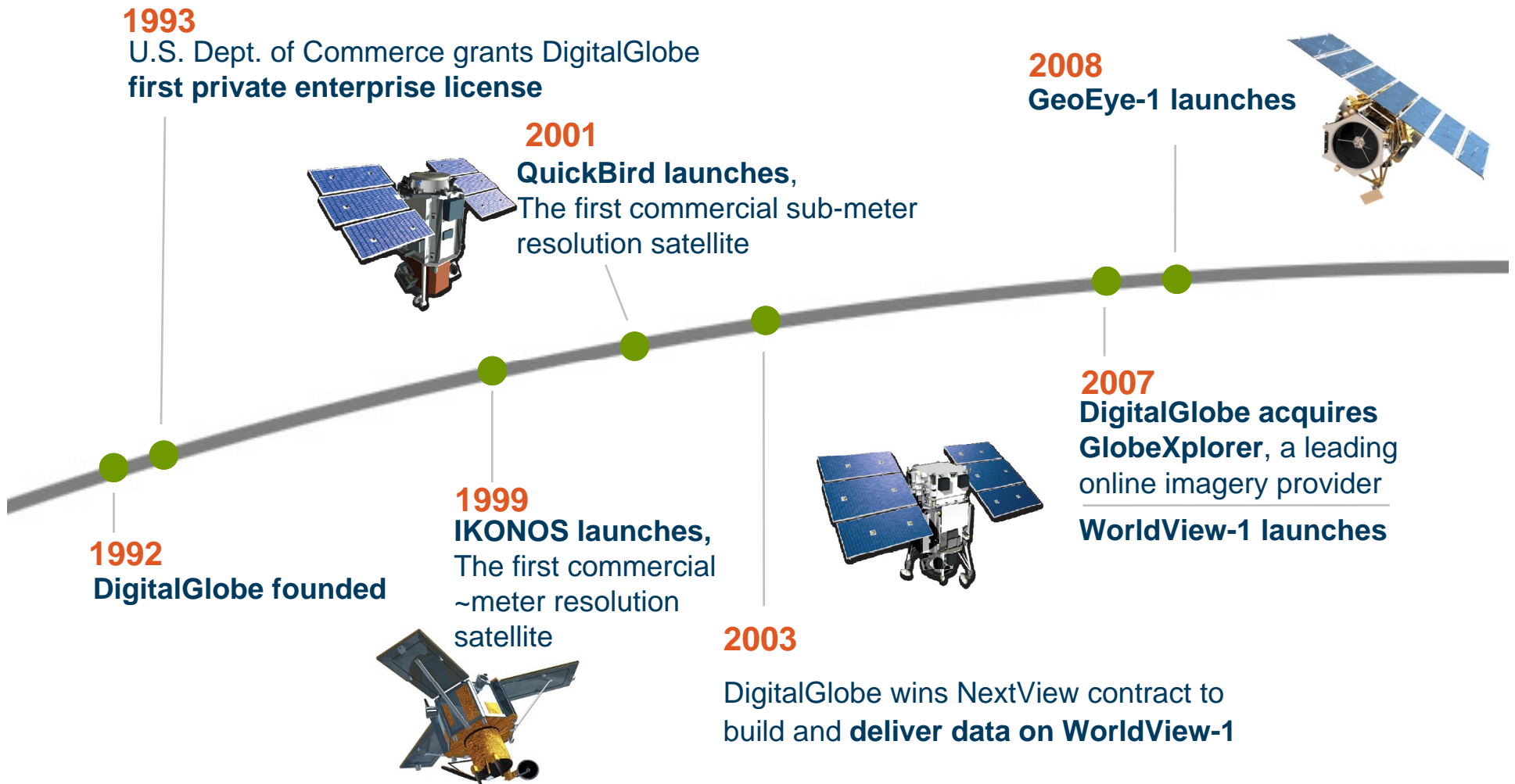


Who we are

- World's Leading Provider of High Resolution Satellite Imagery
- Delivering Imagery powered Information and Insight Solutions
- Expanding Platform to facilitate new business and access models



Advancing our industry one milestone at a time



Advancing our industry one milestone at a time

2009

DigitalGlobe **opens London office** and expands Singapore office

DigitalGlobe begins trading as DGI on NYSE

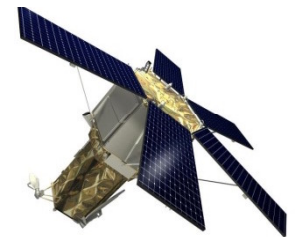


2010

DigitalGlobe surpasses one billion km² of earth imagery

2013/2014

Estimated cost of **WorldView-GeoEye-2**



2009

WorldView-2 launches

FirstLook launches

to provide the industry's first information product



2013

DigitalGlobe and GeoEye merge to make DigitalGlobe currently operating five satellites in low earth orbit

DigitalGlobe **current archive 3.8 Billion km² of earth imagery**



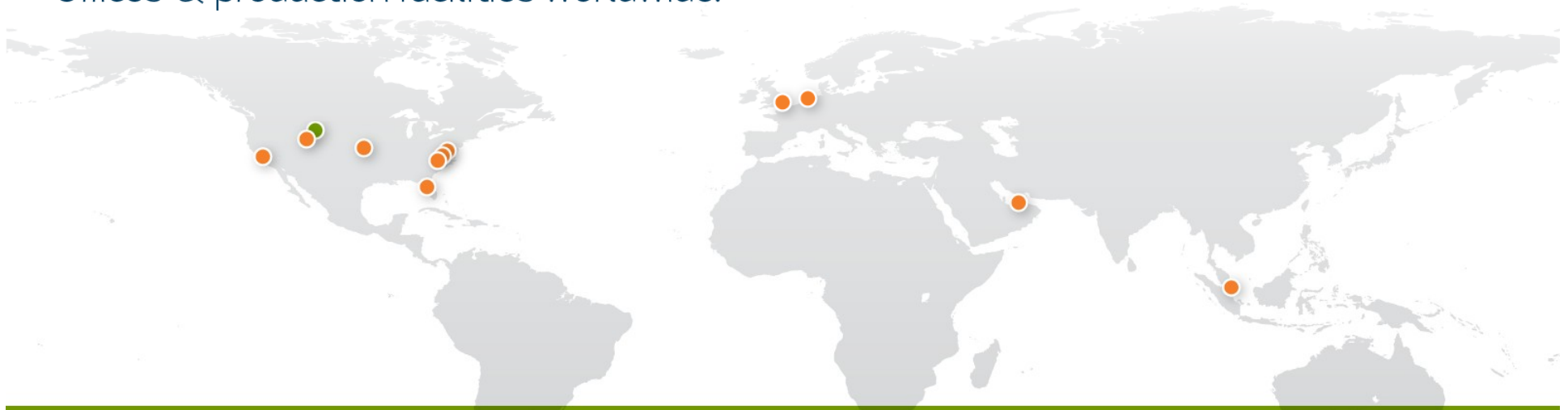
DigitalGlobe™ at a glance

Over 1,000 employees



Stock symbol: **DGI**
LISTED
NYSE®

Offices & production facilities worldwide:



Markets served

 National security & intelligence

State & local government 

 Location-based services

Critical infrastructure 

 Energy, oil & gas, mining

Crisis & humanitarian support 

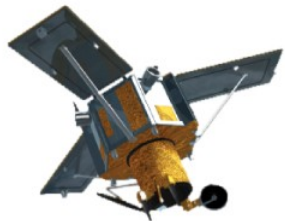
 Agriculture & forestry

Insurance & real estate 

 Aviation & marine

Today's clearest view of the Earth

... from the world's most advanced commercial satellites



IKONOS®

.82 meter resolution
9 m CE90



QuickBird®

.65 meter resolution
23 m CE90



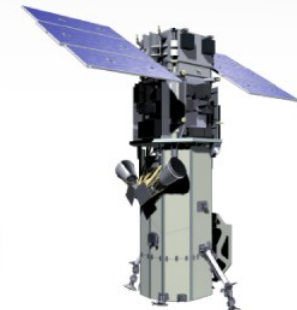
WorldView-1®

.50 meter resolution
<4 m CE90



GeoEye-1®

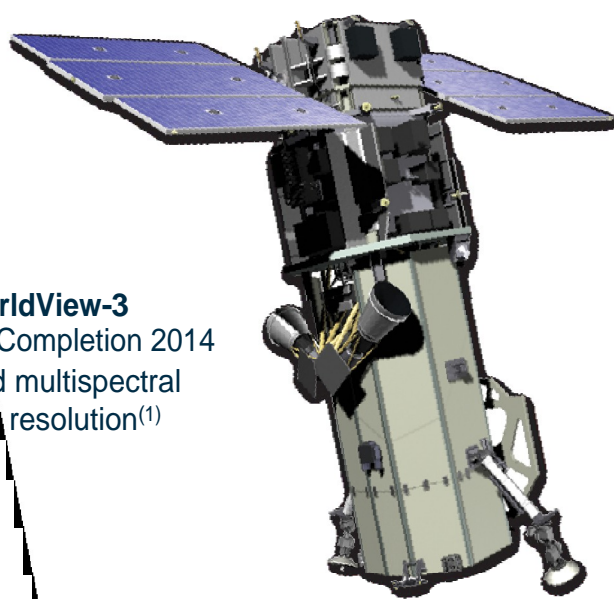
.46 meter resolution
<3.5 m CE90



WorldView-2®

.46 meter resolution
<3.5 m CE90

Upcoming DigitalGlobe Constellation Additions



WorldView-3
Expected Completion 2014
16 band multispectral
31 cm resolution⁽¹⁾



GeoEye-2
Expected Completion 2013
4 band multispectral
34 cm resolution⁽¹⁾



Lot of data,
Big files,
Big coverage



Our satellite ImageLibrary =

>4 billion km²

That's This Many!



Earth's total landmass is approx. 149 million km²

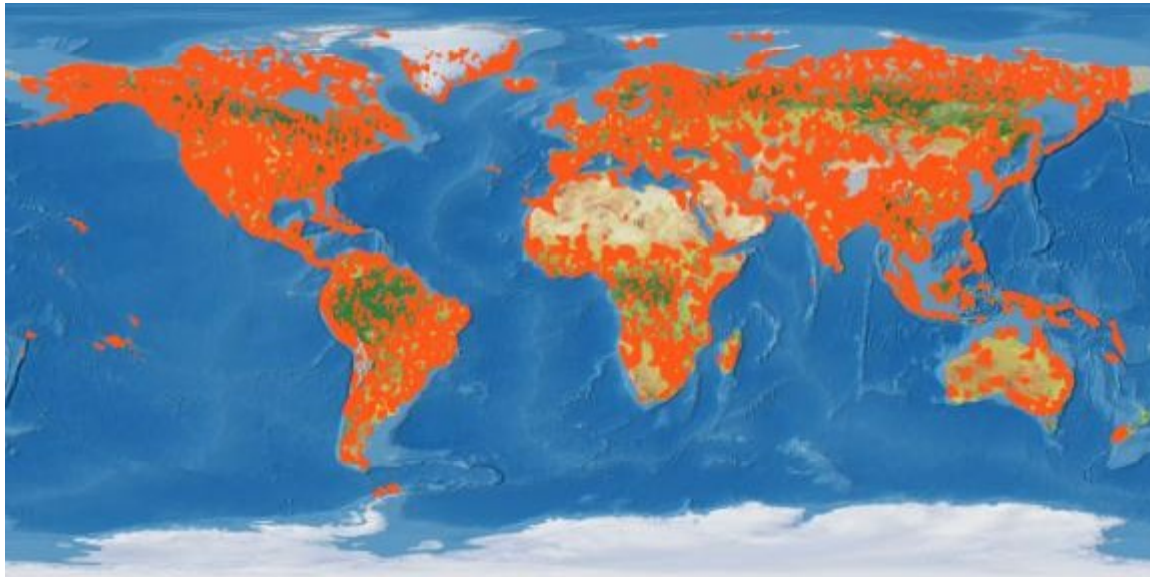
50 PB

25 times all of the content in US academic research libraries
The entire written works of mankind, from the beginning of recorded history, in all languages

See more of the Earth

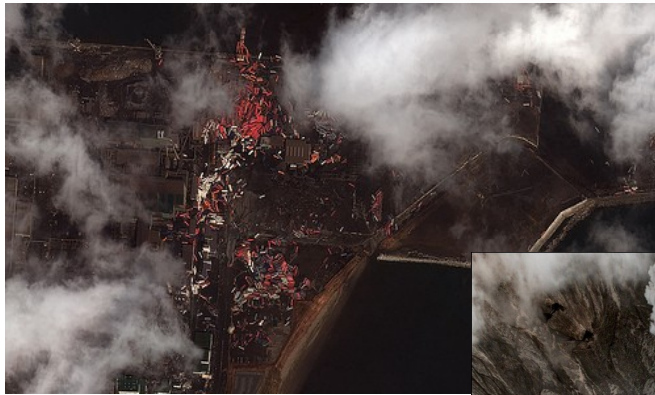
Coverage

■ 30 days collection



- **2.6 million km²** added each day – we capture over six times the earth's landmass every year
- **More access** – three satellites with the some of the most agile technology
- **Better collection** – we can capture the earth's landmass in 60 days
- **Content leader** – over 3.8 billion km² archived imagery available

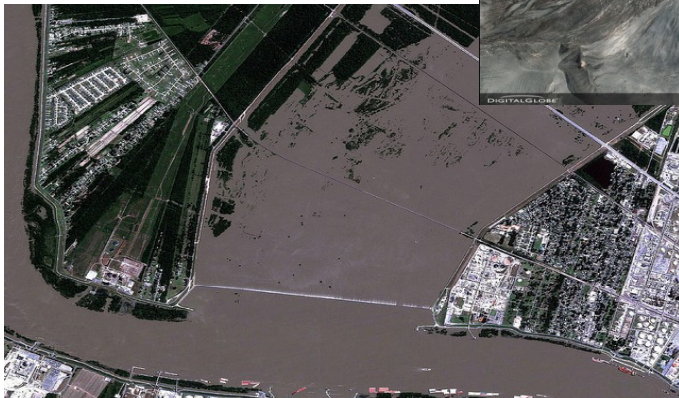
See the Earth now



Deliver images within
hours after collection



Only company
offering on-demand
access and download



Ability to refresh
imagery from the same
location almost daily

Flexible options for imagery, information, and insight

Imagery

Global imagery sourced from DigitalGlobe's own high-resolution satellite constellation and aerial network.

- Base Products
- Global Basemap
- Stereo
- Precision Aerial
- Ortho Series

Monitoring

Find fast web-based access to pre- and post-event imagery of world disasters delivered to almost any desktop or web-based mapping platform.

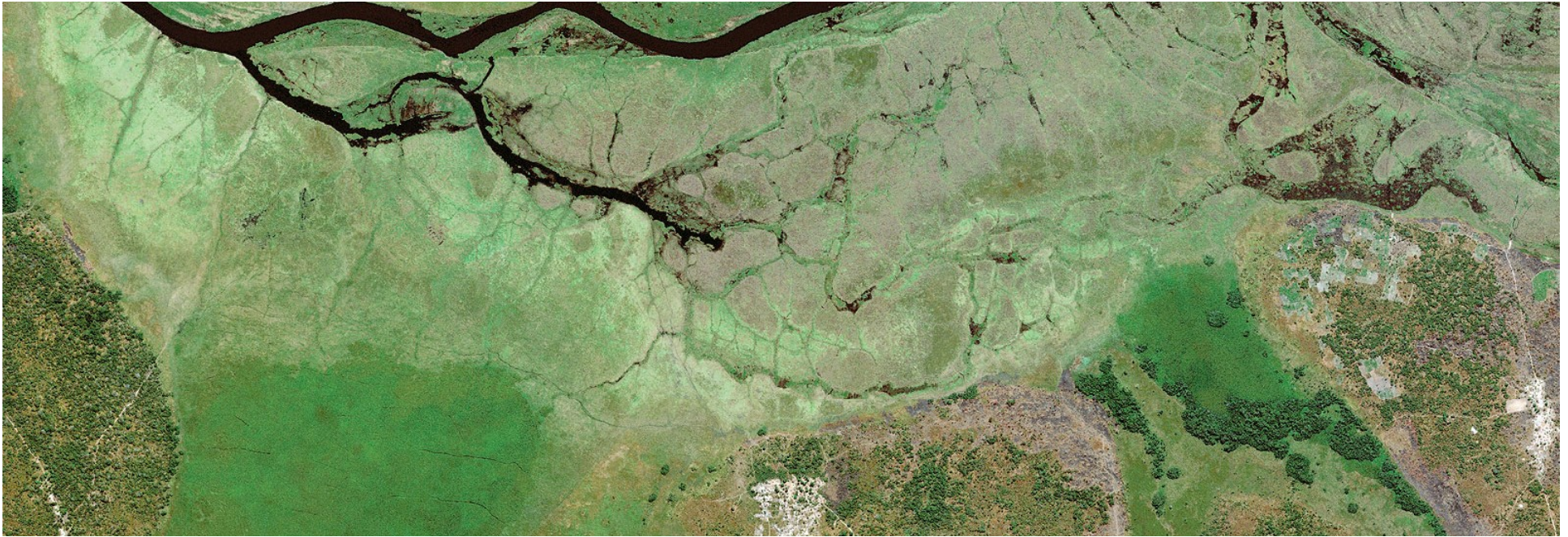
- FirstLook
- Diplomatic Facility Support Program

Information/Insight

Get analytical insights of global events and changes to support decision-making.

- Custom Analysis
- Analysis Center
- Elevation Series
- Land Use / Land Cover, Change Detection, and more

High Resolution Satellite Imagery for Forestry



Forestry

- Customers

- Developing Countries that need sustainable forestry/ natural resources management for conservation
- Countries that need to meet nation demands in paper, oils and timber
- Moving towards adoption of new technology and large scale monitoring of resources

- Definition

- Customers who want to do statewide/nationwide forestry management for:
 - Understand Forestry Holdings in the State/Country and who owns what piece of land
 - Monitoring deforestation and degradation of forests and incentivize reforestation activities
 - Plan commercial supply activities for paper, timber/wood and oils
 - Monitor illegal logging activity
 - Sustenance of urban green space to counter effects of pollution in cities

Forestry

- Importance

- Maintain proper forestry records for state/national inventory of natural resources
- Enable self sufficiency and decrease foreign dependency on oil/paper/timber
- Reduce deforestation by incentivizing reforestation activities
- Curb illegal logging/clearing activities
- Identify illegal crop growth amid forestry

- Deficiencies or Needs

- Nation / state wide inventory of forestry resources
- Understanding of what type of forests exist where
- Understanding of current growing conditions and impact on commercial wood/paper supplies
- Cohesive plan to support sustainability
- Prevent fraud and exploitation

Forestry

- DigitalGlobe Value Proposition

- Accurate High Resolution Imagery to Map Nation / state wide Forests
- Tree Species identification with WorldView class satellites with 8+ spectral bands
- Planning disaster relief efforts in cases of landslides and forest fires
- Economy of Scale

- Positioning

- Worldview2 satellite designed primarily for vegetation identification
- Automated Information Algorithms that need local expertise to create customer solutions and can help reserve agencies conserve their national assets/natural resources

Forestry Issues Addressed

- Forest Resources
- Yearly Estimation of Timber/ Paper/ Palm Oil
- Illicit Crop Identification and Monitoring
- Disaster relief efforts in cases of landslides and forest fires

Forestry Issues Addressed

- Forest Resources
- Yearly Timber/ Paper/ Palm Oils Estimation
- Illicit Crop Identification and Monitoring
- Disaster Relief Planning (Landslides and Forest Fires)

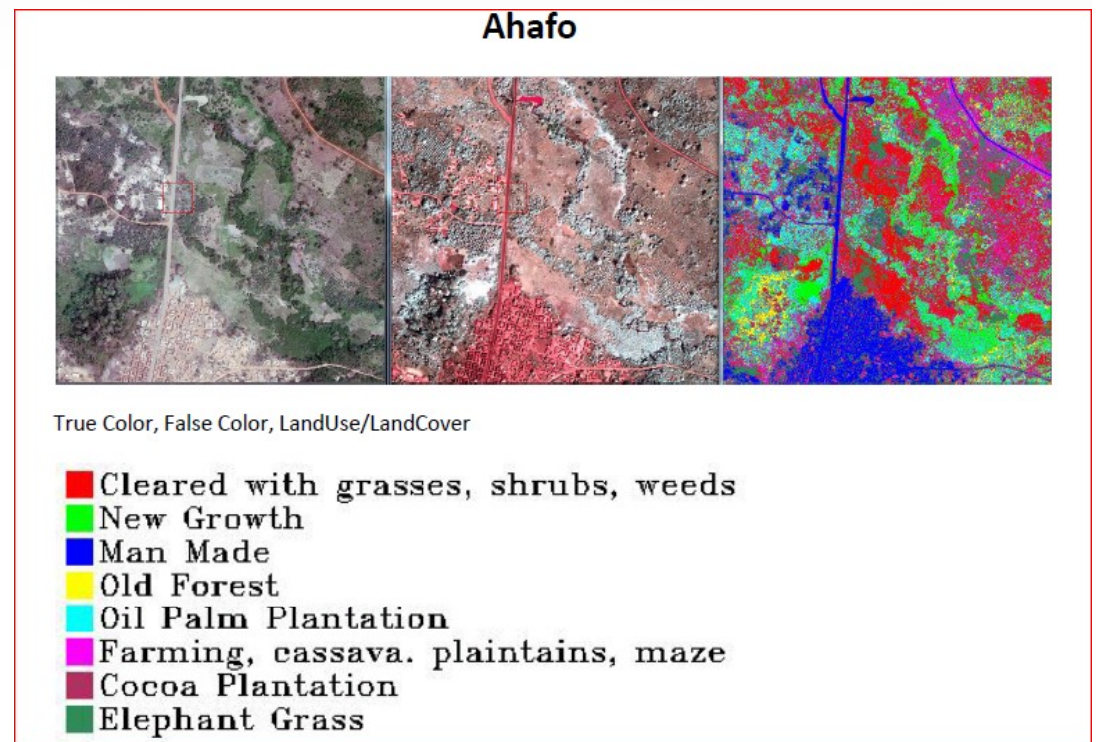
Forest Resources

- Who is the Customer?
 - National Forest Reserve, Forest Survey Agencies
 - State Forest Departments
 - Ministry of Environment & Forest / Forest Protection

- Customer Needs?
 - Time consuming surveying/feet on the ground
 - Records often passed down from generations are incomplete and are on paper
 - Records often not up-to-date
 - Digitized from Inaccurate Imagery or other sources

Forest Resources

- DigitalGlobe Value Proposition
 - High accuracy imagery and 8+ spectral bands for species identification and classification
 - Monitoring of forested areas on a frequent basis



Forestry Issues Addressed

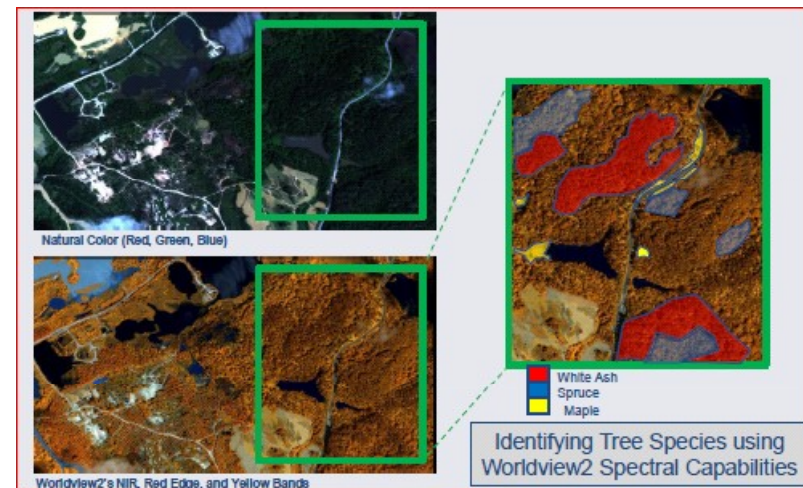
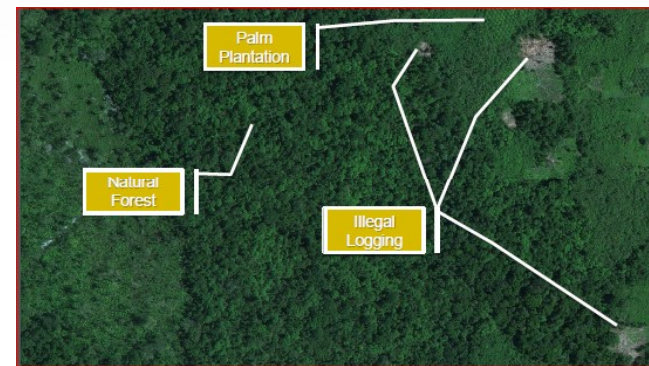
- Forest Resources
- Yearly Estimation of Timber/Paper/Palm Oil
- Illicit Crop Identification and Monitoring
- Disaster Relief Planning (Landslides and Forest Fires)

Yearly Estimation of Timber/Paper/Palm Oil

- Who is the Customer?
 - State Forest Departments
 - UN-World Bank funded projects
 - Fire Management/Forestry Public Security Bureau
- Customer Needs?
 - Incorrect inventory of timber/commercial wood grown in a region/country
 - Illegal trading of timber due to inaccurate estimations of national production capacity
 - National economies hampered by inaccurate estimates of timber production capacity

Yearly Estimation of Timber/Paper/PalmOil

- DigitalGlobe Value Proposition
 - Species identification and Acreage Estimation with Worldview Technology
 - Monitoring using constellation



Forestry Issues Addressed

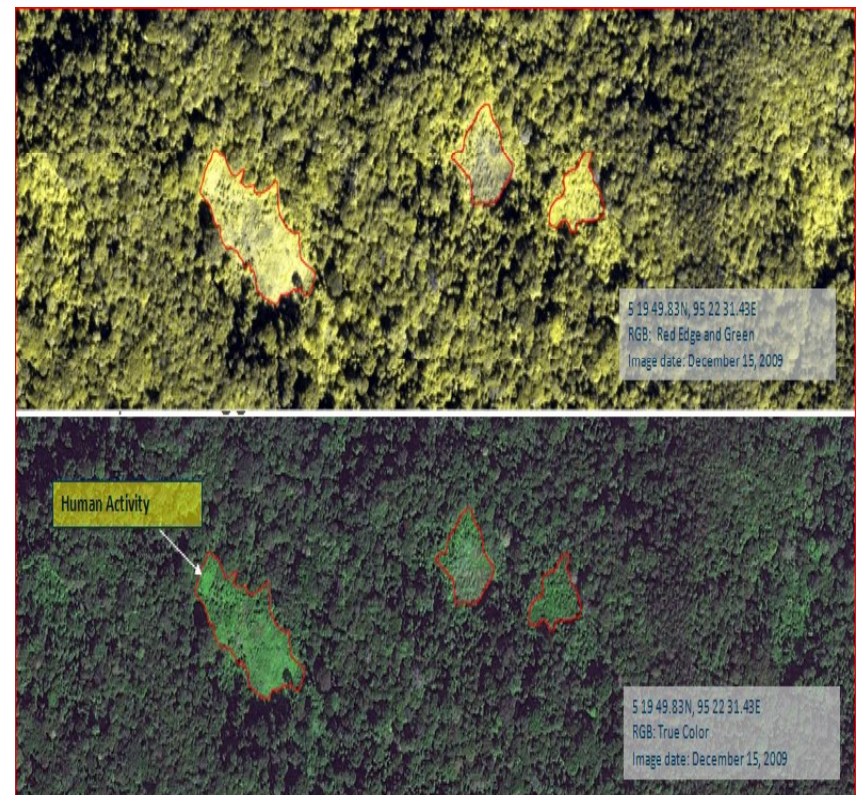
- Forest Resources
- Yearly Estimation of Timber/ Paper/ PalmOil
- **Illicit Crop Cultivation Amid Forests**
- Disaster Relief Planning (Landslides and Forest Fires)

Illicit Crop Cultivation Amid Forests

- Customers
 - Counter Narcotics Departments
 - Military
 - National Security/Police
- Customer Needs
 - Identify and eradicate where illegal crops are being grown
 - Have forest regions secured to prevent innocent civilians from entering these regions

Illicit Crop Cultivation Amid Forests

- DigitalGlobe Value Proposition
 - Cues to identify accurately where illegal crops are grown
 - Needs local expertise to provide the complete solution



Forestry Issues Addressed

- Forest Resources
- Yearly Estimation of Timber/ Paper/ PalmOil
- Illicit Crop Cultivation Amid Forests
- **Disaster Relief Planning (Landslides and Forest Fires)**

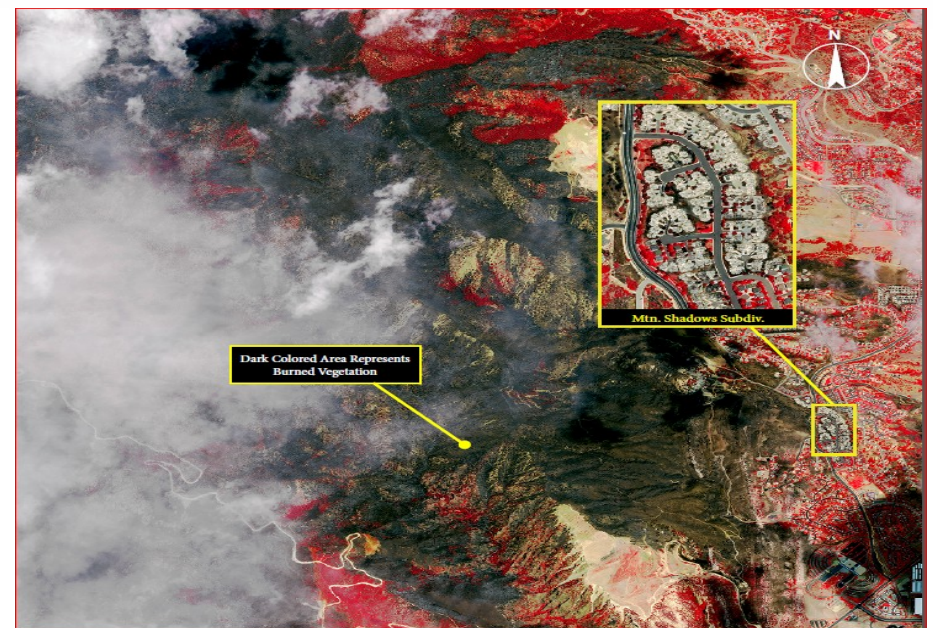
Disaster Relief Planning (Landslides and Forest Fires)

- Customers
 - Information agencies for disaster prevention and reduction
 - State Forest Departments

- Customer Needs
 - Identify areas of constant flooding and landslides and highlight importance of forests to anchor soil in place
 - Generate quick and accurate relief maps for forest fires, for rescue operations
 - High spatial resolution to generate rescue routes with aid of local ground information

Disaster Relief Planning (Landslides and Forest Fires)

- DigitalGlobe Value Proposition
 - Daily visit of satellites ensure high temporal resolution to indicate change and spreading of event
 - NIR band helps quickly identify healthy Vs burnt vegetation, thereby helping dispatch units to affected areas quicker
 - SWIR Band allows for penetration through smoke and haze



Bannerghatta National Park - 2004



Bannerghatta National Park - 2007



Bannerghatta National Park - 2011

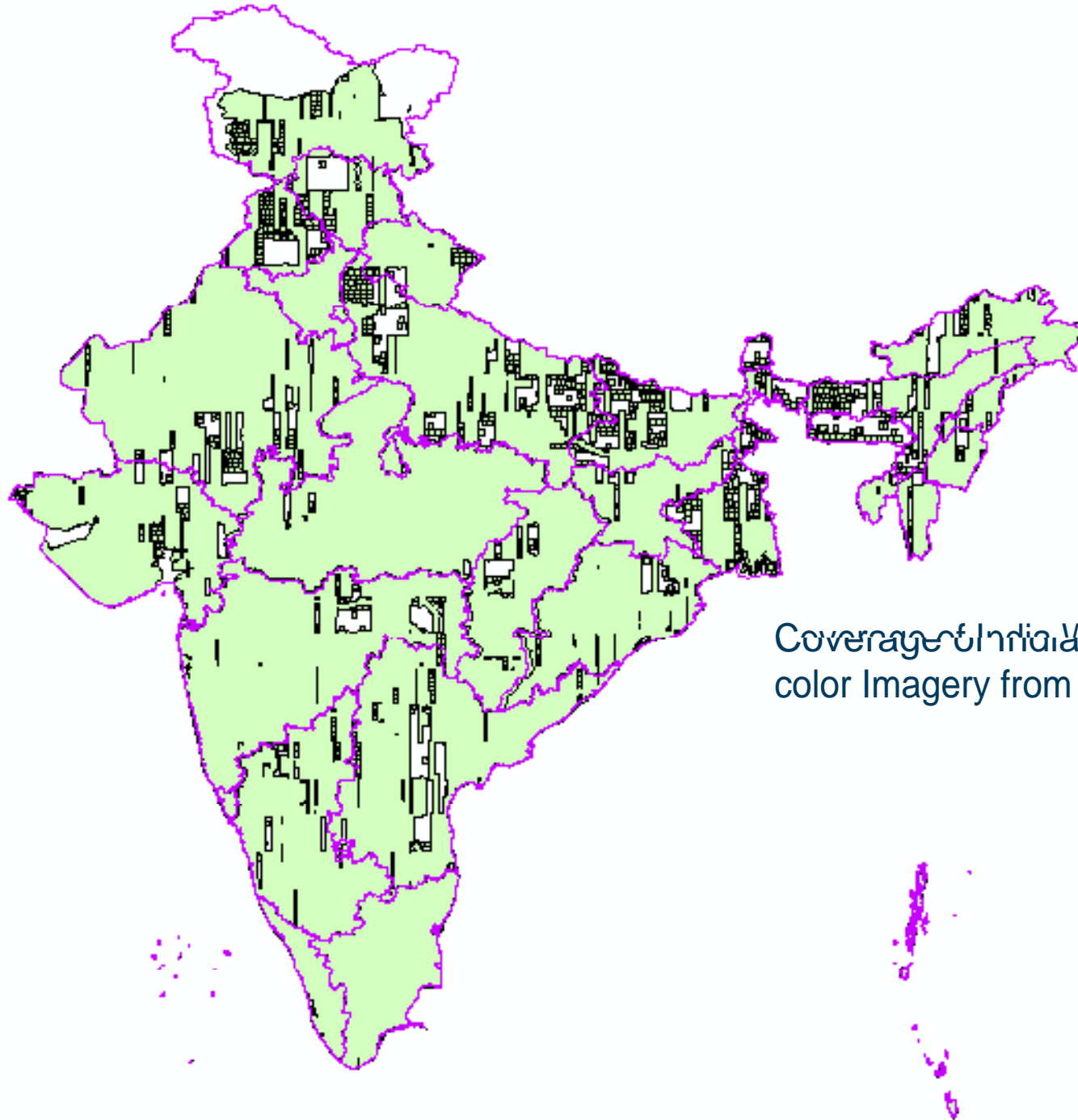


Bannerghatta National Park - 2007

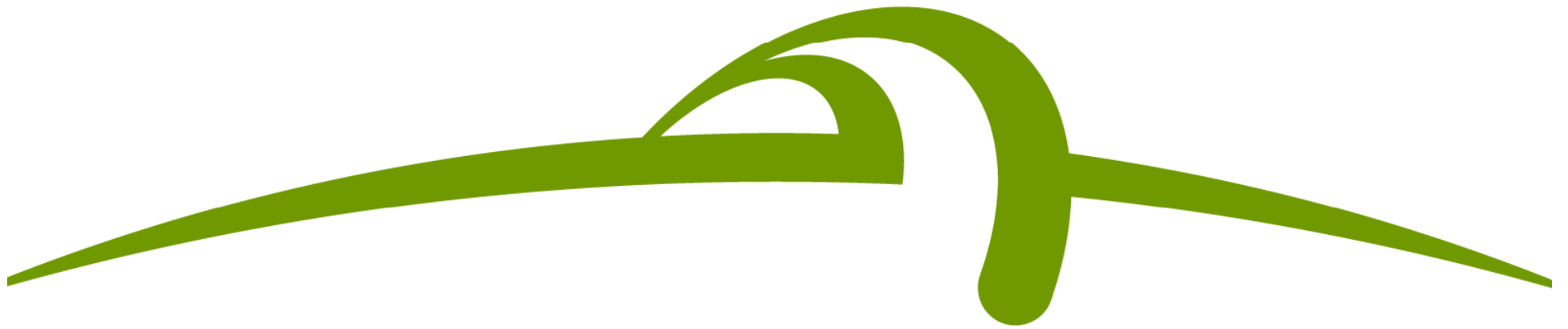


Bannerghata National Park - 2011





Coverage in India With Full
color Imagery from 2010 onwards



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