



Using space based earth observations to understand our changing planet

KUMAR NAVULUR, NOVEMBER 2017

See a better world.

DigitalGlobe satellite constellation



1999



IKONOS®

.80 meter
resolution
9 m CE90

2001



QuickBird®

.60 meter
resolution
23 m CE90

2007



WorldView-1®

.50 meter
resolution
<4 m CE90

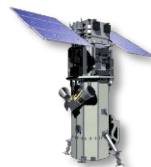
2008



GeoEye-1®

.40 meter
resolution
~3.5 m CE90

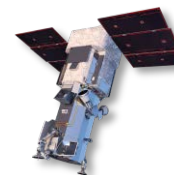
2009



WorldView-2®

.40 meter
resolution
<4 m CE90

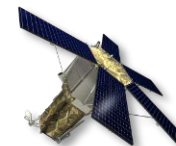
2014



WorldView-3®

.30 meter
resolution
<4 m CE90

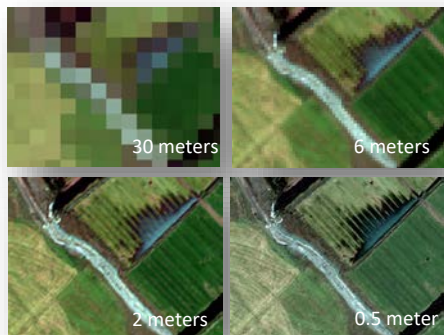
2016



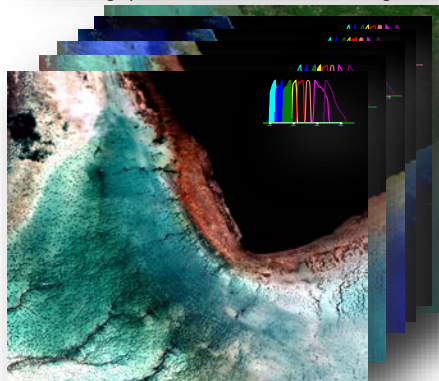
WorldView-4®

.30 meter
resolution
<5 m CE90

We capture earth images at multiple scales and in multiple dimensions



Increasing Spatial Resolution for Monitoring Areas



Increasing Number of Spectral bands for Mapping Applications



Global Collection Capacity and Frequent Refresh for Monitoring Changing Planet



Large Scale Computing and Global Infra-Structure Allows Making Maps in Days

1st Trend: **Resolution**

Customer needs
evolve beyond
aerial



Increasing Spatial
Resolution
More Spectral Bands
Intra-Day Revisit

2nd Trend: **Accuracy**

Emergence of map
making industry and
greater accuracy drives
growth



Increasing Positional Accuracy
Increasing Information Accuracy

3rd Trend: **Speed**

Reliance on imagery
at an all-time high and
customer priority
becomes speed and
relevancy



Near Real Time Tasking/Download
Maps at global scale in hours/days
Crowd Sourcing
Getting Data of out of jail using
Cloud

4th Trend: **Analytics**

New valuable problem-
solving uses emerging
and priority becomes
measuring on surface and
below water



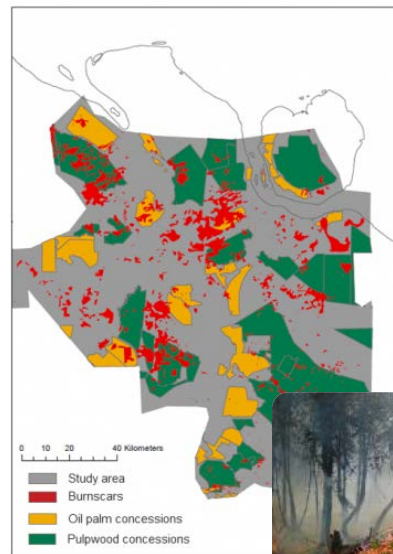
Analytics on Demand
Location Intelligence
Predictive Insight

Leveraging Satellite Imagery To Help Smallholder Farmers

EMPOWERING SMALL HOLDER FARMERS IS THE ONLY WAY TO MEET THE WORLD'S FOOD SECURITY NEEDS.



Mapping Deforestation and Illegal Forest Fires



WORLD
RESOURCES
INSTITUTE



Helping address Refugee Crisis



Leveraging Imagery to curb Modern Slavery



What skill sets we are looking for



- Data Scientists
 - AI/Machine Learning
 - Remote Sensing
 - Cloud computing
- GIS Specialists



See a better world.™
