

# Latest trends and Innovations in GIS Technology

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THE OPENING CEREMONY OF THE ARAB REGIONAL OFFICE OF ASTRONOMY  
FOR DEVELOPMENT AND ARAB LANGUAGE EXPERTISE CENTRE

InfoGraph



الشركة الاستشارية لأنظمة المعلومات البيانية  
Information & Graphics Systems Consultants L.L.C.



# InfoGraph (Founded in 1991 in Amman, Jordan)

- InfoGraph specialty is Geographic Information Systems (GIS) & Remote Sensing software products, services, and applications.
- The Exclusive Distributor of ESRI, Inc. in Jordan.
- InfoGraph has the only ESRI Authorized Learning Center in Jordan.
- InfoGraph offers GIS consulting, GIS Web design and implementation, and provides digital data.
- InfoGraph provides also GIS integration services with enterprise systems such as CRM, workflow, and archiving systems.
- During the past twenty five years, InfoGraph has supplied ESRI GIS products and provided services related to the development of successful GIS projects at a number of major institutions in Jordan and in the region.



Also an Authorized Distributor for

**EXELIS**



**Cityworks®**



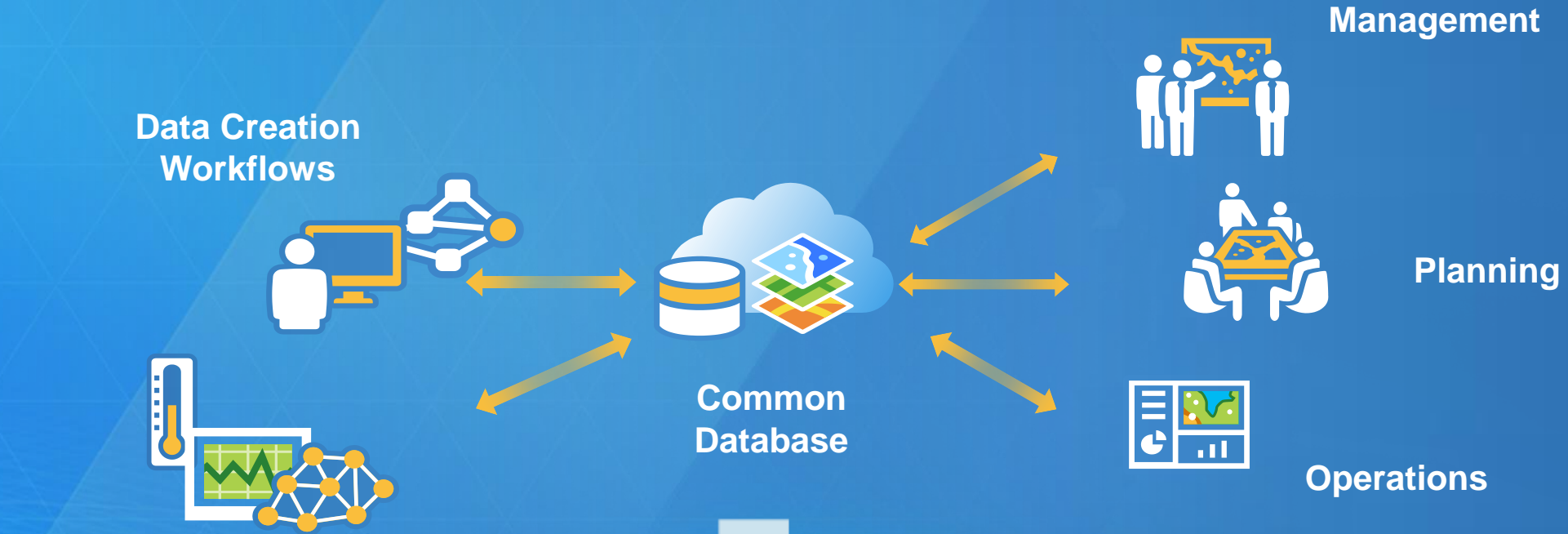
**hnit•baltic**



# GIS technology



**GIS** is “**System of Record**” for organizing and managing the geographic context of your assets and resources



# GIS is Leveraging Advancing Technology

More Measurement, Computing and Networks



*Integrating the Growing Numbers of Sensors and Devices . . . .*

*. . . . . Creating a Nervous System For Science*

# GIS has evolved on the web

*A new pattern has emerged...*

## Leveraging

Web Services  
Measurement  
Big Data  
Faster Computing  
Web  
Cloud  
Devices

## Integrating

Location Analytics  
Imagery  
GPS  
LBS  
Real Time  
Lidar  
3D  
Pervasive Content



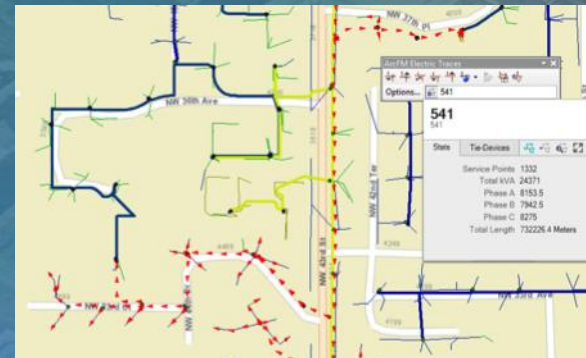
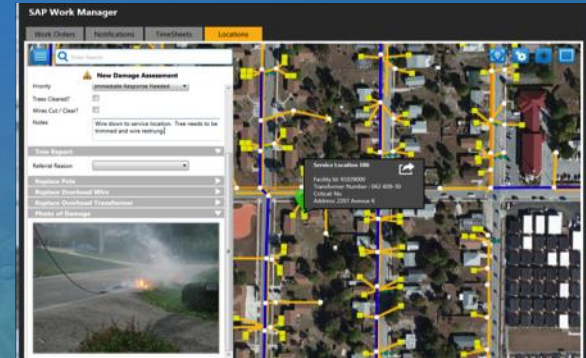
## Emerging

Apps  
Pervasive Access  
Mapping  
Analytics  
Mashup  
Online Content  
Collaboration  
Open  
Easy  
Content Management

**Web GIS**

*Making GIS Easier, Always Available, and Pervasive*

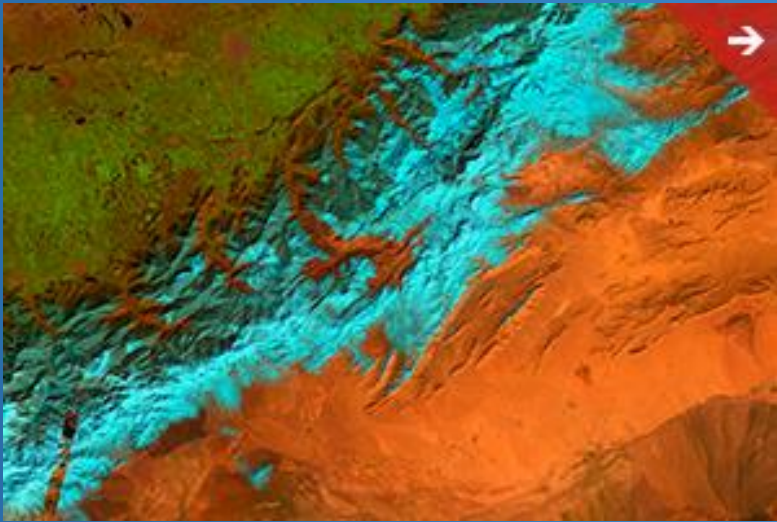
# Highlights of **ESRI** offerings



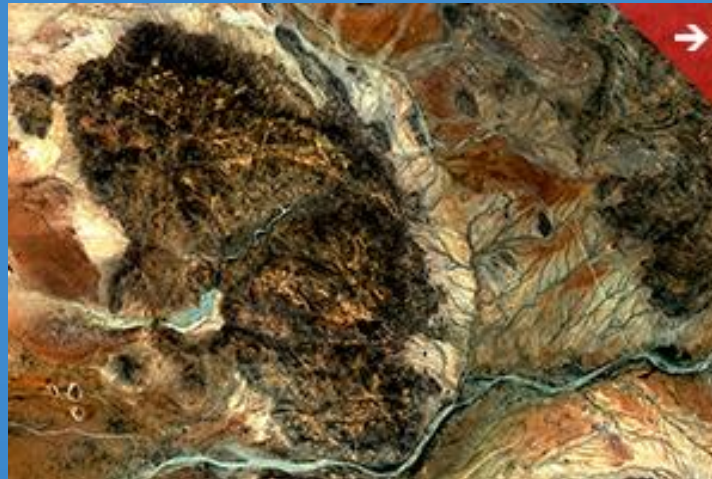


# Satellite Imagery to Unlock Earth's Secrets

- ESRI provides access to the World's Largest Online Imagery Collection



High Resolution  
Global Basemaps



Multi-Spectral, Temporal,  
and Dynamic Image Services



Premium Imagery Content

**ArcGIS** provides a comprehensive platform to manage, process, analyze, and share imagery to extract valuable information.

... Explore the Invisible World



www.esri.com/software/landsat-imagery/viewer

## Landsat Imagery

Main Enhancements Viewer Image Services Tours More Info

### ChangeMatters Viewer

Pan and zoom around the maps to understand earth changes that have happened over time. Advanced change detection tools are also available by clicking any full screen button.

Instructions

View larger

### ChangeMatters - Infrared

Search:  Select Image Map: Infrared Select Dates: 1975 - 2010

1975 2010 NDVI Change for 1975 to 2010

1975 - 1990  
1975 - 2000  
1975 - 2005  
1975 - 2010  
1990 - 2000  
1990 - 2005  
1990 - 2010  
2000 - 2005  
2000 - 2010  
2005 - 2010

Legend: Snow/Ice, Urban, Water, Clouds, Wetlands, Veg Increase, Veg Decrease

# Travel through Time

Landsat takes images of every location on earth once every 16 days, so we can see how places change over time.

August 7th, 2013



# Imagery Data is Really Big. ESRI can Handle it!

- Efficient. Scalable. Optimized. Leverage the most advanced technology for managing and serving, overlapping, time-variant, multi-resolution imagery from multiple sources, formats, and projections. Make the imagery you have on-premises or in the cloud accessible and valuable to a wide range of users.

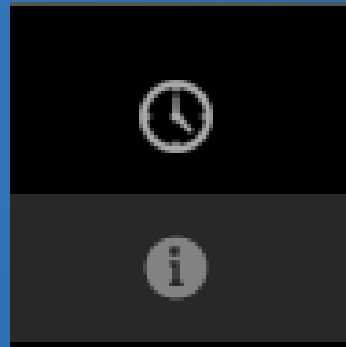
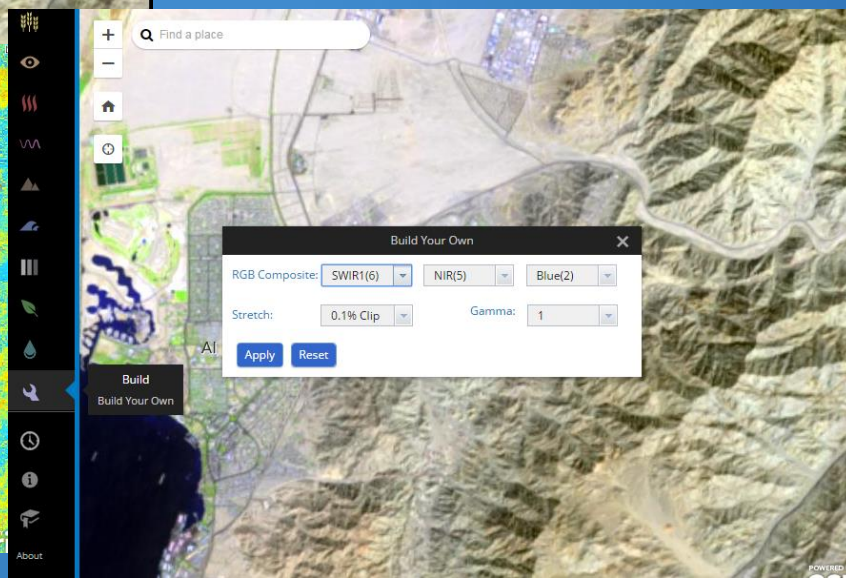
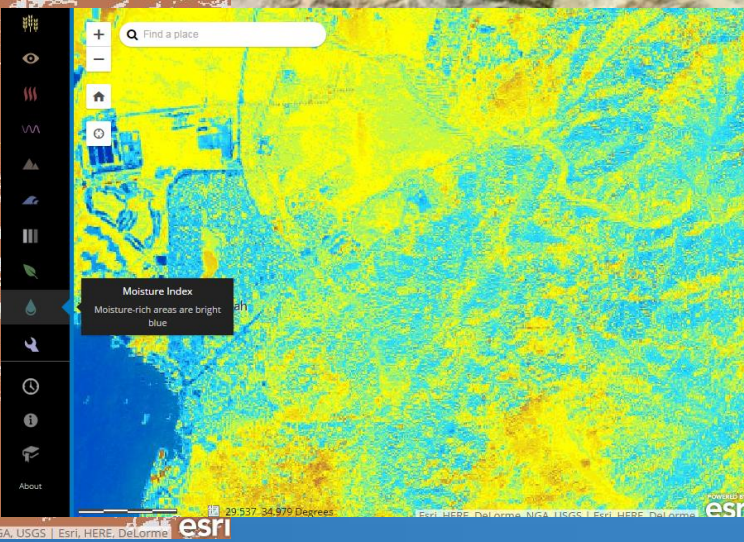
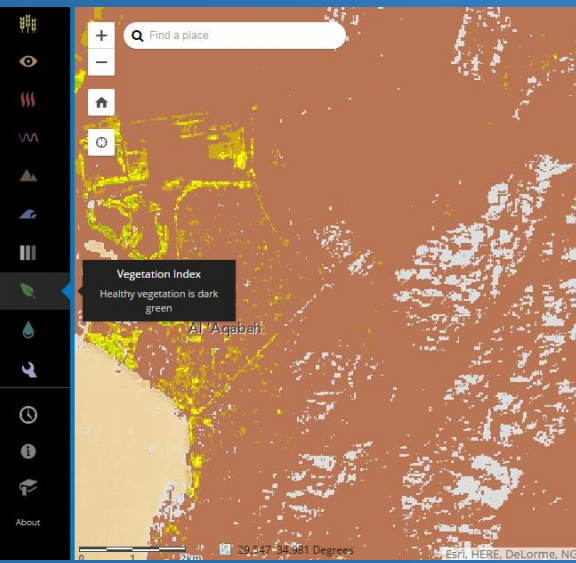
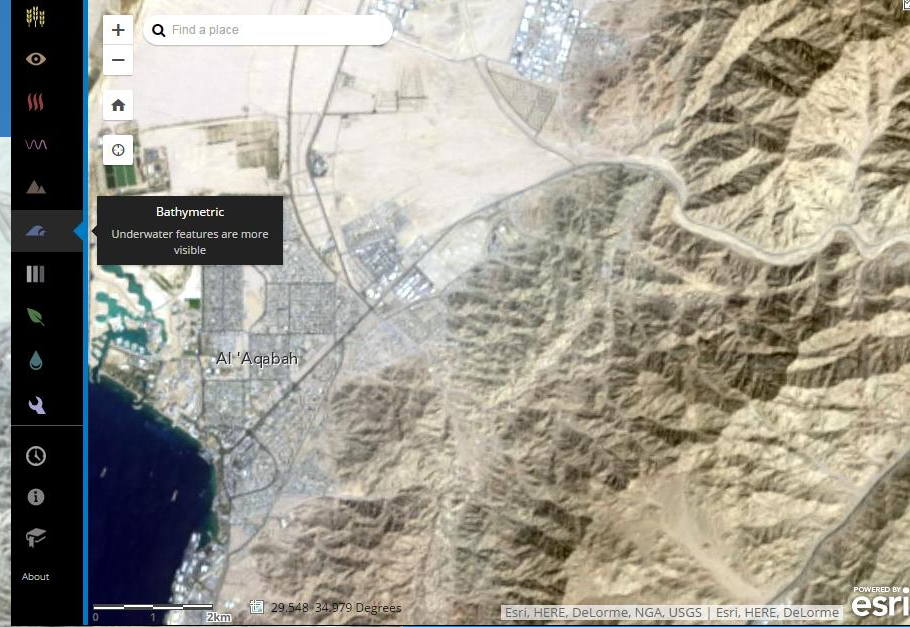
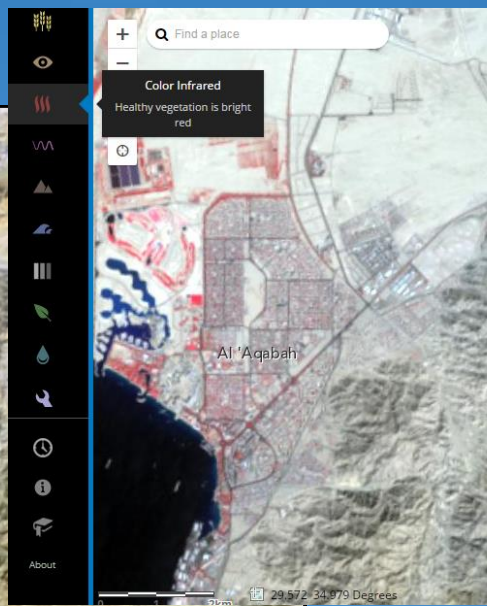
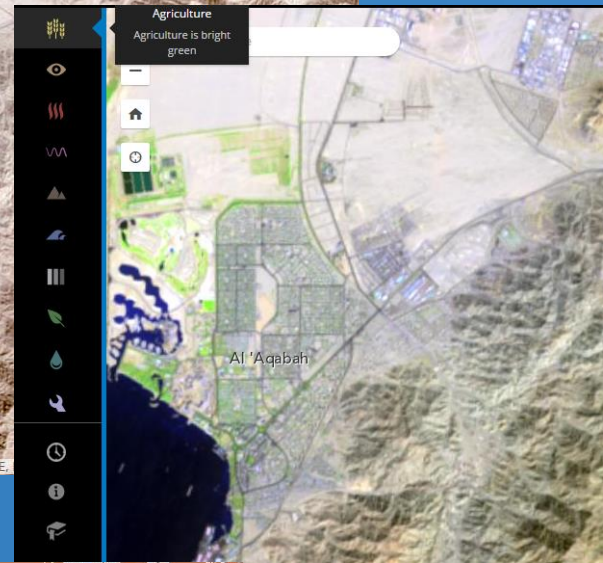
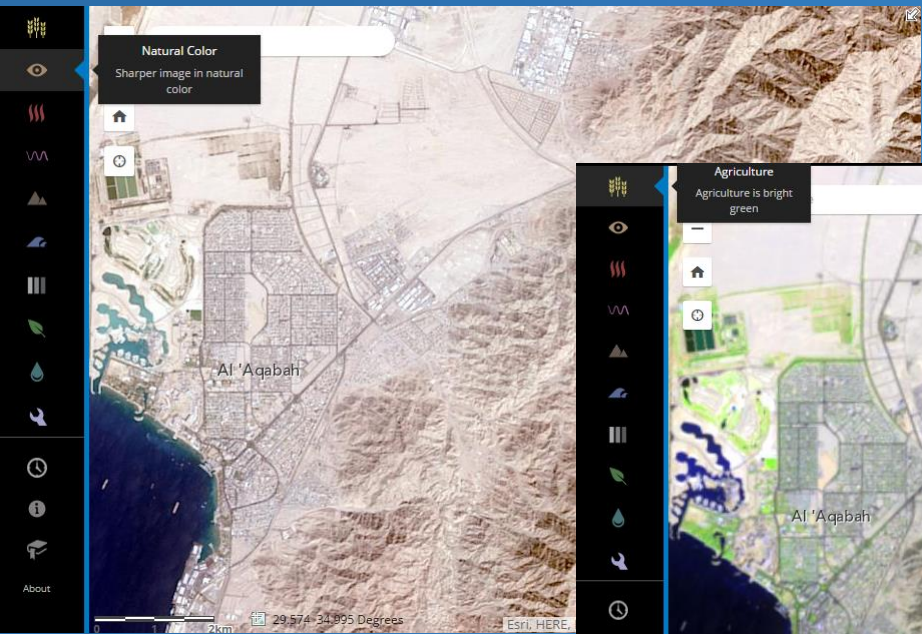


Suitability Analysis



Feature Extraction

# ArcGIS lets you use Landsat in your own apps, with new scenes added daily.



Zoom to any location on earth, and try the tools in this simple web app. <http://www.esri.com/landing-pages/software/landsat/unlock-earths-secrets>

# Satellite map!

maps.esri.com/rc/sat/index.html

esri Satellite Map

+  
-

- Amateur
- Communication
- Geosynchronous
- GlobalStar
- Inmarsat
- Intelsat
- Iridium
- Navigation
- Orbcomm
- Space Stations
- Visible
- Weather

Earthstar Geographics

POWERED BY esri

<http://maps.esri.com/rc/sat/index.html>

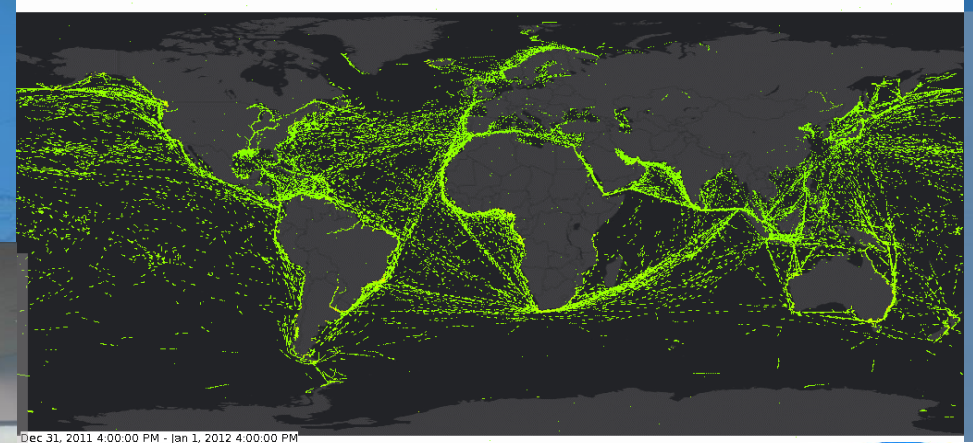
# ArcGIS Is Real-Time

Continuous  
Monitoring, Alerting and  
Decision Making

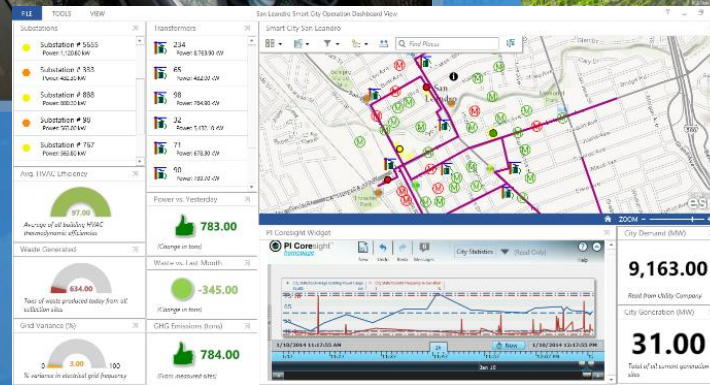
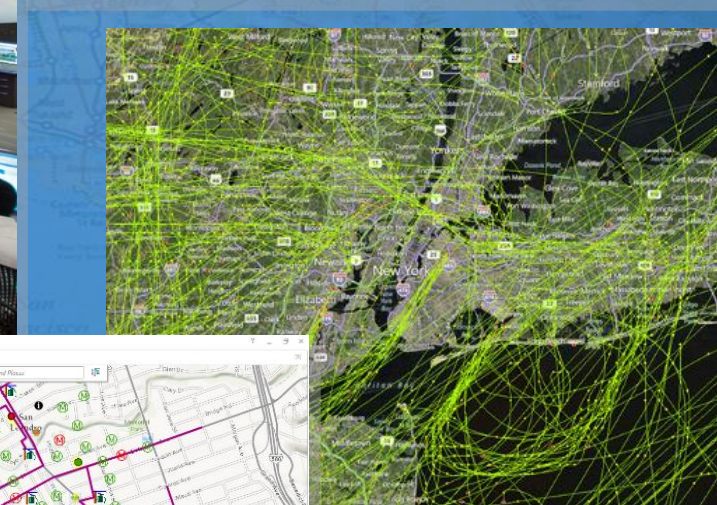
- 📍 Streaming Data
- 📍 Many Sensors
- 📍 Spatial Analysis



PG&E



Dec 31, 2011 4:00:00 PM - Jan 1, 2012 4:00:00 PM



OSIsoft Integration

*Enabling Immediate Action and Responsive Government*

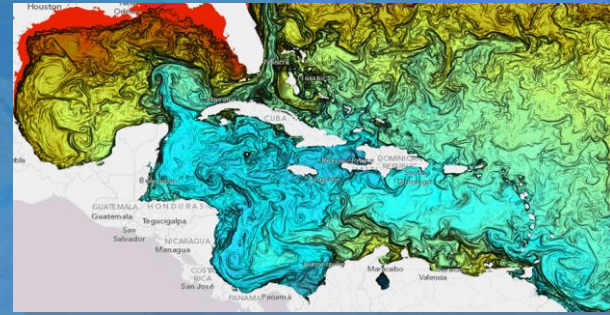


# ArcGIS

## Supports Imagery

- Scientific formats (HDF, GRIB, NetCDF)
- Sentinel -2
- Visualization and analytics
- Advancing tools
- More Online content
- Becoming real-time

Managing, analyzing, and Serving intelligent imagery

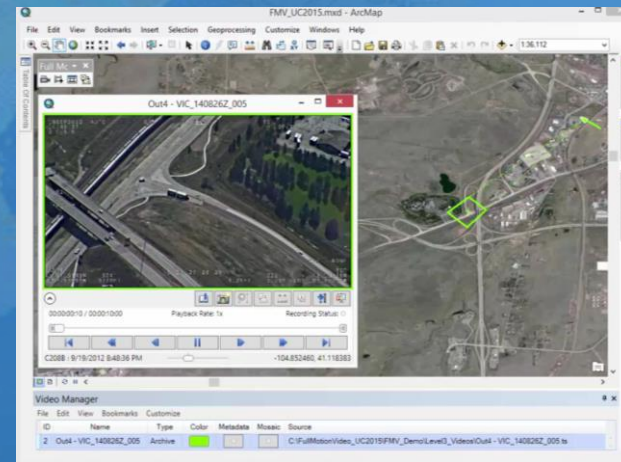


Scientific Data

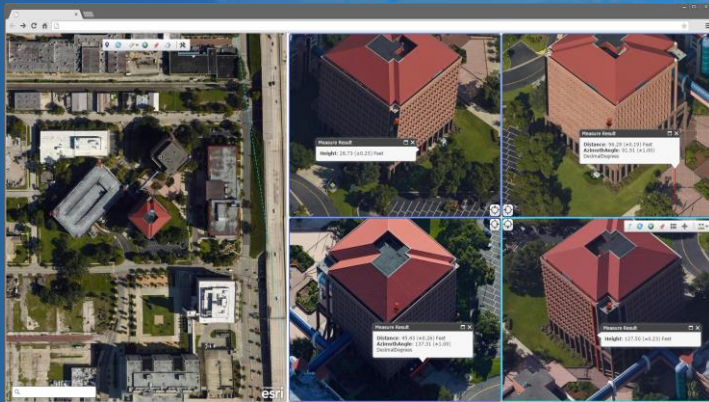
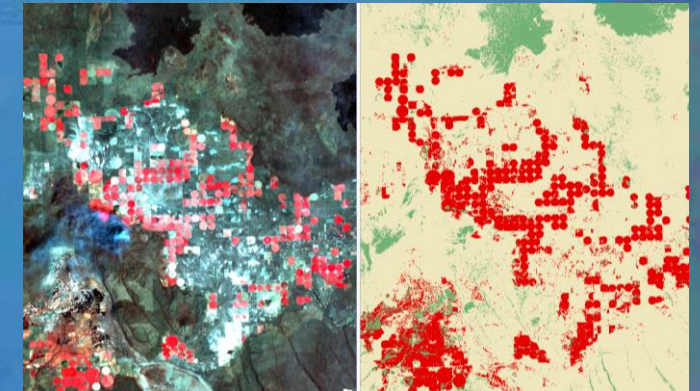


UAV/Drone Support

Full-motion Video



Classification and Accuracy

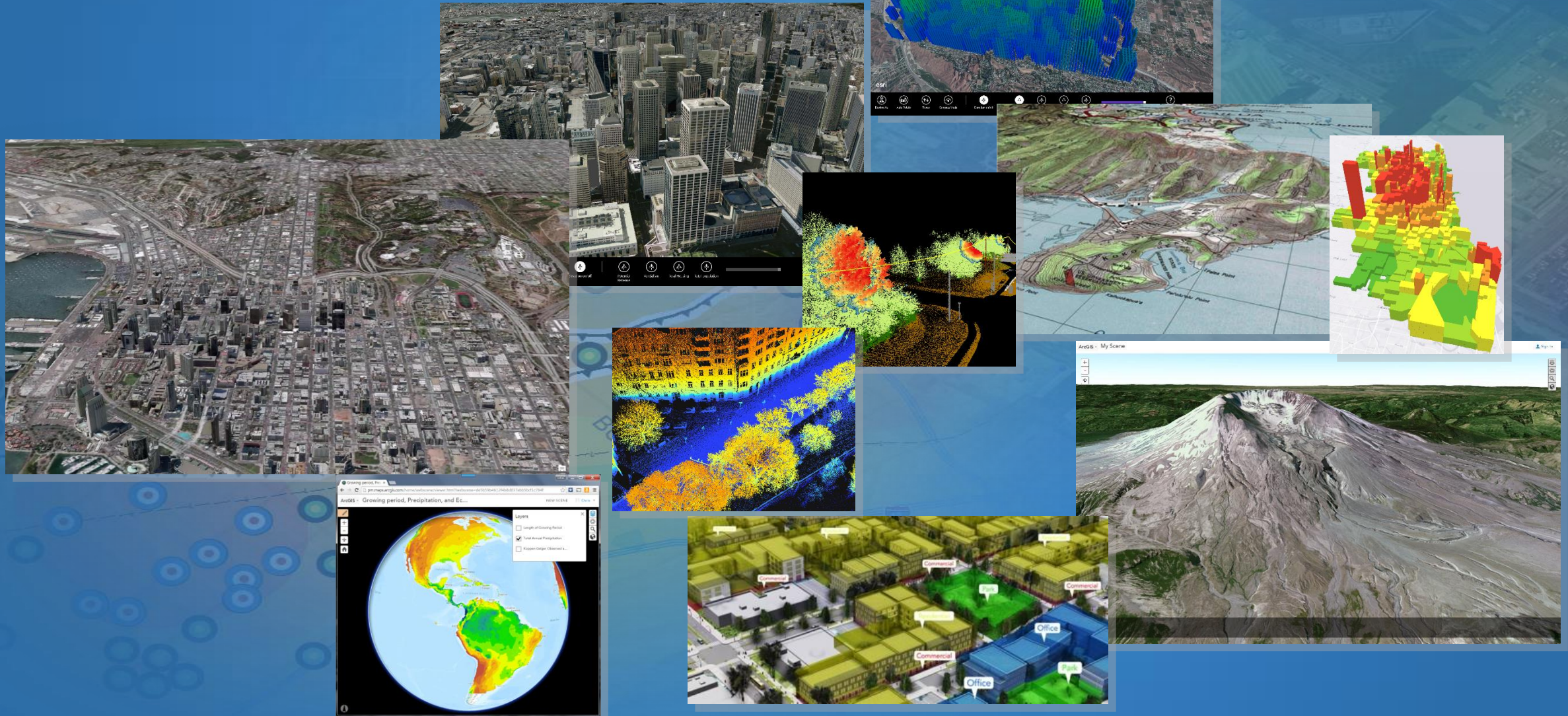


Oblique Imagery & Measurements

*Supporting single scenes and massive collections*

# ArcGIS is 3D

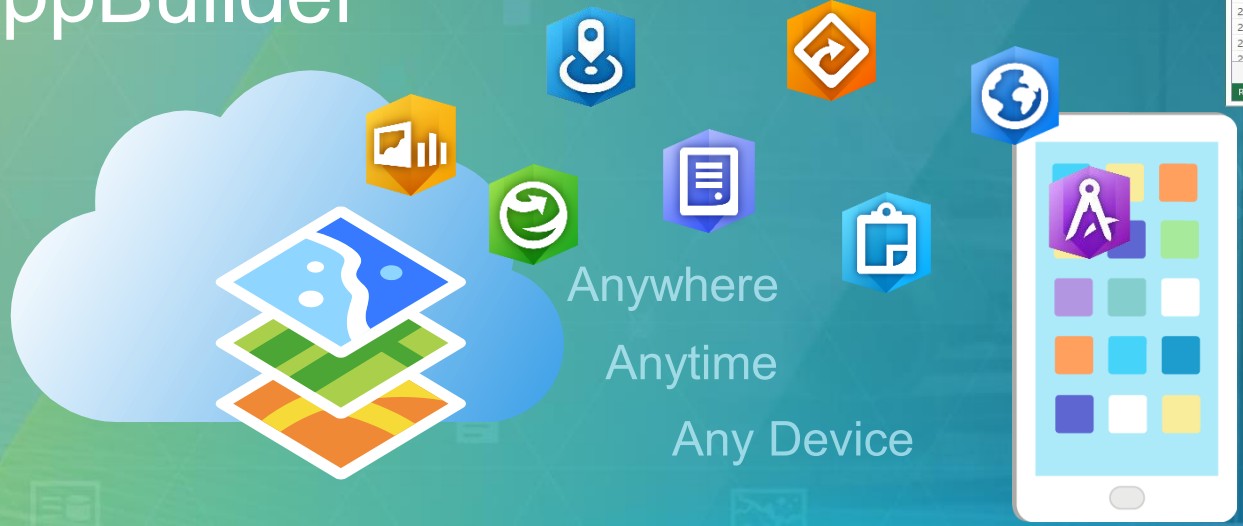
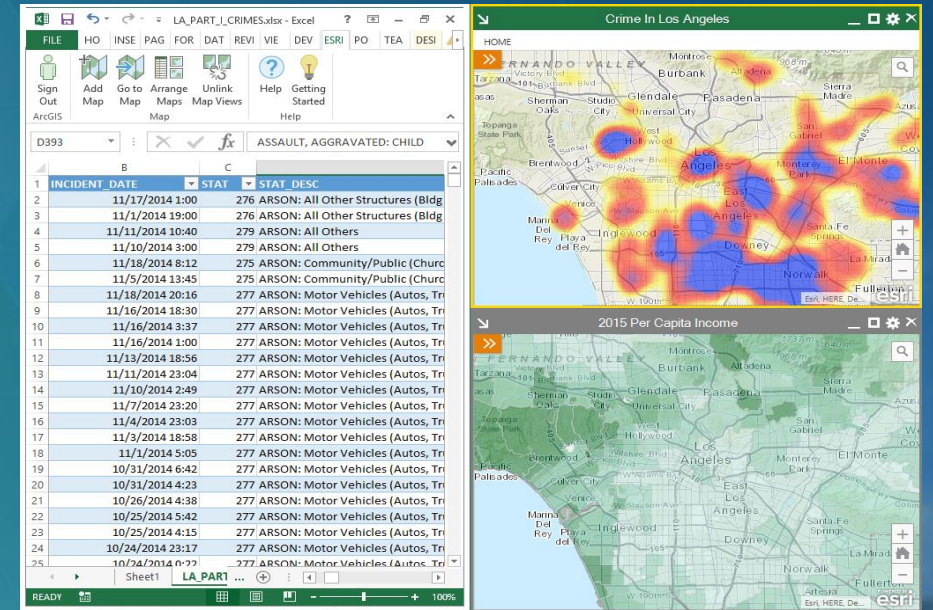
Advanced Visualization  
and Analysis



# ArcGIS and The App Revolution

App Templates  
AppStudio  
Web AppBuilder

ESRI maps for office



Two black rectangular buttons with white text and icons. The top button features the Google Play logo and the text 'GET IT ON Google play'. The bottom button features the Apple App Store logo and the text 'Available on the App Store'.

Apps Support Many Smart Functions



Collector for ArcGIS



Navigator for ArcGIS

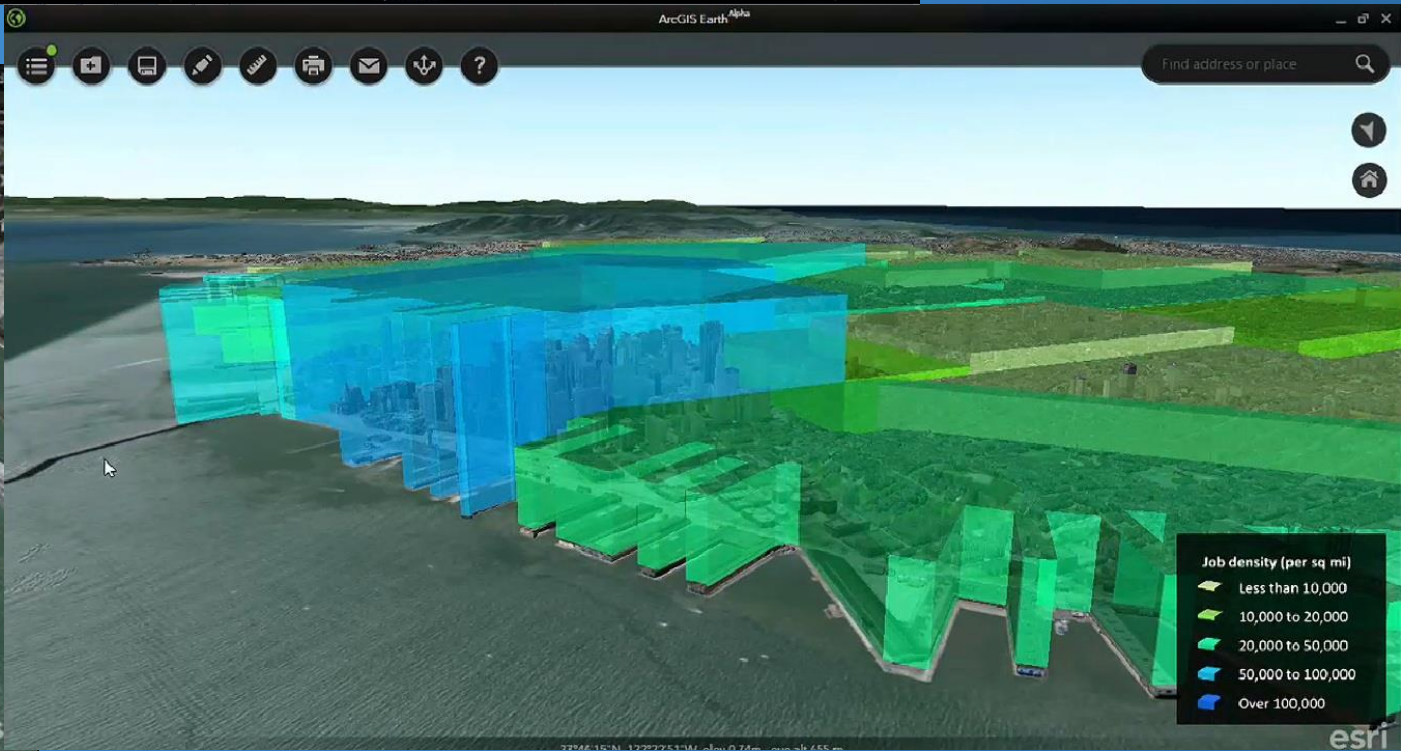
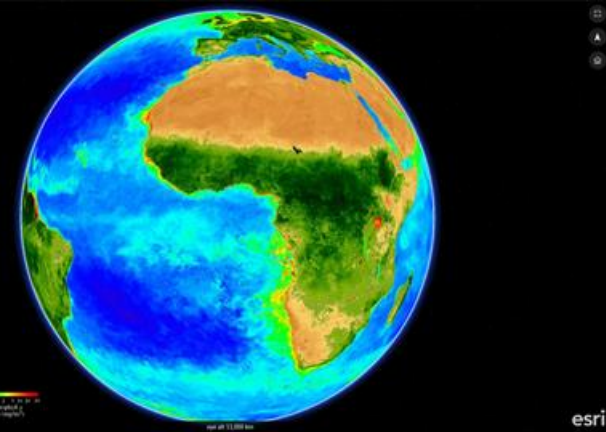
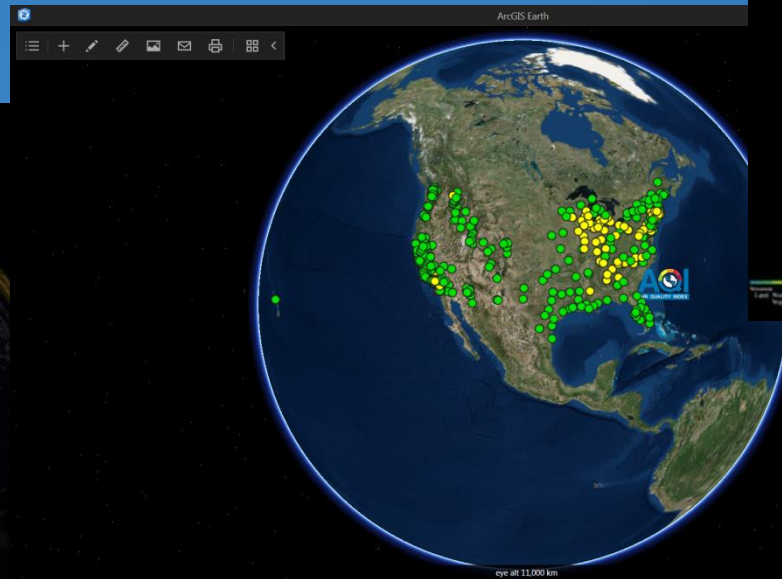


Operations Dashboard for ArcGIS



Workforce for ArcGIS

# ArcGIS Earth



# GIS Technology Will Enable Everything We Do To Be Smarter

Changing the Way We Think and Act



*Bringing Together Data, Technology, and People . . .  
. . . Creating a Framework for Smarter Government*

# InfoGraph

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