



Staging and Serving Scientific Data in ArcGIS Online

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Agenda

- **Morning Session:**

- **9:00 to 9:15**

- Purpose and take-away

- **9:15 to 10:15**

- Overview of The Living Atlas of the World
- Example of Existing Services
- Overview of Datasets that we will publish

- **10:15 to 10:30 - Break**

- **10:30 to 11:00**

- GLDAS Demo – Daniel Siegel

- **11:00 to 12:00**

- Data Prep
- Creating a Mosaic Dataset
- Loading Data
- Data Capabilities and settings

- **12:00 to 1:00 – Lunch**

- **Afternoon Session:**

- **1:00 to 2:45**

- Publishing Services
- Acceptance Testing

- **2:45 to 3:00 - Break**

- **3:00 to 4:00**

- Contribute and Nominate Application
- Nominating your data for the Living Atlas

- **4:00 to 4:30**

- Review
- Questions

Purpose and Take Away

- *“Learn how to serve multidimensional data providing discoverable content for scientists, researchers, and resource management professionals.*
- *National Oceanic and Atmospheric Administration (NOAA), National Aeronautics and Space Administration (NASA), and other global scientific agencies collect and provide access to hundreds of raw multidimensional datasets online on a regular basis for information such as sea surface temperature and ice thickness. This workshop will provide the methodology and tools for university, government, and research institution faculty and staff to stage and serve scientific data in meaningful ways with ArcGIS for Server and ArcGIS Online. Workshop participants will use multimedia data to work through the staging, metadata, and serving steps required for transforming data into accessible and authoritative content in ArcGIS Online, enabling data discovery opportunities for colleagues and other researchers.*
- *ArcGIS data management experience helpful but not required.”*
- **This workshop is designed to inform users about the Living Atlas of the World and teach users how to prepare and host raster data that can be consumed and used for analysis in the ArcGIS Platform. The image services that users create will be curated for use in ArcGIS Online and nominated for inclusion in the Living Atlas of the World.**

Content is a Growing Part of the ArcGIS Platform

Over 1,000,000 public items

Imagery

Basemaps

Landscape

Demographics



ArcGIS includes a Living Atlas of the World

Maps and Layers from Esri and Thousands of Contributors



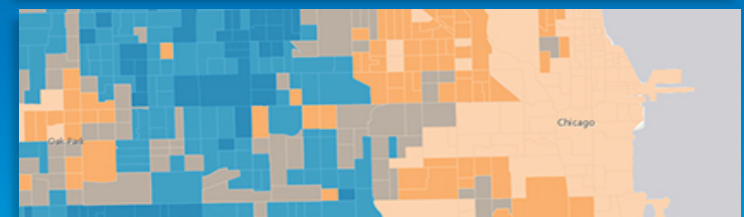
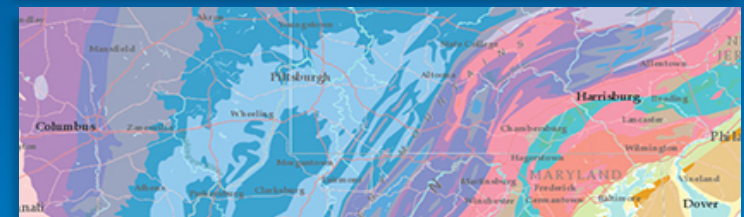
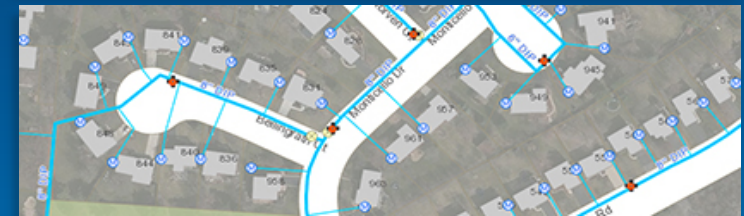
The Collection is growing and changing on a daily basis...

Transportation
Weather
Historical
Landscape
Urban Systems
Basemaps
Boundaries
Land Cover
Soils
Hazards
Oceans
Imagery
Observations
Demographics
Habitats
Elevation
Hydro

... with Curated Content on Many Topics

Living Atlas Content is Published by Esri, Users, and Partners

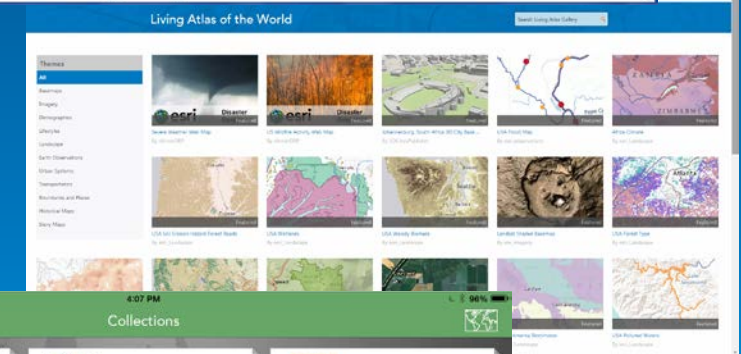
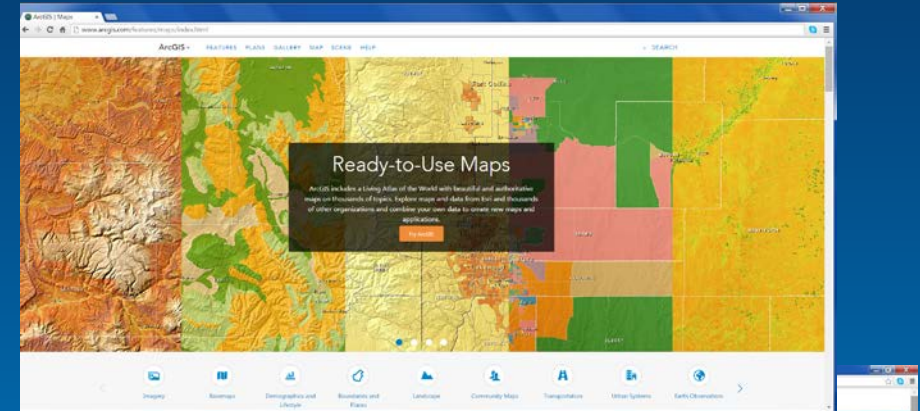
Built by the ArcGIS Community and Curated by Esri



Accessing the Living Atlas through ArcGIS

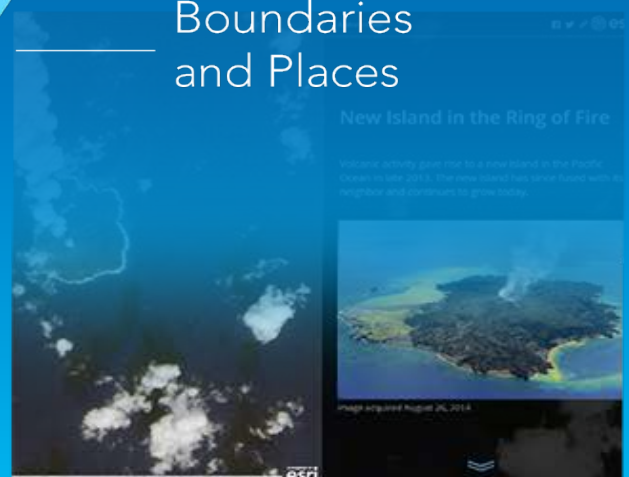
Multiple ways to Experience the Living Atlas of the World through ArcGIS Apps

- **ArcGIS Online (ArcGIS.com)**
 - Ready-to-Use Maps feature pages
 - Gallery: Esri Featured Content
 - Add Data: Browse Esri Map Layers
- **Living Atlas of the World Web App**
 - Browse and preview maps, layers, and tools
- **Explorer for ArcGIS App**
 - Native App for iOS and Mac platforms
 - Free to use with your Org Subscription



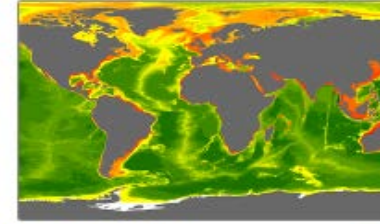
Esri Content Portfolio within Living Atlas

Content is organized into a set of themes, using Esri and Community Data

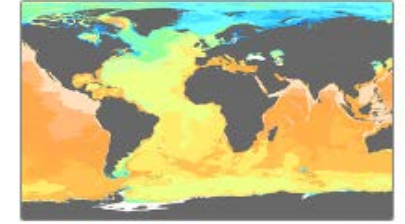


Updates

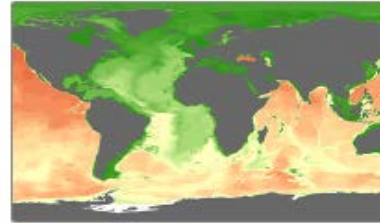
- Call to Action
 - More Ocean content in the Living Atlas
 - Living Atlas Contributor App
- Newly released ocean content
 - Global Layers from Marine Conservation Institute (MCI)
 - 2nd BETA Release – Need feedback from users
- Earth Observations – Sea Surface Temperature
 - Newly released image service



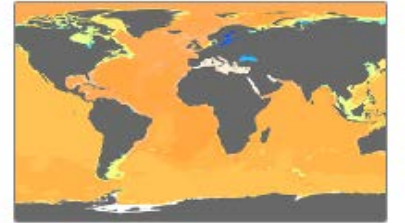
Seafloor Omega Aragonite (Ω ARAG)



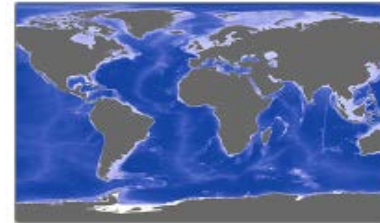
Seafloor Dissolved Oxygen (ml l-1)



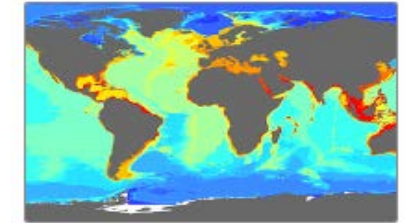
Seafloor Silicate (μ mol l-1)



Seafloor Salinity (ps)



Seafloor Bathymetry (meters)



Seafloor Temperature ($^{\circ}$ C)



World Seafloor Geomorphology



Arctic Ocean Basemap



Understanding our world.