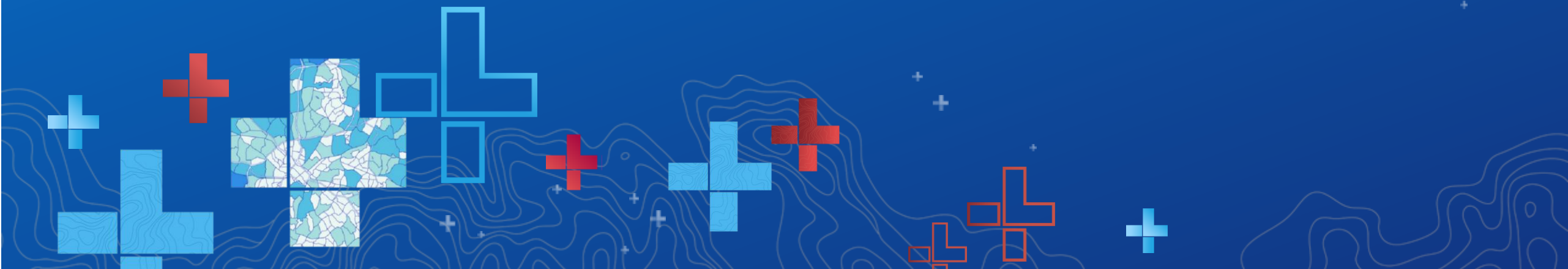




ArcGIS Living Atlas of the World: An Introduction

Ashley Miller, Patrick Ryan, Keith VanGraafeiland

2020 ESRI FEDERAL GIS CONFERENCE | WASHINGTON, D.C.





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What's New?


Living Atlas of the World: an Introduction

f t g ...




Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about poverty status by age group. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about living arrangements of children and adults by age group. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




ACS Population Variables - Boundaries
Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about total population count by sex and age group. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




ACS Median Household Income Variables - Boundaries
Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about median household income by race and age of household. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




ACS Race and Hispanic Origin Variables - Boundaries
Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about population broken down by race and Hispanic origin. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




ACS Transportation to Work Variables - Boundaries
Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about workers' place of residence by mode of commute. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




ACS Educational Attainment Variables - Boundaries
Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about education level for adults 25+. Counts broken down by sex. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




ACS Housing Costs Variables - Boundaries
Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about housing costs as a percentage of household income. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




ACS Race and Hispanic Origin Variables - Centroids
Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about population broken down by race and Hispanic origin. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




ACS Employment Status Variables - Boundaries
Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about hours worked, and those unemployed and not in labor force. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




ACS Language Spoken at Home Variables - Boundaries
Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about language spoken at home by age. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...




ACS Travel Time To Work Variables - Boundaries
Feature Layer By: esri_demographics
This layer contains the most current release of data from the American Community Survey (ACS) about workers' place of residence by commute length. These are 5-year estimates shown by tract, county, and state boundaries.

☆ ☆ ...



ACS Disability Status Variables - Boundaries
Feature Layer By: esri_demographics

☆ ☆ ...



ACS Housing Units Occupancy Variables - Boundaries
Feature Layer By: esri_demographics

☆ ☆ ...

↓

Living Atlas of the World: an Introduction

Leveraging the Living Atlas to Build Engaging Maps that Enhance Understanding and Contribute to the Community

FedGIS 2020

<https://storymaps.arcgis.com/stories/f0067611444243799970465d3cee113a>

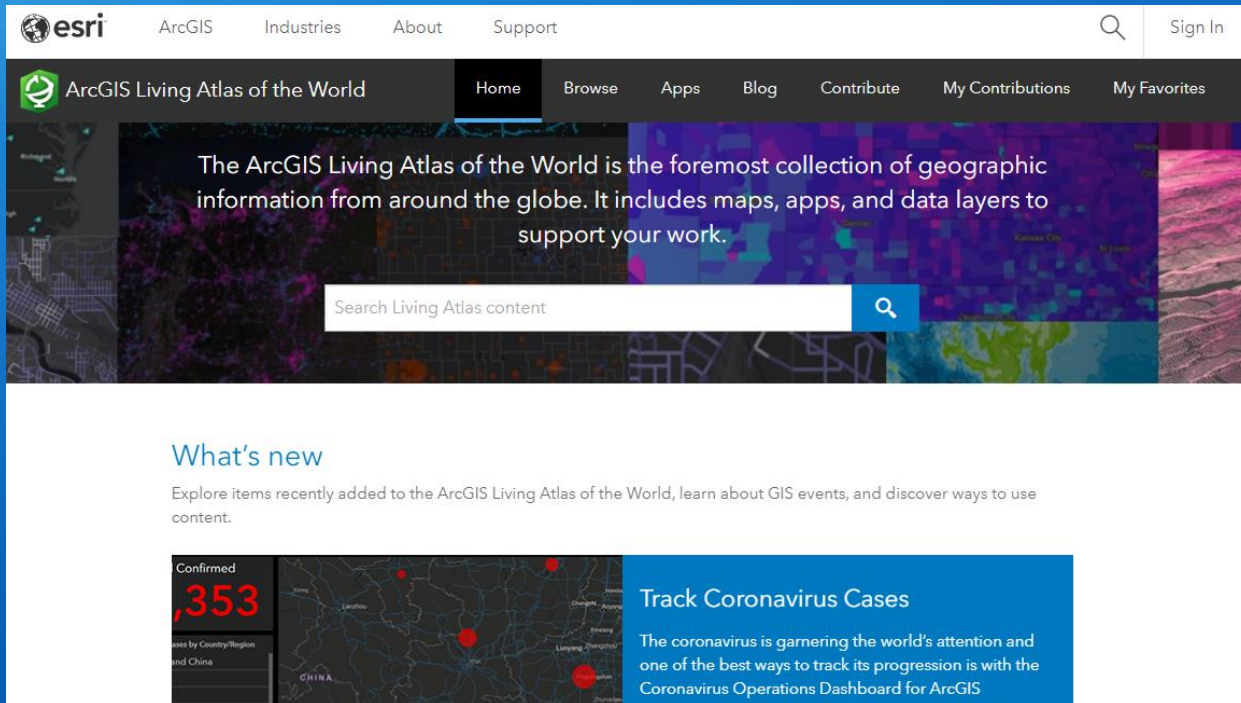
The Living Atlas of the World

Authoritative
Curated
Interoperable
Updated
Growing



ArcGIS Living Atlas of the World





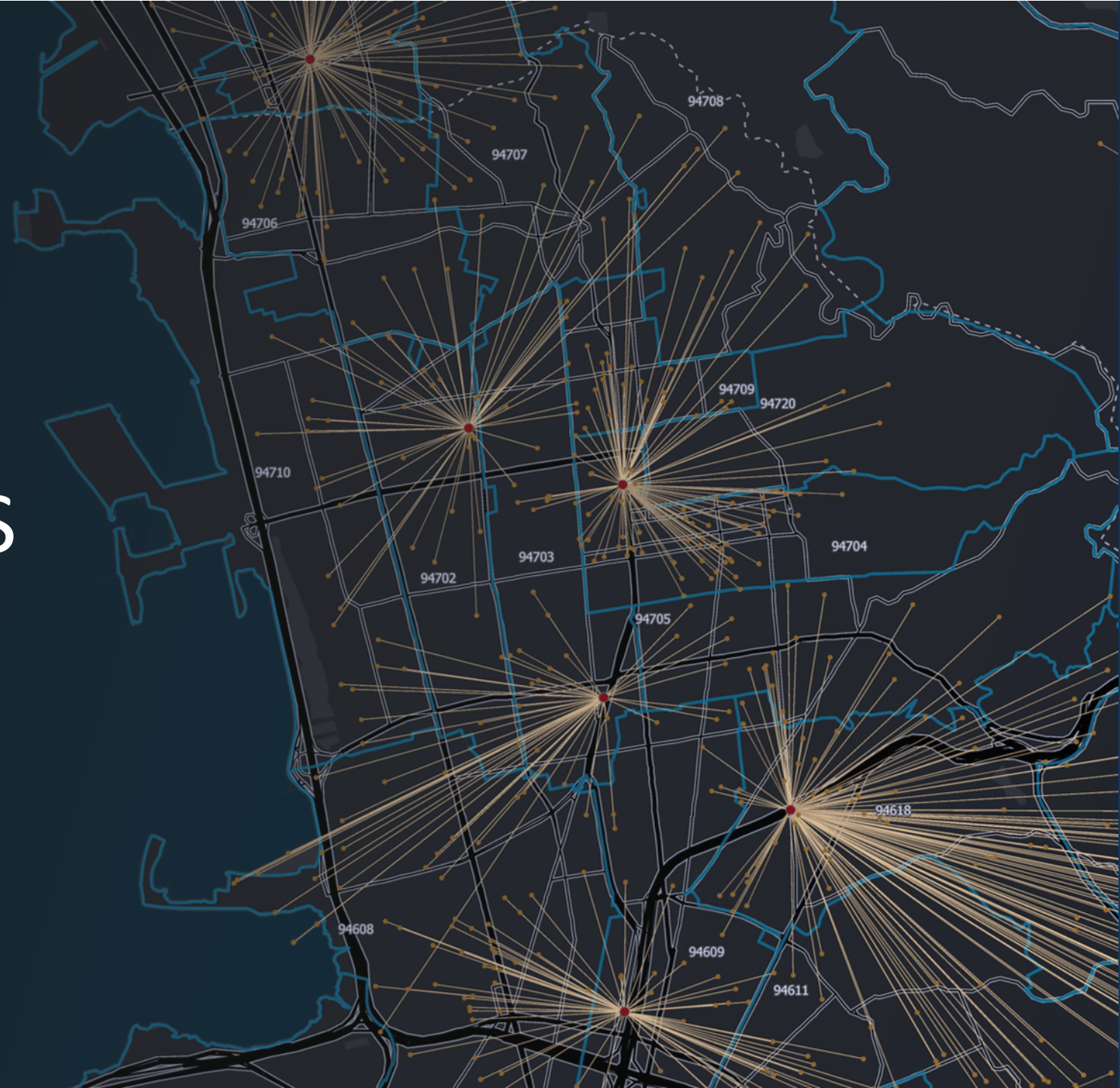
Accessing the Living Atlas: Online/ArcGIS Pro

Keith VanGraafeiland

Website

A new pattern of GIS

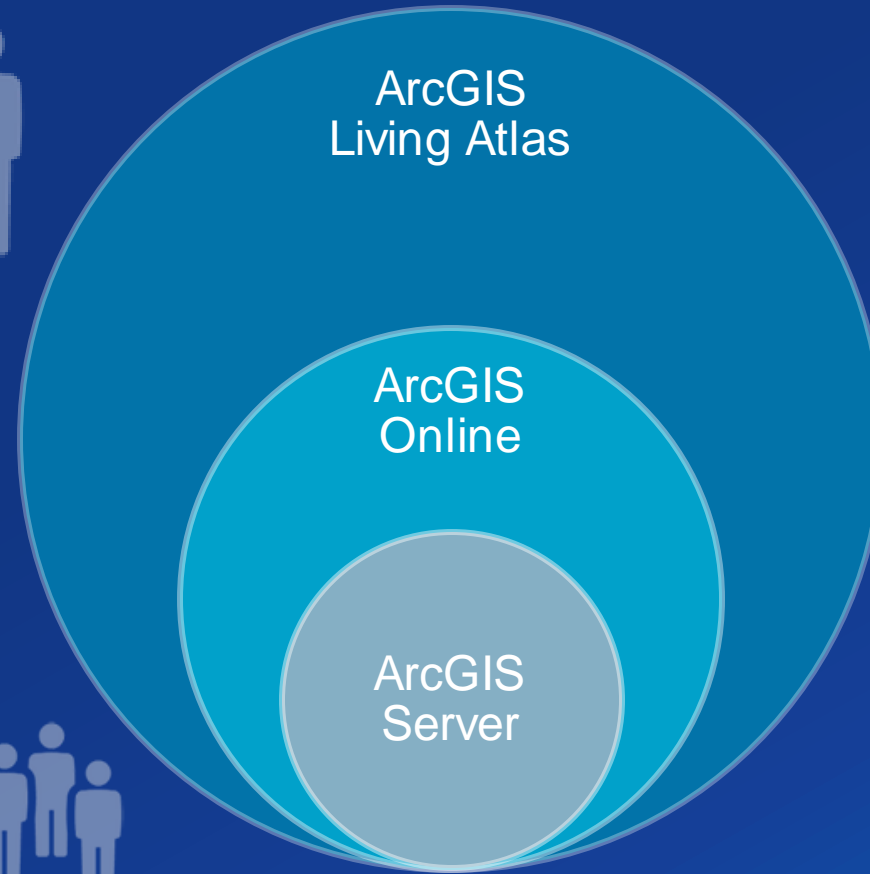
Start Where Others Finished



HomelandSecurity
BureauLaborStatistics
NASA
HUD
TheWeatherCompany
NatureServe
MDA
DigitalGlobe
E.O.WilsonFoundation
GlobalForestWatch
WorldWildlifeFoundation
USDA
CDC
EPA
FEMA
BOEM
FishWildlife
ForestService
USGS
USDeptInterior
Census
AmericanCommunitySurvey
OpenStreetMap
NCAR



Exposure



Sea Ice and Global Climate Change

NESDIS/National Snow and Ice Data Center

- Monthly Analysis
- 1978 to present
- Mean Sea Ice Extent
- Historical Median Extent

App Link

Sea Ice Aware

[About this app](#)



Aug 2019

5.03 million km²

31.8% below median

1980 1990 2000 2010

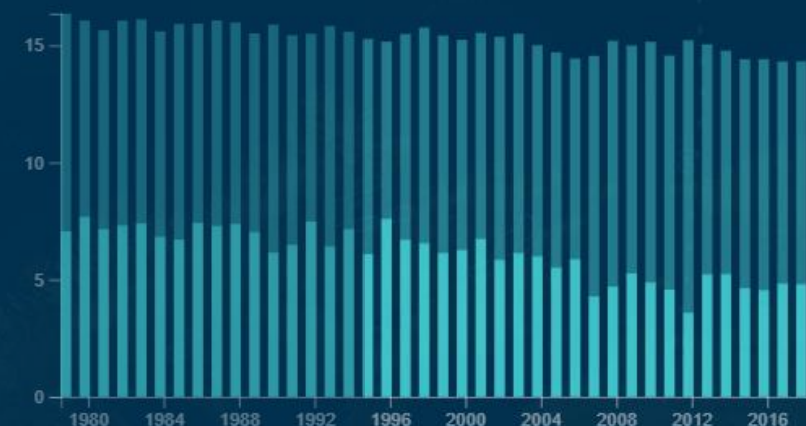


Arctic Sea Ice

Antarctic Sea Ice

Annual Sea Ice Extent in million km²

Max Extent Min Extent



Monthly Change

current year monthly median



Coral Health and Bleaching Alerts

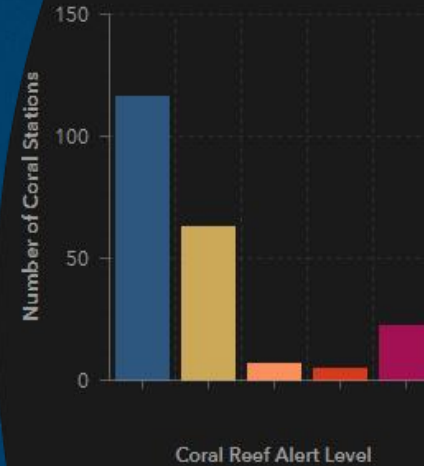
NOAA Coral Reef Watch

- Updated Daily
- Coral Bleaching
- Heat Stress
- Coral Reef Watch Virtual Stations

Dashboard Link



Risk of Bleaching
34
out of 213 stations
Last update: a minute ago



Conditions at Belize
16.25 Degree Heating Weeks

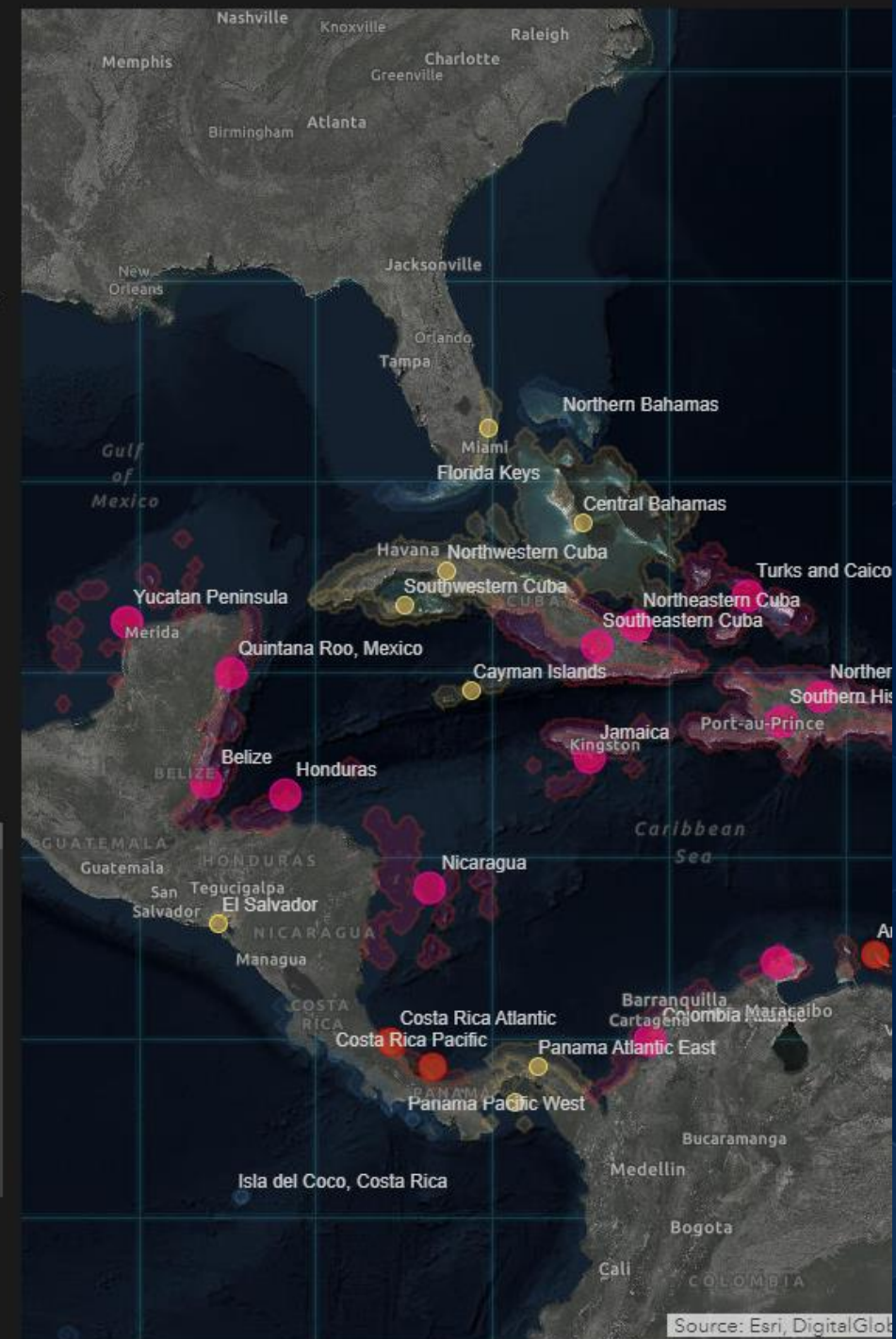
Conditions at Northwestern Hawaiian Islands
16.12 Degree Heating Weeks

Conditions at Gilbert Islands, Kiribati
22 Degree Heating Weeks

Conditions at Yucatan Peninsula
Degree Heating Weeks

Conditions at Nauru

esri
WHERE

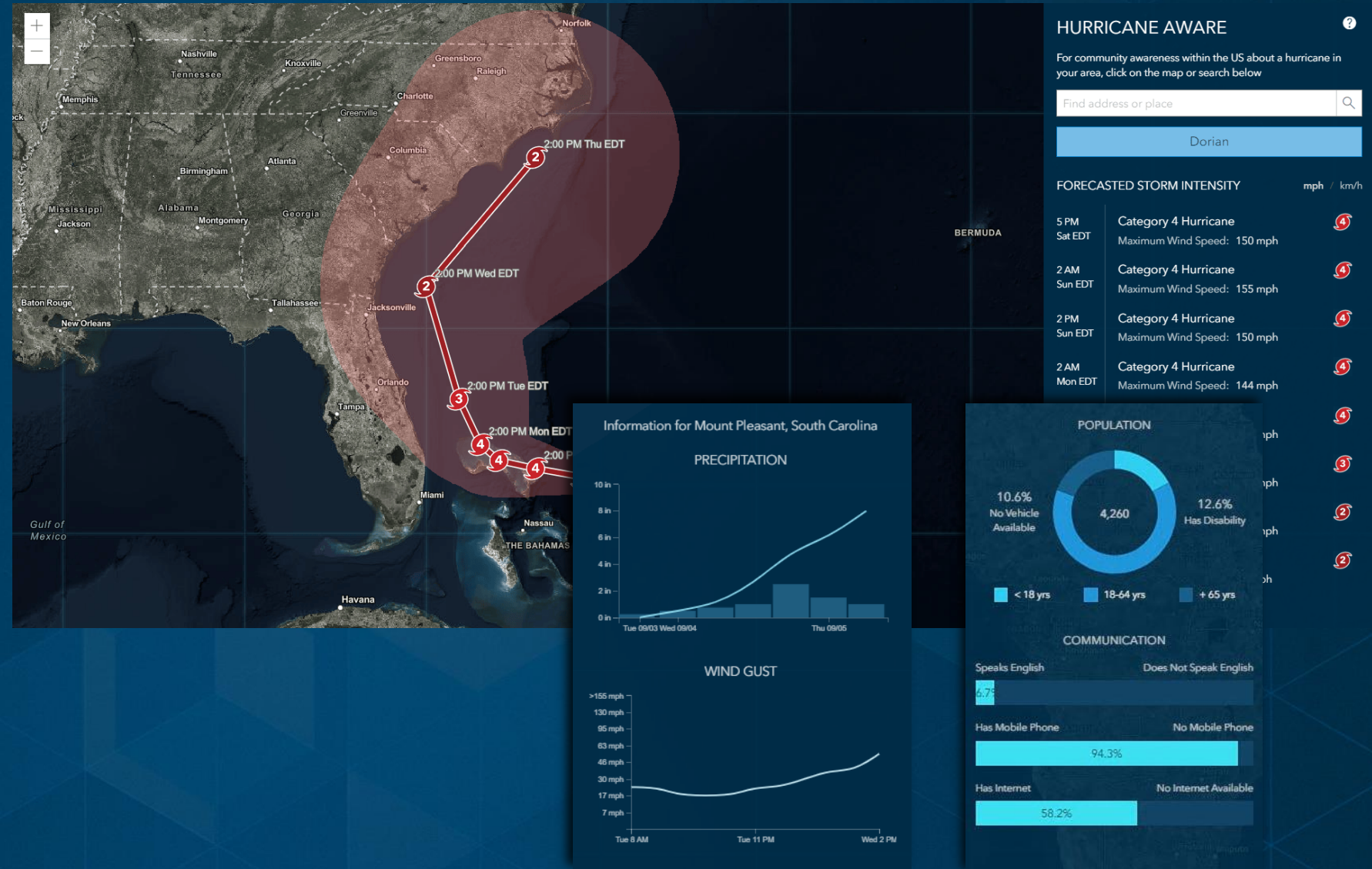


Hurricane Impact Analysis

NOAA NWS

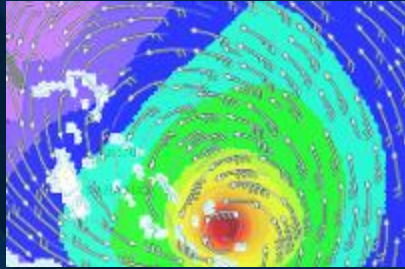
- Hurricane track forecasts
- Rain and wind forecast
- Vulnerable populations

livingatlas.arcgis.com/hurricane



Content from NOAA

Available in Living Atlas



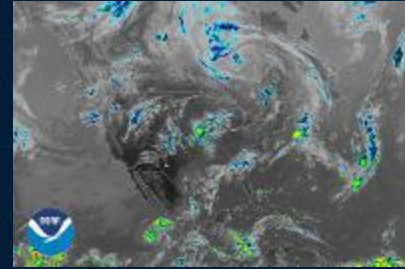
Gridded Surface Forecasts



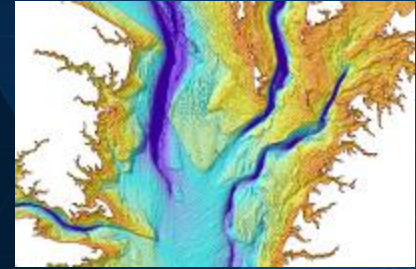
Tropical Cyclones



Surface Meteorological and Hydrologic Analysis



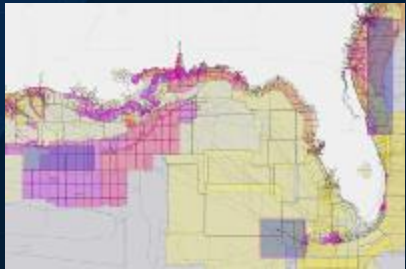
NOAA Colorized Satellite Imagery



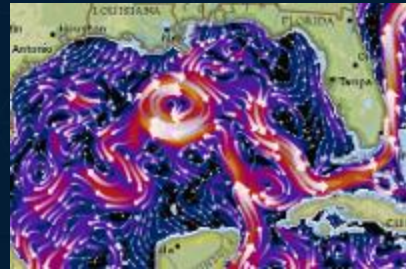
NOAA Estuarine Bathymetry



Recent Weather Radar Imagery



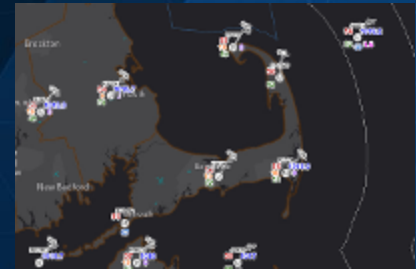
NOS Hydrographic Survey Data



Oceanographic Forecast Model Guidance



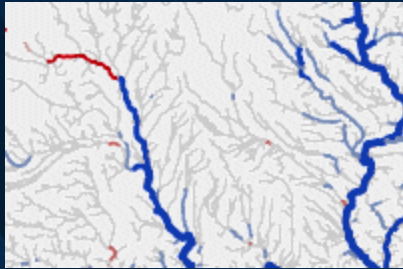
NOAA's Marine Protected Areas Inventory



Near-Real-Time Surface In-Situ Observations

Content from NOAA by Esri

Available in Living Atlas



National Water Model



Current Weather and Wind Station Data



USA Storm Reports



NOAA Coral Reef Watch (CRW) Virtual Stations



Arctic Sea Ice Extent



Essential Fish Habitat - Areas Protected from Fishing



USA Weather Watches and Warnings



National Weather Service Wind Speed Forecast



Active Hurricanes, Cyclones and Typhoons

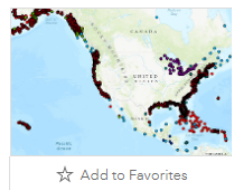


National Weather Service Smoke Forecast

Center for Operational Oceanographic Products Services (CO-OPS) Contributions to Living Atlas

CO-OPS Products

Edit Thumbnail



This map shows CO-OPS map service with the locations where products have been derived from oceanographic observations.

Web Map by Ashley.Miller_noaa

Created: Mar 13, 2019 Updated: Feb 5, 2020

Living Atlas

Add to Favorites

Description

The National Ocean Service's Center for Operational Oceanographic Products and Services (CO-OPS) provides locations of present and historical stations around the US and its territories. Layers served are datums, published benchmarks, benchmark levels, currents predictions, and water level predictions.

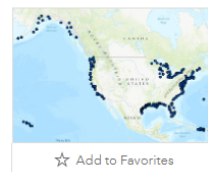
Questions/Concerns about the service, please contact the IDP-GIS team.

Raw data have not been subjected to the National Ocean Service's quality control criteria and standards of official National Ocean Service data. They are released for limited public use as preliminary data to be used only with appropriate caution.

Link to graphical web page: <https://tidesandcurrents.noaa.gov/>

CO-OPS Stations (Active)

Edit Thumbnail



This map shows CO-OPS stations that currently collect and disseminate water level, current, and meteorological data.

Web Map by Ashley.Miller_noaa

Created: Mar 11, 2019 Updated: Aug 7, 2019 View Count: 84

Living Atlas

Add to Favorites

Description

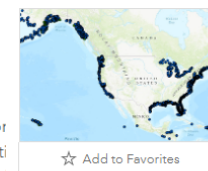
This map depicts all current stations maintained and operated by the Center for Operational Oceanographic Products and Services. These stations are part of a network of long-term, continuously operating water level stations throughout the United States and its territories. This includes ocean observing and coastal systems and additional stations located in the Great Lakes. The layers displayed include locations where water levels, currents (water velocity), and meteorological data are being collected. Please refer to the specific layer description for more information or visit <https://tidesandcurrents.noaa.gov/>.

Questions/Concerns about the service, please contact the IDP-GIS team.

Raw data have not been subjected to the National Ocean Service's quality control criteria and standards of official National Ocean Service data. They are released for limited public use as preliminary data to be used only with appropriate caution.

CO-OPS Stations (Historic)

Edit Thumbnail



This map shows CO-OPS stations that historically collected and disseminated water level, current, and meteorological data.

Web Map by Ashley.Miller_noaa

Created: Mar 11, 2019 Updated: Aug 7, 2019 View Count: 84

Living Atlas

Add to Favorites

Description

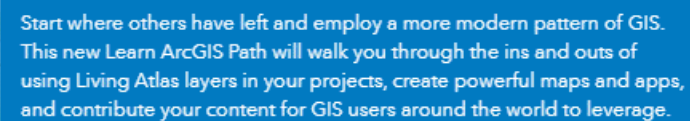
This map depicts all historic stations maintained and operated by the Center for Operational Oceanographic Products and Services. These stations were part of a network of long-term, continuously operating water level stations throughout the United States and its territories. This includes ocean observing and coastal systems and additionally stations located in the Great Lakes. The layers displayed include locations where water levels, currents (water velocity), and meteorological data are being collected. Please refer to the specific layer description for more information or visit <https://tidesandcurrents.noaa.gov/>.

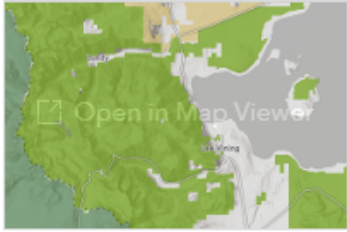
Questions/Concerns about the service, please contact the IDP-GIS team.

Raw data have not been subjected to the National Ocean Service's quality control or quality assurance procedures and do not meet the criteria and standards of official National Ocean Service data. They are released for limited public use as preliminary data to be used only with appropriate caution.


C

Explore items recently added to the ArcGIS Living Atlas of the World, learn about GIS events, and discover ways to use content.







This feature layer displays the managers of lands under federal fee ownership from the USGS Protected Areas Database of the United States version 2.0.

 Feature Layer by Esri

Created: Jul 19, 2019 Updated: Sep 26, 2019 View Count: 119

 Authoritative

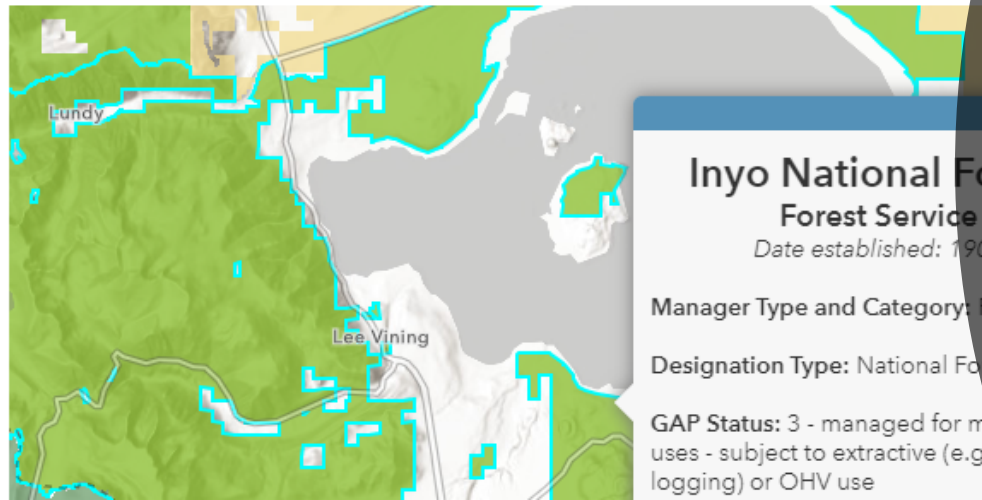
 Living Atlas

[Open in Map Viewer](#)

Description

This layer displays Federal administrative agencies from the USGS Protected Areas Database of the United States. The layer includes fee simple parcels (where available) from authoritative data sources symbolized from the 'M' the PAD-US 2.0 Fee feature class.

This service does not include designations that often overlap state, private or other inholdings. U.S. Department of Defense internal represented but is implied Federal. See the [USA Protected Areas - Federal Management Agencies map](#) ownership, designations, and easements.



an item is only as
good as its
description

[Try this one.](#)

The Contributing Process

Ensure your contribution has this information before nomination:

- Descriptive Thumbnail Image
- Summary
- Complete Description of your data including the source
- Tags
- Credits
- Make it public

Helpful tip: Configure your attributes and adjust your field aliases

The screenshot displays two versions of a map titled 'CO-OPS Stations' by Ashley Miller. The top version is 'CO-OPS Stations (Active)' and the bottom is 'CO-OPS Stations (Historic)'. Both maps show the West Coast of North America with station locations marked. The 'Active' map has 94 / 100 Points and 110 Views, while the 'Historic' map has 85 Views. Both maps are marked as 'Accepted' on August 23, 2019. The interface includes a 'Suggested improvements' section with two items: 'Reduce the number of layers' (4/8 points) and 'Improve access and use constraints' (6/8 points). The 'Secure layers?' section shows that all layers are secure (YES).

CO-OPS Stations (Active)

94 / 100 Points

Open In Edit

Accepted
August 23, 2019

Web Map by Ashley.Miller_noe | Public

This map shows CO-OPS stations that currently collect and disseminate water level, current, and meteorological data.

water level currents ... 1 more

Modified: August 7, 2019 Views: 110

Edit thumbnails

Suggested improvements

- 4/8 points Reduce the number of layers
- 6/8 points Improve access and use constraints

Secure layers?

- YES Conductivity Stations
- YES Water Temperature Stations
- YES Meteorological Stations
- YES Current Stations
- YES Water Level Stations

CO-OPS Stations (Historic)

94 / 100 Points

Open In Edit

Accepted
August 23, 2019

Web Map by Ashley.Miller_noe | Public

This map shows CO-OPS stations that historically collected and disseminated water level, current, and meteorological data.

Water Levels Currents ... 1 more

Modified: August 7, 2019 Views: 85

Edit thumbnails

Suggested improvements

- 4/8 points Reduce the number of layers
- 6/8 points Improve access and use constraints

Secure layers?

- YES Meteorological Stations
- YES Current Stations
- YES Water Level Stations

The Benefits of Contributing

- Curated collection of authoritative data
- Improve data discoverability and accessibility to your organization's data
- Enable greater value and impact through ESRI community's use
- Information made available in a more understandable way
- Data that are ready to be used immediately (referenced, tagged, etc)

