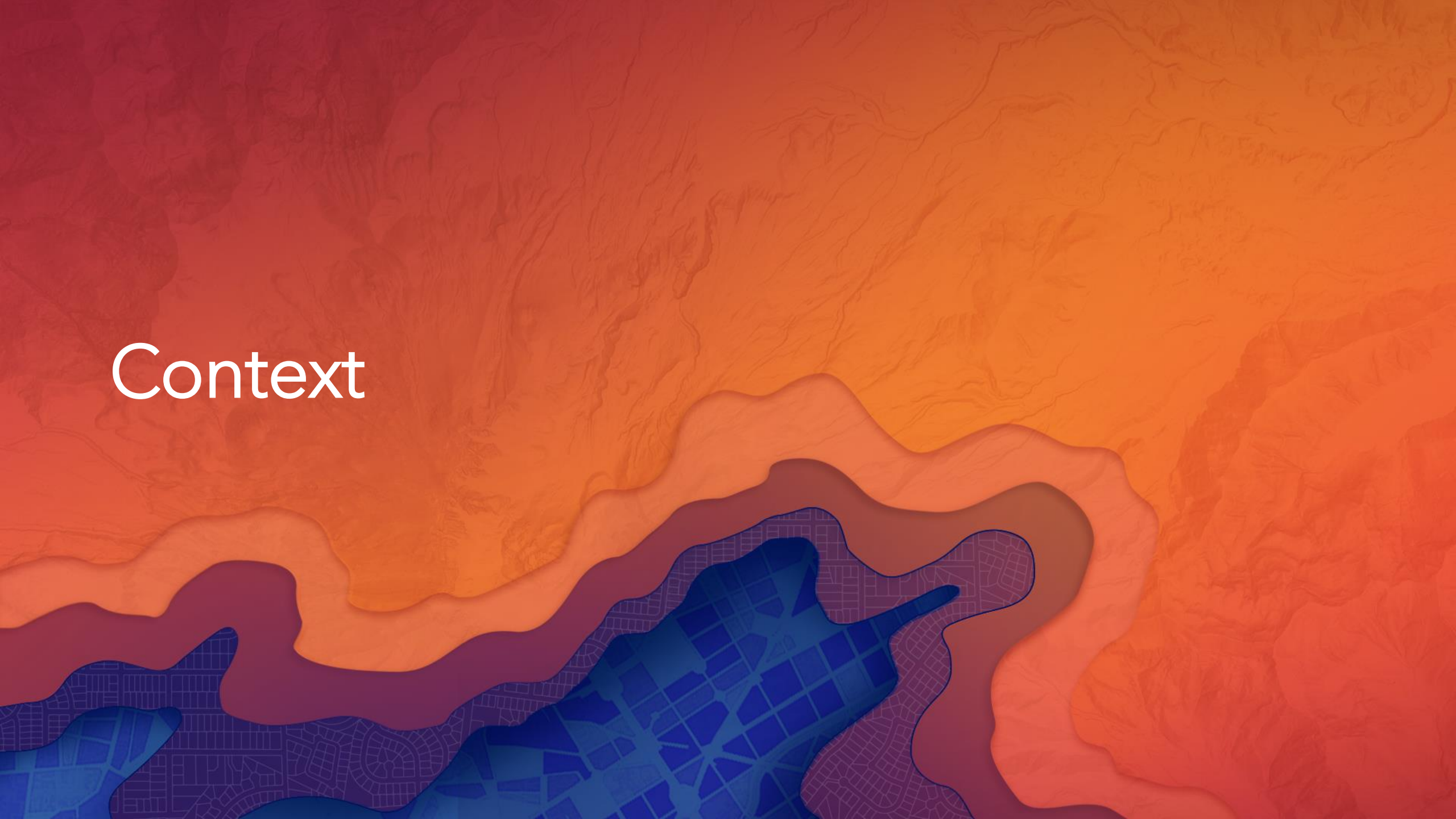
Working with OGC Services

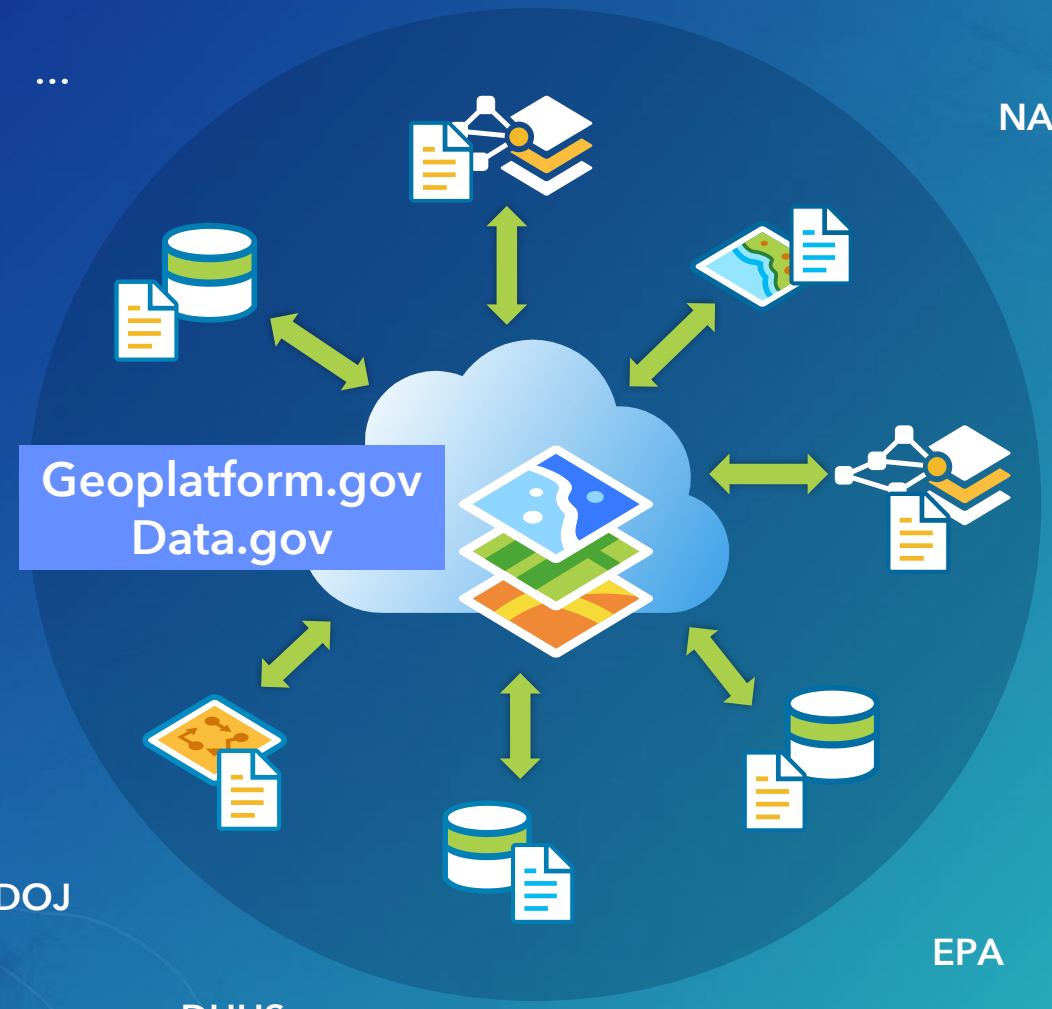
Using JS API and Web App Builder Widget

@martenhogeweg

Context



Geospatial Platform



GeoSUR (Latin America)

Venezuela

INPE

Paraguay

Brazil

. . .

Argentina

Panama

Uruguay

Mexico

Chile

Ecuador

Peru

Bolivia

Group on Earth Observations

Systems of Systems

SAEOS

INPE

PANGAEA

GCMD

ArcGIS Online

SeaDataNet

EEA-SDI

EuroGEOSS

WMO WIS

IOOS

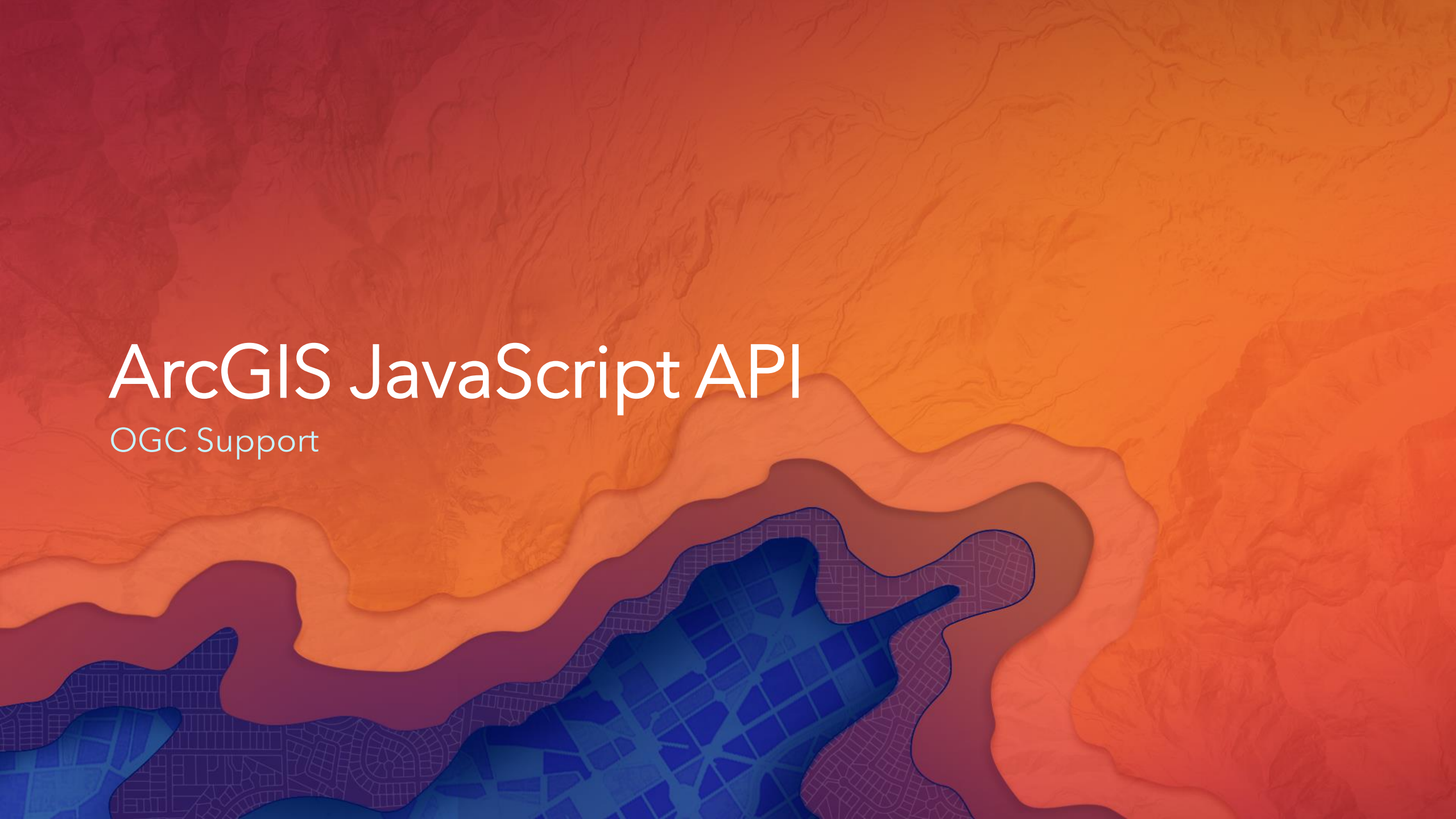
GSFC-DAAC

EnviroGRIDS

GBIF

ArcGIS JavaScript API

OGC Support

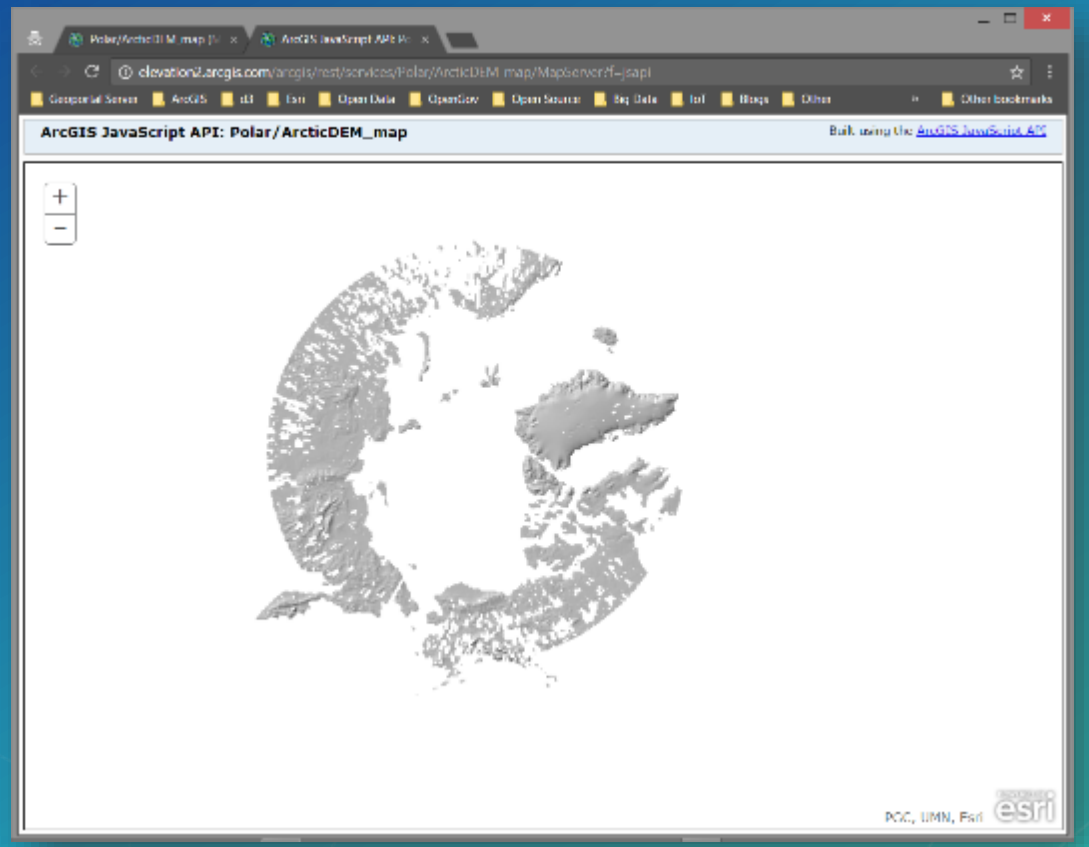


ArcGIS Serves OGC Service Types – Arctic Elevation Services

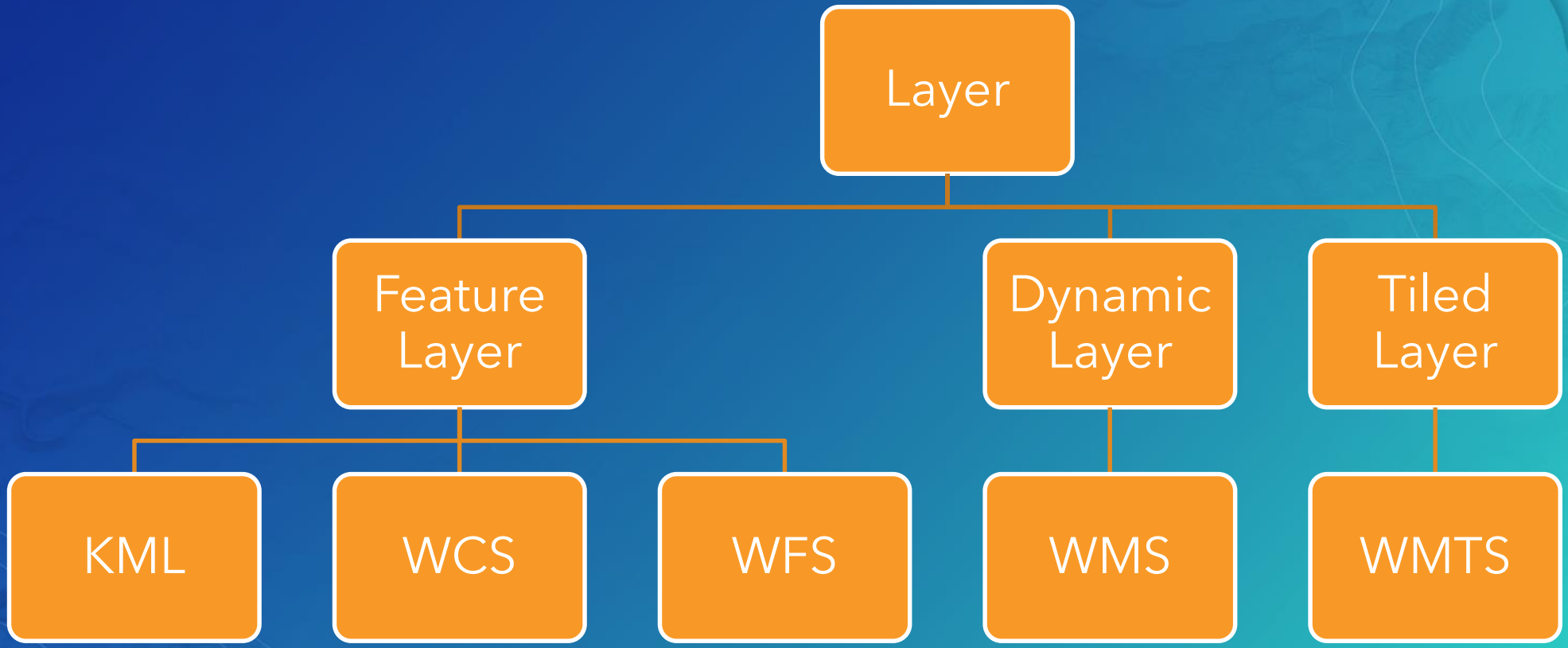
- http://elevation2.arcgis.com/arcgis/rest/services/Polar

- Developed by Esri Image Server Team together with NGA, Polar Data Center

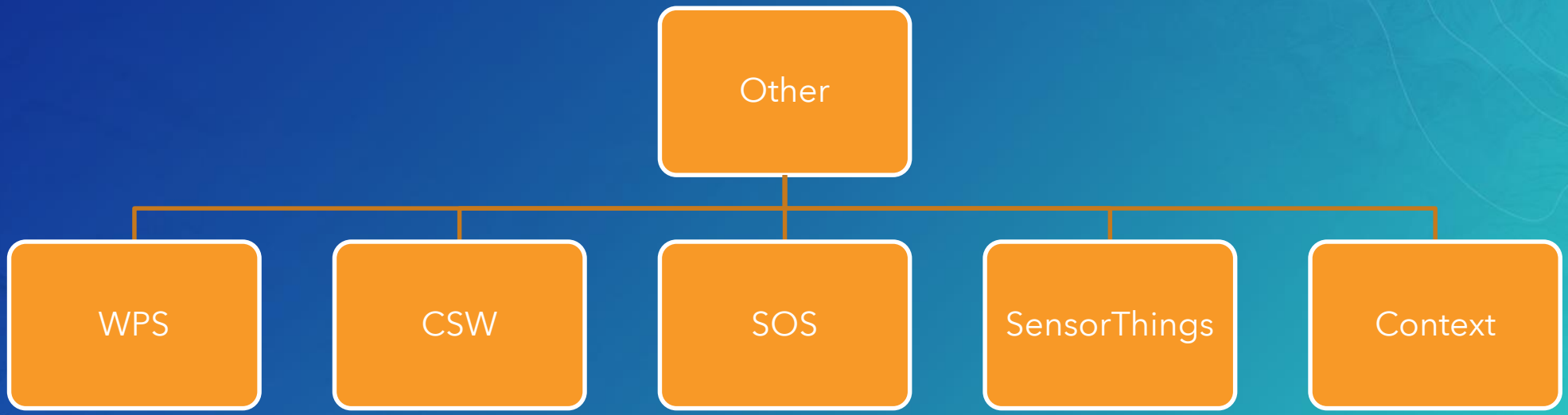
- OGC service endpoints enabled: WMS, WCS.



ArcGIS JavaScript API 3.x – OGC Layer Types



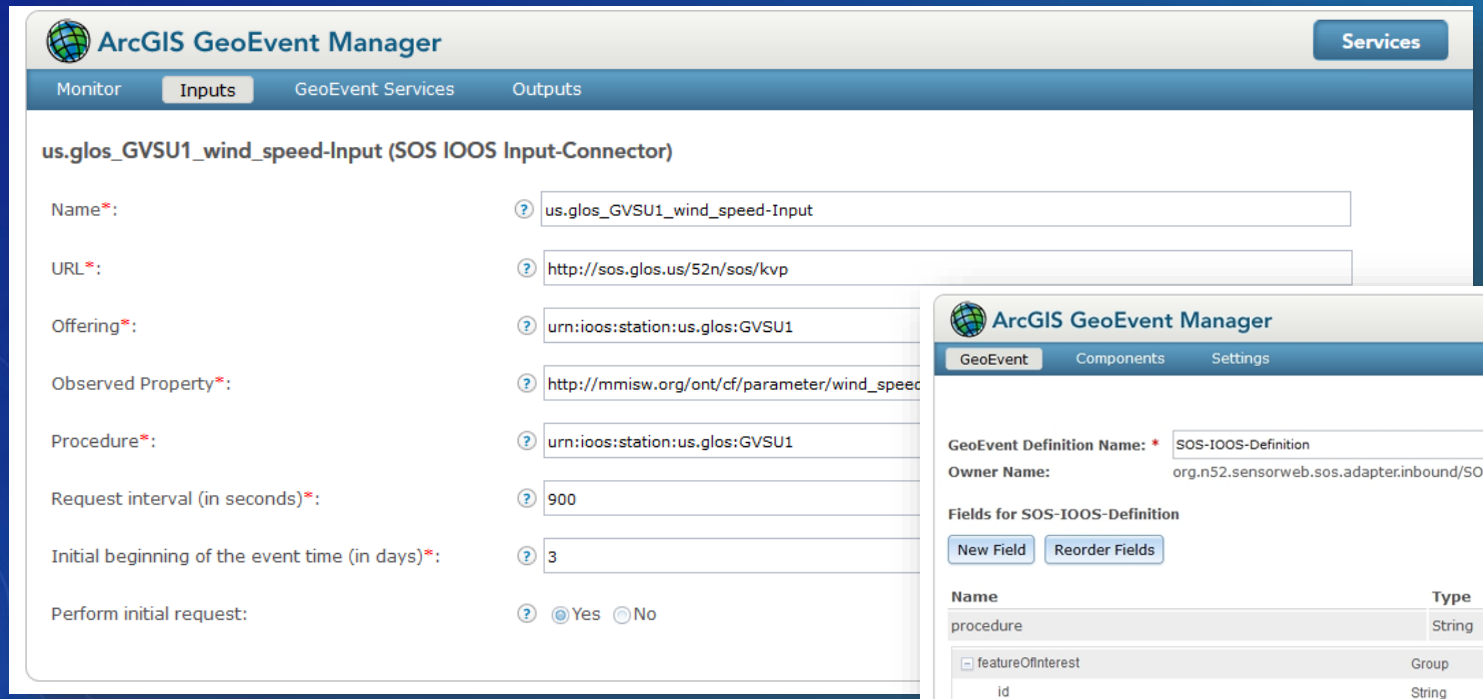
ArcGIS JavaScript API 3.x – Other OGC Types

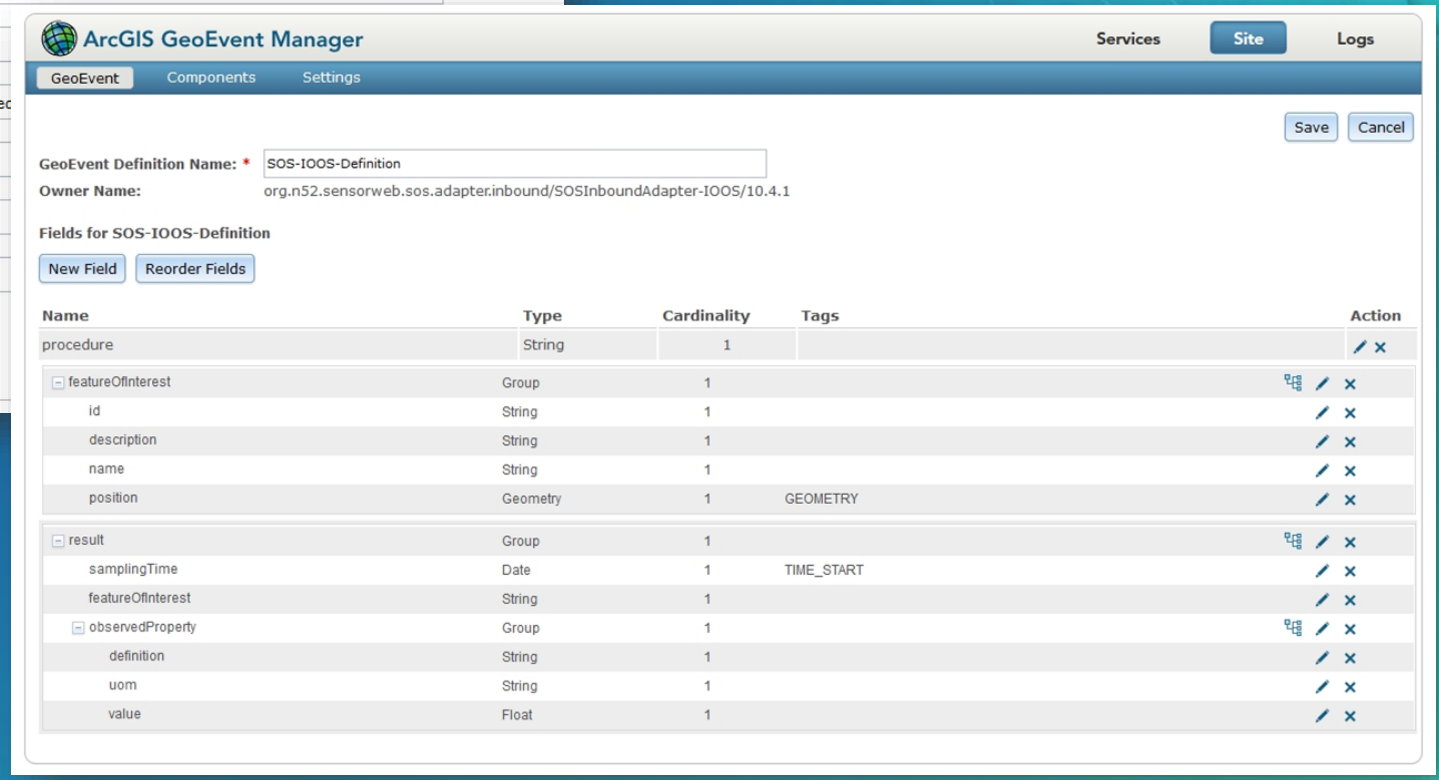


Sensor Networks

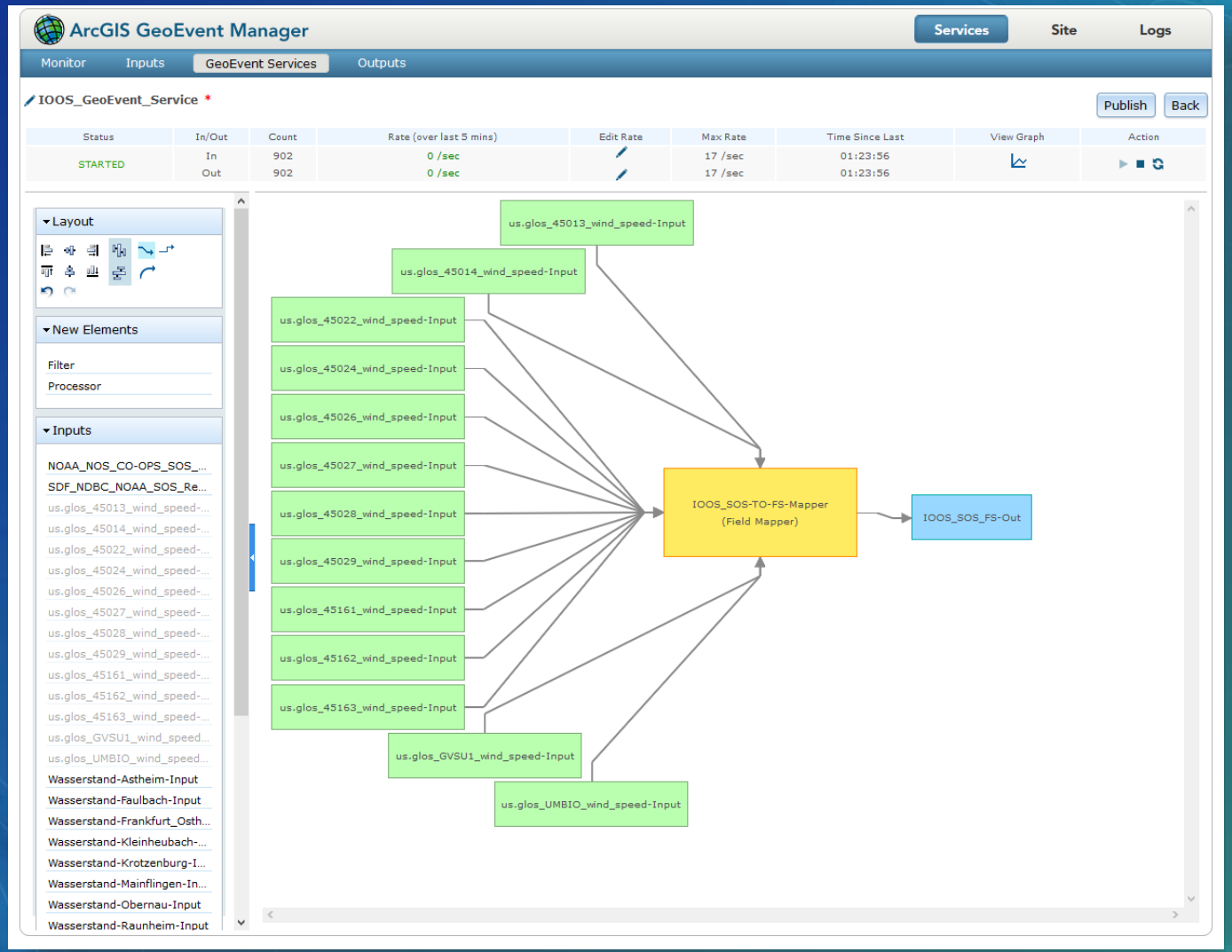
OGC SOS, SensorThings

IOOS SOS Input Connector

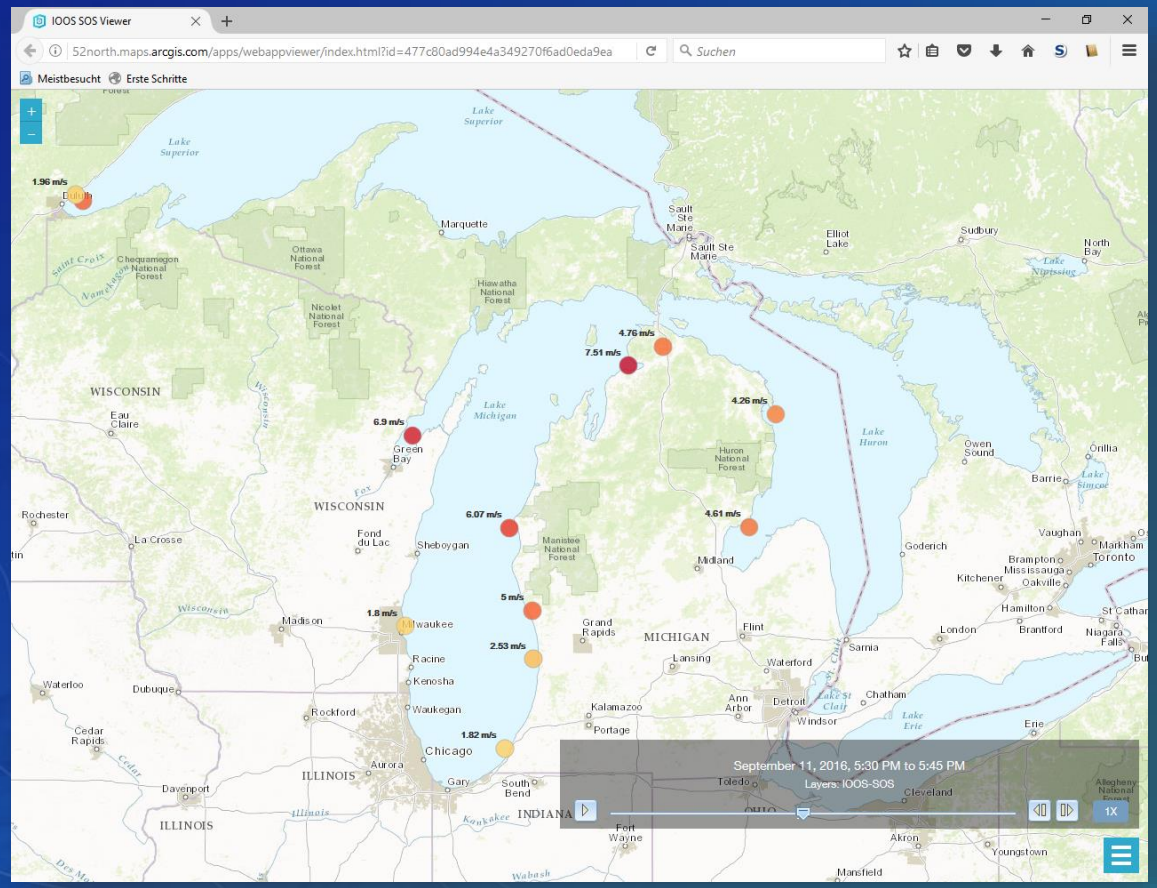


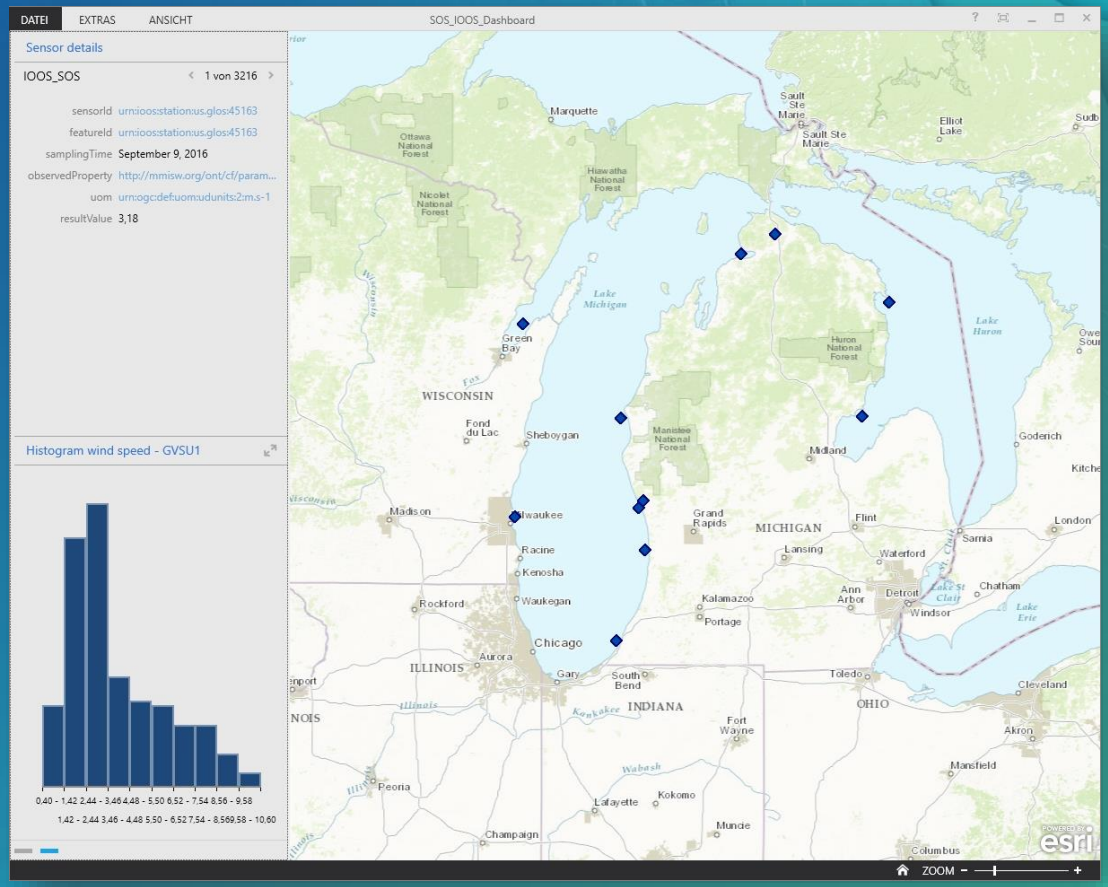


IOOS SOS GeoEvent Service



IOOS SOS Web Apps

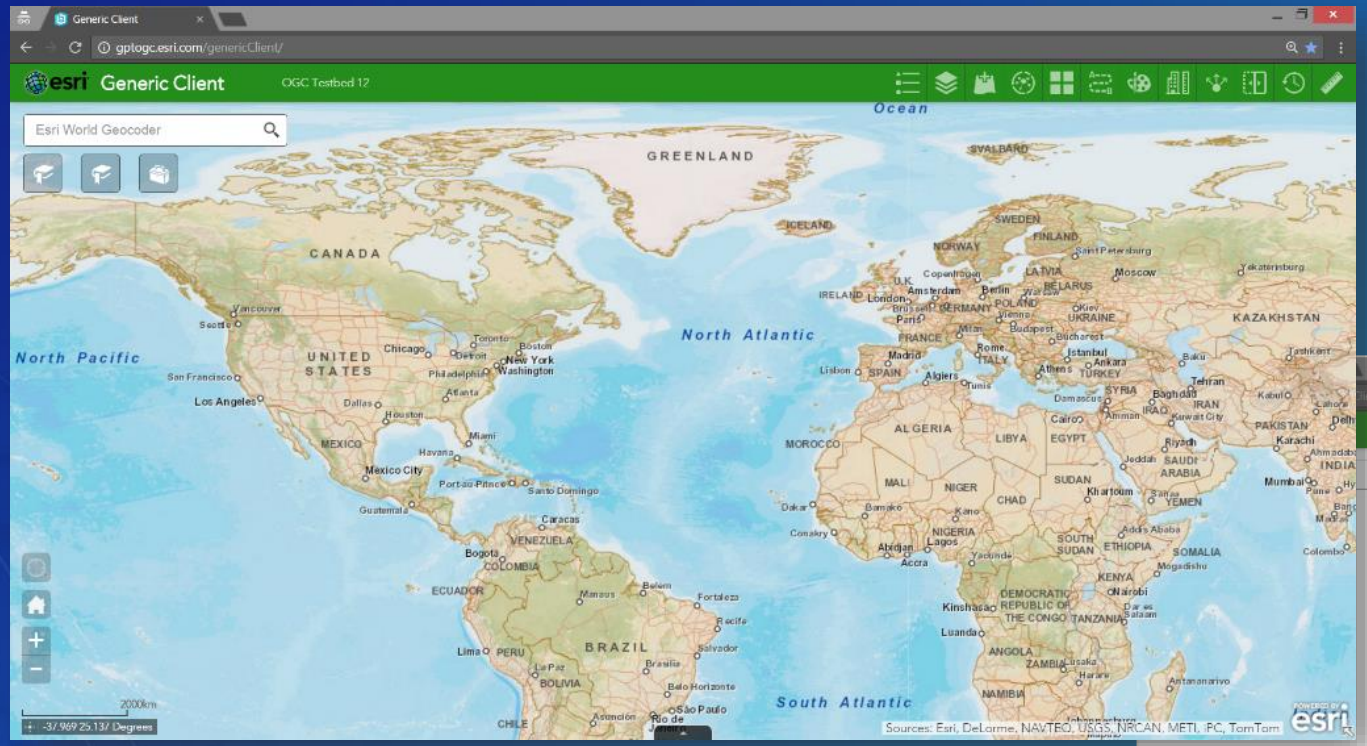


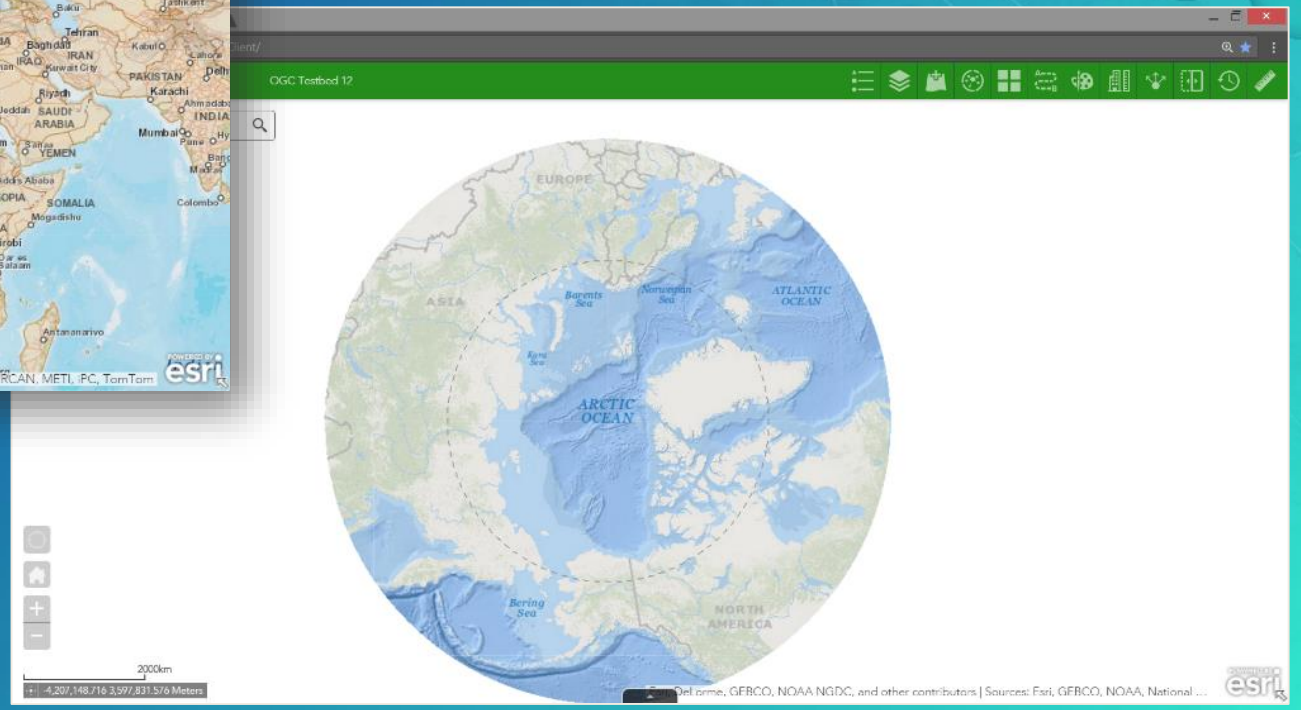


Bringing it All Together

OGC Testbeds

https://gptogc.esri.com/genericClient

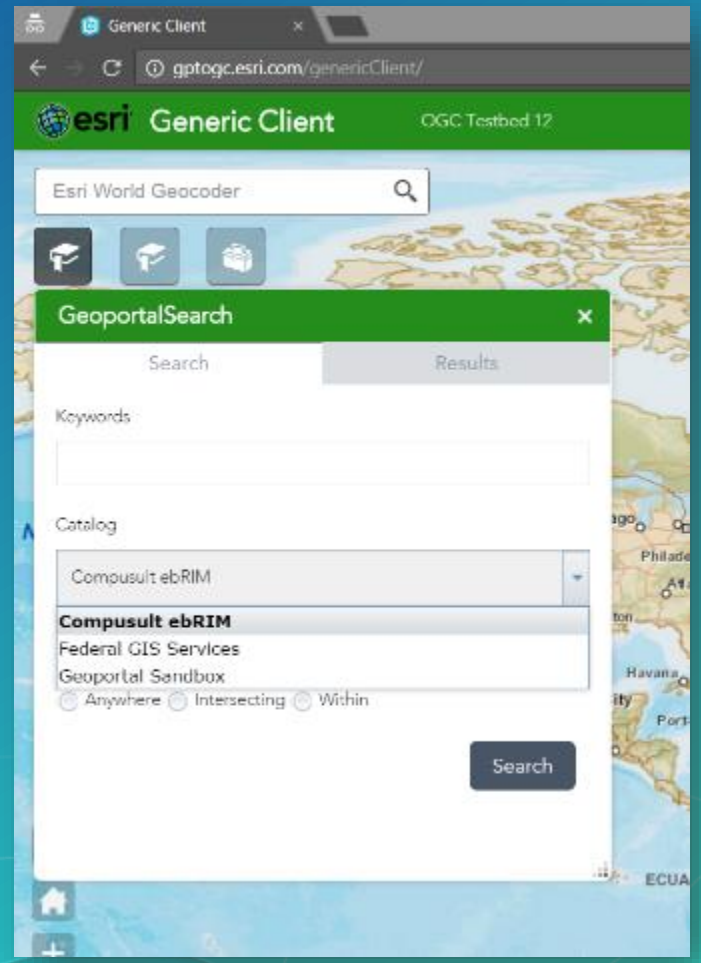




http://gptogc.esri.com/arcticClient/

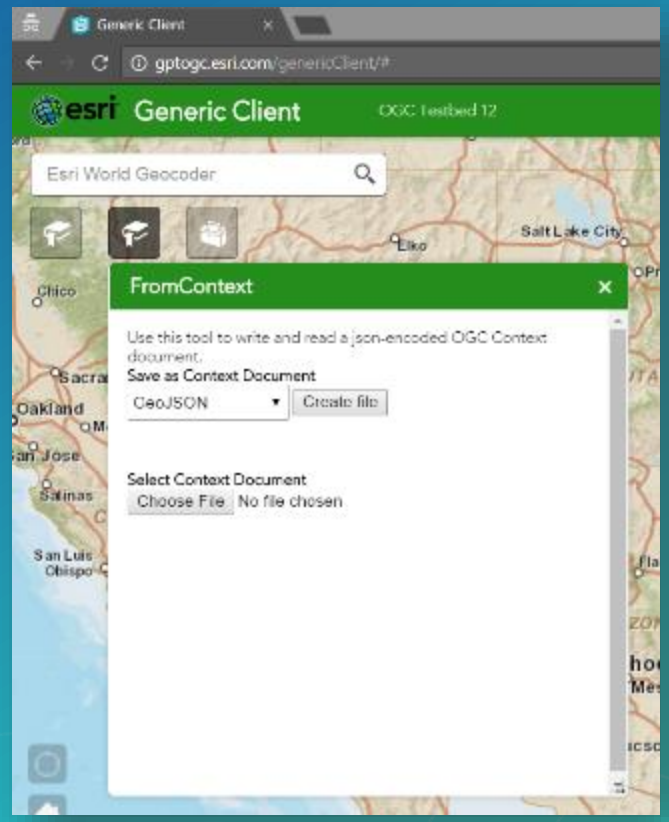
Geoportal Federated Search Widget

- Available on github: https://github.com/Esri/geoportal-server/tree/master/components/wab
- Search remote OpenSearch or OGC CSW catalogs
- Show footprints of search results
- Consume supported services in WAB viewer



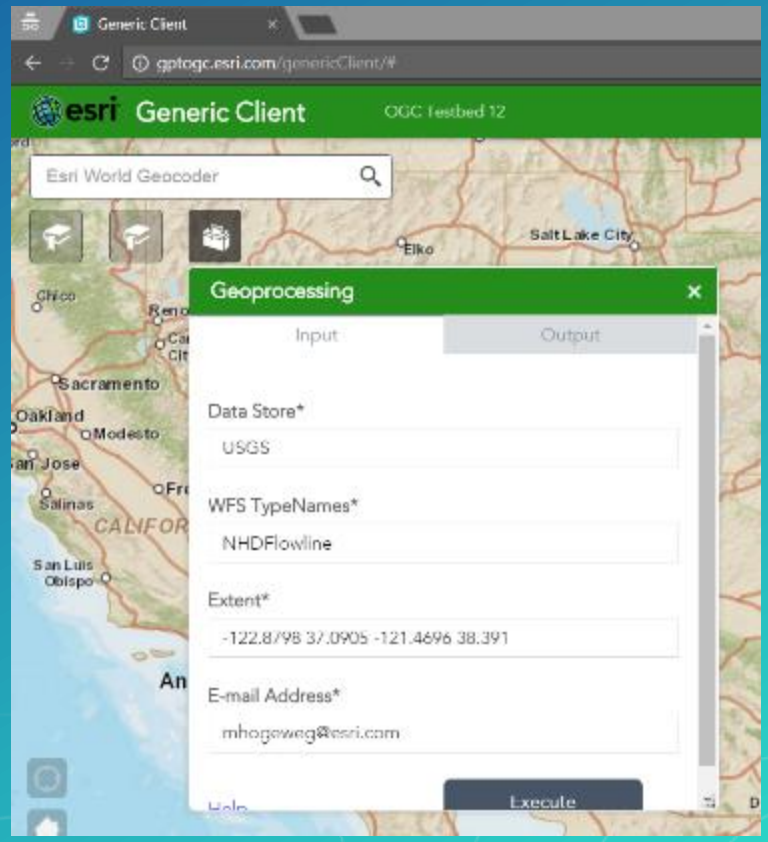
OGC Context Document Widget

- Open GeoJSON formatted OGC Context documents
- Then select layer/service to add to map
- For WMS: the entire service is added
- For WMTS, WCS: user selected the tileset or coverage
- Limited success with WMTS due to fixed projection
  - Limited success with WCS due to unsupported coverage profiles in OGC Testbed 12 WCS services
  - We use COTS JS API 3.18 in this app, no testbed-specific code



WFS Data Extraction – Geoprocessing Widget

- Fill in Data Store (USGS) and WFS TypeNames
- Set Extent
- Set email address
- Send Async Request to CubeWerx WFS that
  - Clips/Zips the Data
  - Sends Email when Data is Ready for Download
- Geoprocessing Service: http://geoss.esri.com/arcgis/rest/services/OGC/A007/GPServer
  - OGC WPS Enabled
  - Consumable in ArcGIS Desktop & WAB

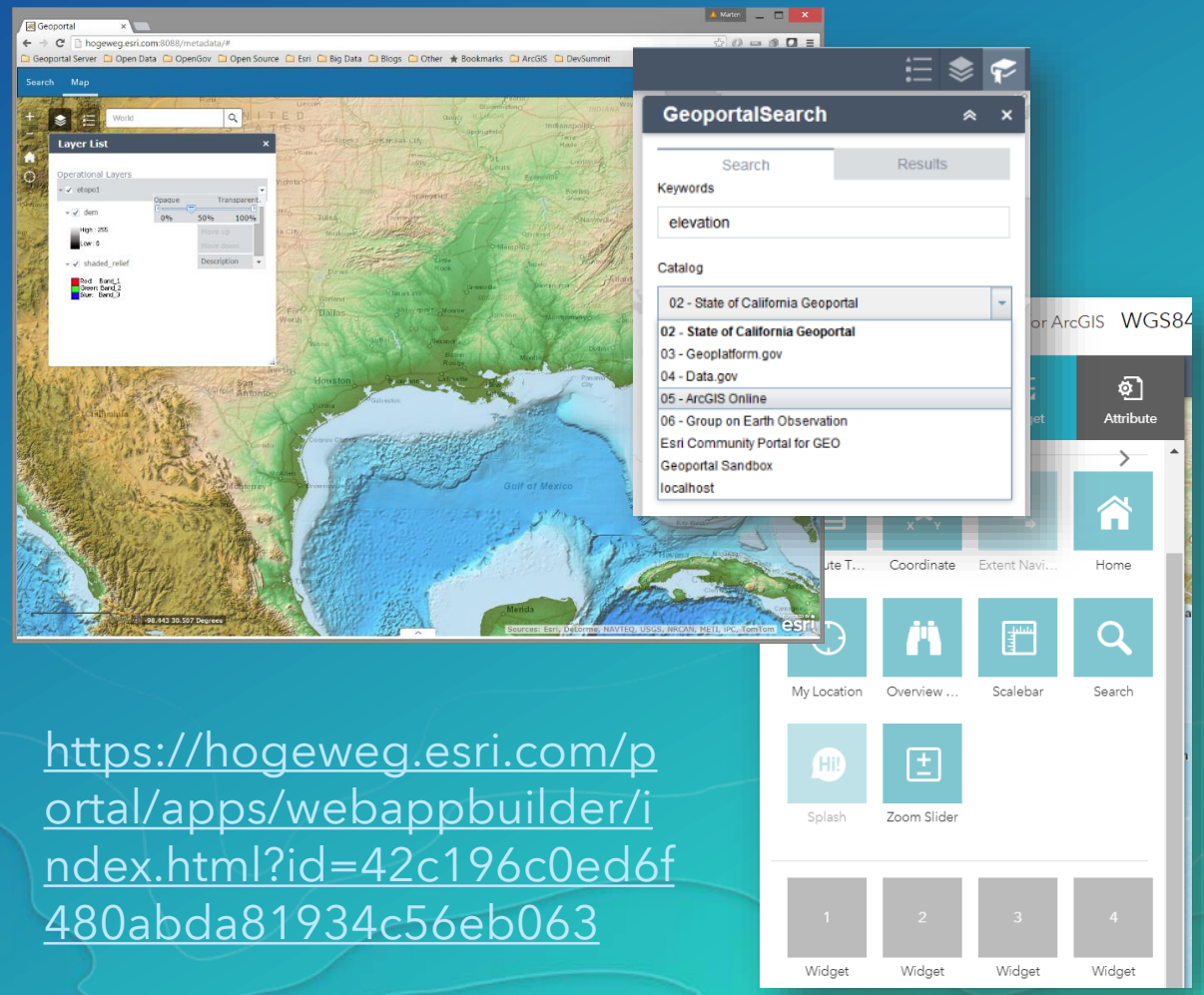


Widgets for Web AppBuilder and Portal 10.5.1

Enable discovery across ArcGIS platform

http://gptogc.esri.com/genericClient/

- Federated Search Widget
- Add to Map Widget
- OGC Context Widget
- ArcGIS Layers
- Koop Feature Services
- OGC Support
  - WMS
  - WCS
  - WFS
  - KML
  - Context Documents

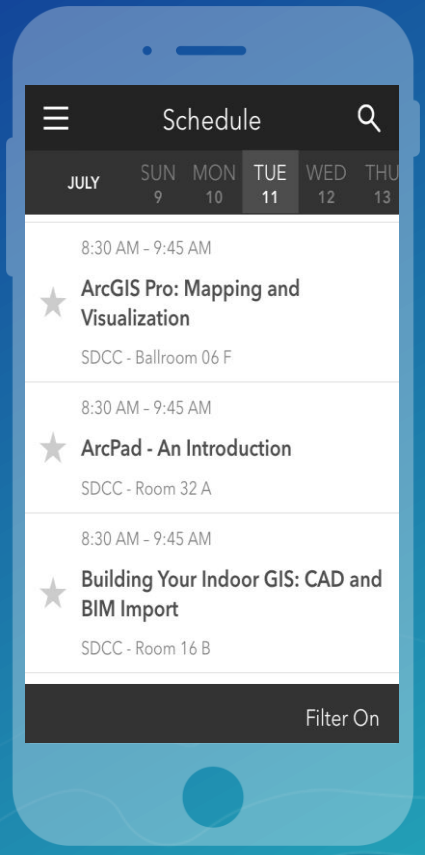


https://hogeweg.esri.com/portal/apps/webappbuilder/index.html?id=42c196c0ed6f480abda81934c56eb063

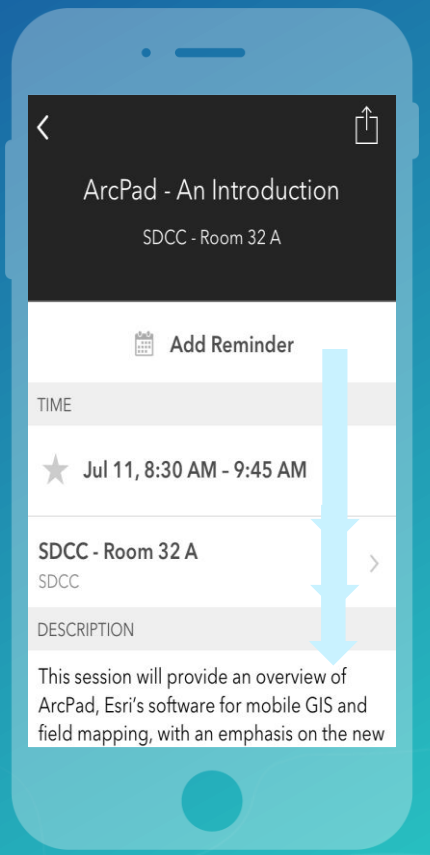
Please Take Our Survey on the **Esri Events App!**

Download the Esri Events app and find your event

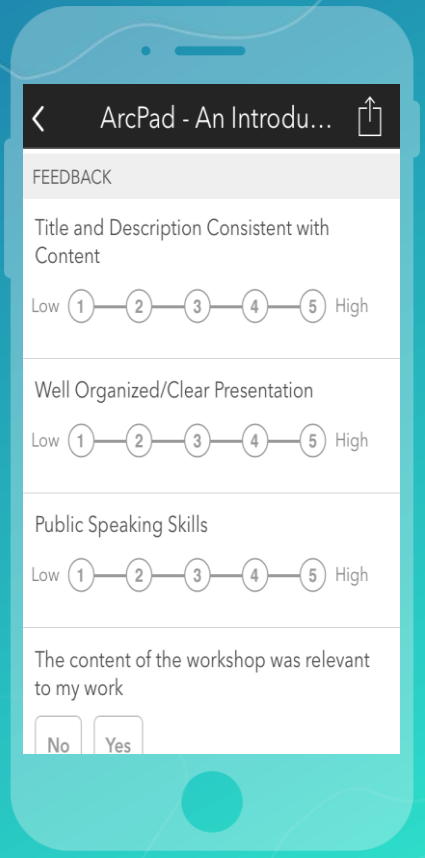
Select the session you attended



Scroll down to find the survey



Complete Answers and Select "Submit"



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