

```
<arcgis-map zoom="4" center="-118,34">  
  <arcgis-search position="top-right" />  
</arcgis-map>
```

ArcGIS Pro 3.3 Overview

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```
<arcgis-map zoom="4" center="-118,34" />  
view.goTo({  
  center: [-126, 49]  
})  
.catch(function(error) {  
  if (error.name !== "AbortError") {  
    console.error(error);  
  }  
});
```

Administration

ArcGIS Pro 3.3 moves to .NET 8

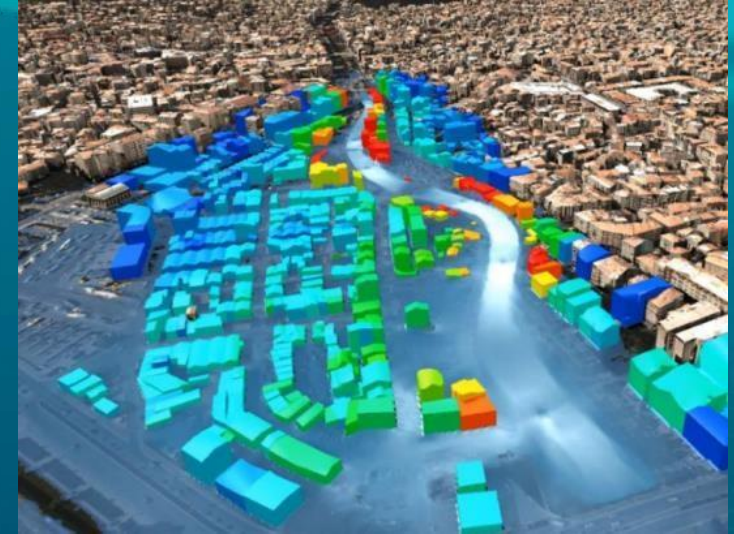
Ensures latest security and performance improvements

- **November 2020** - .NET Framework and .NET Core merged into a unified .NET
 - Unified divergent frameworks, reduced code complexity, advanced cross-platform reach
 - Even numbered .NET releases are Long Term Support (LTS - supported for 3 years)
- **ArcGIS Pro 3.0** - first release that moved to .NET 6 (first LTS .NET release)
 - **Major** release that entailed breaking changes to move to the unified .NET
- **ArcGIS Pro 3.3** - moves to .NET 8
 - **Minor** release that provides new functionality, but **NO BREAKING CHANGES**
 - Requires .NET 8 to be installed on machines before installing ArcGIS Pro 3.3
 - **No breaking changes** - continued compatibility with all ArcGIS Pro 3.x versions
 - Existing 3.x add-ins continue to work

Highlights

Flood Simulation

- Predict and plan for potential flooding events
 - Fast and interactive simulation and playback
- Workflows
 - Define an AOI, configure, and run a simulation
 - Visualize results and review statistics
 - Compare 'what-if' scenarios
 - Test mitigation plans
 - Share analysis results



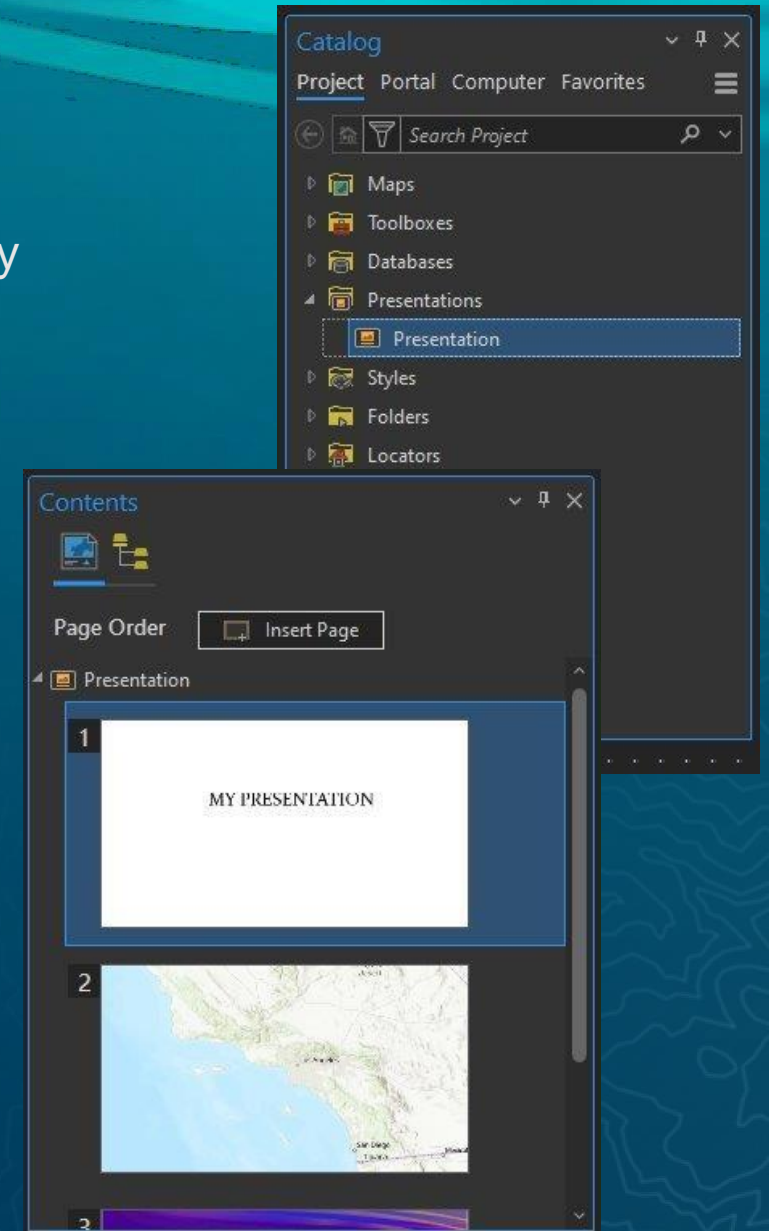
Highlights

Presentations

- Use maps, scenes, videos and text to interactively present a GIS story
- A new document type stored in a Pro project
- Interactively present in full-screen mode
- Share presentation as PDF, images, or video

• Examples

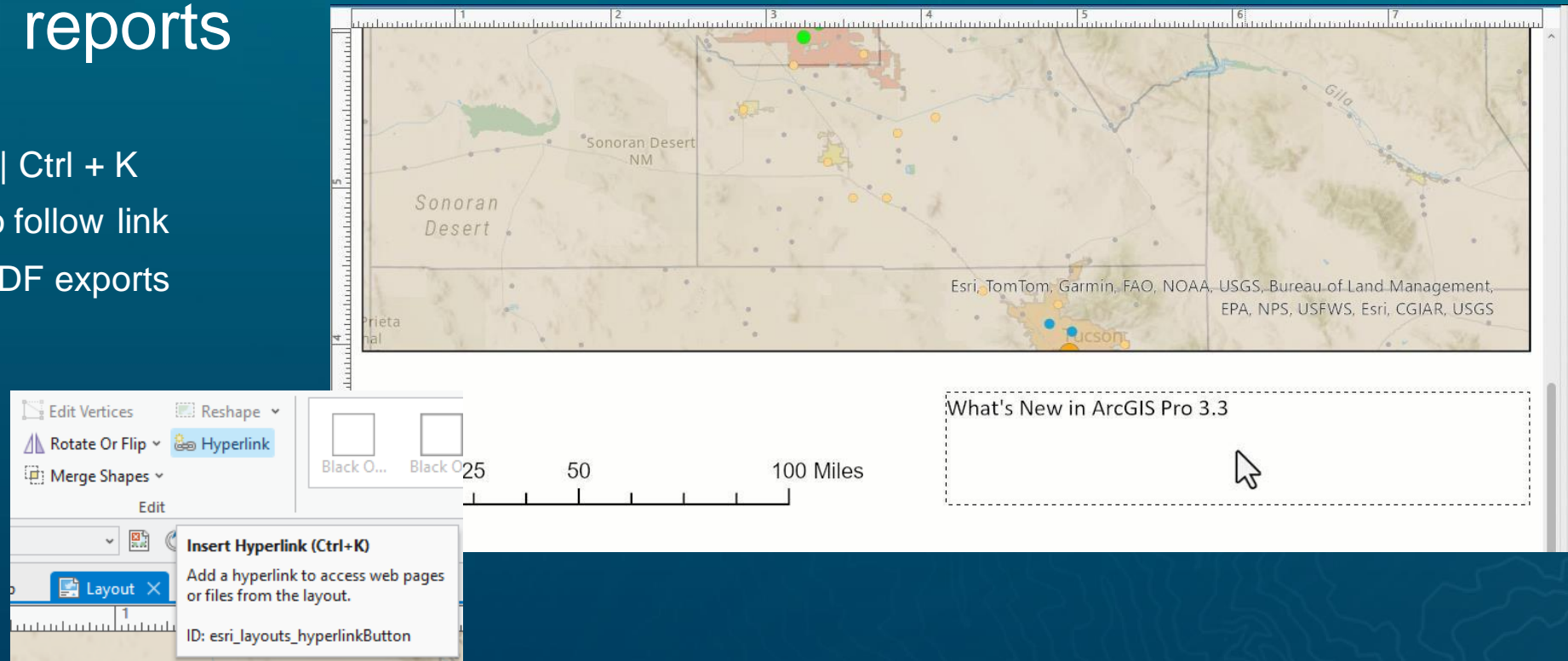
- Present analytical results to stakeholders
- Show a proposed urban development
- Describe events with a strong geographical component
- Export as a video for wider viewing



Highlights

Hyperlink management in layouts and reports

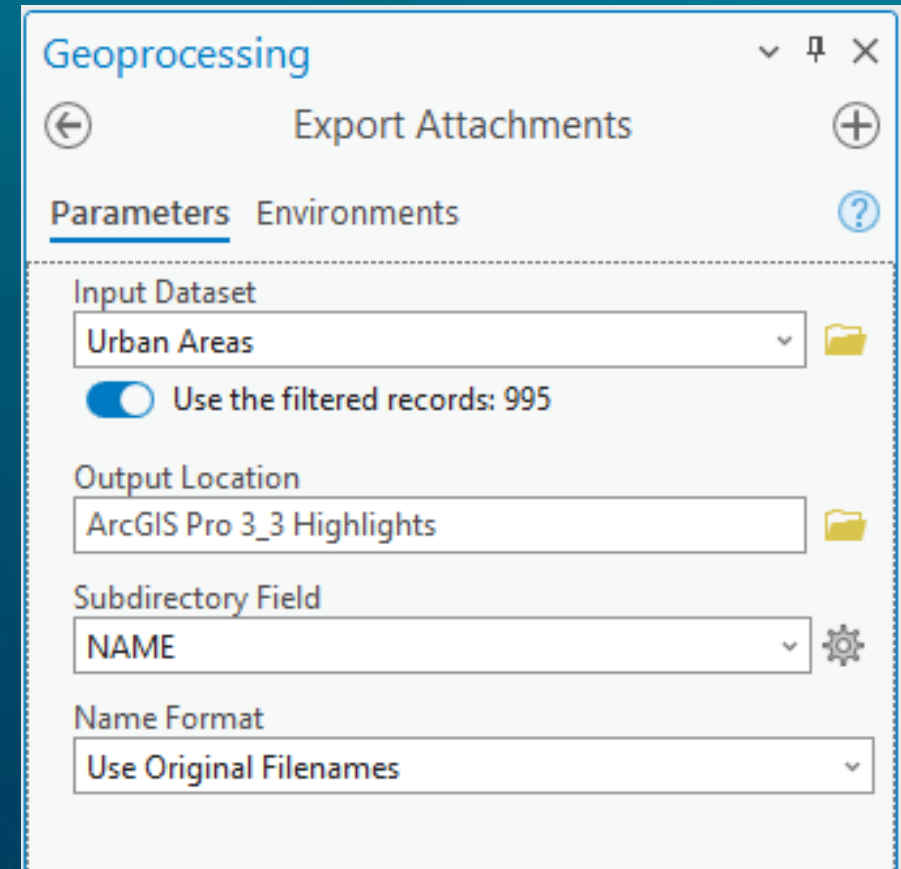
- Familiar UX
 - Highlight text | Ctrl + K
 - Ctrl + Click to follow link
 - Included in PDF exports



Highlights

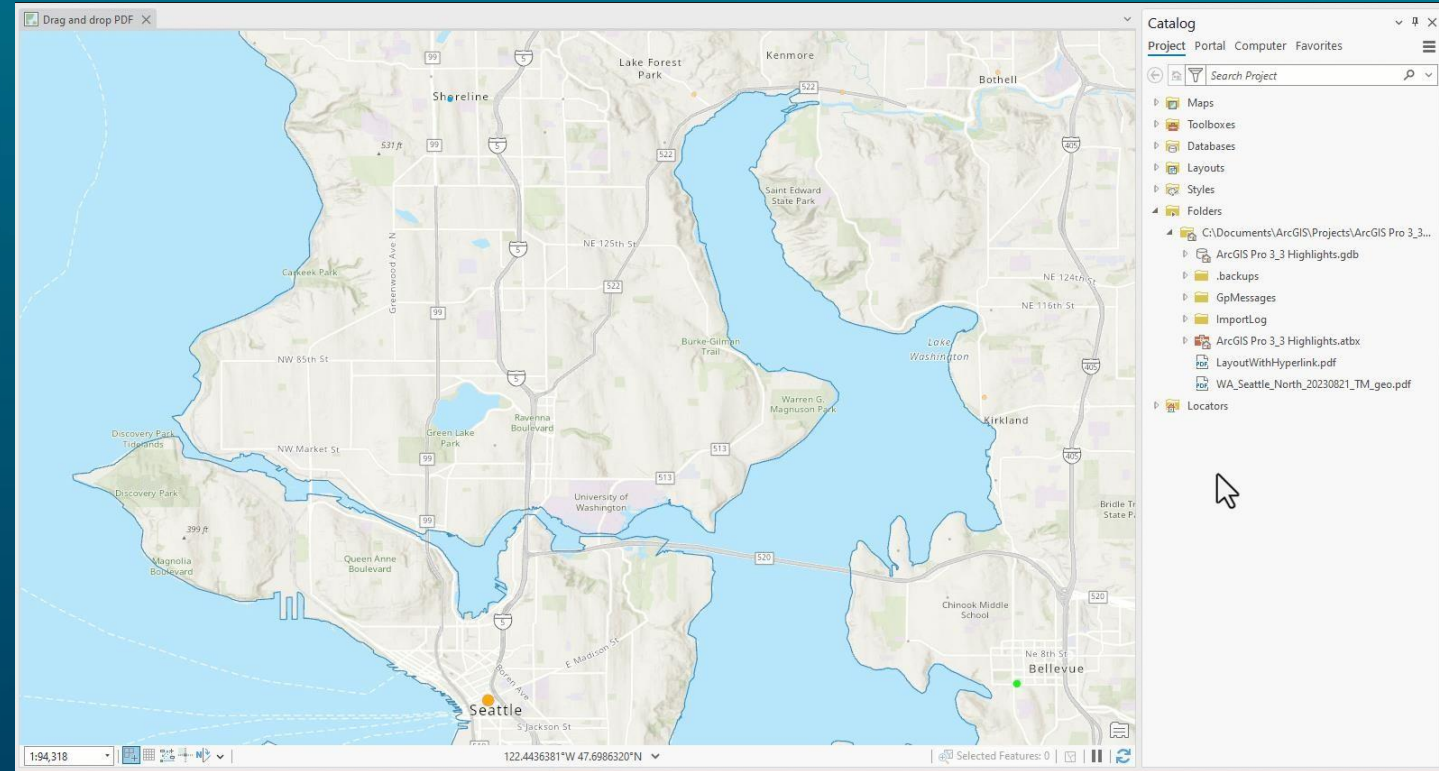
Export Attachments

- New geoprocessing tool
- Feature class/table to specified folder
- Export to subdirectories based on attribute value
- Rename exported files based on attribute value(s)



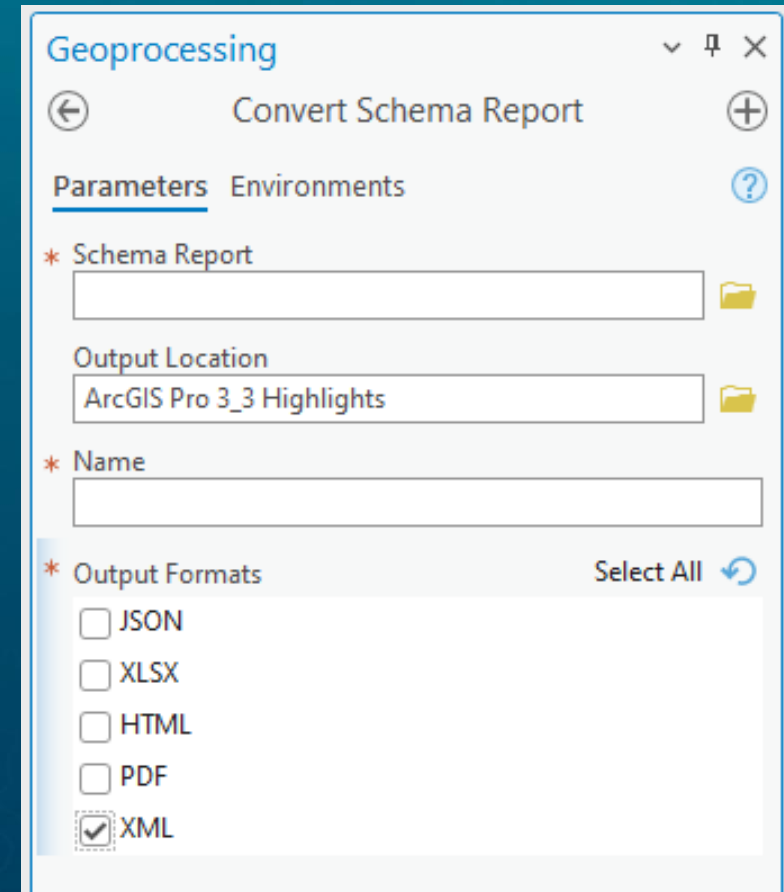
Highlights

- Add PDF directly as raster layer
 - No need to duplicate data and store as TIFF
 - Drag and drop from file system/Catalog
 - Select page from multipage document
 - Georeference if needed



Highlights

- Convert Schema Report
 - Converts JSON or XLSX files created from Generate Schema Report tool (new in Pro 3.2) to XML workspace document
 - XML → create a geodatabase



Highlights

- Extract Data From Geodatabase

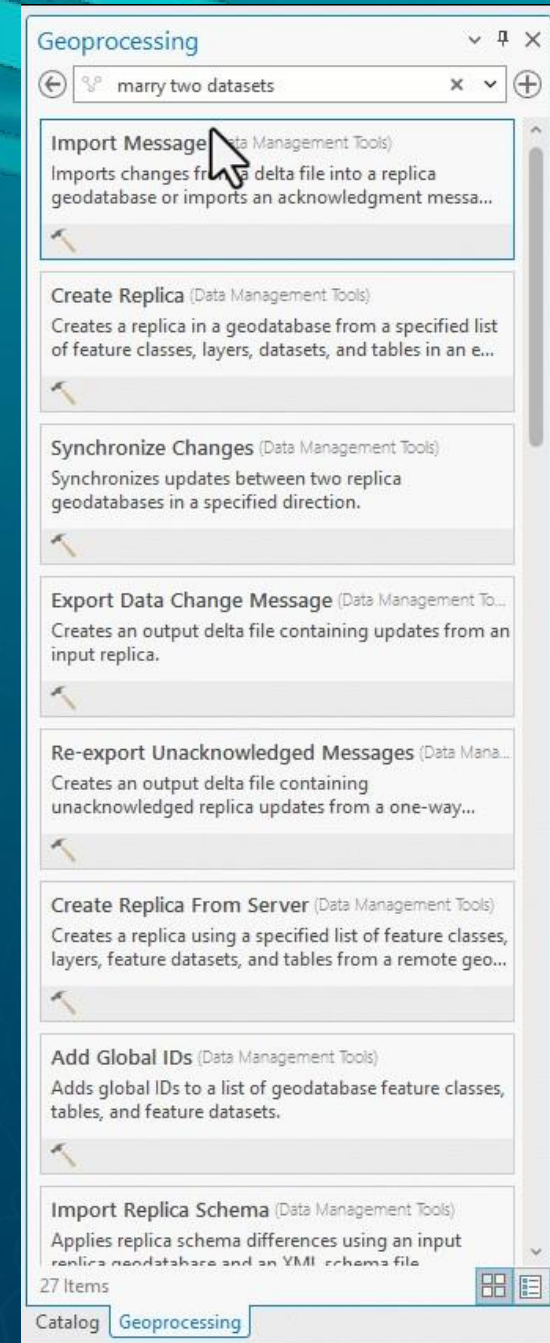
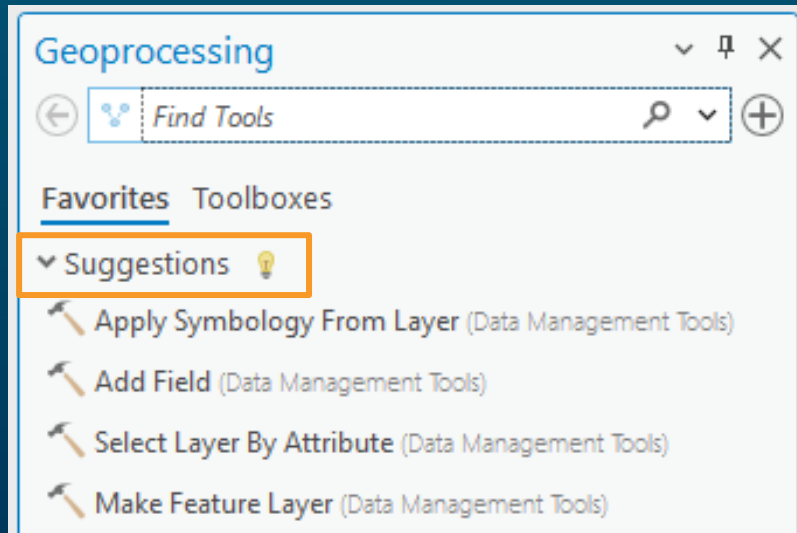
- New geoprocessing tool (Extract Data Wizard equivalency)
- Copy a subset of data by providing spatial extent, geometries or selection
- Extract to existing geodatabase, XML, or new geodatabase
- Extract schema and data, or schema only

The screenshot shows the 'Extract Data From Geodatabase' tool interface. The title bar reads 'Geoprocessing' with standard window controls. Below the title bar, there are navigation icons (back, forward) and the tool name 'Extract Data From Geodatabase'. There are tabs for 'Parameters' (selected) and 'Environments', along with a help icon. The main area contains several parameter fields:

- * Datasets to Extract:** An empty text box with a folder icon to its right.
- Extract:** A dropdown menu currently set to 'Schema only'.
- Output Type:** A dropdown menu currently set to 'Geodatabase'.
- Geodatabase to Extract Data to:** An empty text box with a folder icon to its right.
- Geometry Filter Type:** A dropdown menu currently set to 'Contains'.
- Advanced Setting:** A collapsed section containing:
 - Expand Feature Classes and Tables:** A dropdown menu set to 'Use defaults'.
 - Re-use Schema:** A dropdown menu set to 'Do not reuse'.
 - Extract Related Data:** A dropdown menu set to 'Get related'.
 - Extract Using Geometry Features:** An empty text box with a folder icon to its right.
- All records for tables:** An unchecked checkbox.

Highlights

- Improved geoprocessing tool Search and Suggestions
 - Semantic search using conversational or plain-language queries
 - Suggestions in Favorites tab



Highlights

Time Series Cross Correlation

- Estimate delayed effects between primary and secondary analysis variables

- Potential applications

- Compare hourly temperature to electricity usage
- Estimate delay between increase in precipitation and increase in reservoir water volume
- Estimate delay between marketing spending and customer purchases

Geoprocessing

Time Series Cross Correlation

Parameters Environments

* Input Space Time Cube

* Primary Analysis Variable

* Secondary Analysis Variable

* Output Features

Enable Time Series Pop-ups

Maximum Time Lag

Secondary Variable Lag Direction

Shift secondary variable both directions

Spatial Neighbors to Include in Calculation

No neighbors

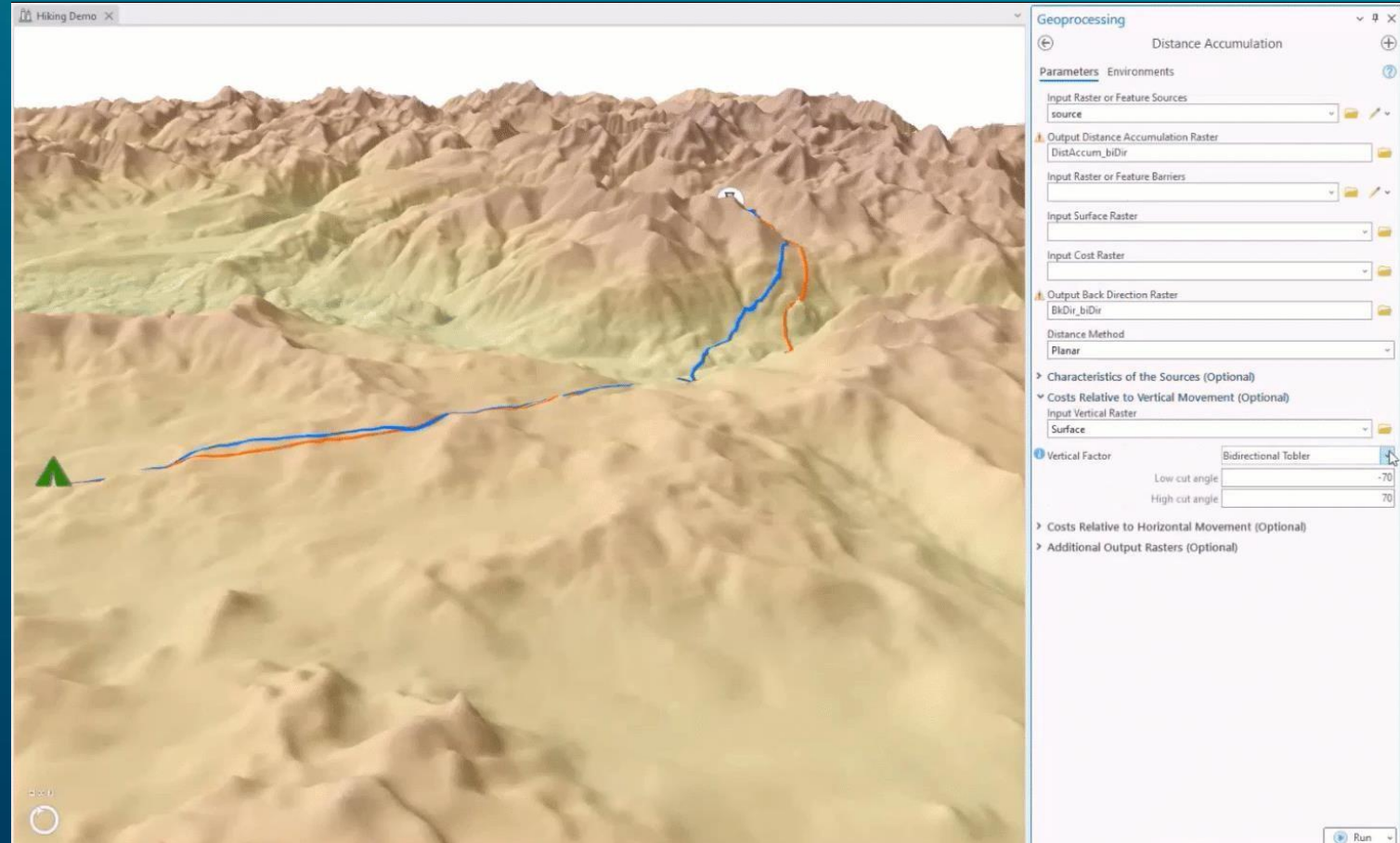
Filter and Remove Trend

Output Lagged Correlations Table



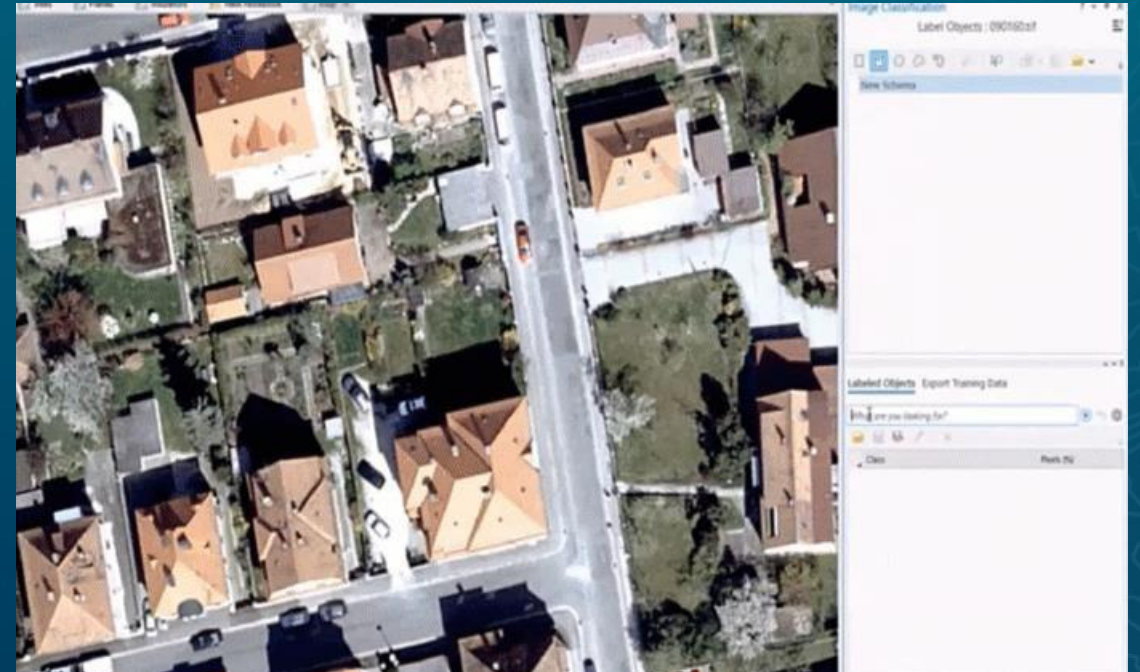
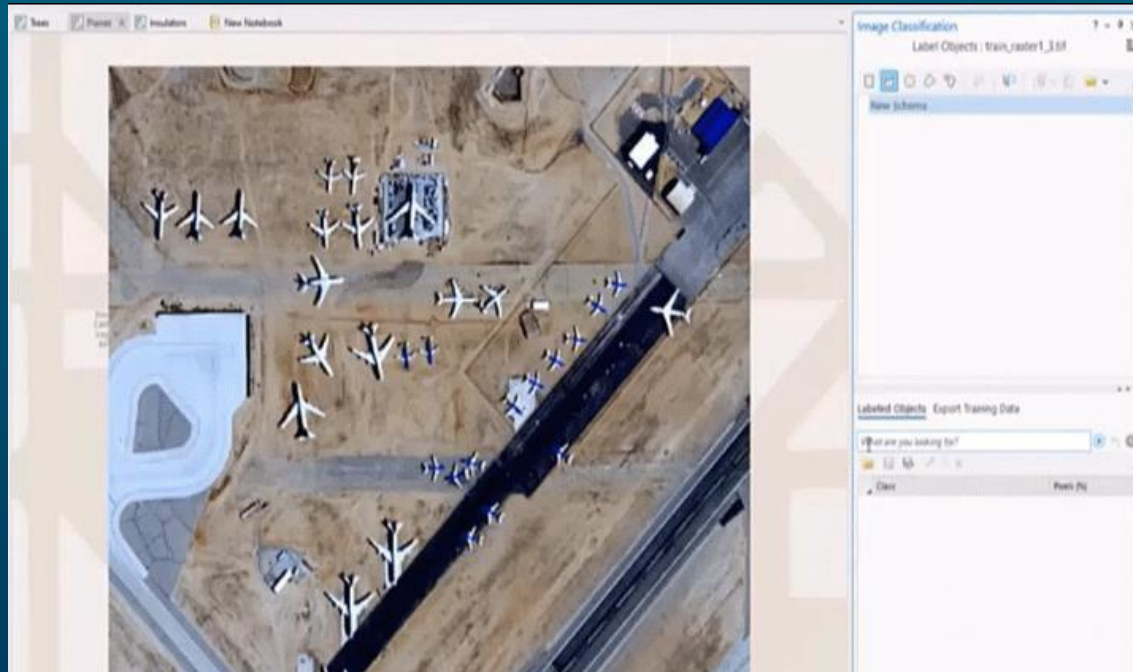
Highlights

- Tobler's Hiking function
 - Added to Distance Accumulation
 - Also added Bidirectional Tobler function



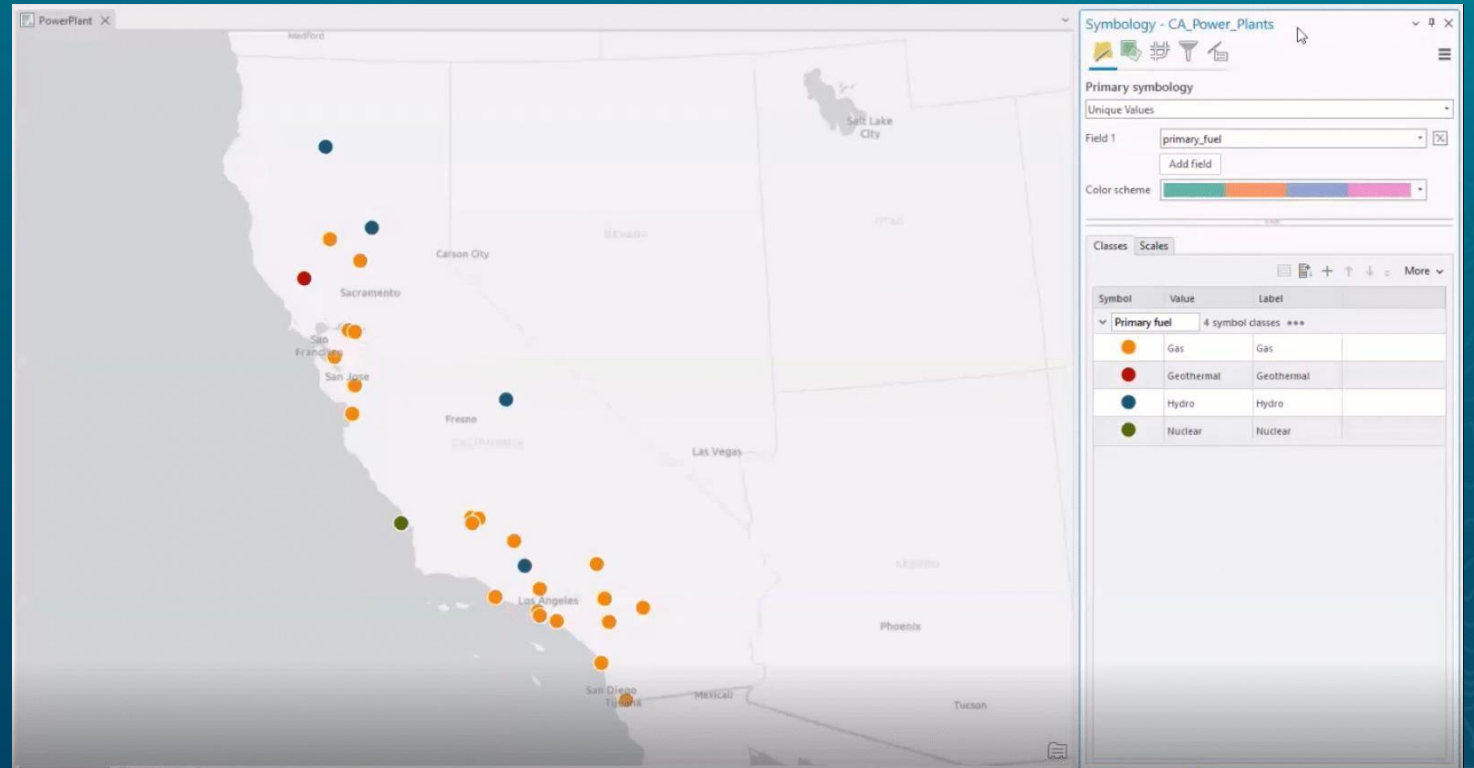
Highlights

- AI assisted labeling for deep learning training
 - Text prompt to automatically detect objects for labeling



Highlights

- “Quantity by Category” renderer
 - Unique value renderer → Vary symbology by attribute
 - Classify data to specify method, number of classes, histogram



Highlights

Chart improvements

- Match layer symbology for bar charts
- Treat null as category
- Custom intervals

Treat null as category

Data Labels

Label bars

Y-axis

Interval

Bounds

Maximum

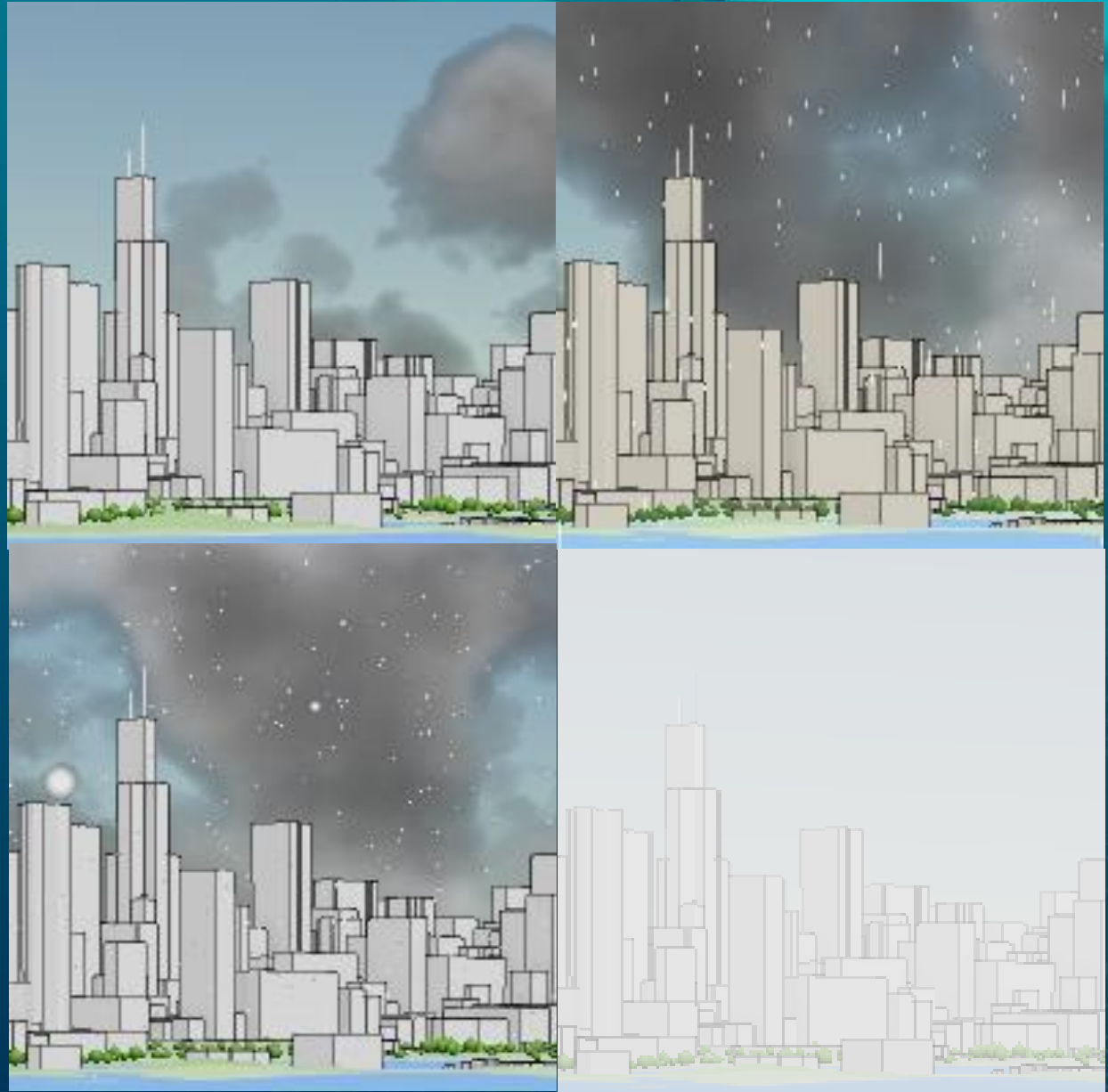
Number format

Category: None

The screenshot displays the ArcGIS Desktop interface. On the left, the Contents pane shows a list of layers, with 'Detailed Water Bodies' selected. The main map area shows a topographic map with various water bodies highlighted in green and blue. The Chart Properties pane on the right is open, showing the 'Detailed Water Bodies - Counts by' chart. The 'Variables' section is set to 'Count', and the 'Treat null as category' checkbox is checked. The 'Data Labels' section is also checked, with 'Label bars' selected. The 'Y-axis' section is visible, showing an interval of 1000 and a maximum value of 2629. The 'Number format' is set to 'Category: None'.

Highlights

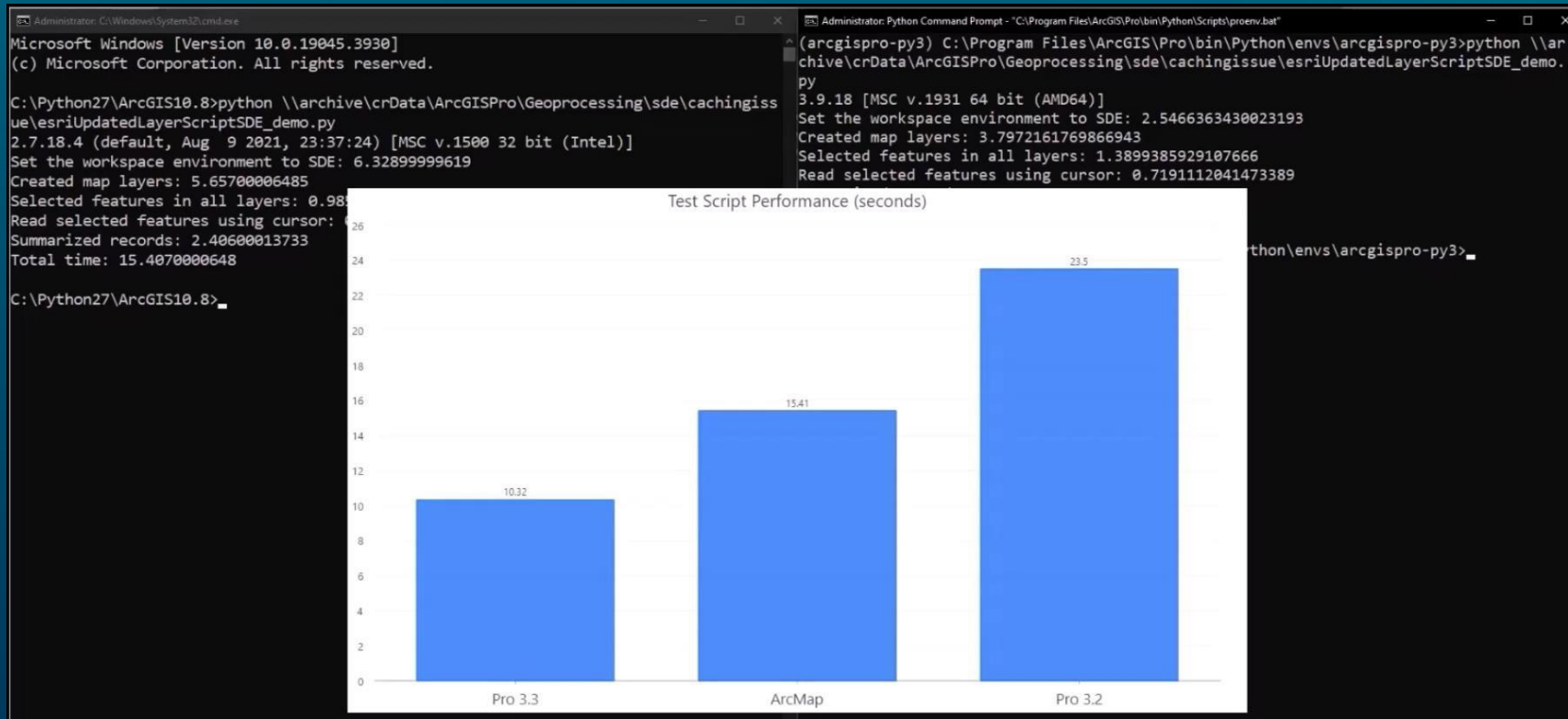
- Weather in global scenes (clouds, rain, snow, fog)



Performance and Productivity

Geoprocessing

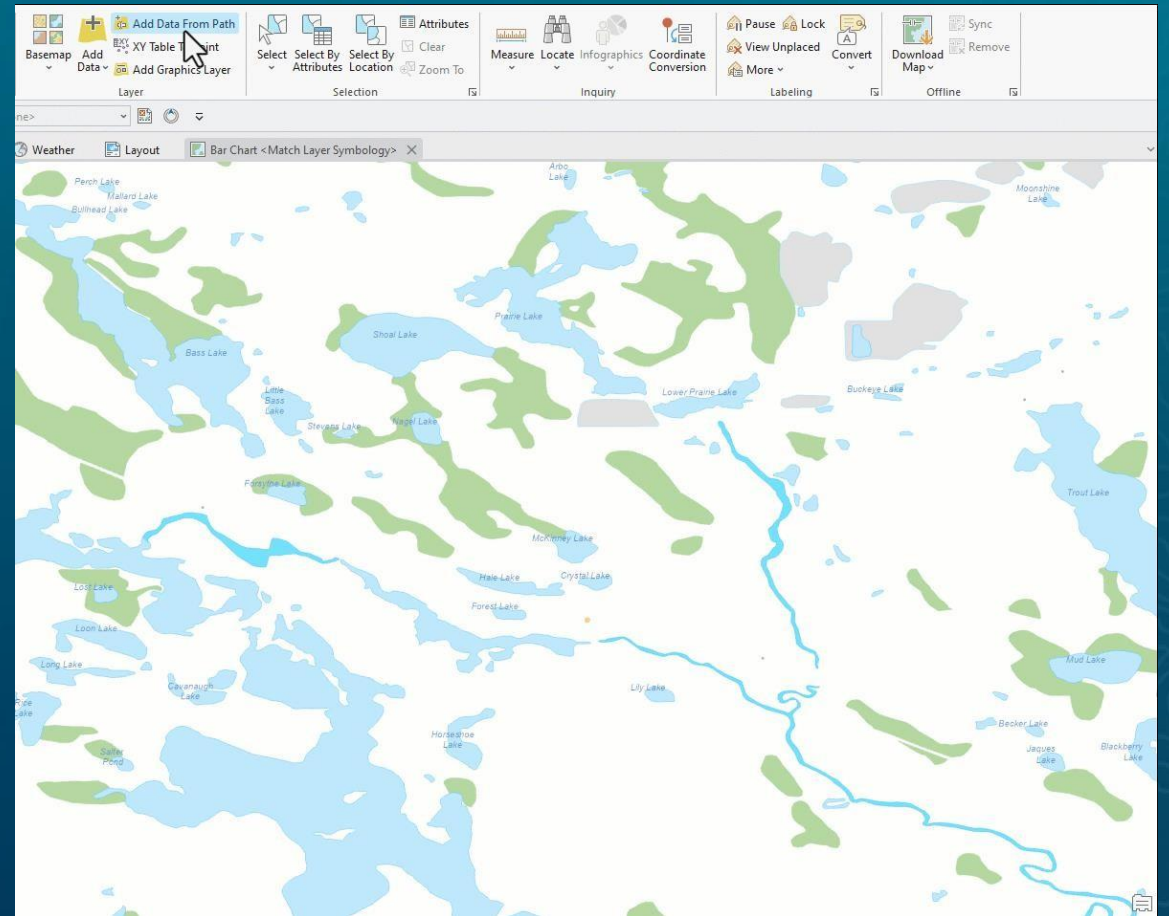
- Geoprocessing workspace caching



Performance and Productivity

Application

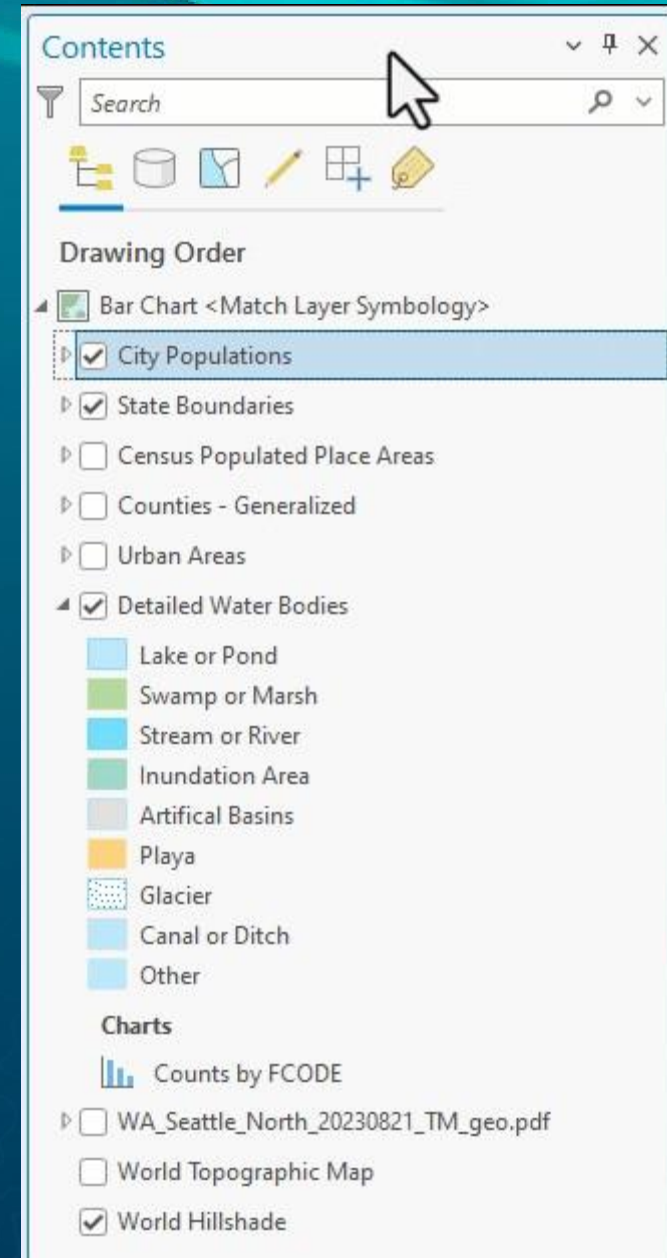
- **Configure Shortcut** – new option to get directly to an appropriate context when setting up contextual keyboard shortcuts



Performance and Productivity

Mapping

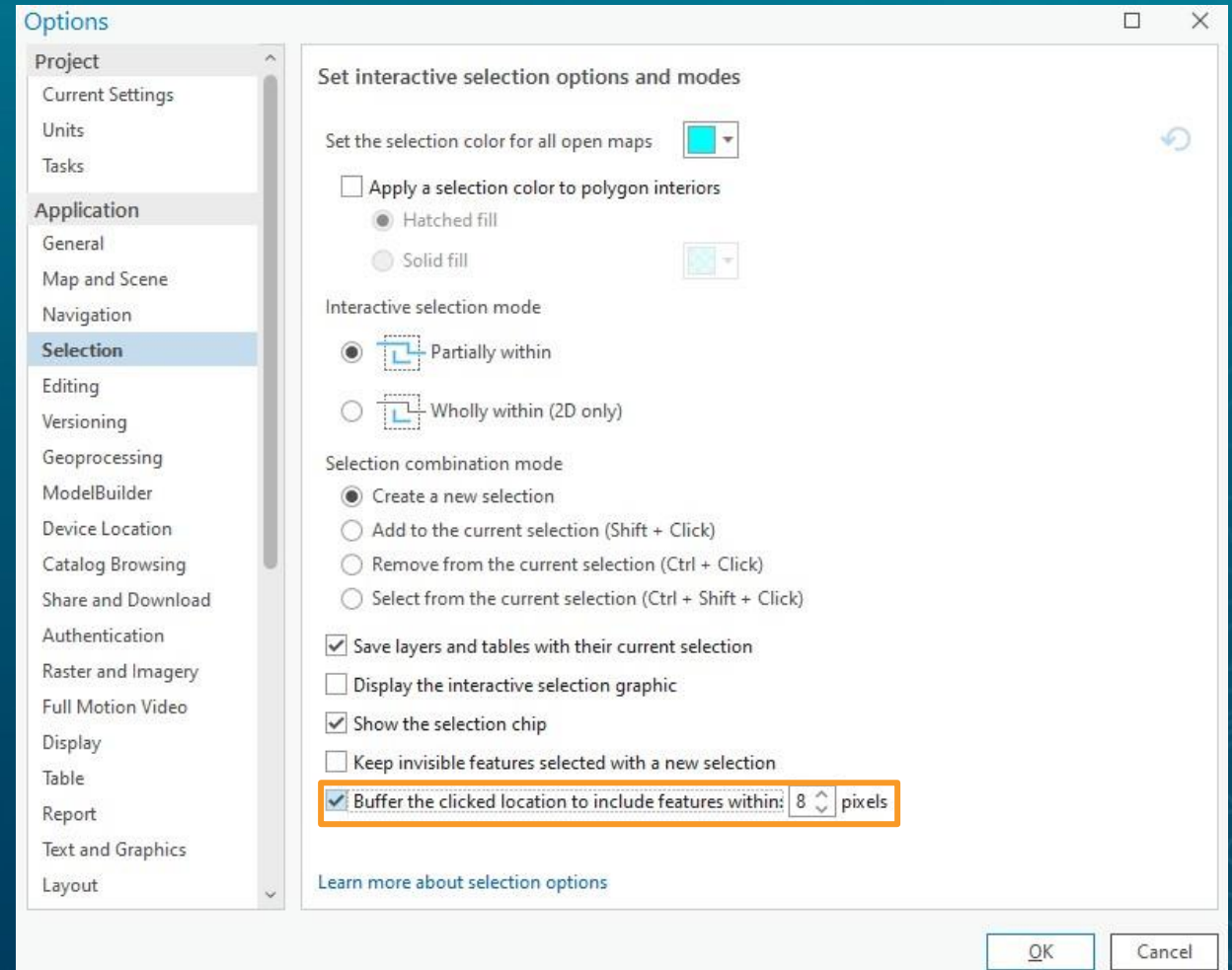
- **Navigate through Contents pane using first letter**
For example, C key



Performance and Productivity

Mapping

- **Click tolerance** for selections and popups



Performance and Productivity

Mapping

- **Print attribute table**

The screenshot shows the ArcGIS Pro interface with the 'State Boundaries' attribute table open. The table contains 21 rows of data, each representing a coastline segment. The 'Print' option is highlighted in the context menu, and a tooltip indicates the keyboard shortcut 'Print Table (Ctrl+P)' and the action 'Print the table.'.

OBJECTID	Shape	Type	Type_Desc	shape_Length
1	Polyline	3	Coastline	0.00405
2	Polyline	3	Coastline	5.90407
3	Polyline	3	Coastline	0.0118
4	Polyline	3	Coastline	0.64286
5	Polyline	3	Coastline	0.01825
6	Polyline	3	Coastline	0.00647
7	Polyline	3	Coastline	0.00416
8	Polyline	3	Coastline	0.00408
9	Polyline	3	Coastline	0.86915
10	Polyline	3	Coastline	0.00746
11	Polyline	3	Coastline	2.84057
12	Polyline	3	Coastline	0.01164
13	Polyline	3	Coastline	0.00604
14	Polyline	3	Coastline	0.00831
15	Polyline	3	Coastline	1.80602
16	Polyline	3	Coastline	0.02661
17	Polyline	3	Coastline	0.01745
18	Polyline	3	Coastline	0.01496
19	Polyline	3	Coastline	0.00652
20	Polyline	3	Coastline	0.00280
21	Polyline	3	Coastline	0.05996

Performance and Productivity

Automation

- Arcpy type hinting

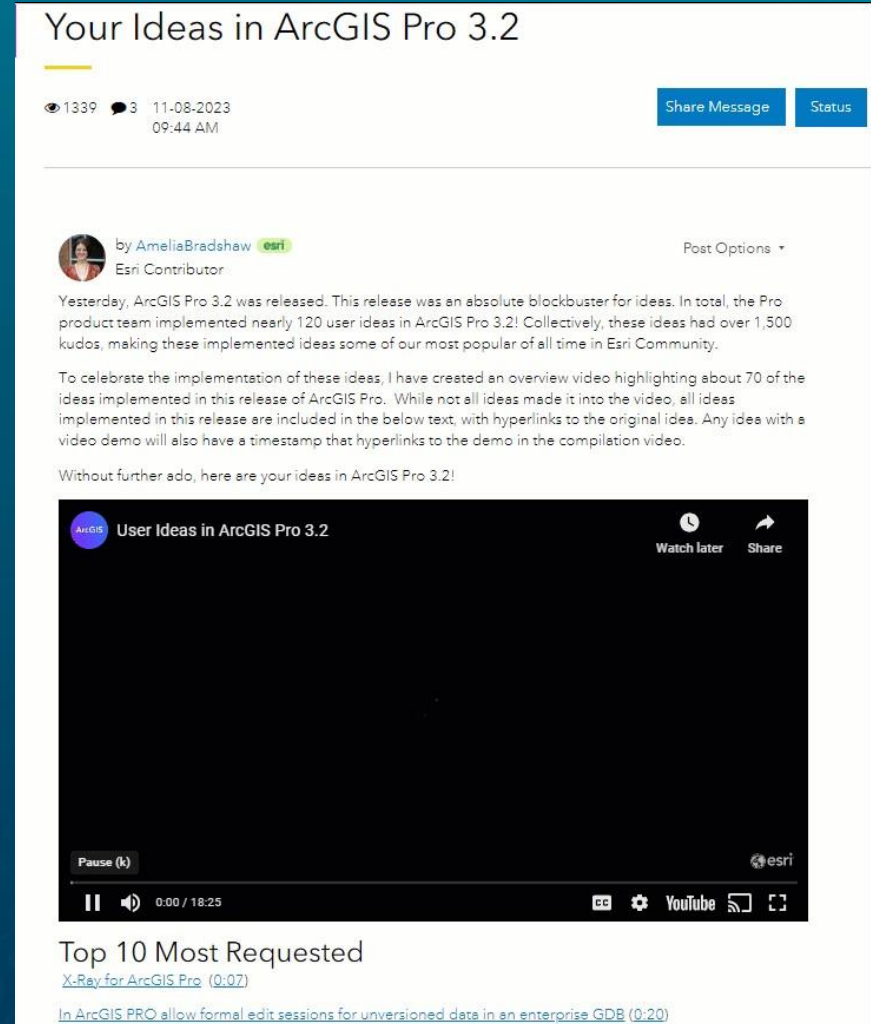
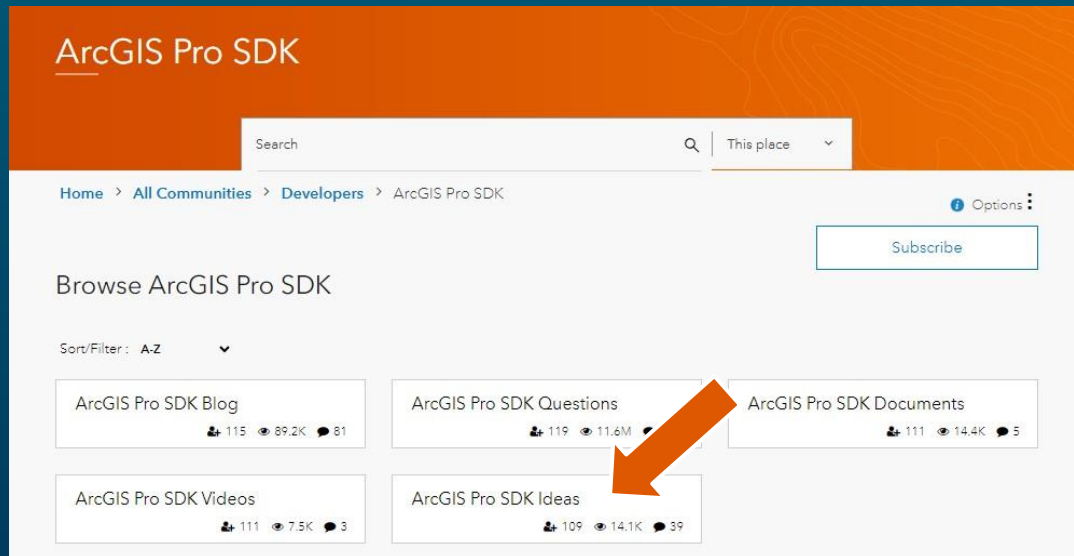
- Example: show arcpy.da class, function and member args
- String literals
- Dictionary keys
- Result objects

```
type-hinting.py 1 •
type-hinting.py > ...
1 # type hints
2 # don't affect runtime code (ignored)
3 # IDEs: VSCode but also PyCharm
4 # static code analysis (mypy)
5 # help you generate better code
6 # impose some consistency
7
8 import arcpy
9 # arcpy.da has members and args on each
10 fc = r"c:\temp\f.gdb\cities"
11
12 # show arcpy.da class & function
13 # show arcpy.da member's args
14 arcpy |
15
16
17 # works nicely at 3.2 without type hints
18 arcpy.Buffer_analysis
19 # did not work at 3.2
20 arcpy.analysis.Buffer
21
22 # literals
23 arcpy
24
25 # you don't have to guess at the keys
26 ii = arcpy.GetInstallInfo()
27 ii
28
29 # result objects
30 res = arcpy.analysis.Buffer(fc, buffer_distance_or_field=1)
31 # used to get nothing here
32 res
33
34 # NOT DONE/FUTURE RESEARCH
35 # no literals on gp tool wrappers (future research)
36 arcpy.analysis.Buffer(line_side)
37
38 # future research: adding other sub-modules and gp tool return
39 ras = arcpy.sa.Aspect()
40 ras
```

Engaged ArcGIS Pro User Community

Our users' contributions make ArcGIS Pro better

- 1,000+ new ideas in the past year
- 60+ ideas implemented in ArcGIS Pro 3.3
- New dedicated ArcGIS Pro SDK idea exchange



```
// show the compass and pass the  
mapRotation state data  
Compass(rotation = mapRotati  
// reset the Com  
rotation to  
mapView
```



esri[®]

**THE
SCIENCE
OF
WHERE**[®]

```
ist = new LayerList()
```

```
the top right cor
```

```
st, "top-right
```

```
center="-118,34"
```