Applying Spatial Analysis Techniques to Make Better Decisions

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GIS INSPIRING WHAT'S NEXT

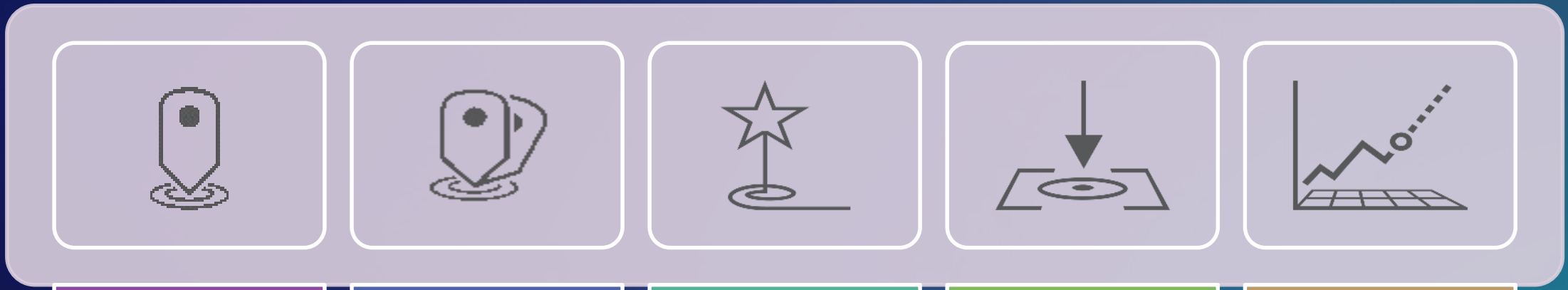
Topics

- Spatial Analysis Overview
- Demos and examples
  - Various types of spatial analysis
  - From basic to more advanced
  - Mixed ArcGIS products
- Take away points

Spatial Analysis Overview

Spatial Analysis

Gain value from location data to make better decisions



- Understand where
- Determine how things are related
- Find the best locations and paths
- Detect and quantify patterns
- Make predictions

Spatial Analysis

Top Trends

ArcGIS - Comprehensive Analytics Platform

Analysis Experience for Everyone

Fast Data Discovery & Analytics

Big Data Analytics

Online Analytics

Real-time Analytics

Professional Desktop Suite

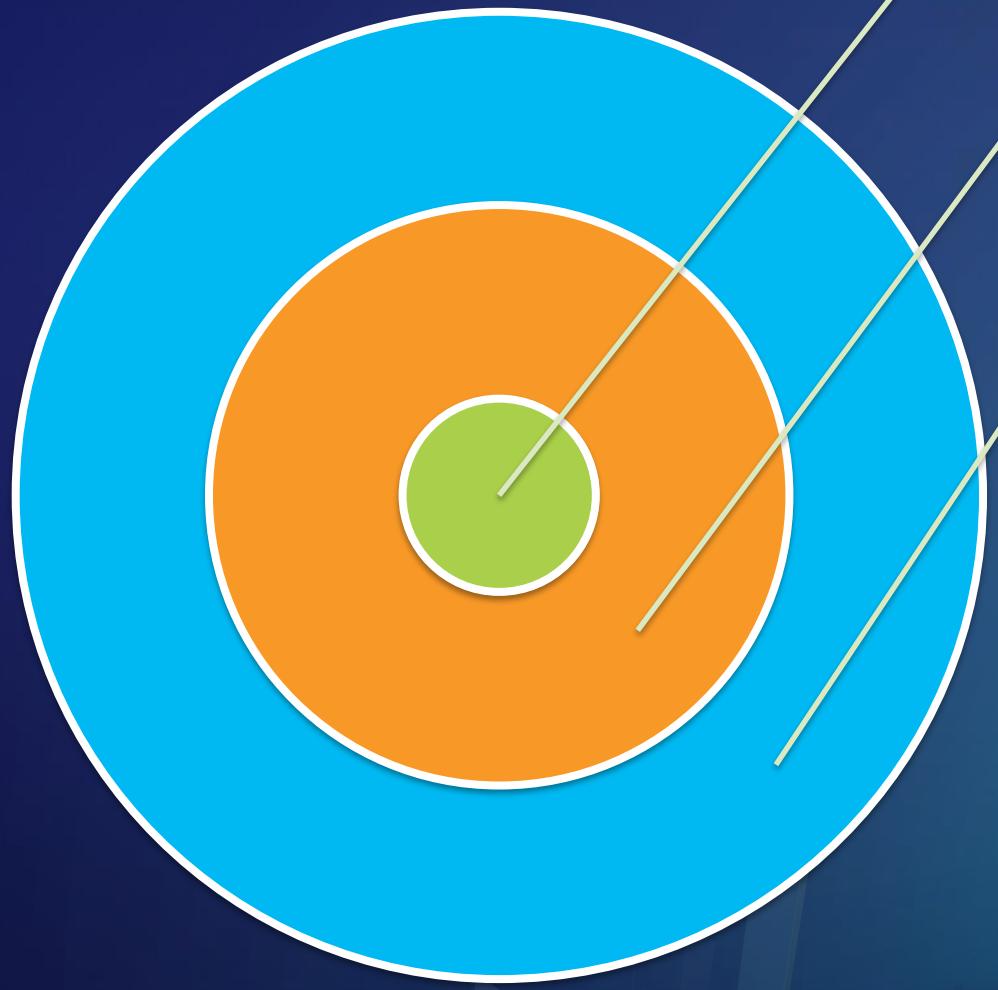
Python Notebooks & R Integration

Location-based Content & Services

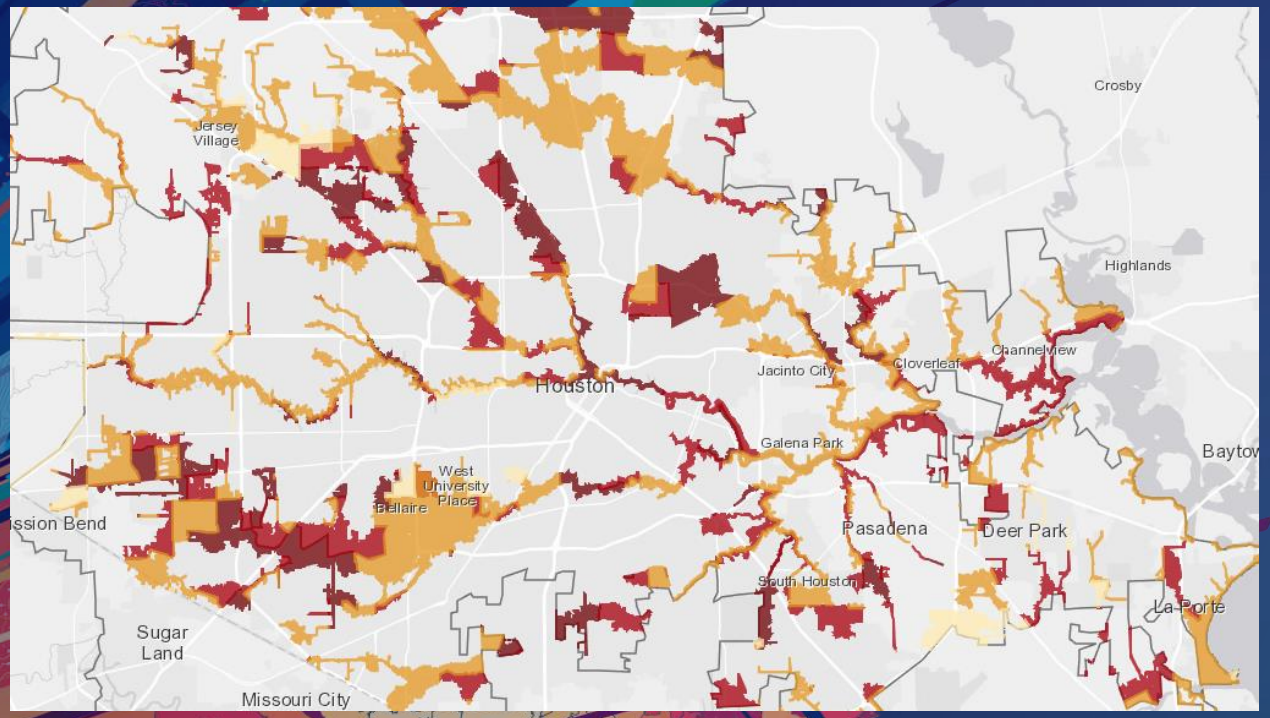
Focused Analytical Solutions

Spatial Analysis

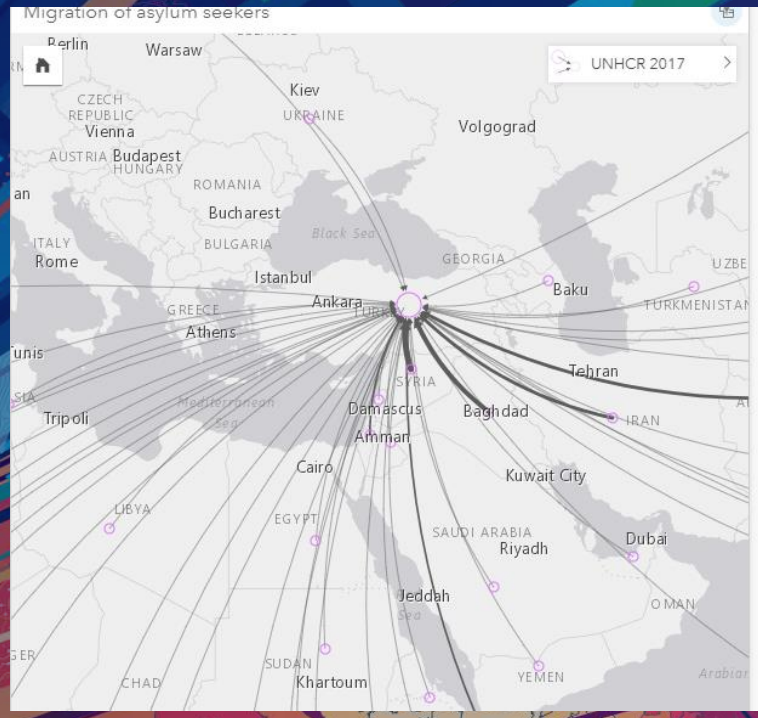
Our Goal



Demos and Examples



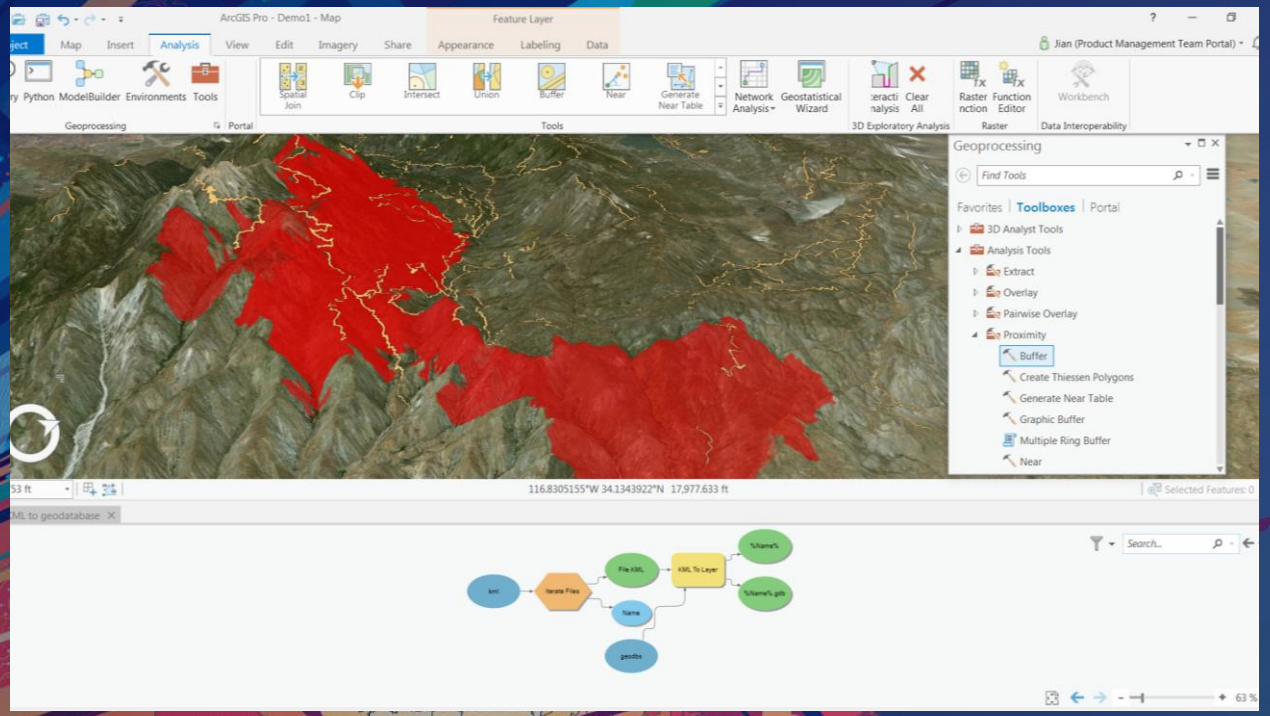
Spatial Analysis Online



Countries of asylum

Country of asylum	Refugees SUM
Turkey	3,480,347
Pakistan	1,393,157
Uganda	1,350,507
Lebanon	998,898
Iran	979,435
Germany	977,318
Bangladesh	932,219
Sudan	906,607
Ethiopia	889,411
Jordan	691,055
Congo DRC	537,086
Kenya	431,900
Chad	411,482
France	352,819
Cameroon	337,387
China	321,827
Tanzania	308,528
United States	292,582
South Sudan	283,412
Total	20,129,352

Analysis using Insights

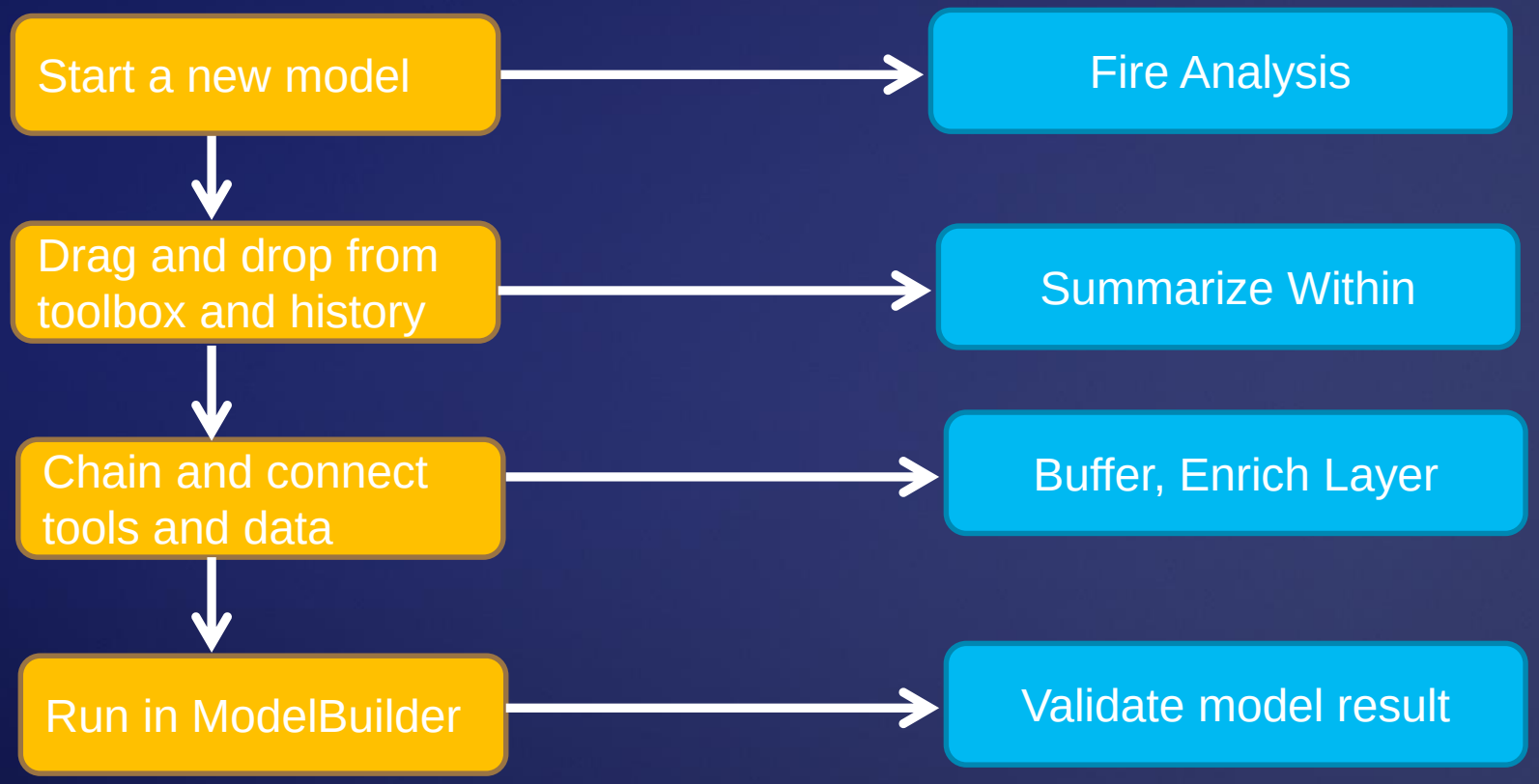


Analysis using ArcGIS Pro

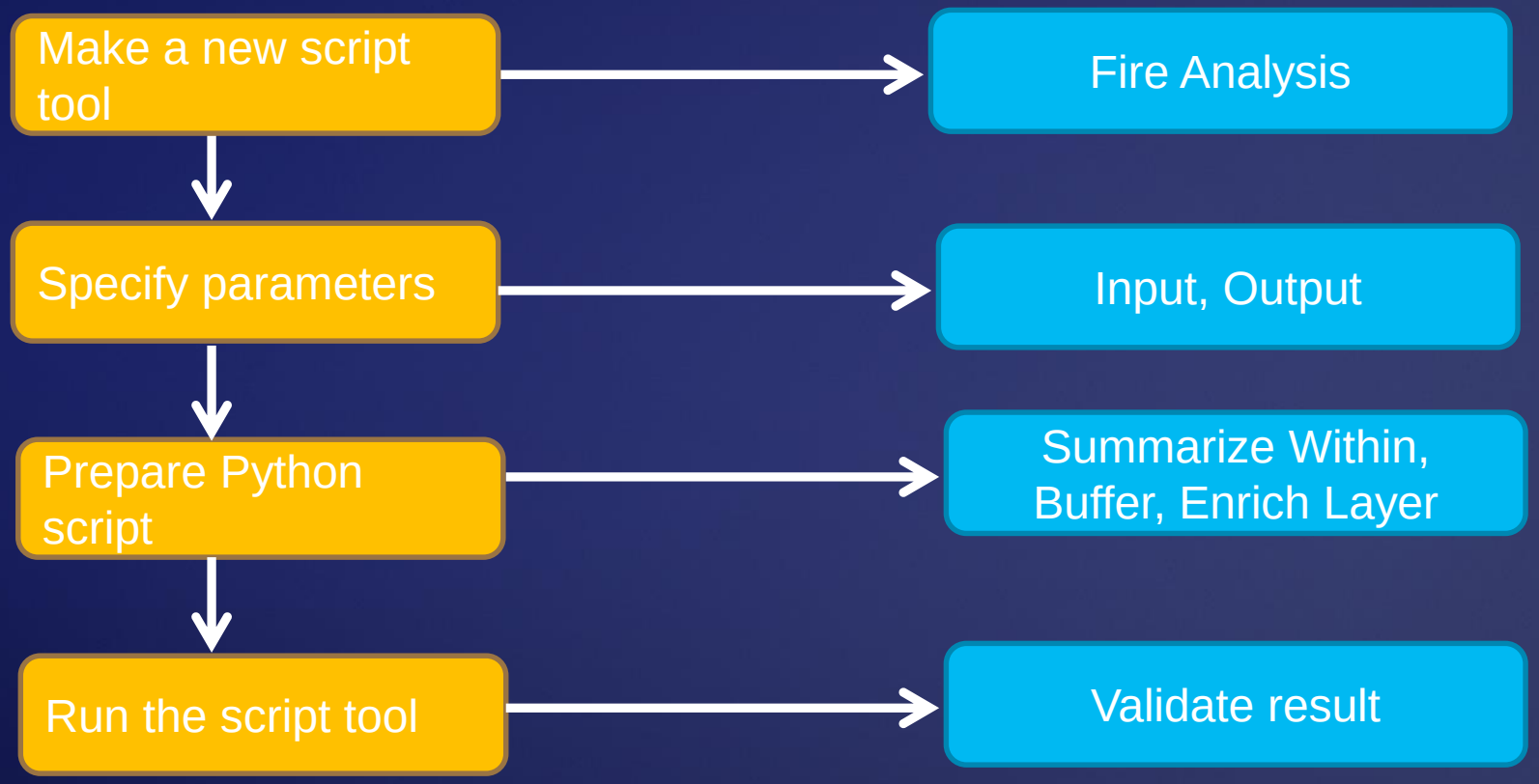
Demo Review

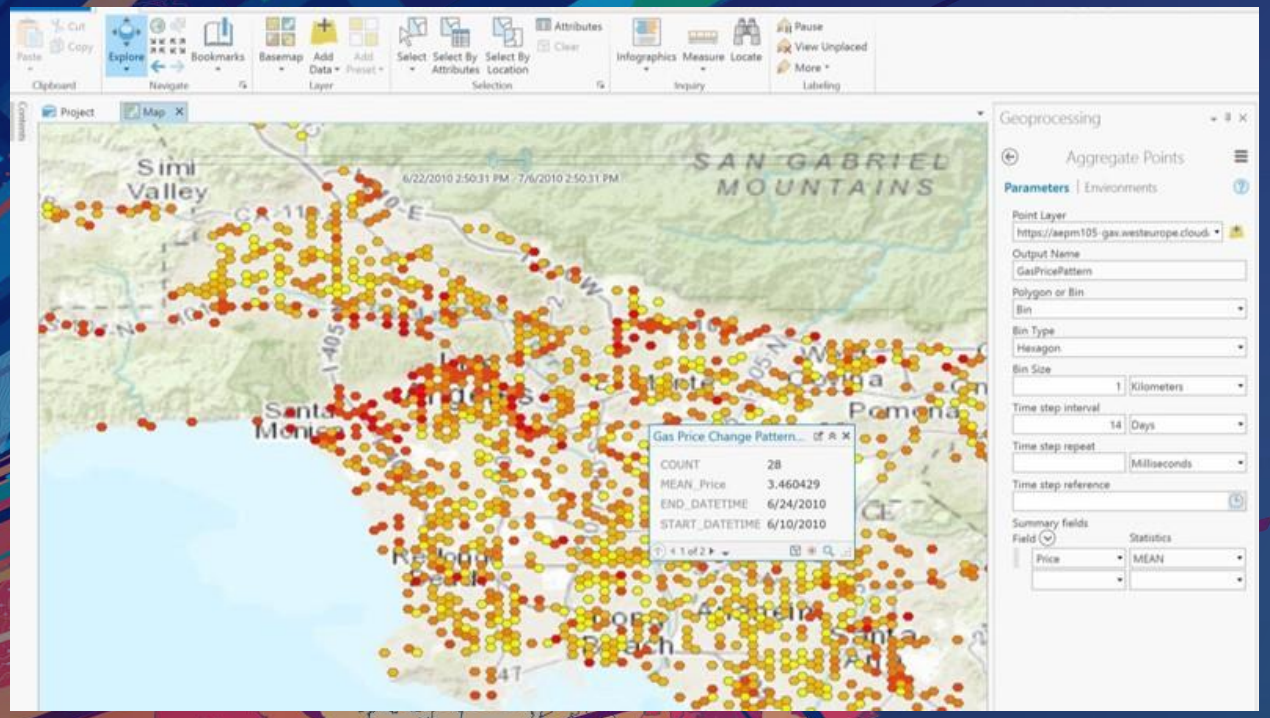
Add Geometry Attributes	Size of fire in acres
Add Field Calculation Field	% change in fire area day to day
Summarize Within	Impact of the affected areas
Enrich Layer	Total population of affected area

Demonstration review



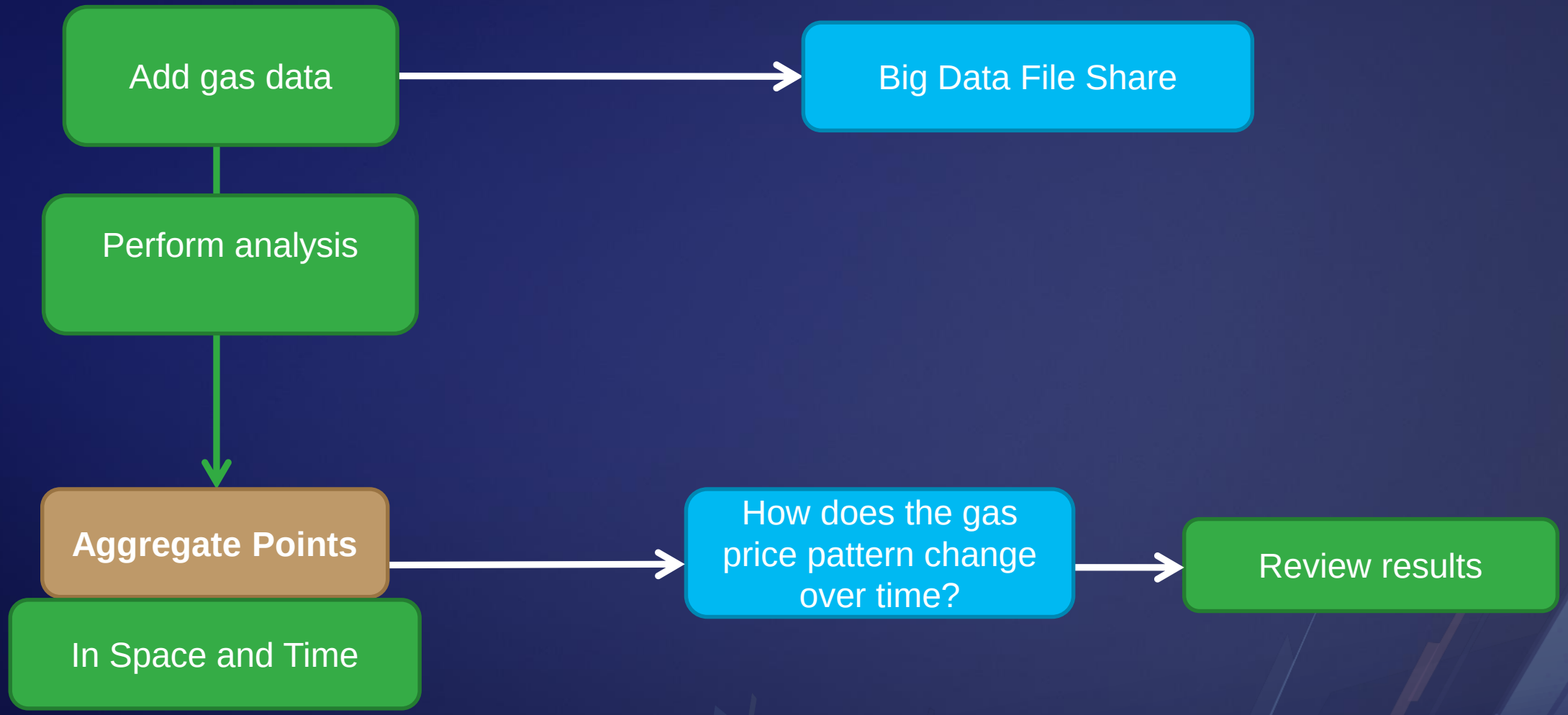
Demonstration review





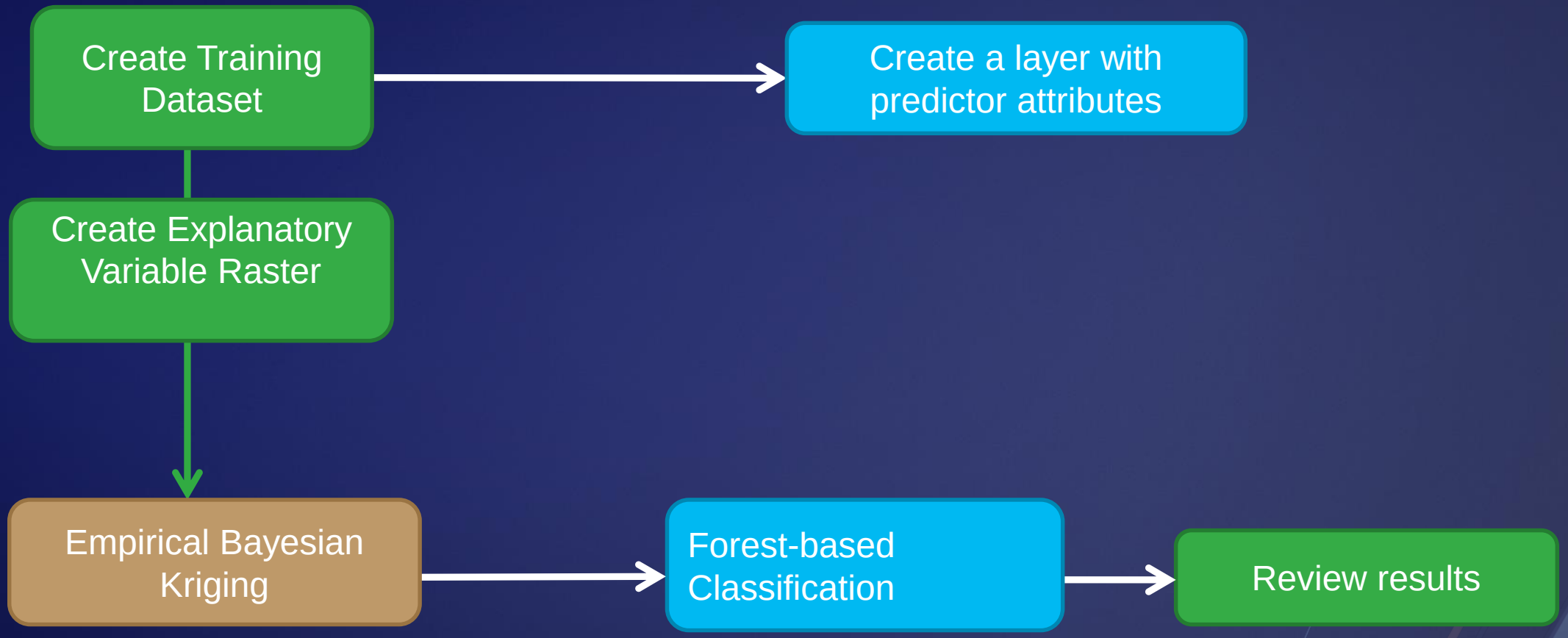
Analyze Big Data

Demo Review


Add gas data
Big Data File Share
Perform analysis
Aggregate Points
In Space and Time
How does the gas price pattern change over time?
Review results

Integrate Data Science

Demo Review


Create Training Dataset
Create a layer with predictor attributes
Create Explanatory Variable Raster
Empirical Bayesian Kriging
Forest-based Classification
Review results

Take Away Points

Take away points …

- Spatial analysis brings the true power of GIS
- ArcGIS is a comprehensive analytics platform, provides an analysis experience for everyone
- Esri continues to advance Spatial Data Science and make location intelligence available to all

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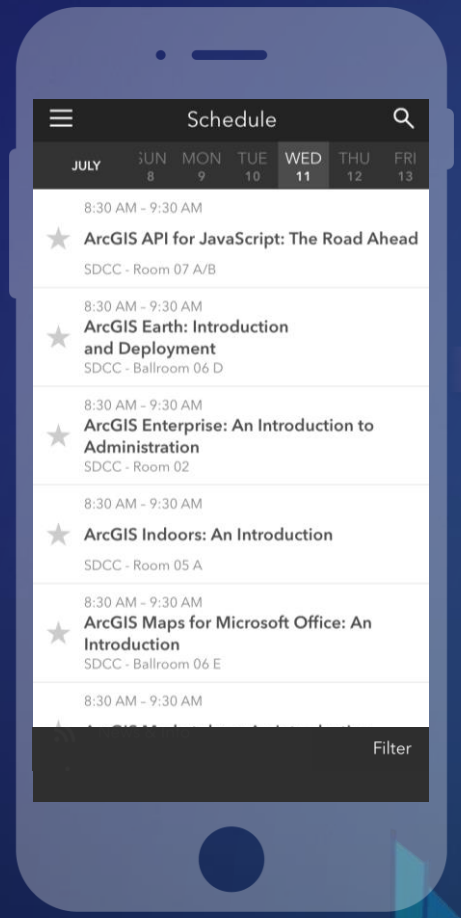
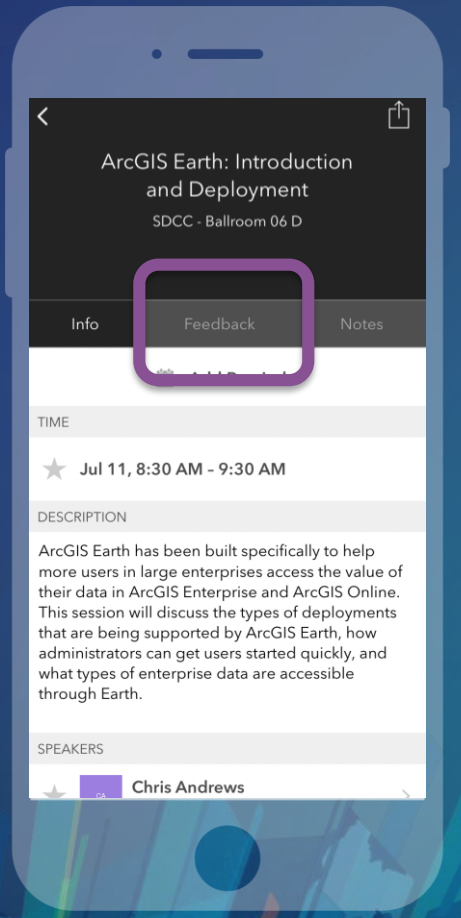
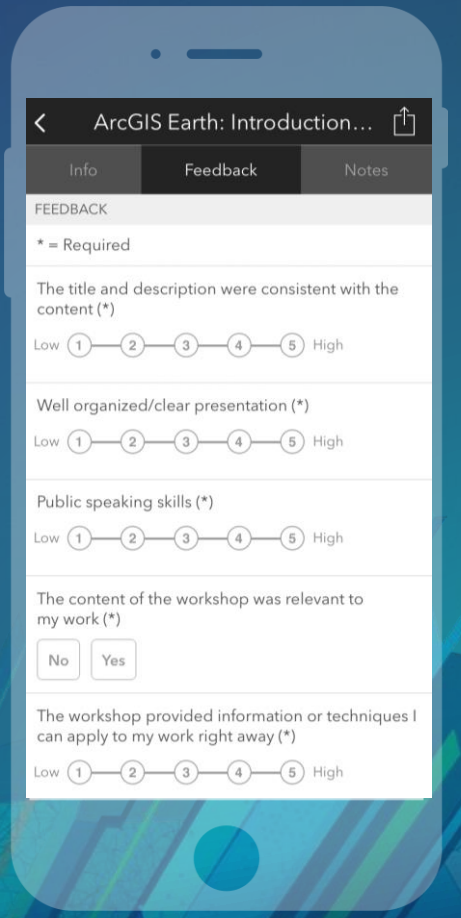


Scroll down to find the feedback section



Complete answers and select “Submit”



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