National Park Service
U.S. Department of the Interior

Alaska Regional Office

Animal Movement Tools

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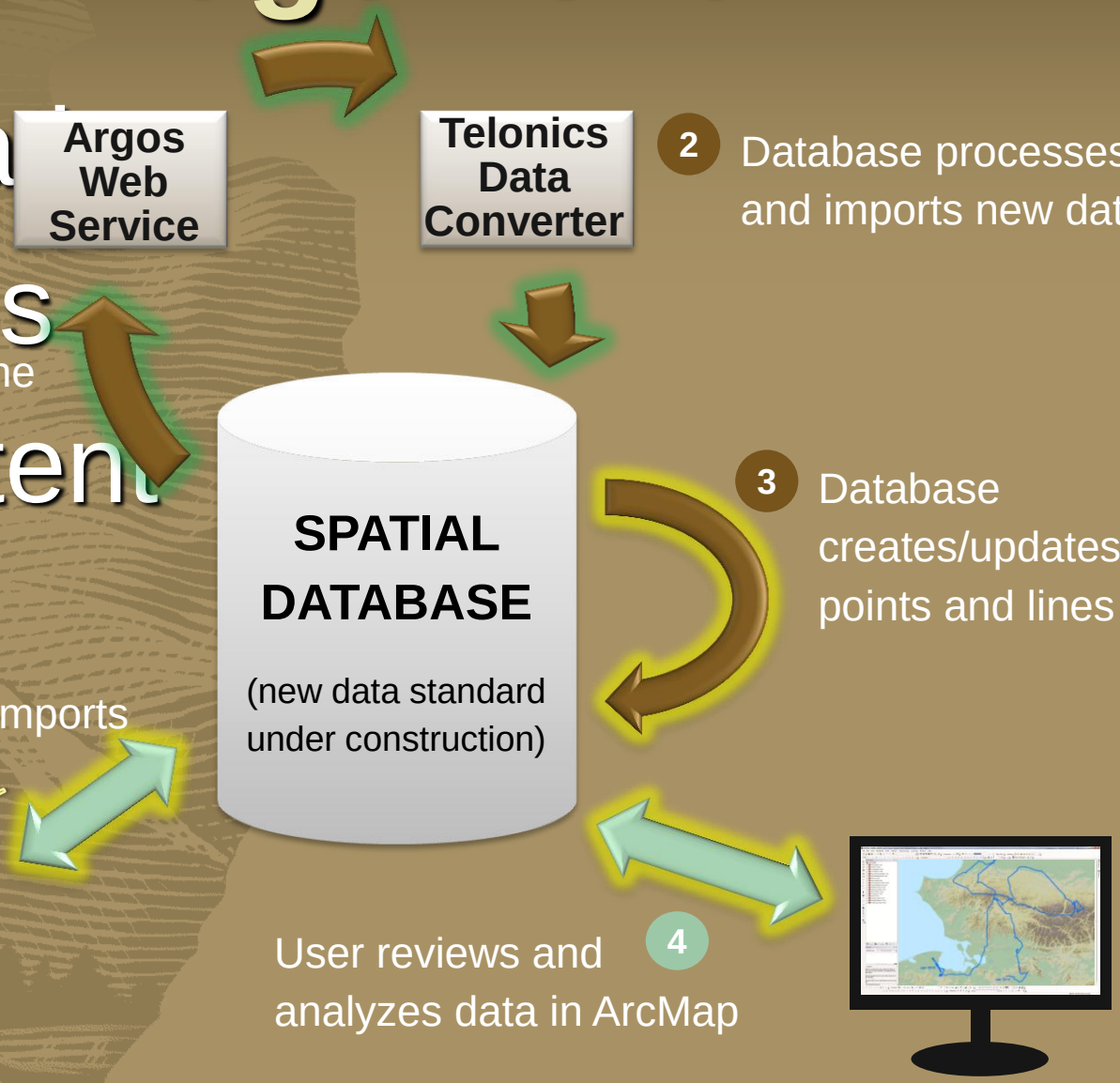
EXPERIENCE YOUR AMERICA

Animal Movement Tools

- Data Management
- Visualization
- Analysis

Data Management

- Automa
- Painless
- Consisten
- Robust

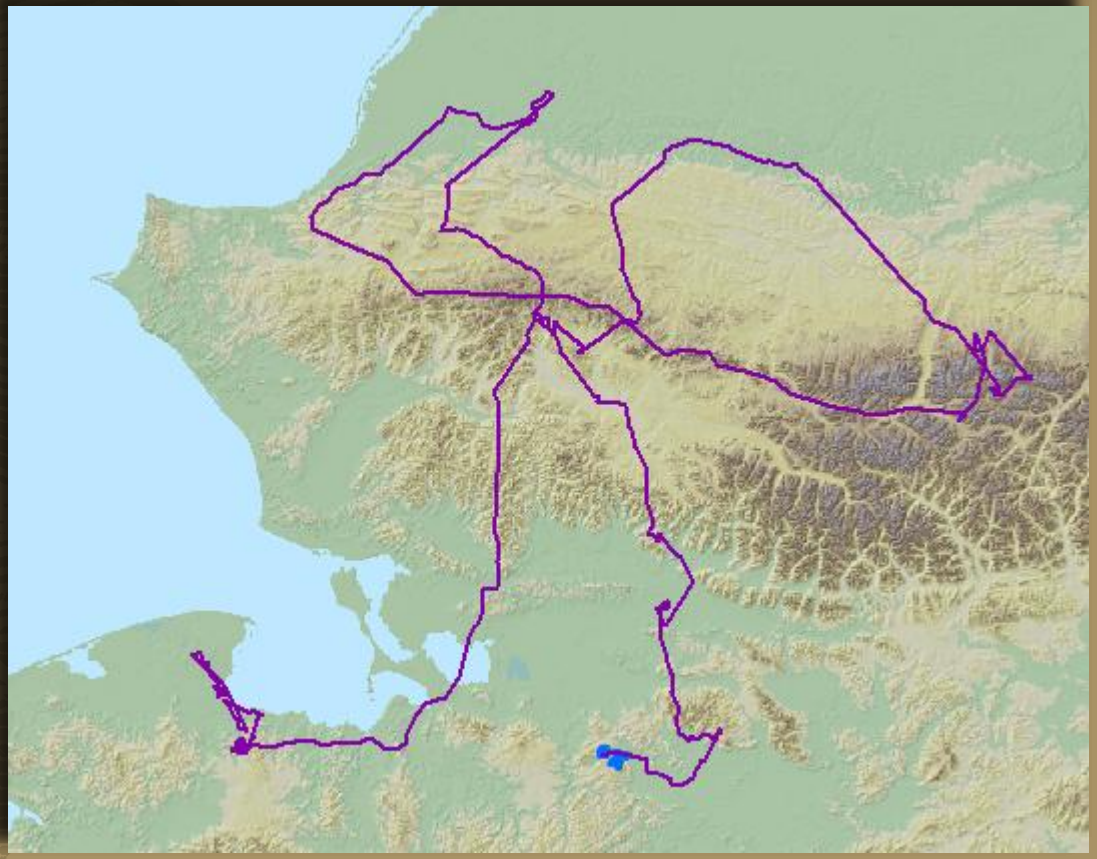


Visualization

- ArcMap Query Layers

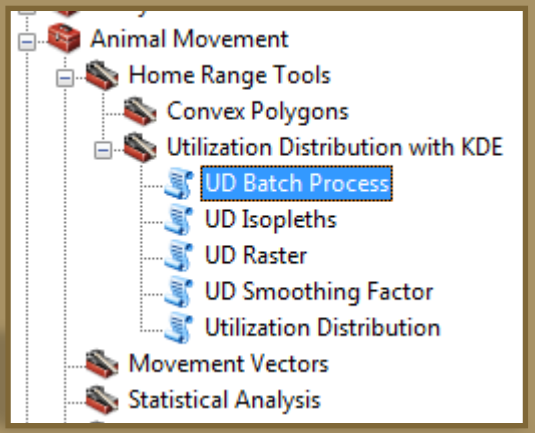
```
SELECT * FROM
ARCN_Animals.Locations
WHERE AnimalId =
'0901' AND FixDate
BETWEEN '2010-12-01'
AND '2011-04-01'
```

```
SELECT * FROM
ARCN_Animals.Movement
WHERE AnimalId = '0901'
AND year(StartDate) =
'2010'
```



Analysis Toolbox

- Movement Vectors
- Statistical Analysis
  - CSR, Clustering, Outliers, …
- Home Range Analysis
  - MCP, KDE, Local Convex Hull,
  - Brownian Bridge
- Others (TBD)
  - Static/Dynamic Interaction
  - Distance/Compositional Analysis
  - **Please provide your feedback**



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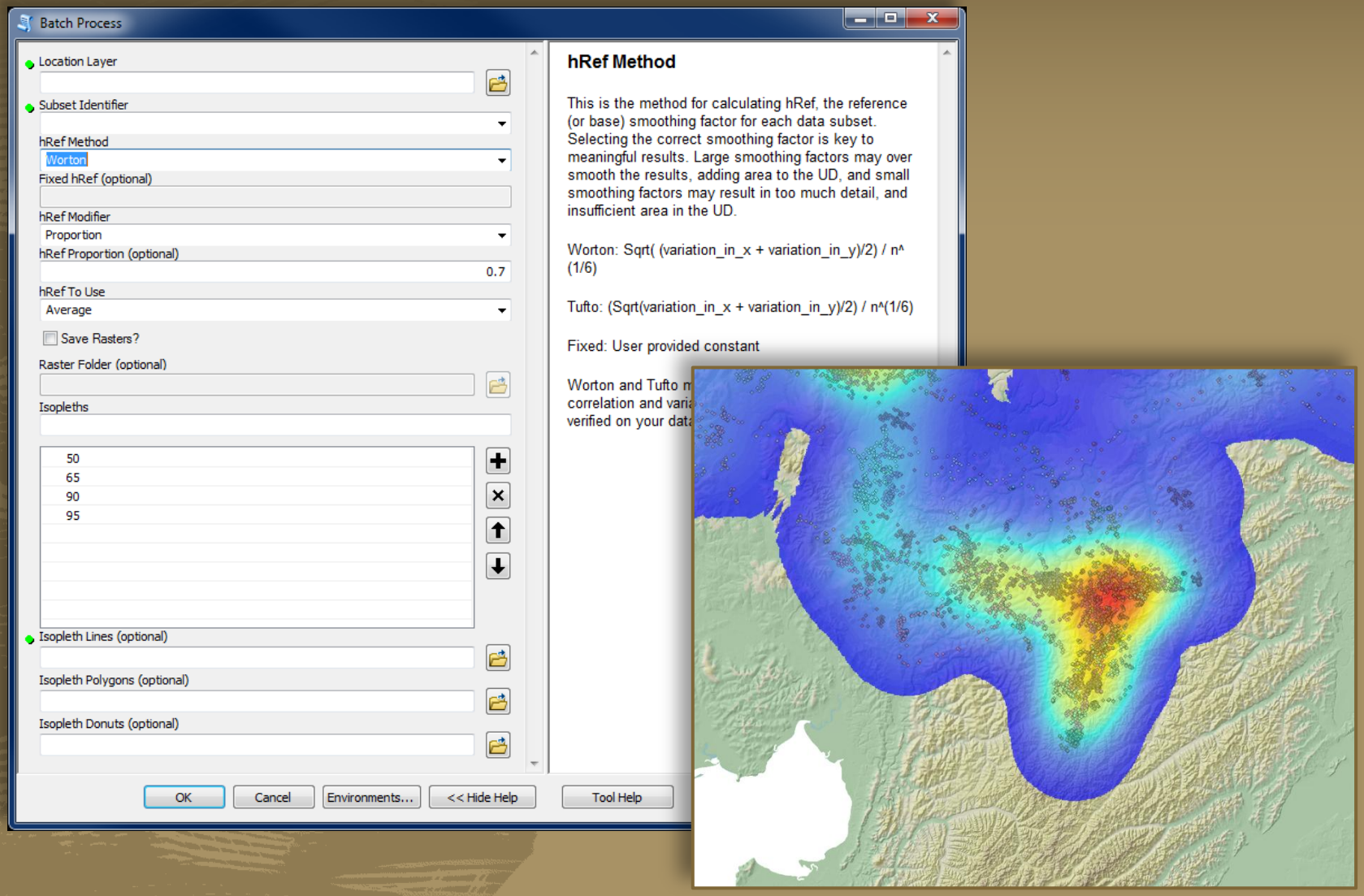
Kernel Batch Process



GIS Team

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