

DRAFT -- To be published in DMT'10 Proceedings
(see <http://ngmdb.usgs.gov/Info/dmt/>)

What's coming in ESRI ArcGIS 10 Desktop for better, faster, more efficient geologic maps, map production, and map serving

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INTRODUCTION

Esri is planning a major release of the ArcGIS software platform in 2010 (Figure 1), which will have significant implications for geologic map making. The new release will allow for better, faster, and more efficient workflows for the desktop user, will enhance collaboration for office and field mappers, and will enhance map publication.

In ArcGIS10, there will be new editing tools based on templates, more complete python scripting integration for workflows and automation, new 3D editing capabilities, major advances in image management-analysis, and new map production tools (“Data Driven Pages”) to facilitate map production. Regardless of whether you are using ArcGIS in a desktop, mobile, or server environment, the new enhancements will improve how geographic information is leveraged throughout your enterprise. ArcGIS 10 will “transform the way you use GIS”. ArcGIS 10 is expected to be available in June, 2010.

GIS technology and its use for geologic map making is constantly evolving (Figure 2). The most current information about existing Esri GIS applications can be found at the Esri website <http://www.esri.com>, more information about training for mobile GIS can be found at <http://training.esri.com>, and current geoscience industry examples and case studies can be found at <http://www.esri.com/industries.html>. Please see <http://www.esri.com/software/arcgis/whats-new/new-features.html> for details on new features.

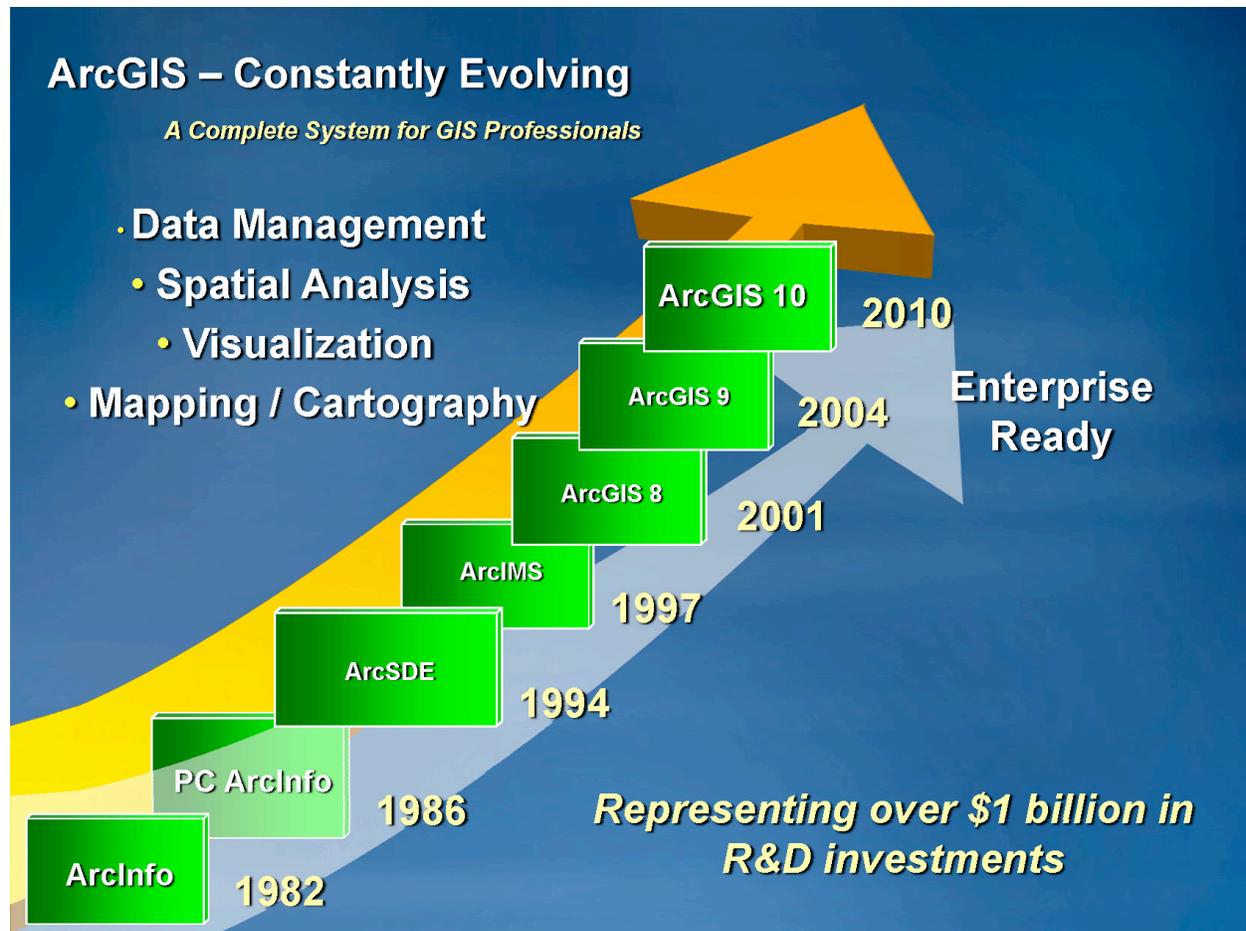
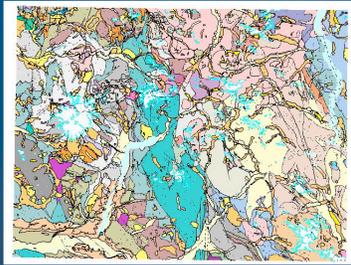
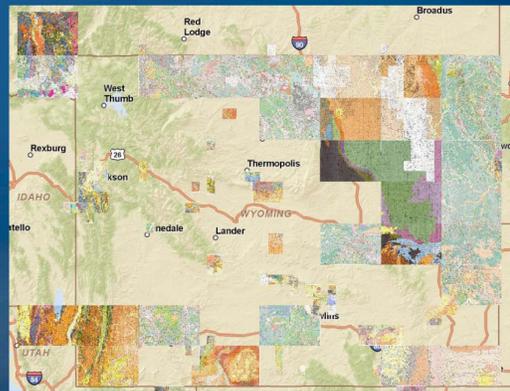


Figure 1. Esri's ArcGIS software is constantly evolving. From the release of ArcInfo in the early 1980's to the pending release of ArcGIS 10 in 2010, Esri's GIS software provides ever improving tools for data management, spatial analysis, visualization, and mapping.

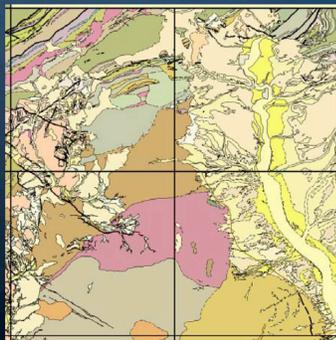
Geologic Maps are also Evolving...



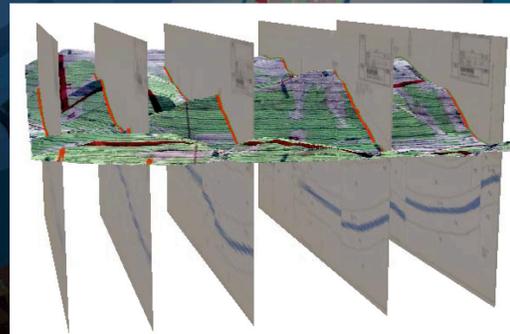
Esri's Geologic Map Template (GMT)
<http://resources.arcgis.com/>



USGS Scanned Map Project
<http://energy.er.usgs.gov/arcgis/services>



USGS NCGMP
<http://ngmdb.usgs.gov/Info/standards/NCGMP09/>



... and coming soon, 3D

Figure 2. Geologic maps are also evolving from early paper maps of the USGS and state geological surveys to ongoing efforts such as Esri's Geologic Mapping Template (<http://resources.arcgis.com/gallery/file/map-templates/details?entryID=6AA281F3-1422-2418-8825-C44631AFA8EE>) and the USGS's "NCGMP09" geologic map standard database design (<http://ngmdb.usgs.gov/Info/standards/NCGMP09>) and scanned geologic map delivery effort (<http://energy.er.usgs.gov/arcgis/services>).

DEMONSTRATION

Live demonstrations of ArcGIS 10 using ArcMap, 3D Analyst Extension and ArcGIS Explorer were quickly presented during the DMT meeting (Figure 3). A video file of the demo is available directly from the author and is posted at the DMT 2010 website (http://ngmdb.usgs.gov/Info/dmt/docs/DMT10_Lynch1.wmv).

Demos

3D Editing with ArcGIS 10 3D Analyst Extension at the Teapot Dome, NPR3, Wyoming

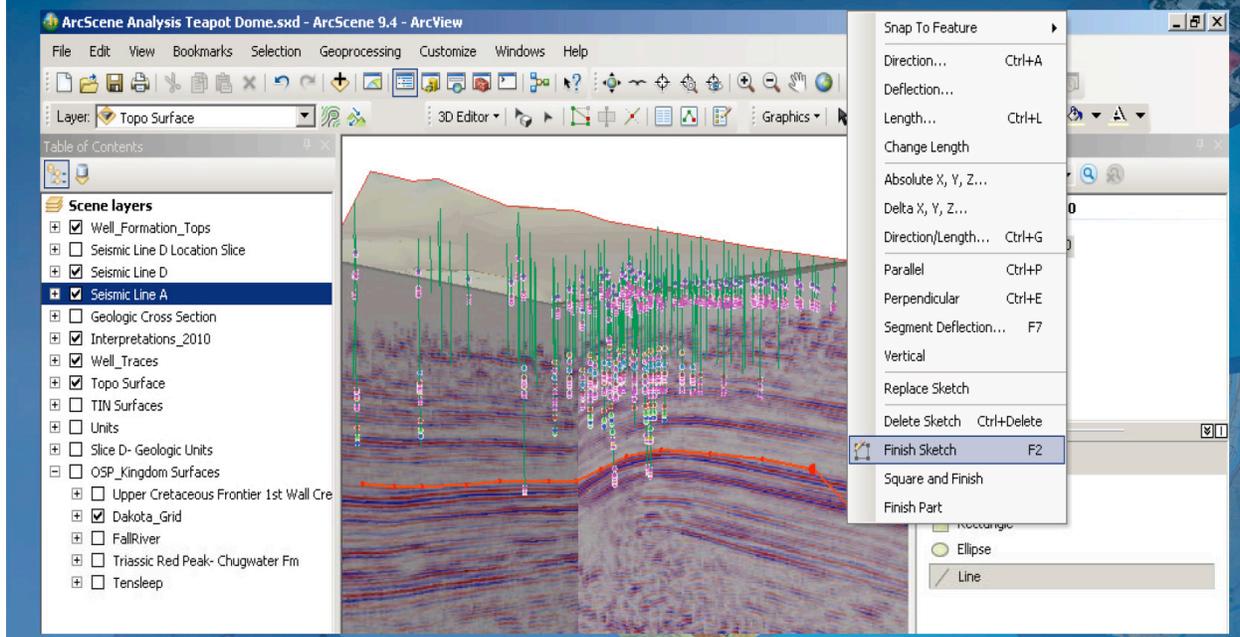


Figure 3. Screen capture of live demo of ArcGIS 10 3D Analyst extension with data from Teapot Dome, Natrona County, Wyoming. NPR3 is the Naval Petroleum Reserve #3 (<http://ludb.clui.org/ex/i/WY3148/>).

ACKNOWLEDGMENTS

The author thanks Geoff Wade and Danny Spillmann (Esri) for their ongoing support of geology and natural resource industry activities at Esri, and Dave Soller (USGS) for all his tireless work with the DMT program.

REFERENCE

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