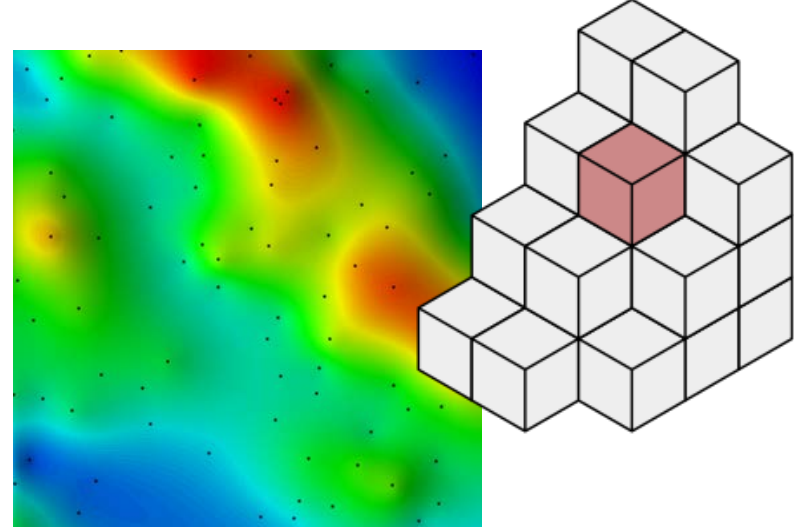


Impact of Geographic Information Systems (GIS) at NASA

- Significant increase in the number of users interested in using NASA Earth Science data in a GIS
- Per the ACSI survey results for "Top tools used to work with data": ArcGIS ranked number #1 at 64%
- NASA Earth Science providers utilize GIS to support the delivery of priority data products, experiment with various geospatial technologies, and are becoming more interested GIS capabilities
- Exploration in GIS has led to opportunities for on-going software enhancements and mission partner technical coordination

Why do end users want GIS?

- Integrated with other analysis and visualization platforms
- Interoperable with other non-scientific data formats
- Easily discovered, accessed and used via services
- Ability to deploy powerful raster analytics



Tools used to work with data	2017	2017
	%	N
ArcGIS	64%	2,349
Convert to Vector	4%	159
ENVI	32%	1,176
ERDAS/IMAGINE	21%	766
Excel	27%	980
Fennel	1%	29
Geomatica	4%	148
Global Mapper	15%	562
GRASS	3%	118
HDFLook	12%	435
HDFView	1%	51
HDFView	9%	311

What is the ArcGIS Platform?

GIS is Evolving...

Becoming Part of an Interconnected Platform

Bringing Together Data, Technology and People...
... Creating a Framework for Solving Complex Problems



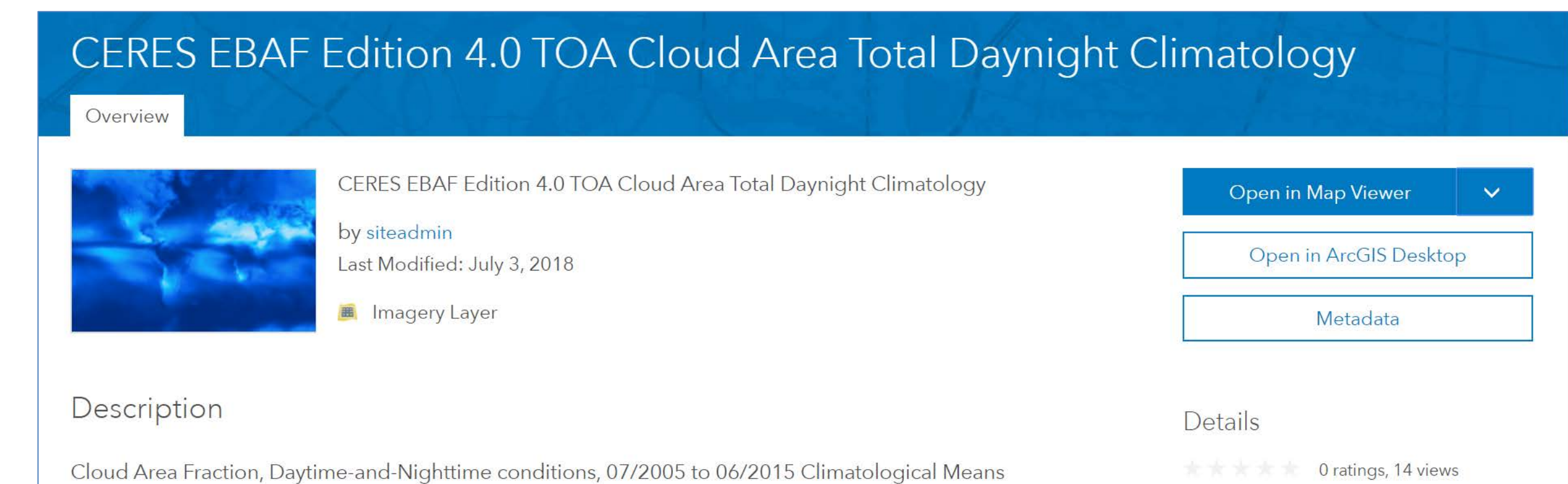
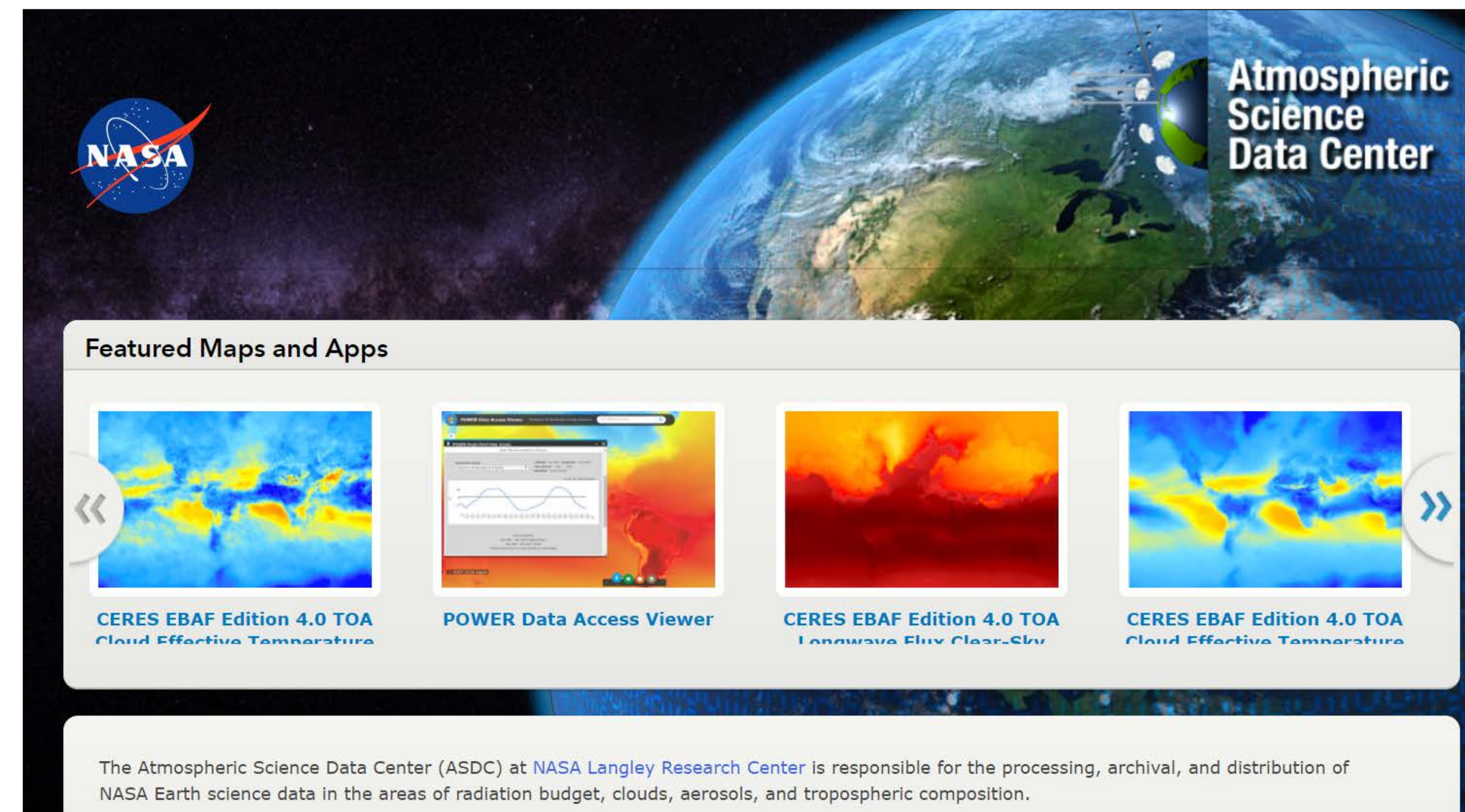
Possibilities with GIS

- App development, customization, and rapid deployment
- Distributed Raster Analytics
 - Quickly process massive imagery or raster datasets
 - Execute advanced, customized raster analysis
- Integration with GeoPlatform and Esri Living Atlas
 - Increased public awareness, consumption, and use of NASA data across a diversifying user base
- Portal to Portal Collaboration
 - Aggregate and share information products across the enterprise
- ArcGIS Enterprise in the Cloud
 - ArcGIS Enterprise available on AWS Marketplace and Azure
 - Use ArcGIS Cloud Builder to easily build sites and configure autoscaling
 - Deploy different architectures using CloudFormation templates

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GIS Platform: Capabilities and Possibilities



Access the GIS Platform and additional information

NASA's Enterprise License Agreement (ELA) allows the agency to acquire access to Esri ArcGIS software at no additional cost to programs

Top 5 Reasons to Leverage the GIS Platform:

1
Provides ability to apply string of pre-packaged or custom functions together

2
Provides Pre-packaged Common Machine Learning Algorithms and Techniques

3
Simple Interfaces that streamline the creation of spatial analysis through maps, charts, and apps.

4
Improved capabilities for handling and interpreting large-scale analytics and big multidimensional data.

5
Collaboration features to connect and analyze information across the enterprise.

