

# NGDA Dataset Report

**Official NGDA Title:** Shuttle Radar Topography Mission (SRTM)

**Metadata Record Title:** Shuttle Radar Topography Mission 1 Arc and 3 Arc Second Digital Terrain Elevation Data - National Geospatial Data Asset (NGDA)

**A-16 NGDA Theme:** Elevation

## Executive NGDA Theme Champion(s):

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## Dataset Manager(s):

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## Metadata:

**Registration Status:** Complete

**Registered on** 4/30/2015

**GeoPlatform Link\*:** <https://www.geoplatform.gov/node/243/983cbae7-c4d1-47f2-aa04-f96752c39851>

**Data.gov Metadata Link\*:** <http://catalog.data.gov/harvest/object/0d4247bd-6c88-41e8-b00f-89ce36b6a5da/html>

\*If the metadata has been updated and reharvested after publication of this report, the link may no longer be valid. The dataset may be searched for manually in Data.gov or GeoPlatform.gov.

# NGDA Lifecycle Maturity Assessment (LMA) Report

## Time Frame:

2002-Present

## LMA Submission:

**Status:** Complete

**Date:** 10/28/2015

**Extension Requested:** No

## LMA Reviewer(s):

**Supervisor:** binnie@usgs.gov

**Theme Lead:** Did not review

**Executive Champion:** Did not review

**SAOGI\*:** Did not review

**Other:** Did not review

## LMA Verifier:

**Name:** Doug Binnie

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## Attachments:

To get access to any attachments referenced in the report, email the LMA Help Desk at [NGDA\\_LMA\\_help@fgdc.gov](mailto:NGDA_LMA_help@fgdc.gov). Please use the subject "Dataset Report Attachment(s)" and indicate the associated official NGDA title.

\*Senior Agency Official for Geospatial Information (SAOGI)

## Lifecycle Maturity Assessment (LMA) Summary

### Overall Maturity:

**Optimized; Established**

General Questions: 100%

**Optimized; Established**

Stage 4 - Access: 100%

**Optimized; Established**

Stage 1 - Define/Plan: 86%

**Mature; Consistent**

Stage 5 - Maintain: 82%

**Mature; Consistent**

Stage 2 - Inventory/Evaluate: 100%

**Optimized; Established**

Stage 6 - Use/Evaluate: 100%

**Optimized; Established**

Stage 3 - Obtain: 66%

**Managed; Predictable**

Stage 7 - Archive: 100%

**Optimized; Established**

### NGDA Dataset Maturity Definitions:

How To Calculate Maturity: [https://www.geoplatform.gov/sites/default/files/How\\_to\\_Calculate\\_Maturity.pdf](https://www.geoplatform.gov/sites/default/files/How_to_Calculate_Maturity.pdf)

Maturity	Maturity Characteristics for All Lifecycle Stages
Optimized; Established Rank = 5	Dataset meets virtually all business needs of all users. The dataset is considered authoritative by owners and secondary users. It is curated across all stages of the approved lifecycle. Future needs are defined on a regular basis and resources for addressing both current and future business requirements are available.
Mature; Consistent Rank = 4	Dataset meets all the business needs of the primary owner and most of the secondary users. The dataset is curated and used as authoritative by the primary owner. Dataset is used widely by secondary users actively engaged in sustaining the dataset. Future needs are identified and steps are planned to address these. All stages are supported and reviewed on a recurring basis. The dataset is well managed in relation to the approved lifecycle.
Managed; Predictable Rank = 3	Dataset meets a significant number of the business needs of the primary owner and is widely used as an authoritative resource by secondary users. Benchmark activities are occurring in at least four of the approved lifecycle stages. Management practices in relation to the approved lifecycle is moderate but consistent. Dataset is integrating changing business requirements in lifecycle stages impacting overall maturity.
Transition; Transformation Rank = 2	Dataset meets business needs of the primary owner and has moderate use by secondary users. Benchmark activities are occurring in at least three stages. Efforts to integrate funding, include partners, and obtain data are not supported in a sustained manner. Management practices in relation to the stages of the approved lifecycle is limited.
Planned; Initial Development Rank = 1	Dataset limited in meeting business needs of the primary owner. Benchmark activities in the approved lifecycle are just starting to consider secondary uses, partnerships are forming to support additional dataset uses. Dataset development is in a very early stage. Minimal or limited management against the benchmarks in the approved lifecycle.
No Activity Rank = no activity	Dataset meets project or local business needs of the primary owner, secondary or additional uses or users were not considered, not recognized as an authoritative data or is part of a similar dataset. Not managed to any of the benchmarks in the approved lifecycle.

## General Questions for All Stages

1) Is there a recurring process to obtain funding for all lifecycle stages of this dataset?

**Answer:** Funding support is part of agency budget on a recurring basis, funding is consistent and tied to business processes, and supports all lifecycle stages.

**Justification Comment:**

**Attachment(s):** 0

Funding to support the SRTM Collection is provided by the USGS LRS program on an annual basis. This allocation is included as part of the base funding provided by the program.

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2) Is there a process in place to ensure that open government and transparency guidelines are followed in all lifecycle stages for this dataset?

**Answer:** Process is published as appropriate with respect to sensitivity requirements, process is transparent, published appropriately.

**Justification Comment:**

**Attachment(s):** 0

The SRTM data collection is available openly to the public through the Earth Explorer user interface (<http://earthexplorer.usgs.gov>). All pertinent mission and collection-level information is published at <https://lta.cr.usgs.gov/SRTM>. In addition to Earth Explorer, collections are also registered within the USGS Science Data Catalog (<http://data.usgs.gov/datacatalog/#q=SRTM%20AND%20NGDA>) and Data.gov ([http://catalog.data.gov/dataset?tags=ngda&q=SRTM&sort=score+desc%2C+name+asc&res\\_format=ted%2C+bil%2C+or+geotiff](http://catalog.data.gov/dataset?tags=ngda&q=SRTM&sort=score+desc%2C+name+asc&res_format=ted%2C+bil%2C+or+geotiff)) and

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3) Are there processes and tools in place so that staff are sufficiently knowledgeable to ensure a continuity of the dataset for all stages of the lifecycle, especially during staffing transitions?

**Answer:** Processes and tools to ensure dataset continuity are in place and implemented for all lifecycle stages.

**Justification Comment:**

**Attachment(s):** 1

EROS has a policy in place to assess candidate datasets.

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## STAGE 1 - Define/Plan

4) Are user and business requirements defined and formalized?

**Answer:** A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

**Justification Comment:**

**Attachment(s):** 1

SRTM was delivered to EROS "As-Is", meaning that EROS had no input to the initial user requirements regarding the mission planning. All statements of work were developed through an official MOU process between the USGS and NIMA (NGA). EROS does provide access and distribution based upon user requirements (e.g. reformatting from DTED to GeoTIFF).

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5) How are partners/stakeholders involved in the requirements collection process?

**Answer:** Ad hoc process is used for involving Partners/stakeholders in identifying requirements.

**Justification Comment:**

**Attachment(s):** 0

The SRTM collection was received "as-is". USGS EROS had no input into the collection requirements.

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6) Is there a quality assurance process for the dataset?

**Answer:** Quality assurance published as appropriate with respect sensitivity requirements.

**Justification Comment:**

**Attachment(s):** 0

Appropriate levels of testing are performed before any release of initial datasets or modifications are completed.

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7) Is there a process to evaluate the sensitivity, privacy, and confidentiality of this dataset?

**Answer:** Sensitivity, privacy, and confidentiality evaluations fully implemented, reviewed and updated on a recurring basis.

**Justification Comment:**

**Attachment(s):** 1

All SRTM data was documented by NGA as publicly available.

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8) Are defined data standards used in collecting, processing, and/or rendering the data?

**Answer:** Standards fully implemented documented and published as appropriate.

**Justification Comment:**

**Attachment(s):** 0

Not applicable for this dataset, but procedures are in place to ensure that any licensed or restricted data are only made available to those users with the correct credentials

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## STAGE 2 - Inventory/Evaluate

9) Is there a process for determining if data necessary to meet requirements already exist from other sources (either within or outside the agency) before collecting or acquiring new data?

**Answer:** Process for determining appropriate data is being reused fully implemented, reviewed, and updated on a regular basis.

**Justification Comment:**

**Attachment(s):** 0

In the case of SRTM, USGS EROS was designated by NIMA (NGA) as the distribution point for Finished Level 1 and Level 3 data.

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## STAGE 3 - Obtain

10) Is there a process for obtaining data in relation to this dataset?

**Answer:** No.

**Justification Comment:**

**Attachment(s):** 0

SRTM was received from NGA "As-Is" and is currently static. EROS had no role in the acquisition phase of this project.

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11) Is the metadata in a FGDC endorsed geospatial metadata standard?

**Answer:** Metadata is available in a format endorsed by the FGDC, it fully describes the dataset and provides all the information required to make the dataset discoverable, accessible, and usable.

**Justification Comment:**

**Attachment(s):** 0

Through Earth Explorer, all records are available in FGDC format.

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12) How complete is the geographic coverage as defined in the requirements for the dataset?

**Part 1 Answer:** Business requirements for cyclic updates identified and a process is in place.

**Part 2 Answer:** Dataset has presently attained the greatest geographic coverage as defined by the current requirements or roughly 100%.

**Justification Comment:**

**Attachment(s):** 0

SRTM successfully collected radar data over 80% of the Earth's land surface between 60° north and 56° south latitude with data points posted every 1 arc-second (approximately 30 meters). All land areas within this extent have been acquired and are available.

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## STAGE 4 - Access

13) Do you have a process for providing users access to the data in an open digital machine readable format?

**Answer:** User access process is fully implemented, data is available, process is reviewed and updated on a recurring basis.

**Justification Comment:****Attachment(s):** 0

While some specialized datasets at EROS existing natively in a quasi-proprietary format needing specific plugins, software, or application packages (e.g. HDF, FRED, DTED, NITF), machine readable formats such as GeoTIFF or JPEG are created and available as a download option when applicable.

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**STAGE 5 - Maintain****14)** Is there a maintenance process for updating and storing the dataset?**Answer:** Dataset maintenance process is fully implemented and processes are reviewed and periodically updated.**Justification Comment:****Attachment(s):** 0

All datasets are managed utilizing up to date hardware under maintenance agreements. Multiple copies are stored to ensure that no data is lost.

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**15)** Is there an error correction process as part of dataset maintenance?**Answer:** Error correction process established.**Justification Comment:****Attachment(s):** 0

All files are checked for completeness utilizing a checksum process before the data is copied to offline copy. Any corrupt data from the "working" copy is easily recovered from the offline copy.

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**STAGE 6 - Use/Evaluate****16)** Is there a process to determine if the dataset meets user needs?**Answer:** Process is fully implemented and repeated on a recurring basis.**Justification Comment:****Attachment(s):** 0

Users have the capability to provide feedback on all datasets supported through the Earth Explorer user interface. Feedback on usability is strongly encouraged and vetted appropriately

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**17)** Is there a process to provide users information on how to access and properly use the dataset?**Answer:** Process is fully implemented supporting access and proper use, process is reviewed on a recurring basis.**Justification Comment:****Attachment(s):** 0

Users have the capability to provide feedback on all USGS EROS user interfaces. Feedback on usability is strongly encouraged and vetted appropriately  
Product pages are created for each dataset. These pages describe the dataset characteristics, history, formats, and also distribution means.

[https://lta.cr.usgs.gov/products\\_overview](https://lta.cr.usgs.gov/products_overview)

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**18)** Are the business processes and management practices assessed to meet changing technology?**Answer:** Assessment process is fully implemented for taking advantage of changing technology, process is reviewed on a recurring basis.**Justification Comment:****Attachment(s):** 0

EROS constantly produces trade studies to investigate new technology across all areas within the data life cycle.

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**STAGE 7 - Archive****19)** Is there an archiving process for the dataset?**Answer:** Archival and disposition processes are fully implemented.**Justification Comment:****Attachment(s):** 1

EROS utilizes a nearline, offline, and offsite (NARA) copy.

