

NGDA Dataset Report

Official NGDA Title: Landsat 1-5 Multispectral Scanner (1972-1992)

Metadata Record Title: Landsat 1-5 Multispectral Scanner (1972-1992) - National Geospatial Data Asset (NGDA)

A-16 NGDA Theme: Imagery

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Metadata:

Registration Status: Complete

Registered on 4/30/2015

GeoPlatform Link*: <https://www.geoplatform.gov/node/243/04f5f01b-ebfd-443c-9fe8-b5035c43d68a>

Data.gov Metadata Link*: <http://catalog.data.gov/harvest/object/e6cd6d7d-bd0e-41bd-a1df-219daa54b237/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:

1972-1992

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. 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: 100%

Optimized; Established

Stage 5 - Maintain: 100%

Optimized; Established

Stage 2 - Inventory/Evaluate: 100%

Optimized; Established

Stage 6 - Use/Evaluate: 100%

Optimized; Established

Stage 3 - Obtain: 100%

Optimized; Established

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

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 Landsat Collections 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.

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 Landsat data collections are 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 <http://landsat.usgs.gov/>. In addition to Earth Explorer, collections are also registered within the USGS Science Data Catalog (<http://data.usgs.gov/datacatalog/#fq=datasource%3A%22Earth%20Resources%20Observation%20and%20Science%22&q=NGDA%20Landsat>) and Data.gov (<http://catalog.data.gov/dataset?sort=score+desc%2C+name+asc&q=Landsat+NGDA&organization=usgs-gov>)

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

The Lifecycle Process is documented and utilized

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): 0

Annual working group meetings take place to review current requirements and formulate areas of opportunity for future development and growth.

https://landsat.usgs.gov/science_Landsat_Science_Team.php

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

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): 0

Annual working group meetings take place to review current requirements and formulate areas of opportunity for future development and growth.

https://landsat.usgs.gov/science_Landsat_Science_Team.php

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

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

Justification Comment:**Attachment(s):** 1

See Attached Plan

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):** 0

Give the current sensors available through the Landsat program, there are not privacy concerns and all data is available to the public.

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

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

Replication within the satellite realm is a favorable action being that it decreases the latency between revisit cycles

STAGE 3 - Obtain**10)** Is there a process for obtaining data in relation to this dataset?**Answer:** Process is fully implemented, reviewed and updated on a regular basis.**Justification Comment:****Attachment(s):** 0

Cost, Schedule, Scope, and Value are all reviewed on an annual basis during budget requests.

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.

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

Each operational Landsat satellite covers the entire globe every 16 days.

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

machine readable formats such as GeoTIFF or JPEG are created and available as a download option when applicable.

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.

15) Is there an error correction process as part of dataset maintenance?

Answer: Error correction process includes user notification, process reviewed on a recurring basis.

Justification Comment:

Attachment(s): 0

All files are checked for completeness utilizing a checksum process after data production

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. In addition, annual working group meetings are held to ensure that the science community is able to utilize Landsat data to meet their needs.

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

The current user-interfaces are fully documented with user guides. Additional information is also available on the USGS Landsat website (<http://landsat.usgs.gov>)

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.

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

Processes are in place to ensure that all data is preserved and safeguarding utilizing best practices.