

**Name of dataset or data source:**

ASDST Reliability of Prediction Derived Model

**Custodian of the dataset or data source:**

ED Science (E&amp;H)

**Description:**

The Aboriginal Sites Decision Support Tool [ASDST](#) extends the Aboriginal Heritage Information Management System (AHIMS) by illustrating the potential distribution of site features recorded in AHIMS. ASDST was first developed in 2012 by the Office of Environment and Heritage (OEH) to support landscape planning of Aboriginal Heritage. The Tool produces a suite of raster GIS modelled outputs and is held in Esri GRID format. The first suite was published in 2016 as Version 7 at 100m resolution and in Lamberts Conic Conformal Projection (LCC). The current Version 7.5 was produced by the now Department of Planning, Industry and Environment (DPIE) in 2020 at 50m resolution in Geographic Coordinate System (GCS). Each layer covers the extent of NSW.

The suite of layers includes separate predictive layers for different Aboriginal site feature types. The feature codes used in layer naming conventions are:

- ALL = model for all feature types combined
- AFT = predicted likelihood for stone artefacts
- ART = predicted likelihood for rock art
- BUR = predicted likelihood of burials
- ETM = predicted likelihood of western mounds and shell
- GDG = predicted likelihood of grinding grooves
- HTH = predicted likelihood of hearths
- SHL = predicted likelihood of coastal middens
- STQ = predicted likelihood of stone quarries and
- TRE = predicted likelihood of scarred trees.

The feature models have been derived in two forms:

- The first form ("p1750XXX" where XXX denotes three letter feature code) predicts likelihood of feature distribution prior to European colonisation of NSW.
- The second form ("curr\_XXX" where XXX denotes three letter feature code) predicts feature likelihood in the current landscape.

For both sets of feature likelihood layers, cell values range from 0 - 1000, where 0 indicates low likelihood and 1000 is high likelihood.

Please note the scale is likelihood and NOT probability. Likelihood is defined as a relative measure indicating the likelihood that a grid cell may contain the feature of interest relative to all other cells in the layer.

Additionally, there are other derived products as part of the suite. These are:

- drvd\_imp = which is a model of accumulated impacts, derived by summing the difference between the pre colonisation and current version of all feature models. Cell values range from 0 - 1000, where 1000 is a high accumulated impact.
- drvd\_rel = which is a model of the reliability of predictions based on an environmental distance algorithm that looks at recorded site density across the variables used in the models.
- drvd\_srv = which is a survey priority map, which considers model reliability (data gap), current likelihood and accumulated impact. Cell values range from 0 -

1000 where 1000 indicates highest survey priority relative to the rest of the layer.

For more details see the technical reference on the [ASDST](#) website.

NB. Old layers with a suffix of “\_v7” indicate they are part of ASDST Version 7 produced in 2016. The current models (Version 7.5) do not contain a version number in their name and will continue to be named generically in future versions for seamless access.

Updates applied to ASDST version 7.5

For all ASDST 7.5 data sets, the resolution was increased from a 100m cell to a 50m cell. All data sets were clipped and cleaned to a refined coastal mask. Cell gaps in the mask were filled using a Nibble algorithm. The pre-settlement data sets were derived by resampling the version 7 pre-settlement data sets to 50m cell size. The present-day data sets were derived from the version 7.5 pre-settlement layers and 2017-18 land-use mapping and applying the same version 7 parameters for estimating the preservation of each feature type on each land-use. For version 7.5, the model reliability data set was derived by resampling the version 7 data set to 50m cell size. Accumulated impact and survey priority version 7.5 data sets were derived by applying the version 7 processing algorithm but substituting the version 7.5 pre-settlement and present-day ASDST models.

#### Data quality rating:

- ★ Institutional Environment - 5
- ★ Accuracy - 4
- ★ Coherence - 5
- ★ Interpretability - 4
- ★ Accessibility - 4

### INSTITUTIONAL ENVIRONMENT

Excellent



- ✓ Does the information have the potential to enhance services or service delivery?
- ✓ The data aligns with the Data Quality Framework, including:
  - Legislation
  - Policies
  - Information Asset Governance
  - Standards
  - Data Management Plans
- ✓ The following governance roles and responsibilities for this asset are clearly assigned:
  - Information Asset Owner
  - Information Asset Custodian
  - Information Steward
- ✓ Data collection is authorised by law, regulation or agreement
- ✓ The Custodial agency has no commercial interest or conflict of interest in the data

### ACCURACY

Very Good



- ✓ Data has been subject to a data assurance process (for example: Checking for errors at each stage of data collection and processing, or verifying data entry and making corrections if necessary.)
- ✓ There are no known gaps in the data or if there are gaps (for example: non-responses, missing records, data not collected),

they have been identified in caveats attached to the dataset.

- ✓ No changes have been made or other factors identified (for example: weighting, rounding, de-identification of data, changes or flaws in data collection or verification methods) that could affect the validity of the data; or any changes/factors have been identified in caveats attached to the asset.
- ✓ The data collection met the objectives of the primary user. The data correctly represents what it was designed to measure, monitor or report.

X Data is revised and the revision is published if errors are identified

## COHERENCE

Excellent



- ✓ Standard definitions, common concepts, classifications and data recording practices have been used.
- ✓ Elements within the data can be meaningfully compared.
- ✓ This data is generally consistent with similar or related data sources from the same discipline
- ✓ The data can be analysed over time (for example, there have not been any significant changes in the way items are defined, classified or counted over time).
- ✓ The data does not form part of a collection or, if it is the latest in a series of data releases, there have not been any changes in methodology or external impacts since the last data release.

## INTERPRETABILITY

Very Good



- ✓ Information is available about the primary data sources and methods of data collection (e.g. instruments, forms, instructions).
- ✓ Information is available to help users evaluate the accuracy of the data and any level of error
- ✓ Information is available to explain concepts, help users correctly interpret the data and understand how it can be used
- ✓ Information is available to explain ambiguous or technical terms used in the data

X A data dictionary is available to explain the meaning of data elements, their origin, format and relationships

i Find out more about the data dictionary from the Custodian (contact details below).

i Find out more about the primary data sources and methods of data collection from the Custodian (contact details below).

i Find out more about concepts used in this dataset and how to understand or interpret the data from the Custodian (contact details below).

i Find out more about ambiguous or technical terms used in the data from the Custodian (contact details below).

## ACCESSIBILITY

Very Good



- ✓ Data is available online with an open licence
- ✓ Data is available in machine-processable, structured form (e.g. CSV format instead of an image scan of a table)
- ✓ Data is available in a non-proprietary format (e.g. CSV, XML)

✓ Data is linked to other data, to provide context (e.g. employee ID is linked to employee name or species name is linked to genus)

✗ Data is described using open standards (e.g. RDF, SPARQL) and persistent identifiers (URIs or DOIs)

## DATA DISCLAIMER

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**For more information about this dataset or data source, contact:**

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131555

## Understanding the Data Quality Statement

The data quality statement aims to help you understand how a particular dataset could be used and whether it can be compared with other, similar datasets. It provides a description of the characteristics of the data to help you decide whether the data will be fit for your specific purpose.

The Data Quality statement is prepared by the data custodian (provider of the dataset), using a questionnaire that has been developed in accordance with the NSW Government Standard for Data Quality Reporting.

### **About the quality rating:**

The reporting questionnaire asks five questions for each of these data quality dimensions:

- Institutional Environment
- Accuracy
- Coherence
- Interpretability
- Accessibility

For each question: “yes” = 1 point; “no” = 0 points

The number of points determines the Quality Level for each dimension (high, medium, low).

Only dimensions with four or five points receive a star.

Points	Quality Level	Star / No Star
0	Poor	No Star
1	Poor	No Star

2	Fair	No Star
3	Good	No Star
4	Very Good	Star
5	Excellent	Star

## Evaluating data quality

Quality relates to the data's "fitness for purpose". Users can make different assessments about the data quality of the same data, depending on their "purpose" or the way they plan to use the data.

The following questions may help you evaluate data quality for your requirements. This list is not exhaustive. Generate your own questions to assess data quality according to your specific needs and environment.

- What was the primary purpose or aim for collecting the data?
- How well does the coverage (and exclusions) match your needs?
- How useful are these data at small levels of geography?
- Does the population presented by the data match your needs?
- To what extent does the method of data collection seem appropriate for the information being gathered?
- Have standard classifications (eg industry or occupation classifications) been used in the collection of the data? If not, why? Does this affect the ability to compare or bring together data from different sources?
- Have rates and percentages been calculated consistently throughout the data?
- Is there a time difference between your reference period, and the reference period of the data?
- What is the gap of time between the reference period (when the data were collected) and the release date of the data?
- Will there be subsequent surveys or data collection exercises for this topic?
- Are there likely to be updates or revisions to the data after official release?