



Logan-Albert Rivers Digital Elevation Model

Metadata Statement

Last Updated: August 2025

Version 1

eCat: 150588

User Constraints:



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Keywords:

elevation, flood, water, catchment, dem

Abstract:

The Logan-Albert Rivers 5m Digital Elevation Model (DEM) is generated from all relevant data available on the Elvis - Elevation and Depth - Foundation Spatial Data (Elvis) platform with a resolution of 5 Metres or higher. Source datasets with a resolution higher than 5m have been resampled to 5m.

This elevation model is generated using 8251 datasets from a total of 10878 datasets sourced from multiple providers including State and Territory Governments. The capture dates for input data range from 25/03/2009 - 17/09/2022. See Table 1 below for further information.

The area covers the land mass of the Logan-Albert Rivers drainage basin as defined by the Bureau of Meteorology Geofabric.

Map of Logan-Albert Rivers:

Logan-Albert Rivers Catchment

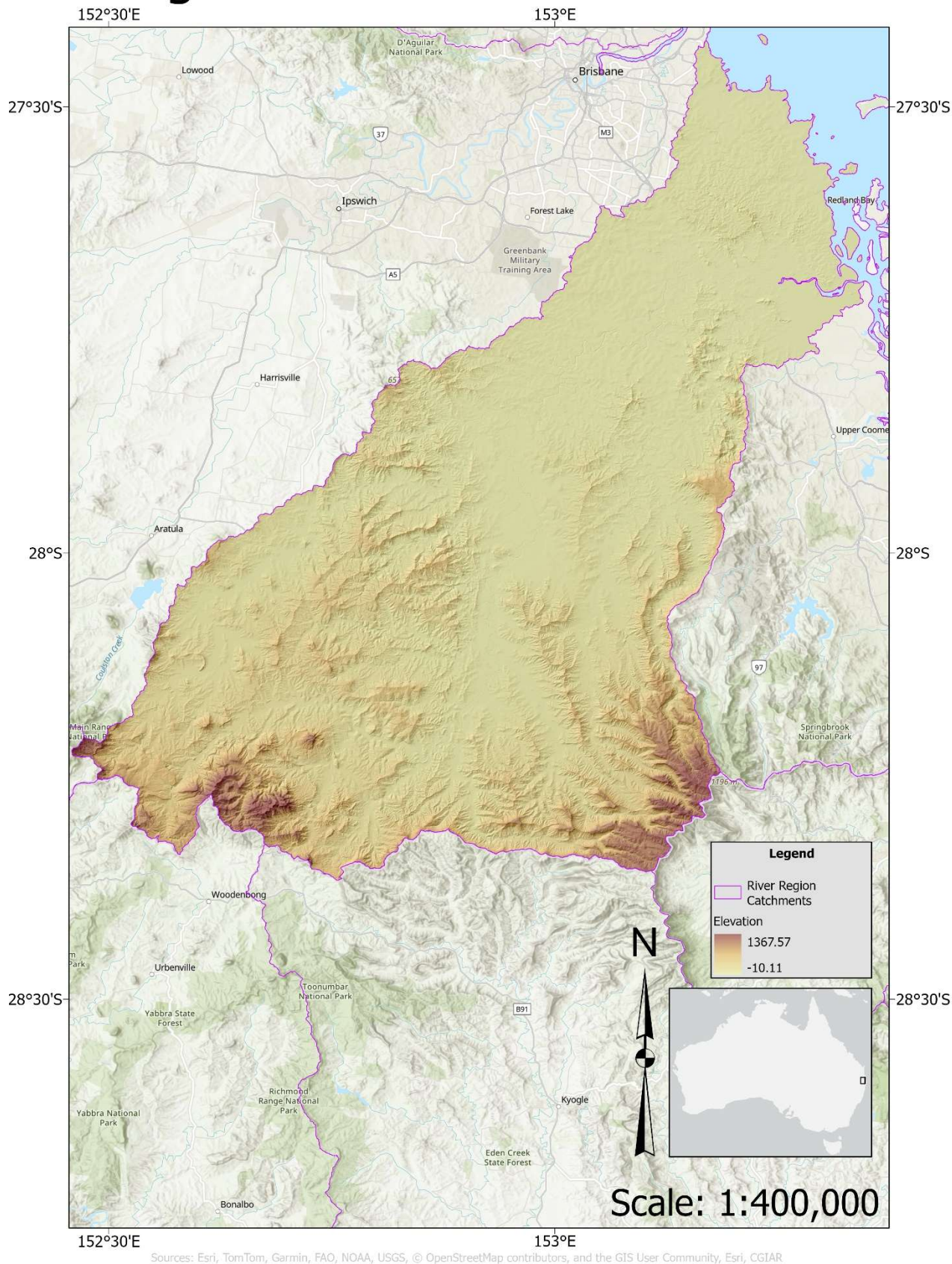


Image 1: Logan-Albert Rivers Map

Lineage:

A 10m buffer was applied to the extent of the drainage basin to ensure overlap with neighbouring basins. Datasets available in the Elvis platform that intersected the buffered basin area were downloaded. Where multiple datasets overlapped, the cell value from the most recently captured data was used.

As required, individual tiles were resampled to 5m resolution, reprojected to GDA2020 and aligned to the whole 5m grid value to ensure cell alignment between datasets. Nearest neighbour resampling method was used for each of these steps.

Tiles were then mosaicked to form a single raster output. In some areas small holes were present in the mosaicked product due to the input tiles not aligning or overlapping completely. Data gaps less than or equal to 15m (3 cells) were filled by interpolation. Cells within larger data gaps were assigned "no data" values in the output mosaic.

Data has been sourced from the captures and custodians listed in Table 1.

Table 1: Source of data used in production of Logan-Albert Rivers DEM.

PROJECT	CAPTURE DATE	RESOLUTION (Metres)	DATA TYPE	CUSTODIAN
RichmondRiver2023	17/09/2022	1	DEM	CSIRO - https://www.csiro.au/
MountLindesay201709	10/09/2017	2	DEM	NSW Government - Spatial Services - https://www.spatial.nsw.gov.au/
ClarenceRiver2023	17/09/2022	1	DEM	CSIRO - https://www.csiro.au/
Warwick201709	10/09/2017	2	DEM	NSW Government - Spatial Services - https://www.spatial.nsw.gov.au/
ScenicRim_2011_LGA	19/07/2011	1	DEM	QLD Government - https://www.nrmmrrd.qld.gov.au
Logan_2013_LGA	18/05/2013	1	DEM	QLD Government - https://www.nrmmrrd.qld.gov.au
Ipswich_2019_LGA	11/06/2019	1	DEM	QLD Government - https://www.nrmmrrd.qld.gov.au
Logan_2017_LGA	03/06/2017	1	DEM	QLD Government - https://www.nrmmrrd.qld.gov.au

Murwillumbah201709	10/09/2017	2	DEM	NSW Government - Spatial Services - https://www.spatial.nsw.gov.au/
GoldCoast_2014_LGA	22/06/2014	1	DEM	QLD Government - https://www.nrmmrrd.qld.gov.au
Redland_2014_LGA	22/06/2014	1	DEM	QLD Government - https://www.nrmmrrd.qld.gov.au
Moreton_Bay_2022_Bathymetry_MSL	08/08/2022	3	DEM	QLD Government - https://www.nrmmrrd.qld.gov.au
Brisbane_2019_Prj	11/06/2019	1	DEM	QLD Government - https://www.nrmmrrd.qld.gov.au
Brisbane_2009_LGA	25/03/2009	1	DEM	QLD Government - https://www.nrmmrrd.qld.gov.au

Reference System:

Horizontal: GDA2020 MGA Zone 56 (EPSG: 7856)

Vertical: Australian Height Datum 1971 (EPSG: 5711)

Spatial Extent

West: 152.45°

South -28.37°

East 153.36°

North -27.41°

Source Information

Creative Commons Attribution licensed data was obtained through the Elvis platform from multiple sources. Attribution statements for each data source are listed below.

- © Department Finance, Services and Innovation
- CSIRO - <https://www.csiro.au/>
- © State of Queensland (Department of Resources) 2023
- © State of Queensland (Department of Natural Resources and Mines) 2017
- © State of Queensland (Department of Natural Resources and Mines) 2019
- © State of Queensland (Department of Natural Resources, Mines and Energy) 2018
- © State of Queensland (Department of Environment and Science) 2023

Dataset Limitations

Input DEMs with a resolution of 5m or higher were sourced from the Elvis platform. In areas of overlapping coverage, the values from the input dataset with the most recent capture date were used in the final output raster. GA performed several transformations on the input data due to the varying input resolutions, projections, points of origin and methods used by data custodians to create the source DEMs. These transformations may have introduced artifacts in the mosaic product, most notably along original input dataset edges. This dataset has not been hydrologically enforced.

Metadata Index

The metadata index provided is designed to allow users to trace the origins of the data used to generate the output DEM mosaic. The index is created using the spatial extents of each input dataset as sourced from the Elvis platform. As individual input datasets may go through a variety of preprocessing steps such as reprojecting and resampling to a common grid before mosaicking, there may be small variations between the index and the output mosaic. The index is intended to be used as a guide only.

There may be instances in the index where small holes, or slivers are present. This is due to neighbouring input DEM tiles not sharing a common boundary. These holes are typically only one or two cells wide. Small slivers may have been filled by interpolated data derived from values at each side of the hole. The raster product will show continuous data in this case; however the index will still show a sliver as it has been generated through a separate workflow.

In some instances, larger holes may be present in both the index and raster dataset. As outlined above, this is where neighbouring input DEM tiles do not join to create a continuous surface. Holes that exceed the no data filling parameters (see Lineage) will remain as "no data" in the output raster. Due to the process of filling small holes, some areas around larger holes may have been interpolated and as such the index will not exactly match the raster when inspecting at, or near cell size level.

Table 2: Data Dictionary of the supplied Metadata Index for the Logan-Albert Rivers dataset.

Attribute	Description
PROJECT	The name of the project data is sourced from
CAP_DATE	The date the data was captured. (If a date range, the earliest date is supplied
RESOLUTION	The resolution, in metres, of the sourced data.
DATA_TYPE	Data type of the sourced data.
CUSTODIAN	The custodian of the sourced data.

Modification Frequency

As Required

Revision Dates and Descriptions

August 2025: Product was generated

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