NSW Foundation Spatial Data Framework Data Custodian Records



The following spatial theme profile is the formal custodian arrangements for whole of government foundation spatial data.

Elevation and Depth theme

Theme profile



Image depicts a sample of gridded digital elevation and bathymetric data © Geoscience Australia 2012

Name	Elevation and Depth
Description	Elevation and Depth is the measurement of the Earth's surface above or below a vertical datum to obtain the height of the land. Data is collected using a range of sensors including: laser, sonar, radar and optical. Technical methodologies are used to derive spot heights, raster surfaces, contours, triangulated irregular networks and digital elevation models.
Datasets	Contours Spot Heights Relative Heights Point Clouds Digital Elevation Models

Purpose	 Elevation and Depth provides an accurate representation of the Earth's surface enabling evidence based decision making, 3D modelling, planning and earth surface representation. Elevation and Depth underpins: safe hydrographic, aeronautical and road navigation climate science, including climate change adaptation emergency management and natural hazard risk assessment environmental, including water management engineering projects and infrastructure development definition of maritime and administrative boundaries natural resource exploration.
Status	Update frequencies vary for each dataset. Individual current status can be found under each Spatial data profile.
Future status	The objective is to maintain elevation datasets to meet the FDSI requirements of key data users.
	 Current programs include: Aerial LiDAR capture program across NSW. DEM and Point Cloud generation from photogrammetric techniques.
	 Longer term programs include: Update of contour data using updated DEM data generated from LiDAR and photogrammetry. Hydrological enforcement using improved surface models.
Standards	AS/NZS ISO 19115 - ANZLIC Metadata Profile Version 1.1 AS/NZS ISO 19131:2008 Geographic Information - Data product specifications OGC compliant Web Map Services (WMS) and Web Feature Services (WFS) Metadata for the relevant Spatial Services datasets complies with AS/NZS ISO 19115-2, ANZLIC Metadata Profile v1.1 and ISO 19139 Intergovernmental Committee on Surveying and Mapping (ICSM): Guidelines for Digital Elevation Data DFSI Spatial Services: Elevation Data Products Specification and Description (LiDAR) DFSI Spatial Services: Elevation Data Products Specification and
	Description (Airborne Photogrammetry)
Version	Version 0.7