Spatial Collaboration Portal (SCP) Export Tools FAQ

Information Sheet October 2021

Disclaimer: WGS 84 / Web Mercator is a low-accuracy datum / projection (±2 metres). Misalignments can be expected if mixing WGS 84 data from different sources. Take care to review metadata to determine if WGS 84 data is nominally aligned to (or 'equivalent to') GDA94, GDA2020 or yet other coordinate reference system. For more information refer to this WGS 84 Information Sheet.

Does Spatial Collaboration Portal (SCP) Export Content tool use the NTv2-CPD grid?

Spatial data in NSW is most accurately transformed using the 'NTv2 conformal and distortion' (NTv2-CPD) grid. The Spatial Collaboration Portal (SCP) tool uses the NTv2-CPD transformation, where required, to export GDA94, GDA2020, or WGS 84 datasets.

Why does SCP have multiple datasets with the same (or similar) name?

There are several reasons this occurs:

1. A single dataset may be offered as a Web Map Layer, Web Feature Layer, WebMap etc. These are each listed separately under the same name.
2. A NSW Foundation Spatial Data Framework (FSDF) data theme is often offered as both the aggregate of its layers, and as separate data layers, for example:
   - NSW_Land_Parcel_Property_Theme
   - NSW_Land_Parcel_Property_Theme - Lot
3. From October 2021, new GDA2020-aligned services are provided in parallel (until ~June 2022) to existing 'WGS 84-aligned-to-GDA94' services:
   - **Vector data (points, polygons)** for example:

     GDA94 Service

     NSW_Land_Parcel_Property_Theme, and

     GDA2020 Service

     NSW_Land_Parcel_Property_Theme_multiCRS
   - **Raster data (tiled imagery, basemaps)**, for example:

     GDA94 Service

     NSW_Imagery, and

     GDA2020 Service

     NSW_Imagery_GDA2020

Further information on these services is available from:

- GDA2020 Web Services Information Sheet
- GDA2020 Web Services RASTER FAQs
- GIS-specific instructions at Spatial Service Web Services

Note: Exports from the SCP Export Content tool are the same regardless of which of the above services are used for export (GDA94 vs GDA2020, Map Layer vs Feature Layer). Please access the how to guide for 'Export Data' for further assistance.

Why does the SCP Export Content tool provide WGS 84 export options for some, but not all services?

Spatial Services aims to provide well-defined, fit for purpose datasets.
In most cases, that means defining data and services in GDA2020, the legal, and recommended, datum for use in NSW following recent updates to relevant legislation. While it is common to publish spatial data in WGS 84 or its Web Mercator projection, 'WGS 84' is low-accuracy and ambiguous. There is the potential for misalignment when combining WGS 84 and GDA data. This is well documented in the WGS 84 Information Sheet.

Where the dataset is defined in SCP as GDA94 or GDA2020 it will not be exportable as WGS 84. The same dataset may, however, support a web service allowing requests in WGS 84.

Where the dataset is defined in SCP as a WGS 84 dataset, then various options will be available to export that data as WGS 84. Many historical datasets published by Spatial Services, and datasets published by third parties over which Spatial Services has no control, are published in WGS 84.

Why are there three different WGS 84 options under Export Datum?

WGS 84 datasets in SCP will have more export options where the SCP metadata indicates that the dataset is WGS 84 equivalent to (or aligned to) GDA94 or GDA2020.

- **'WGS 84 (original dataset)'** is available for any dataset uploaded to the SCP as WGS 84. This allows the original dataset to be returned unchanged. It is up to the user to determine alignment (if known) with GDA94, GDA2020 (or yet another CRS) from available descriptions or metadata.
- **'WGS 84 equivalent to GDA94 [or GDA2020]'** export options are available when the dataset alignment to GDA94 or GDA2020 is described in the SCP metadata, and a well-defined transformation to another alignment is therefore possible.

  As an example, the following metadata information can be found on the SCP description pages for our WGS 84-aligned-to-GDA94 web services.

Source Spatial Reference (dataset)	Geocentric Datum of Australia 1994 (GDA94), Australian Height Datum (AHD)
Spatial Reference (web service)	EPSG 4326: WGS84 Geographic 2D
WGS 84 Equivalent To	GDA94