QGIS 4.0

& Cloud Native Data Formats

Part I. Cloud Optimized GeoTIFF (COG)

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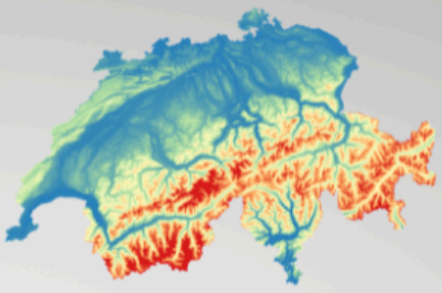
COG

CLOUD OPTIMIZED
GEOTIFF



COG is a way to store raster datasets so they can be efficiently accessed directly from cloud storage, allowing clients to read only the needed portions via HTTP range requests instead of downloading the entire file.

All standard GeoTIFF capabilities are preserved:

- Multiband rasters
- Support for many data types
- Full CRS and georeferencing metadata
- Compression options
- Internal tiling and overviews

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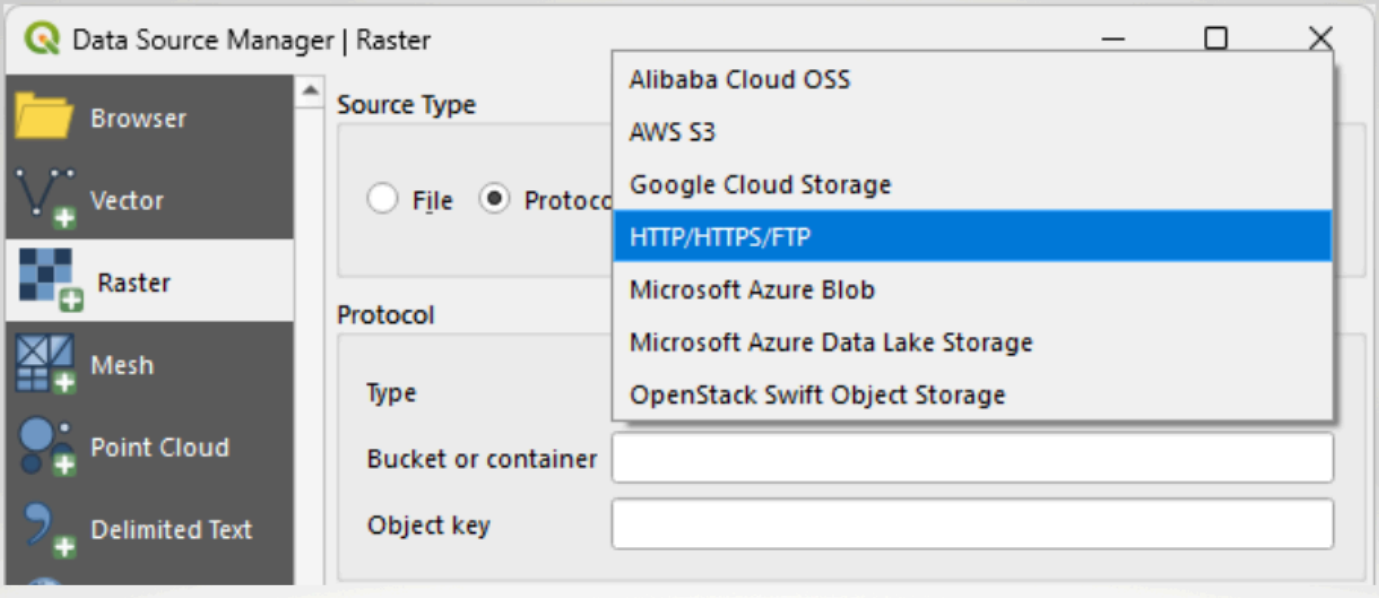
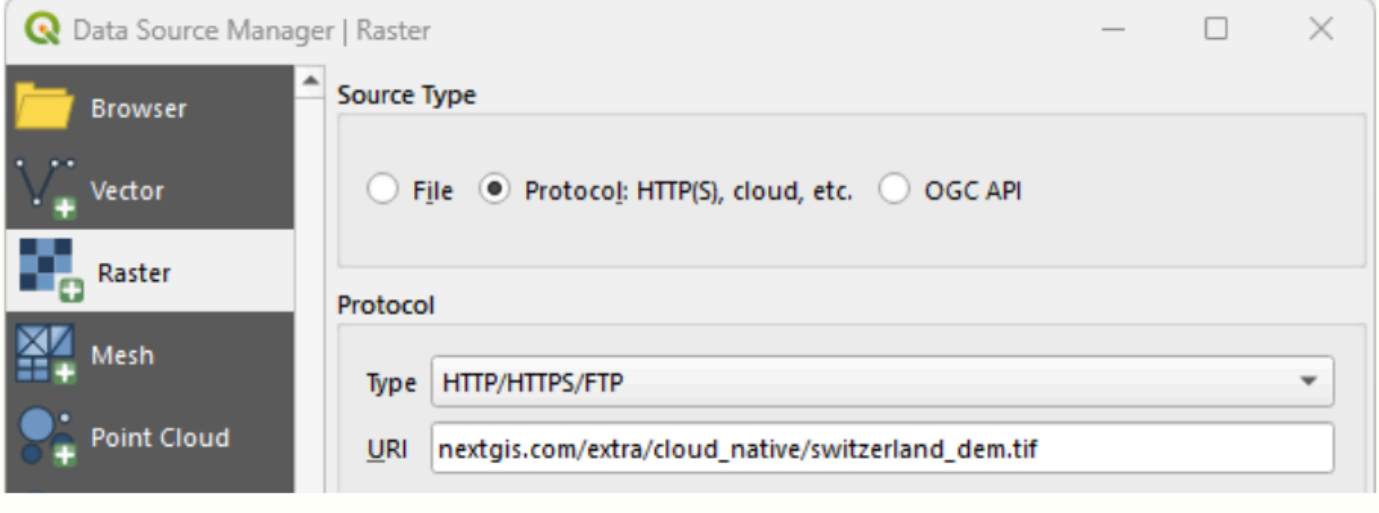
QGIS 4 supports direct reading of COGs from various cloud storage types:



Use Data Source Manager → Raster and set Source type to “Protocol”



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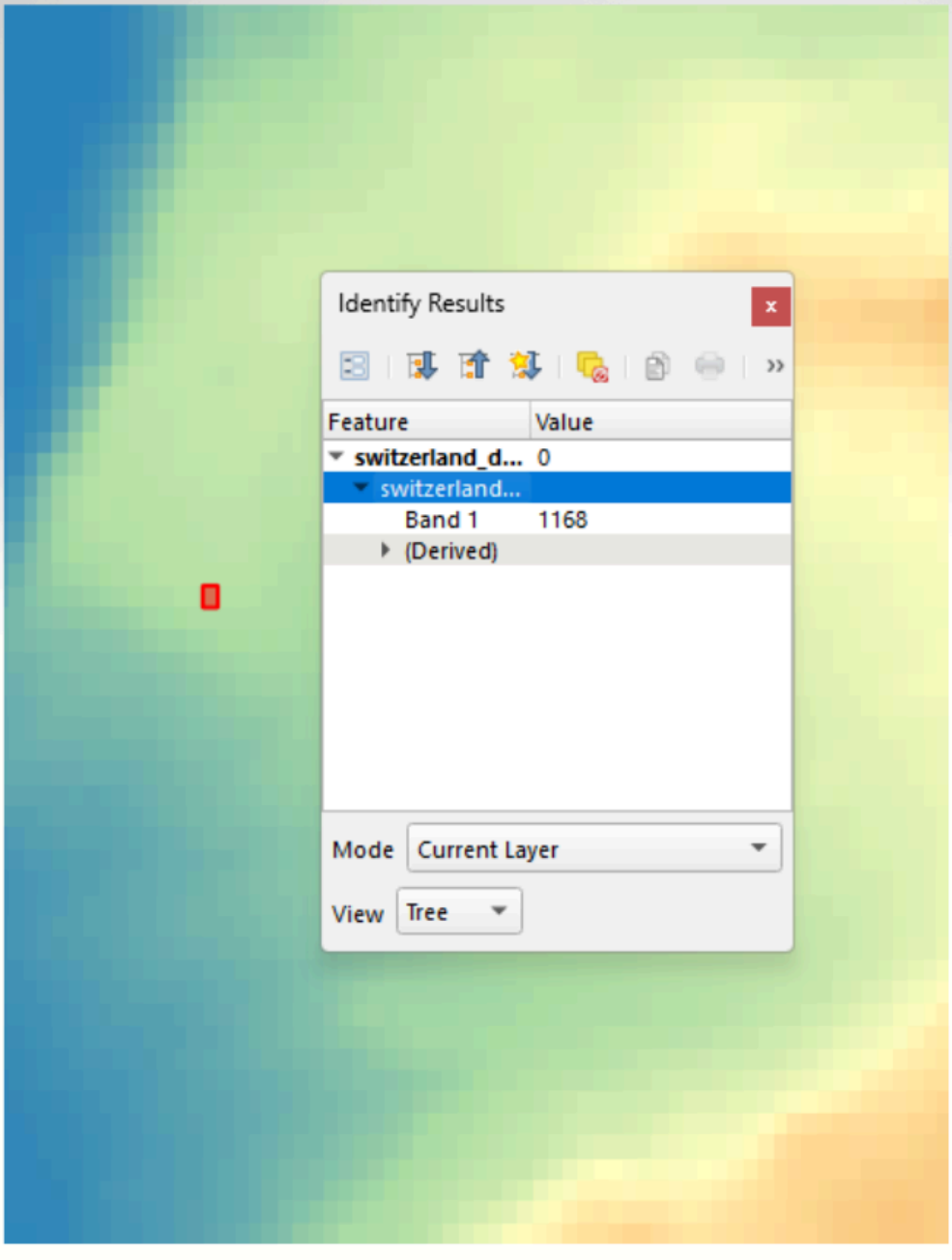
The connected raster is not an RGB tileset or rendered image, but the original raster dataset with full data values, identifiable



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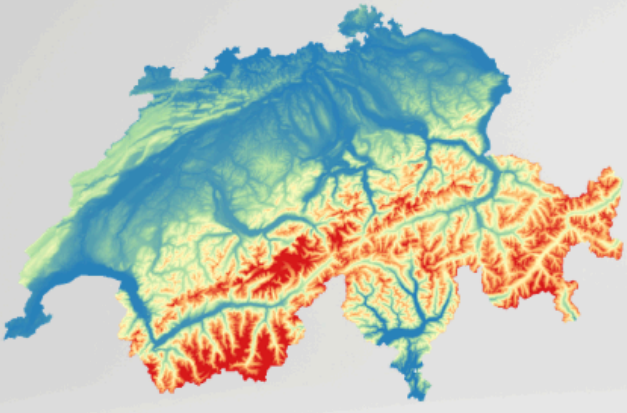
Style it using all QGIS capabilities, just as you would with a local dataset



However, be careful when using it in Raster Calculator or Processing tools. On most cases the raster will be downloaded locally for the operation

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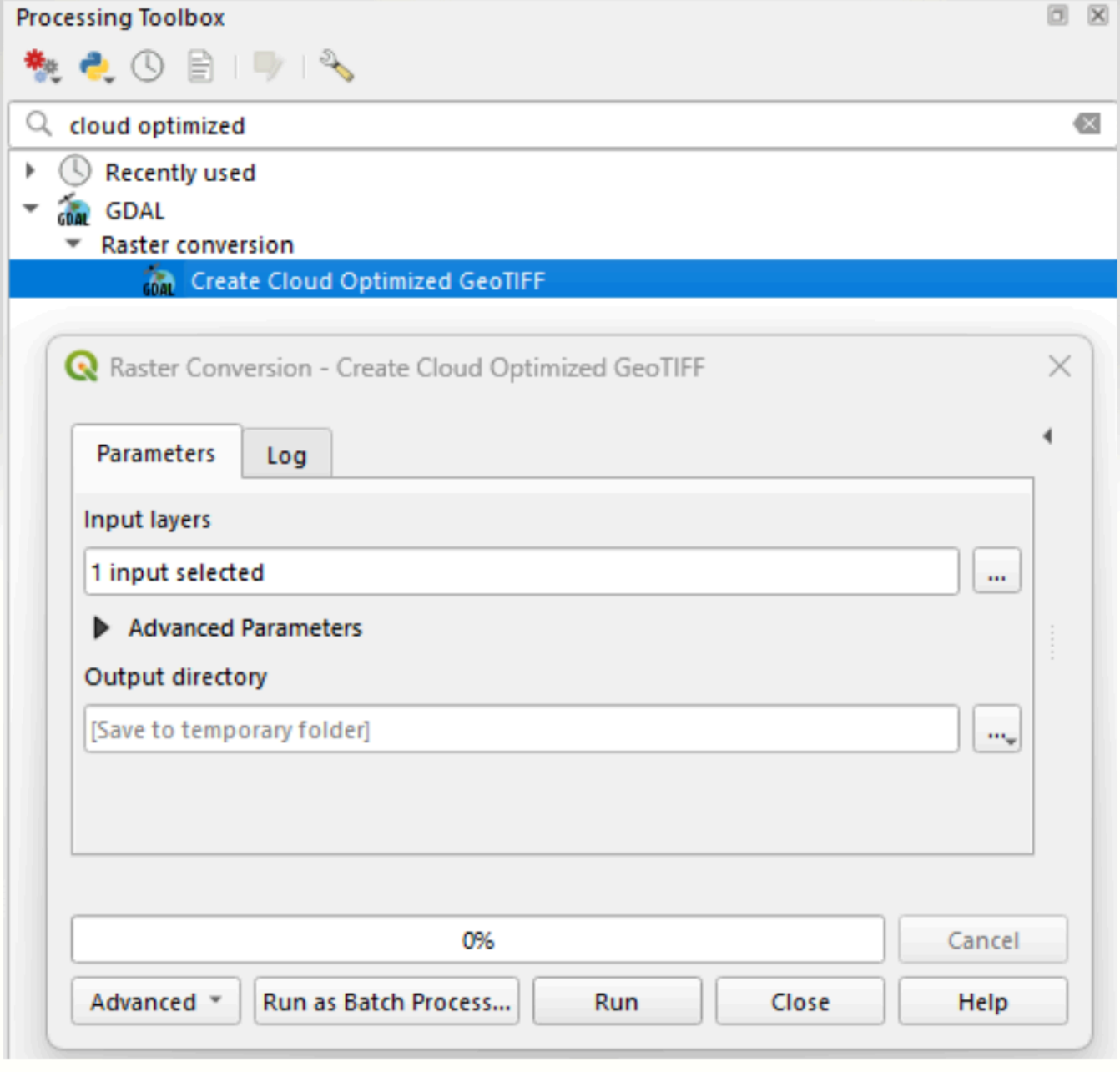
To create a COG from any raster dataset, use the built-in tool:
GDAL → Raster Conversion →

Create Cloud Optimized GeoTIFF



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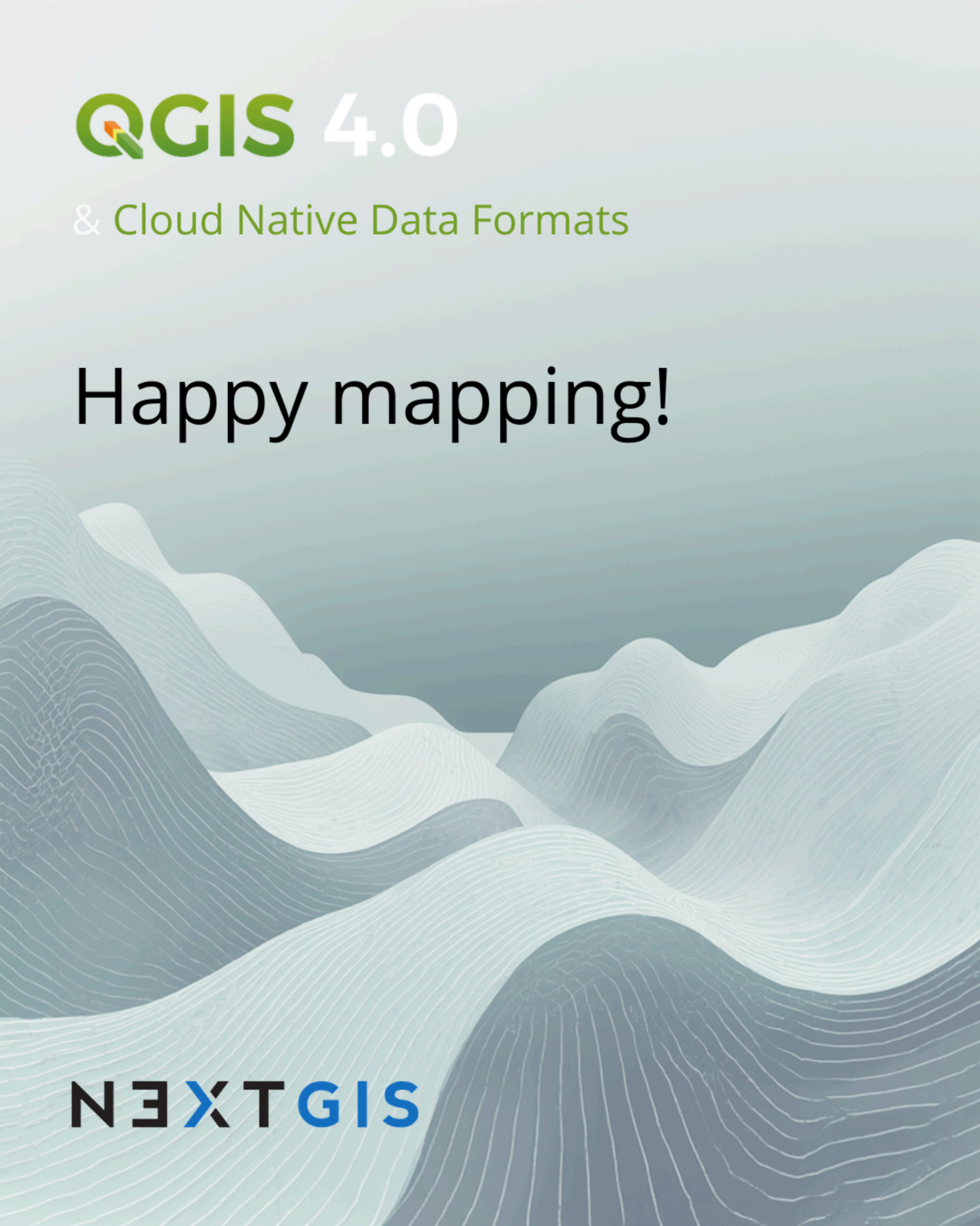
Happy mapping!



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