October 2023 - Dominica

Data Management

Originator	Levels and locations	Role		Number	Revision (Meta-data)

SC1-SFT-V1-01-M3-A-30_10_30-0001-S1-P02

Project	Volume or system	Type	Classification (Optional)	Suitability (Meta-data)
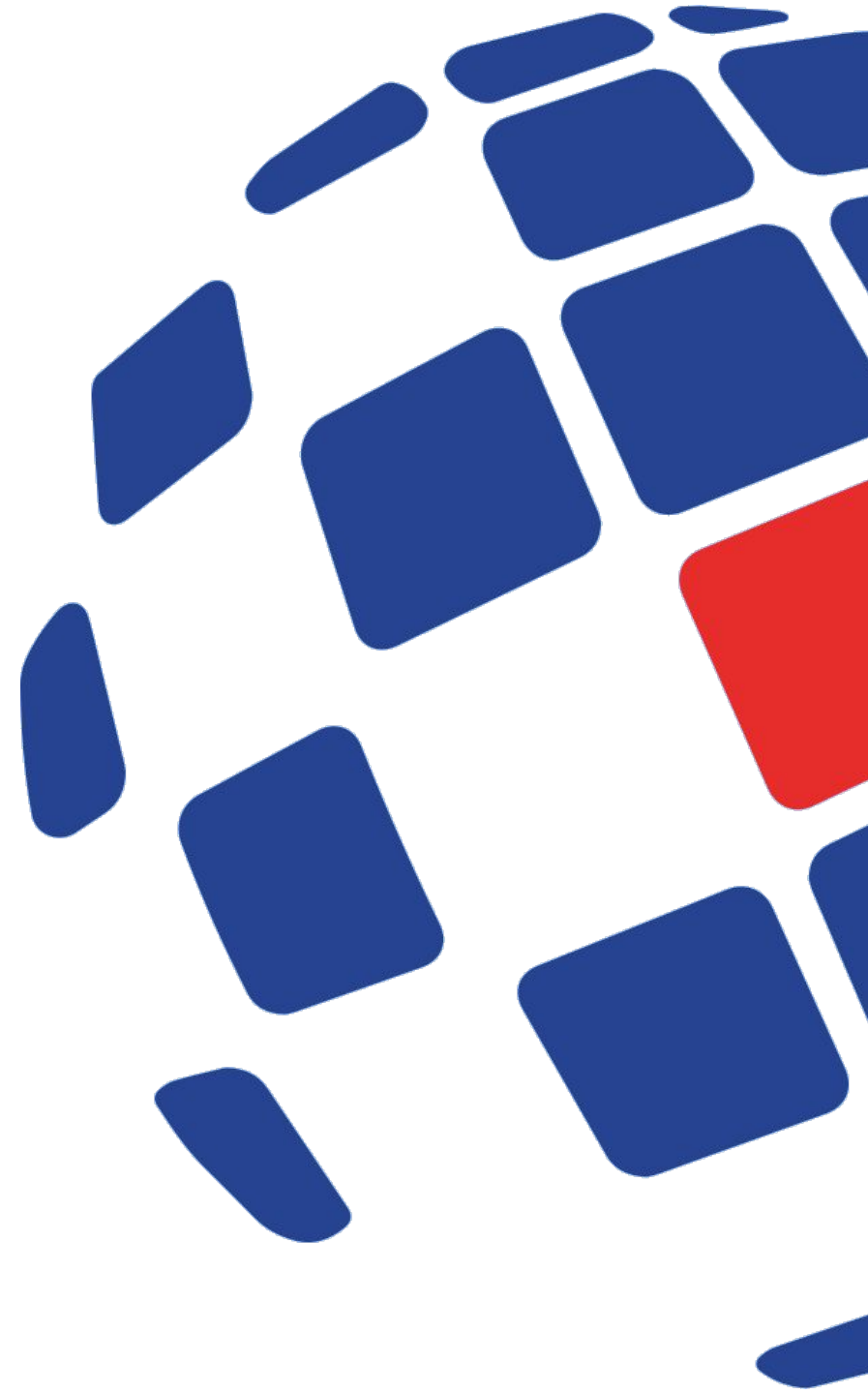
Geodata and Data Management

- What is geodata?

- Folder Structure

- Data Naming Convention

- Metadata

Folder structure:
- Data
  - 0_Resources
  - 1_Data
    - 11_Incoming
    - 12_Active
      - 120_Physical
      - 121_Admin
      - 122_Settlements
      - 123_Population
      - 124_Health
      - 125_Education
      - 126_Risk
  - 2_Projects
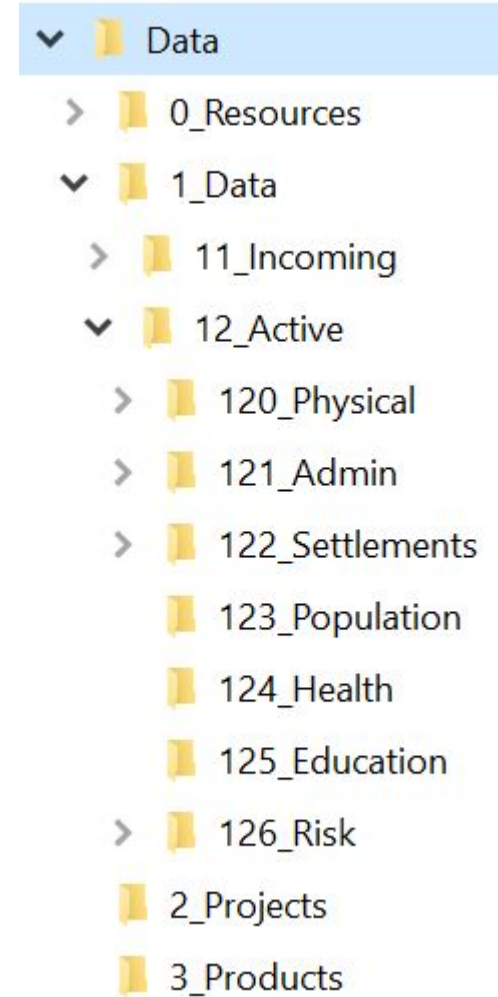 - 3_Products

What is Geodata?

A simplified version of the world

- Maps are made up of multiple layers of geodata

Data Management

- The data used for this course are organised into:

    - A folder structure which groups similar resources together

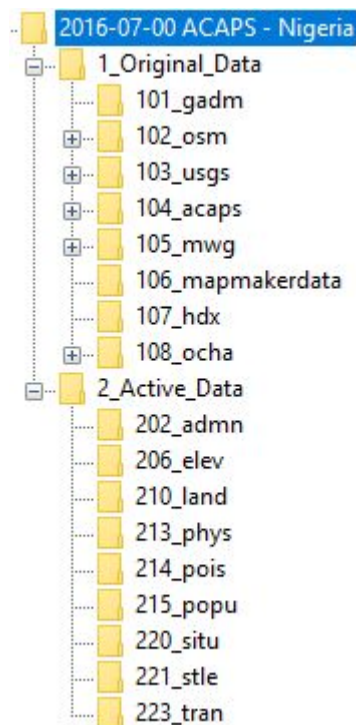   - File names which describe the data inside them
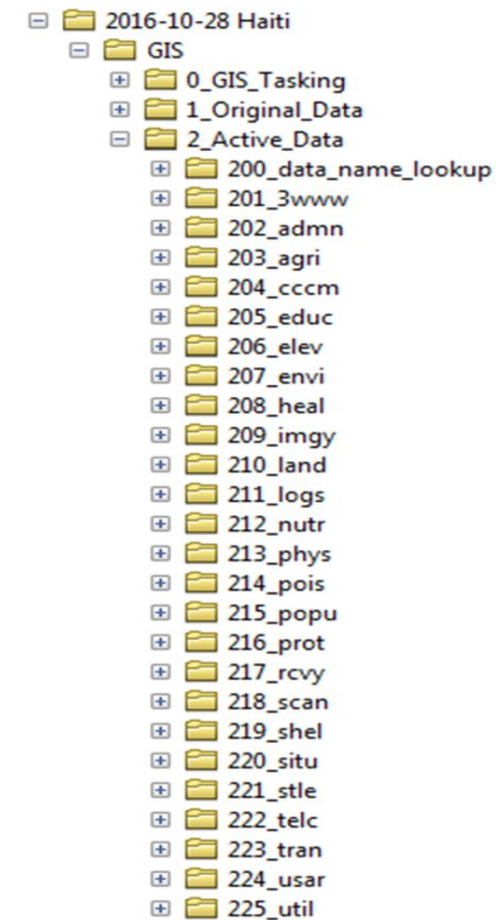
Folder structures – Examples

- Example 1

```
0_Exercise_data
1_Data          →      11_Incoming
2_Projects             12_Active
3_Products
!_readme
```

- Example 3

```
2016-10-28 Haiti
  GIS
    0_GIS_Tasking
    1_Original_Data
    2_Active_Data
      200_data_name_lookup
      201_3www
      202_admn
      203_agri
      204_cccm
      205_educ
      206_elev
      207_envi
      208_heal
      209_imgy
      210_land
      211_logs
      212_nutr
      213_phys
      214_pois
      215_popu
      216_prot
      217_rcvy
      218_scan
      219_shel
      220_situ
      221_stle
      222_telc
      223_tran
      224_usar
      225_util
```

- Example 2

```
2016-07-00 ACAPS - Nigeria
  1_Original_Data
    101_gadm
    102_osm
    103_usgs
    104_acaps
    105_mwg
    106_mapmakerdata
    107_hdx
    108_ocha
  2_Active_Data
    202_admn
    206_elev
    210_land
    213_phys
    214_pois
    215_popu
    220_situ
    221_stle
    223_tran
```

File Naming

- File names have a series of elements, separated by underscore characters

  `[extent]_[theme]_[source]_[free text].[ext]`

- For example:

St Kitts and Nevis

Level 2 Admin Area

From GAUL
(Global Administrative Unit Layers)

Shapefile

`kna_ad2_gaul.shp`

MapAction Data Naming

geoextent_datacategory_datatheme_datatype_scale_source_permission_FreeText

Geoextent	Where is it - world, continent, country
_datacategory	A general what is it
_datatheme	More specific what is it
_datatype	The geometric type of the spatial component of the layer
_scale	Represents the order of magnitude of the scale at which it is appropriate to display the dataset
_source	Where has it come from
_permission	Who can receive the data or maps derived from the data
_FreeText	Anything extra you want to add

Metadata

Data about data

What is Metadata?

- Which can of drink would you prefer?

- Knowing what is available, having choices and informed decisions

What is GIS Metadata?

- *Is this enough Information?*

- *Needs more detailed level information of each (Metadata)*

Metadata

Metadata

- Metadata - Information about Data
- Metadata is a description of the GIS data set that helps the user understand the context of the data.
  - Scale   License restrictions
  - Date   Error or limitations
  - Provenance   Co-ordinate system
- Metadata tools;
  - Data file Specific (Naming conventions)
  - Text files!
  - GIS Specific (QGIS Meta-tools, ArcGIS Catalog)
  - International Standards (ISO 19115)

QGIS Layer Properties - Metadata

Conclusion

- Data management is vital when using GIS.

- Keep things as simple as you can.

- Have system in place you use consistently and document it.

- Have a file naming convention and stick to it.

- Have a folder structure that is suitable for you needs.

- Have a system of recording metadata however basic.

- Have a process in place for receiving data, renaming and folders.

If you do all of this your GIS life will be a lot easier!

This programme is gratefully supported by

mapaction.org