CLAIMS

1. A method for processing spatial data comprising the steps of:

receiving a spatial data file from a spatial data source;

generating a first tileset associated with the spatial data file, the first tileset comprising a plurality of tiles and corresponding identifiers;

comparing the identifier of each of the plurality of tiles in the first tileset with an identifier of each tile in a second tileset to identify at least one duplicate; and

merging the tiles identified to be duplicate tiles,

wherein each generated identifier comprises a zoom level data and a location data associated with the corresponding tile, and

the method further comprises a step of generating a duplicate indicator and appending the duplicate indicator to the identifier, the duplicate indicator associated with the number of duplicate tiles in the first tileset and the second tileset.

2. The method of claim 1, wherein the step of generating the first tileset comprises combining a plurality of generated tiles associated with a higher zoom level to generate a tile associated with a lower zoom level.

3. The method of any one of the preceding claims, further comprising a step of packaging the merged tiles into a file format for storing tileset.

4. The method of any one of the preceding claims, wherein the merged tiles are stored in a specified directory.

5. The method of any one of the preceding claims, wherein the step of merging the tiles comprises overlaying at least one duplicate tile over another duplicate tile.

6. A device for processing spatial data comprising

an input module configured to receive a spatial data file and a second tileset;

a tiling module configured to generate a first tileset associated with the spatial data file, the first tileset comprises a plurality of tiles and corresponding identifiers;

an update module configured to

compare the identifier of each of the plurality of tiles within the first tileset with an identifier of each tile in a second tileset to identify at least one duplicate; and

merge the tiles identified to be duplicate tiles,

wherein each generated identifier comprises a zoom level data and a location data associated with the corresponding tile, and

the update module is configured to generate and append a duplicate indicator to the zoom level data and the location data, the duplicate indicator associated with the number of duplicate tiles in the first tileset and the second tileset.

7. The device of claim 6, wherein the tiling module is configured to generate the first tileset by combining a plurality of generated tiles associated with a higher zoom level to generate a tile associated with a lower zoom level.

8. The device of claim 6 or claim 7, wherein the update module is configured to package the merged tiles into a file format for storing tileset or configured to store the merged tiles into a specific directory, and/or wherein the update module is optionally configured to merge the duplicate tiles by overlaying at least one duplicate tile over another duplicate tile.

9. A system for processing spatial data comprising the device of any one of claims 6 to 8, and a storage module, wherein the merged tiles are sent to the storage module.

10. The system of claim 9, further comprising a Web Map Tile Service (WMTS) service, wherein the storage module comprise an interface to allow access by a Web Map Tile Service (WMTS), wherein the system optionally comprise a vehicle navigation system configured to access the WMTS for rendering map tiles on demand.

11. A system for processing spatial data comprising

a master node arranged in data or signal communication with a plurality of slave nodes, the master node comprising a task scheduler to assign at least one task to each of the plurality of slave nodes;

a first slave node configured to generate a first tileset associated with a first spatial data file, the first tileset comprising a plurality of tiles and corresponding identifiers;

a second slave node configured to generate a second tileset associated with a second spatial data file, the first second tileset comprising a plurality of tiles and corresponding identifiers;

a processing module configured to compare the identifiers of each of the plurality of tiles within the first tileset with the identifiers of each tile in the second tileset to identify at least one duplicate, and

a third slave node configured to merge the tiles identified to be duplicated tiles.

wherein each generated identifier comprises a zoom level data and a location data associated with the corresponding tile, and

the update module is configured to generate and append a duplicate indicator to the zoom level data and the location data, the duplicate indicator associated with the number of duplicate tiles in the first tileset and the second tileset.

12. The system of claim 11, further comprising a storage module arranged in data or signal communication with at least one of the first slave node, the second slave node and the third slave node, the system optionally comprise a pre-processing module to obtain a batch of spatial data and split the batch of spatial data into at least the first spatial data file and the second spatial data file.

13. The system of claim 12, wherein where the system comprise a pre-processing module, the storage module is configured to identify from the batch of spatial data, at least one spatial data file associated with a specific file format, such that spatial data files associated with the specific file format are configured to be sent to the third slave node bypassing the pre-processing module.

14. A non-transitory computer-readable storage medium comprising instructions, which, when executed by one or more processors, cause the execution of the method for processing spatial data according to any one of claims 1 to 5.

15. A data processing device configured to perform the method of any one of claims 1 to 5.

16. A computer executable code comprising instructions for processing spatial data according to any one of claims 1 to 5.