HYDROGRAPHY DATASET DESCRIPTION

Definitions:

Coastal boundary – a geometry line that delimits the river mouth that flows into the sea (limit of the river flow regime).

Otto Pfafstetter coding system – the methodology for coding watersheds proposed by Otto Pfafstetter. In this methodology, at any level of classification, the four tributaries with the largest drainage basin are determined, following along the main watercourse from downstream to upstream. In each river bifurcation, the tributary is defined as the watercourse with the smallest drainage area, while the main watercourse will be the one with the largest area. The four largest tributaries of the main watercourse at each branch level receive downstream numbers 2, 4, 6 and 8 downstream. The four largest tributaries for each of these tributaries are again determined and added to the right of this number the number of the main basin of an immediately lower order and so on until all the watercourses in the drainage network are coded. All other smaller tributaries of the main watercourse are grouped in five areas designated by Pfafstetter (1989) as interbasin, which are assigned the odd numbering 1, 3, 5, 7 and 9, also having the downstream criterion for the amount.

Hydronym – connected drainage lines that have the same river name.

Watercourse starting point – representation of the starting point (source) of a **watercourse**.

Watercourse ending point – representation of the ending point (end/confluence) of a **watercourse**.

Shoreline starting point – representation of the starting point (source) of a **coastal line**.

Shoreline ending point – representation of the ending point (end) of a **coastal line**.

Stream mouth - representation of the end or mouths of **watercourses** flowing into the sea.

Output Products:

pgh_output.geoft_bho_drainage_line - vector representation of the rivers derived from a systematic cartographic mapping in the form of **drainage lines** that represent a drainage network.

pgh_output.geoft_bho_drainage_area – vector representation of drainage catchment areas for each drainage line according to the Pfafstetter watershed coding system.

pgh_output.geoft_bho_drainage_point – vector representation of the drainage network nodes derived from the drainage lines that can be classified in: watercourse starting point, watercourse ending point, shoreline starting point, shoreline ending point or stream mouth.

pgh_output.geoft_bho_watercourse - vector representation of the logical element watercourse basin. The watercourse is the geometric union of all drainage lines that are located from the stream mouth until the headwater using the mayor upstream area criteria.

pgh_output.geoft_bho_shoreline - representation of the coastline.

Spatial Layers

pgh_output.geoft_bho_drainage_line attribute table fields:

v001 – (drainage line identifier) a single number that characterizes a stretch (primary key).

v002 – (origin node) the origin node of drainage stretches. It is associated with the single identifier of drainage points.

v003 – (destination node) the destination node of drainage stretches. It is associated with the single identifier of drainage points.

v004 – (watercourse code) code created by Otto Pfafstetter for the watercourse where the stretch is inserted.

v005– (basin code) Pfafstetter basin code system for the hydrographic catchment area relative to the stretch.

v006 – (stretch length) length of the drainage stretch, in kilometres.

v007– (distance to the basin mouth in relation to the drainage stretch) the distance, in kilometres, throughout the watercourses, from the downstream point of the stretch to the reference shoreline, with the drainage stretch as reference.

v008 – (distance to the watercourse mouth) the distance, in kilometres, throughout the watercourse, from the downstream point of the stretch to the relevant watercourse (a watercourse according to Otto Pfafstetter criteria, whose code is given by watercourse code).

v009– (basin direct catchment area) an area, in square kilometres, of the hydrographic catchment area in the drainage stretch.

v010– (the upstream area from the drainage stretch) an area, in square kilometres, of the upstream basin in the reference drainage stretch (including the catchment area of the stretch itself).

v011– (generic name) the generic name of the drainage stretch's hydronym (river, stream, creek etc.) obtained in the cartography, as systematized.

v012– (connection name) the connection name between the generic name and the specific name of a hydronym (of, 's, de, do, da, dos, del, de las etc.) obtained in the cartography, as systematized.

v013– (specific name) the specific name of the drainage stretch's hydronym obtained in the cartography, as systematized.

v014– (river full name) full name of a river or concatenation of generic name + connection name + specific name obtained in the cartography, as systematized.

v015 – (original name) – the original name of a river as it appears in the cartography, without systematization.

v016 – (code of the watercourse into which it flows) code created by Otto Pfafstetter for the watercourse into which watercourse flows.

v017 – (downstream stretch) number of the stretch immediately downstream to the confluence.

v018 – (point in relation to the basin) distance, in kilometres, from the reference watercourse mouth to the shoreline.

v019 – (basin area referring to the watercourse) area, in square kilometres, of the watercourse catchment area.

v020 – (watercourse order) order from the mouth of the basin in the sea (watercourse that flows directly into the sea is order 1, and watercourse that flows into it is 2, and so on) of the watercourse.

v021– (length of the watercourse) length of the watercourse in kilometres.

v022 – (Otto Pfafstetter level for a basin) maximum number of the number of digits of Otto Pfafstetter code, taking as reference the basin code for the hydrographic catchment area.

v023– (Otto Pfafstetter level for a watercourse) maximum number of the number of digits of Otto Pfafstetter code, taking as reference the watercourse code.

v024– (Strahler order) – water course Strahler Order.

v025 – description of the watercourse dominion type: State, Federal or International.

V026 – Database Version.

V027 – geometry(MultilineString).

pgh_output.geoft_bho_drainage_area attribute table fields:

v001 – (single basin identifier) a single number that characterizes a hydrographic catchment area (primary key).

v002 – (single stretch identifier) a single number that characterizes the drainage line associated with this feature (foreign key).

v003 – (watercourse code) code created by Otto Pfafstetter for the watercourse where the stretch is inserted.

v004 – (basin code) code created by Otto Pfafstetter for the hydrographic catchment area relative to the stretch (alternate key).

v005 – (basin direct catchment area) an area, in square kilometres, of the hydrographic catchment area in the stretch.

v006 – (watercourse order) order from the mouth of the basin in the sea (watercourse that flows directly into the sea is order 1, and watercourse that flows into it is 2, and so on) of the watercourse.

v007 – (Otto Pfafstetter level 1) first number in Otto Pfafstetter code for the hydrographic catchment area of the stretch.

v008 – (Otto Pfafstetter level 2) first two numbers in Otto Pfafstetter code for the hydrographic catchment area of the stretch.

v009 – (Otto Pfafstetter level 3) first three numbers in Otto Pfafstetter code for the hydrographic catchment area of the stretch.

v010– (Otto Pfafstetter level 4) first four numbers in Otto Pfafstetter code for the hydrographic catchment area of the stretch.

v011 – (Otto Pfafstetter level 5) first five numbers in Otto Pfafstetter code for the hydrographic catchment area of the stretch.

v012 – (Otto Pfafstetter level 6) first six numbers in Otto Pfafstetter code for the hydrographic catchment area of the stretch.

v013 – (nível de Otto Pfafstetter) the maximum number of the number of digits of Otto Pfafstetter code for the basin.

v014 – Database version.

v015 – geometry(MutiPolygon)

pgh_output.geoft_bho_watercourse attribute table fields:

v001 – (single watercourse identifier) a single number that characterizes the watercourse (primary key).

v002 – (watercourse code) code created by Otto Pfafstetter for the watercourse where the stretch is inserted (foreign key).

v003 – (point in relation to the basin) distance, in kilometres, from the reference watercourse mouth to the shoreline.

v004 – (length of the watercourse) length of the watercourse in kilometres.

v005 – (basin area referring to the watercourse) area, in square kilometres, of the hydrographic catchment area in the watercourse.

v006 – (code of the watercourse into which it flows) code created by Otto Pfafstetter for the watercourse into which watercourse flows.

v007 – (Otto Pfafstetter level for a watercourse) maximum number of the number of digits of Otto Pfafstetter code for watercourse, taking as reference the watercourse code.

v008 – (watercourse order) order from the mouth of the basin in the sea (watercourse that flows directly into the sea is order 1, and watercourse that flows into it is 2, and so on) of the watercourse.

v009 – description of the watercourse dominion type: State, Federal or international.

v010 – Database Version

v011– geometry(MultilineString).

pgh_output.geoft_bho_drainage_point attribute table fields:

v001 – (single drainage point identifier) a single number that characterizes the drainage stretch nodes (primary key).

v002– (watercourse code) code created by Otto Pfafstetter for the watercourse to which the point refers.

v003– (description of the type of point) description of the type of drainage system point: watercourse starting point, watercourse ending point, shoreline starting point, shoreline ending point or stream mouth.

v004– Database version.

v005– geometry(MultiPoint).

pgh_output.geoft_bho_shoreline attribute table fields:

v001 – (single coastline identifier) a single number that characterizes the coastline (primary key).

v002– Coastline name.

v003– geometry(MultilineString).