

GDF - description

Generic Data Format structure contains 9 variables, where *d* is the most essential one, because it contains the data which can be further processed. The other variables are used for the correct data description – units, coordinate system, fields etc.

GDF file name following the scheme: *GDF_EPISODENAME_file_description*.

The structure of Generic Data Format

Variable name	Type	Description
CRS	character	Coordinate Reference System EPSG code (or local) mapping surveying (http://epsg.io), standard WGS84 (EPSG: 4326). If not applicable input 'n/a'.
d	structure	The variable containing the data. The data may be as a single variable, a vector or an array. Data name following the scheme: <i>Name_of_parameter</i> or <i>NAME</i> (for shortcuts, chemical formulas etc.)
Description	character	The text description of the data contained in the file
FieldDescription	cell	Description of the fields. An array contains two columns: the first contains the name of the field/column of data, the second contains a description of them. All data must be specified

FieldType	ce ll	<p>An array contains two columns: the first contains the name of the field/column of data, the second contains the data type number. All data must be specified. The Numbers of Data type:</p> <p>1 – the real data without limits,</p> <p>2 – the integer data,</p> <p>3 – text value,</p> <p>4 – the real number rounded to 0.1 (shown as 11),</p> <p>5 – time in Matlab format serial time – the time display format; seconds with accuracy 1/10,</p> <ul style="list-style-type: none">• 5a - time containing only year value e.g. '2010', the time display format: year '2010'• 5b - time containing only year and month value e.g. '2010-01', the time display format: year month e.g. '2010 Jan'• 5<pattern> - time read from string with the provided pattern, specified according to the table: <table><tr><td>symbols:</td><td>examples:</td></tr><tr><td>year: 'y'</td><td>"5yyyy MMM dd HH:mm:ss"</td></tr><tr><td>month: 'M'</td><td>result: "2010 Jan 23 14:15:20"</td></tr><tr><td>day: 'd'</td><td>"5yyyy-MM-dd"</td></tr><tr><td>hour: 'H'</td><td>result: "2010-01-23"</td></tr><tr><td>minute: 'm'</td><td>"5HH:mm:ss.SSS"</td></tr><tr><td>second: 's'</td><td>result: "14:15:20.454"</td></tr><tr><td>mili- , micro-second: 'S'</td><td>"5HH:mm:ss.SSSSSS"</td></tr><tr><td></td><td>result: "14:15:20.454323"</td></tr></table> <p>6 – the real data display in an engineering manner with one decimal place, e.g.: 3.5E6, (obsolete, recommended 2cd)</p> <p>7 – the real data display in an engineering manner with two decimal place, (obsolete, recommended 2cd)</p> <p>bc – (b and c are code digits) the real data is displayed in fix-point manner with at minimum b places before decimal and c decimal place,</p> <p>e.g. For number 3.149.</p> <table><tr><td>10:</td><td>„3"</td></tr><tr><td>11:</td><td>„3.1"</td></tr><tr><td>12:</td><td>„3.15"</td></tr><tr><td>20:</td><td>„03"</td></tr><tr><td>23:</td><td>„03.149"</td></tr></table> <p>1bc– the same manner as bc, but with place for a sign (space for sign „+", sign '-' for sign „-"),</p> <p>2cd– (c and d are code digits), the real data is displayed in an engineering manner, with place for a sign (space for sign „+", sign '-' for sign „-"), with c decimal place and exponent expressed by d places. The sign in exponent is always displayed.</p> <table><tr><td>e.g. For number 0.001</td><td>e.g. For number 1000</td></tr><tr><td>211: „1.0E-3"</td><td>211: „1.0E+3"</td></tr><tr><td>221: „1.00E-3"</td><td>221: „1.00E+3"</td></tr><tr><td>212: „1.0E-03"</td><td>212: „1.0E+03"</td></tr><tr><td>222: „1.00E-03"</td><td>222: „1.00E+03"</td></tr></table>	symbols:	examples:	year: 'y'	"5yyyy MMM dd HH:mm:ss"	month: 'M'	result: "2010 Jan 23 14:15:20"	day: 'd'	"5yyyy-MM-dd"	hour: 'H'	result: "2010-01-23"	minute: 'm'	"5HH:mm:ss.SSS"	second: 's'	result: "14:15:20.454"	mili- , micro-second: 'S'	"5HH:mm:ss.SSSSSS"		result: "14:15:20.454323"	10:	„3"	11:	„3.1"	12:	„3.15"	20:	„03"	23:	„03.149"	e.g. For number 0.001	e.g. For number 1000	211: „1.0E-3"	211: „1.0E+3"	221: „1.00E-3"	221: „1.00E+3"	212: „1.0E-03"	212: „1.0E+03"	222: „1.00E-03"	222: „1.00E+03"
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FieldUnit	ce ll	Description of units for individual data, e.g. m/s. An array contains two columns: the first contains the name of the field/column of data, the second contains the unit. All data must be specified.																																						
FormatName	ch ar	Name of data format GDF (Generic Data Format).																																						

EPOS Thematic Core Service Anthropogenic Hazards

Format Version	double	When changing/expansion of the format change its version. It can have one number after the decimal point.
TimeZone	character	Acronym of Time Zone (http://en.wikipedia.org/wiki/List_of_time_zone_abbreviations) from the episode of origin. If not applicable input 'n/a'.