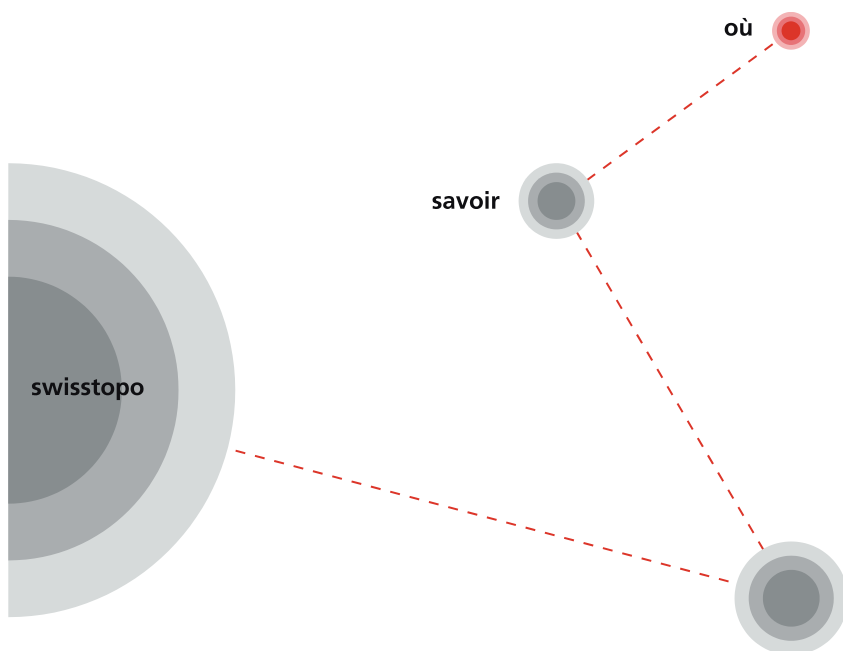


swissEO NDVldiff

Additional content information



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Bundesamt für Landestopografie swisstopo
Office fédéral de topographie swisstopo
Ufficio federale di topografia swisstopo
Uffizi federal da topografia swisstopo

www.swisstopo.ch

Table of Contents

1	Introduction	3
2	FOREST-10M	4
3	FOREST-WARNREGIONS-CSV/PARQUET/GEOJSON.....	5
4	PIXELCOUNT-10M.....	6
5	METADATA	7

1 Introduction

This document is a list of all the elements available in the swissEO NDVIdiff product. This product with the Normalized Difference Vegetation Index (NDVI) changes shows the difference between the vegetation's state of the current year compared to the previous year as observed by satellites.

For each asset, an explanatory table is included with the main information about the different features of the asset.

References to data samples are also included.

Further information is available on the product page: <https://www.swisstopo.admin.ch/en/satelliteimage-swisseo-ndvi-diff>

2 FOREST-10M

This raster contains the NDVI change values masked for the forest areas of Switzerland with a resolution of 10 m.

Detailed information:

Name	Description	Min	Max	Resolution	Color range (continuous)	Units	Scale	NoDataValue	Datatype
ndvi_diff	Normalized Difference Vegetation Index (NDVI) change values Forest Perimeter			10 meters	Value: -300, Identifier: -0.3 Description: HEX #b71c1c Value: -225, Identifier: -0.225 Description: HEX #cd5a48 Value: -150, Identifier: -0.15 Description: HEX #e49974 Value: -75, Identifier: -0.075 Description: HEX #fad7a0 Value: 0, Identifier: 0 Description: HEX #f5f5f5 Value: 75, Identifier: 0.075 Description: HEX #80cbc4 Value: 150, Identifier: 0.15 Description: HEX #55a198 Value: 225, Identifier: 0.225 Description: HEX #2b776c Value: 300, Identifier: 0.3 Description: HEX #004d40 Value: [32700], Identifier: Missing data Description: HEX #b3b6b7		1000	32701	Int16

Data sample:

[Preview](#), [Sample](#)

3 FOREST-WARNREGIONS-CSV/PARQUET/GEOJSON

Files with the average NDVI change values and the percentage availability of valid values over the forest areas per warning region. For Parquet and GeoJson format are also included the coordinates of the warning regions and their bounding box.

Detailed information:

Name	Description	Min	Max	Resolution	Color range (continuous)	Units	Scale	NoDataValue	Datatype
ndvi_diff_mean	NDVI changes Mean Region of forest				Value: -0.3, Identifier: -0.3 Description: HEX #b71c1c Value: -0.225, Identifier: -0.225 Description: HEX #cd5a48 Value: -0.150, Identifier: -0.15 Description: HEX #e49974 Value: -0.75, Identifier: -0.075 Description: HEX #fad7a0 Value: 0, Identifier: 0 Description: HEX #f5f5f5 Value: 0.075, Identifier: 0.075 Description: HEX #80cbc4 Value: 0.150, Identifier: 0.15 Description: HEX #55a198 Value: 0.225, Identifier: 0.225 Description: HEX #2b776c Value: 0.300, Identifier: 0.3 Description: HEX #004d40 Value: [32.700], Identifier: Missing data Description: HEX #b3b6b7			32.701	float
availability_percentage	percentage of available information within region of forest	0	100			%		110	float
REGION_NR	RegionID Trockenheitsplattform	31	68						int

Data sample:

[CSV Sample](#), [Geojson Sample](#), [Parquet sample](#)

4 PIXELCOUNT-10M

This raster contains the count for valid pixels masked for the forest areas of Switzerland with a resolution of 10 m.

Detailed information:

Name	Description	Min	Max	Resolution	Range (continuous)	Units	Scale	NoDataValue	Datatype
pixel_count_current	Number of valid NDVI pixels used for the current time period.	0	~25	10 meters			1	127	Int8
pixel_count_past	Number of valid NDVI pixels used for the previous time period.	0	~25	10 meters			1	127	Int8

Data sample:

[Sample](#)

5 METADATA

JSON file with all necessary information for each element of the product

Detailed information:

PRODUCT	The name of the product: NDVldiff
ITEM	The date and time of the scene in UTC
ASSET	The name of the asset (file or data set)
DATEFIRSTSCENE	The date and time of the first scene used to create the mosaic
DATELASTSCENE	The date and time of the last scene used to create the mosaic
NUMBEROFSCENES	The number of scenes used to create the mosaic
DATEITEMGENERATION	The date the product was generated.
PROCESSORHASHLINK	A link to the commit in the GitHub repository of the processor used.
PROCESSORRELEASEVERSION	The version of the code used
GEOCATID	A unique metadata ID for the product in geocat.ch
POSTPROCESSING_STATE	The status of the postprocessing (COMPLETED)
POSTPROCESSING_DESCRIPTION	A description of the postprocessing
POSTPROCESSING_PRIORITY	The processing priority
POSTPROCESSING_CREATION_TIMESTAMP_MS	The time when the scene was created (as a Unix timestamp in milliseconds)
POSTPROCESSING_UPDATE_TIMESTAMP_MS	The time when the scene was updated (as a Unix timestamp in milliseconds)
POSTPROCESSING_START_TIMESTAMP_MS	The time when the scene was processing was started (as a Unix timestamp in milliseconds)
POSTPROCESSING_TASK_TYPE	The task type (usually export)
POSTPROCESSING_DESTINATION_URI	The destination where the scene was exported to
POSTPROCESSING_ATTEMPT	The number of the attempt the processed scene stems from
POSTPROCESSING_BATCH_EECU_USAGE_SECONDS	How many EECU seconds were used for processing the scene
POSTPROCESSING_ID	The processing ID
POSTPROCESSING_NAME	The path for the processing (including the processing ID)
SOURCE_COLLECTION	The name of the source collection in Google Earth Engine (GEE)
SOURCE_COLLECTION_PROPERTIES	Additional properties of the source collection. See Table 2 for details.
GEE_VERSION	The version of Google Earth Engine (GEE) that was used.

Tabelle 2	SOURCE_COLLECTION_PROPERTIES (FOREST-10M, PIXELCOUNT-10M)
missing_data	Missing data value (32700)
pixel_size_meter	The pixel size in metres
SWISSTOPO_RELEASE_VERSION	The release version of the Swisstopo processor
GEE_api_version	The Google Earth Engine API version
no_data	No data value (32701)
collection	The path to the source collection in GEE
system:time_start	The start time of the scene (as a Unix timestamp in milliseconds)

S2_SR_index_list	A list of the indices of all the S2-SR scenes used for the NDVI calculation
temporal_coverage	The temporal coverage [months]
system:time_end	The end time of the scene (as a Unix timestamp in milliseconds)
scale	The scaling factor used

Tabelle 3	FOREST WARN REGIONS (CSV, GEOJSON, PARQUET)
PRODUCT	Collection name
ITEM	Item ID – timestamp in the format “YYYY-MM-DDT235959”
ASSET	Asset name including file format
SOURCE	The source of the data
format	The format of the file (.csv, .geojson, .parquet)
regionId	The ID of the region
ndvi_diffMean	The NDVI change mean value of the region
availabilityPercentage	The percentage of available pixels with information within the region

Data sample:

[Sample](#)