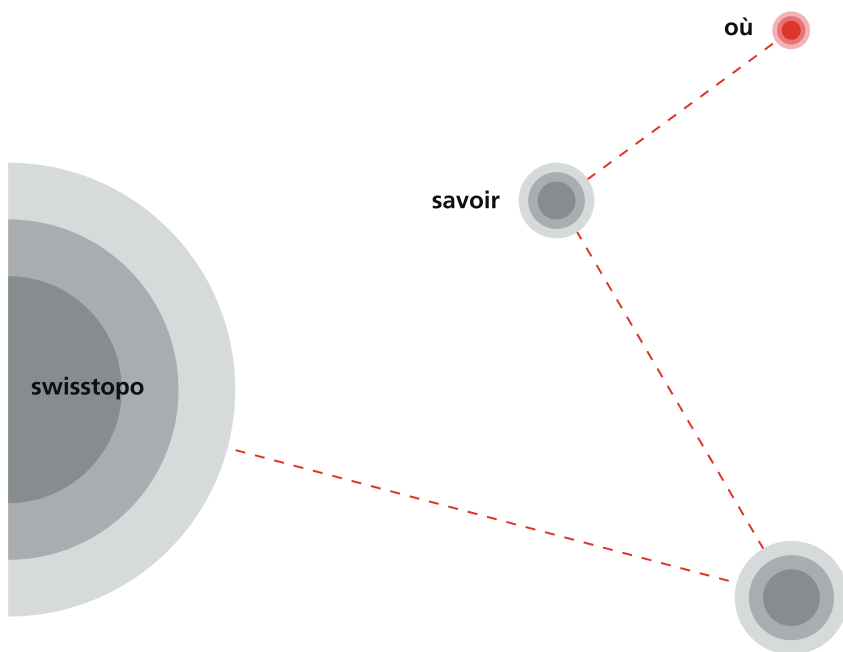


swissEO VHI

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

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1 Introduction

This document is a list of all the elements available in the swissEO VHI product. This product with the Vegetation Health Index (VHI) shows the current health status of vegetation 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 are available on the product page: <https://www.swisstopo.admin.ch/en/satelliteimage-swisseo-vhi>

2 FOREST-10M

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

Detailed information:

Name	Description	Min	Max	Resolution	Classes	Units	Scale	NoDataValue	Datatype
vhi	Vegetation Health Index Forest Perimeter	0	110	10 meters	Value: [0.09], Identifier: Extremely stressed Description: HEX #b56a29 Value: (10.19], Identifier: Very stressed Description: HEX #ce8540 Value: (20.29], Identifier: Stressed Description: HEX #f5cd85 Value: (30,39], Identifier: Slightly Stressed Description: HEX #fff5ba Value: (40,49], Identifier: Normal Description: HEX #cbffca Value: (50,59], Identifier: Good Description: HEX #52bd9f Value: (60,100], Identifier: Excellent Description: HEX #0470b0 Value: [110], Identifier: No data Description: HEX #b3b6b7			255	int8

Data sample:

- [Preview](#)
- [Sample](#)

3 FOREST-WARNREGIONS-CSV/PARQUET/GEOJSON

Files with the average VHI value 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	Classes	Units	Scale	NoData-Value	Datatype
vhiMean	VHI Mean Region of forest	0	110		Value: [0,09], Identifier: Extremely stressed Description: HEX #b56a29 Value: (10,19], Identifier: Very stressed Description: HEX #ce8540 Value: (20,29], Identifier: Stressed Description: HEX #f5cd85 Value: (30,39], Identifier: Slightly Stressed Description: HEX #fff5ba Value: (40,49], Identifier: Normal Description: HEX #cbffca Value: (50,59], Identifier: Good Description: HEX #52bd9f Value: (60,100], Identifier: Excellent Description: HEX #0470b0 Value: [110], Identifier: No data Description: HEX #b3b6b7			110	float
availabilityPercentage	percentage of available information within region of forest	0	100			%		110	float
regionId	RegionID Trockenheitsplattform	1	38						int

Data sample:

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

4 VEGETATION-WARNREGIONS-CSV/PARQUET/GEOJSON

Files with the average VHI value and the percentage availability of valid values over the vegetation 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	Classes	Units	Scale	NoData-Value	Datatype
vhiMean	VHI Mean Region of all vegetation	0	110		Value: [0,09], Identifier: Extremely stressed Description: HEX #b56a29 Value: (10,19], Identifier: Very stressed Description: HEX #ce8540 Value: (20,29], Identifier: Stressed Description: HEX #f5cd85 Value: (30,39], Identifier: Slightly Stressed Description: HEX #fff5ba Value: (40,49], Identifier: Normal Description: HEX #cbffca Value: (50,59], Identifier: Good Description: HEX #52bd9f Value: (60,100], Identifier: Excellent Description: HEX #0470b0 Value: [110], Identifier: No data Description: HEX #b3b6b7			110	float
availabilityPercentage	percentage of available information within region of all vegetation	0	100			%		110	float
regionId	RegionID Trockenheitsplattform	1	38						int

Data sample:

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

5 METADATA

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

Detailed information:

PRODUCT	The name of the product: VHI
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
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 and VEGETATION-10M)
pixel_size_meter	The pixel size in metres
GEE_api_version	The Google Earth Engine API version
SWISSTOPO_PROCESSOR	A link to the commit in the GitHub repository of the Swisstopo processor
system:time_end	The end time of the scene (as a Unix timestamp in milliseconds)
NDVI_scene_count	The number of scenes used for the NDVI
collection	The path to the source collection in GEE
NDVI_reference_data	The path to the NDVI reference data in GEE
system:time_start	The start time of the scene (as a Unix timestamp in milliseconds)
NDVI_index_list	A list of the indices of the scenes used for NDVI
SWISSTOPO_RELEASE_VERSION	The release version of the Swisstopo processor
LST_reference_data	The path to the LST reference data in GEE
VCI_and_TCI_calculated_with	Information on how the VCI and TCI were calculated (5th_and_95th_percentile)
LST_scene_count	The number of scenes used for LST
LST_index_list	A list of the indices of the scenes used for LST
missing_data	Number of missing data
temporal_coverage	The temporal coverage
alpha	Alpha value
no_data	No data value
doy	Day of year

Tabelle3	FOREST WARN REGIONS and VEGETATION WARN REGIONS (CSV, GEOJSON, PARQUET)
SOURCE	The source of the data
format	The format of the file (.csv, .geojson, .parquet)
regionId	The ID of the region
vhiMean	The VHI mean value of the region
availabilityPercentage	The percentage of available pixels with information within the region

Data sample:

[Sample](#)

6 VEGETATION-10M

This raster contains the VHI values masked for the entire vegetated area of Switzerland with a resolution of 10 m.

Detailed information:

Name	Description	Min	Max	Resolution	Classes	Units	Scale	NoData-Value	Datatype
vhi	Vegetation Health Index Vegetation Perimeter	0	110	10 meters	Value: [0,09], Identifier: Extremely stressed Description: HEX #b56a29 Value: (10,19], Identifier: Very stressed Description: HEX #ce8540 Value: (20,29], Identifier: Stressed Description: HEX #f5cd85 Value: (30,39], Identifier: Slightly Stressed Description: HEX #fff5ba Value: (40,49], Identifier: Normal Description: HEX #cbffca Value: (50,59], Identifier: Good Description: HEX #52bd9f Value: (60,100], Identifier: Excellent Description: HEX #0470b0 Value: [110], Identifier: No data Description: HEX #b3b6b7			255	int8

Data sample:

[Sample](#)