Algal Blooms Sweden - 2022

SND-ID: 2022-198-1.

Citation

Ana Tronholm, Magnus Lindeberg, & Jurie Germishuys. (2022). Algal Blooms Sweden - 2022 [Data set]. Zenodo. https://doi.org/10.5281/zenodo.7234159

Creator/Principal investigator(s)

Ana Tronholm - University of Gothenburg, Biological and Environmental Sciences

Magnus Lindeberg - Maranics AB

Jurie Germishuys - Combine Control Systems AB

Research principal

University of Gothenburg - Biological and Environmental Sciences

Principal's reference number

Formas 2020-00714

Description

Dataset containing images of algal blooms in the Baltic Sea. The data is provided with a metadata description containing time spotted, comments, municipality, county and coordinates of each image. The images and metadata file are archived in a zip package. Images show various summer surface accumulations of so-called harmful algal blooms (HABs) or nuisance blooms. Typically, these blooms consists of species of cyanobacteria of the order of Nostocales, including toxic Nodularia and Aphanizomenon. These blooms were verified by Informationscentralen (Länsstyrelsen Stockholm and Länsstyrelsen Västerbotten). However, the blooms seen in the images have not been taxonomically annotated by microscopy nor genetic analysis.

The following data fields are contained in the metadata files (provided in both json and csv format):

report_id: unique identifier for reporting record, type: string
time_spotted: date that bloom was spotted, type: datetime
algae_overview_photo: url to overview photo submitted, type: string
algae_detail_photo: url to detailed photo submitted, type: string
comments: Any additional information relating to the bloom, type: string
lat: Latitude of position where bloom was seen, type: float
long: Longitude of position where bloom was seen, type: float
place: County where bloom was spotted, type: string
kommun: Municipality where bloom was spotted, type: string

Total observations: 161
Note: Not every observation has an accompanying image and others were verified using other information provided.
Two of the submitted photographs for 2022 contained unintentionally collected personal data. They have been excluded from this dataset to make open data publishing possible.

Data contains personal data

No

Language

English

Swedish

Time period(s) investigated

2022-03-23 – 2022-09-12

Variables

161

Data format / data structure

Numeric

Text

Still image

Geospatial

Species and taxons

Nostocales

Data collection 1

- Mode of collection: Compilation/Synthesis
- Description of the mode of collection: Compilation of digital photographs submitted by participants of a citizen science project, along with metadata.
- Time period(s) for data collection: 2022-03-23 – 2022-09-12
- Instrument: Digital camera (Technical instrument(s))

Geographic spread

Geographic description: Swedish Baltic Sea coast

Responsible department/unit

Biological and Environmental Sciences

Funding

- Funding agency: Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS)
- Funding agency's reference number: 2020-00714
- Project name on the application: Åtgärder mot farliga algblomningar: Utveckling av en innovativ och integrerande metod för att förutsäga giftiga cyanobakterier i en föränderlig miljö
- Funding information: Tackling Harmful Algal Blooms: Development of an innovative and integrative method for forecasting toxic cyanobacteria in a changing environment

Research area

Ecology (Standard för svensk indelning av forskningsämnen 2011)

Biota (INSPIRE topic categories)

Oceans (INSPIRE topic categories)

Environment (INSPIRE topic categories)

Keywords

Harmful algal bloom, Algal bloom, Citizen science, Procaryote, Cyanobacteria, Species distribution, Baltic sea

Point (Lon/Lat)

11.995093, 57.691742

Point (Lon/Lat)

18.964639, 63.184108

Point (Lon/Lat)

14.26391, 60.272515

Point (Lon/Lat)

14.26391, 60.272515

Point (Lon/Lat)

17.54684, 58.891345

Point (Lon/Lat)

17.435303, 61.976138

Point (Lon/Lat)

18.067867, 59.336491

Point (Lon/Lat)

14.164673, 57.754517

Point (Lon/Lat)

17.996206, 58.999714

Point (Lon/Lat)

17.995588, 59.000988

Point (Lon/Lat)

12.3248, 58.3681

Point (Lon/Lat)

18.068069, 59.336515

Point (Lon/Lat)

12.340822, 58.361259

Point (Lon/Lat)
18.054314, 59.341944

Point (Lon/Lat)
17.814674, 58.898306

Point (Lon/Lat)
18.487244, 59.294205

Point (Lon/Lat)
18.859406, 59.521086

Point (Lon/Lat)
18.839546, 57.89452

Point (Lon/Lat)
17.918703, 58.80254

Point (Lon/Lat)
17.503796, 62.203617

Point (Lon/Lat)
19.258394, 57.948387

Point (Lon/Lat)
18.712292, 57.33171

Point (Lon/Lat)
18.337689, 59.044039

Point (Lon/Lat)
18.396406, 59.213232

Point (Lon/Lat)
18.522525, 59.074492

Point (Lon/Lat)
17.698289, 59.023595

Point (Lon/Lat)
17.691955, 59.058575

Point (Lon/Lat)
18.323942, 59.090819

Point (Lon/Lat)
18.120575, 57.497518

Point (Lon/Lat)
18.537691, 59.220583

Point (Lon/Lat)
16.730232, 58.325237

Point (Lon/Lat)
18.950043, 57.754007

Point (Lon/Lat)
18.291748, 59.082958

Point (Lon/Lat)
16.83094, 58.365506

Point (Lon/Lat)
16.884441, 58.443511

Point (Lon/Lat)
18.82503, 63.214951

Point (Lon/Lat)
18.932231, 59.83853

Point (Lon/Lat)
17.587681, 58.926094

Point (Lon/Lat)
16.941262, 58.488479

Point (Lon/Lat)
23.6083, 65.81058

Point (Lon/Lat)
18.825925, 63.215004

Point (Lon/Lat)
17.484081, 58.72022

Point (Lon/Lat)
17.544651, 58.81783

Point (Lon/Lat)
17.553828, 58.808448

Point (Lon/Lat)
18.525181, 63.021025

Point (Lon/Lat)
18.740845, 59.097672

Point (Lon/Lat)
17.665515, 59.057373

Point (Lon/Lat)
23.862777, 65.769193

Point (Lon/Lat)
22.556434, 65.791402

Point (Lon/Lat)
21.926124, 65.444952

Point (Lon/Lat)
23.062699, 65.750624

Point (Lon/Lat)
17.505416, 62.190494

Point (Lon/Lat)
17.504311, 62.197045

Point (Lon/Lat)
18.277649, 57.63766

Point (Lon/Lat)
16.730975, 58.285854

Point (Lon/Lat)
16.586952, 57.694641

Point (Lon/Lat)
23.773405, 65.750515

Point (Lon/Lat)
16.597681, 57.683551

Point (Lon/Lat)
23.186753, 65.725775

Point (Lon/Lat)
17.013133, 58.223892

Point (Lon/Lat)
23.553753, 65.789887

Point (Lon/Lat)
21.942787, 65.276458

Point (Lon/Lat)
17.814563, 58.85004

Point (Lon/Lat)
17.012967, 58.22393

Point (Lon/Lat)
16.754494, 57.660464

Point (Lon/Lat)
22.727441, 65.475011

Point (Lon/Lat)
16.555667, 57.012608

Point (Lon/Lat)
24.109261, 65.709777

Point (Lon/Lat)
23.505614, 65.71141

Point (Lon/Lat)
16.556053, 57.012795

Point (Lon/Lat)
19.051963, 59.769621

Point (Lon/Lat)
15.439348, 56.163583

Point (Lon/Lat)
16.74192, 57.728078

Point (Lon/Lat)
18.757267, 59.532983

Point (Lon/Lat)
16.960851, 58.19553

Point (Lon/Lat)
19.18899, 59.438596

Point (Lon/Lat)
18.170291, 57.32293

Point (Lon/Lat)
18.404671, 59.262057

Point (Lon/Lat)
18.735151, 59.265413

Point (Lon/Lat)
15.602303, 56.201261

Point (Lon/Lat)
18.120862, 57.496872

Point (Lon/Lat)
16.919116, 57.170689

Point (Lon/Lat)
18.071995, 62.842651

Point (Lon/Lat)
18.199081, 58.905473

Point (Lon/Lat)
16.899462, 58.360989

Point (Lon/Lat)
15.583561, 56.176974

Point (Lon/Lat)
16.920107, 58.354281

Point (Lon/Lat)
17.202012, 61.345793

Point (Lon/Lat)
16.828745, 58.335403

Point (Lon/Lat)
17.148886, 61.346507

Point (Lon/Lat)
17.88184, 58.867

Point (Lon/Lat)
16.715194, 57.892655

Point (Lon/Lat)
18.350887, 59.262196

Point (Lon/Lat)
16.653042, 57.663907

Point (Lon/Lat)
18.680218, 59.443801

Point (Lon/Lat)
16.913881, 58.251908

Point (Lon/Lat)
16.818395, 58.344731

Point (Lon/Lat)
16.818018, 58.336437

Point (Lon/Lat)
18.848319, 59.199655

Point (Lon/Lat)
18.735576, 59.245931

Point (Lon/Lat)
18.085924, 59.034979

Point (Lon/Lat)
16.727929, 57.886022

Point (Lon/Lat)
16.903301, 58.51537

Point (Lon/Lat)
16.805713, 58.623285

Point (Lon/Lat)
17.665515, 59.057373

Point (Lon/Lat)
22.071474, 65.493649

Point (Lon/Lat)
17.80284, 58.88068

Point (Lon/Lat)
16.928901, 57.206362

Point (Lon/Lat)
16.956539, 57.228561

Point (Lon/Lat)
18.385166, 59.081473

Point (Lon/Lat)
18.30604, 59.00729

Point (Lon/Lat)
16.809983, 58.344371

Point (Lon/Lat)
17.66802, 59.060065

Point (Lon/Lat)
16.959257, 57.229931

Point (Lon/Lat)
22.510189, 59.897489

Point (Lon/Lat)
18.693752, 59.567376

Point (Lon/Lat)
18.817374, 59.646184

Point (Lon/Lat)
17.688857, 59.094259

Point (Lon/Lat)
17.743435, 59.052504

Point (Lon/Lat)
16.956825, 57.230915

Point (Lon/Lat)
17.749602, 59.080829

Point (Lon/Lat)
16.955624, 57.270876

Point (Lon/Lat)
17.692165, 59.094145

Point (Lon/Lat)
19.076929, 59.573737

Point (Lon/Lat)
17.850088, 58.878947

Point (Lon/Lat)
18.352919, 59.033489

Point (Lon/Lat)
16.957396, 57.230574

Point (Lon/Lat)
17.749701, 59.080844

Point (Lon/Lat)
18.595991, 60.298594

Point (Lon/Lat)
20.401966, 63.67784

Point (Lon/Lat)
20.402504, 63.694135

Point (Lon/Lat)
17.666015, 59.057182

Point (Lon/Lat)
18.359802, 63.060435

Point (Lon/Lat)
20.070511, 63.669826

Point (Lon/Lat)
18.416657, 62.980314

Point (Lon/Lat)
19.833687, 63.564995

Point (Lon/Lat)
20.499733, 63.77041

Point (Lon/Lat)
18.870821, 59.400289

Point (Lon/Lat)
19.482408, 63.566821

Point (Lon/Lat)
18.752745, 59.210625

Point (Lon/Lat)
17.778383, 58.952613

Point (Lon/Lat)
17.665587, 59.059859

Point (Lon/Lat)
17.107086, 58.692284

Point (Lon/Lat)
18.721218, 57.341346

Point (Lon/Lat)
18.579582, 59.228316

Point (Lon/Lat)
17.388957, 58.757974

Point (Lon/Lat)
18.909745, 59.88308

Point (Lon/Lat)
18.425788, 59.199449

Point (Lon/Lat)
18.000412, 58.999909

Point (Lon/Lat)
17.55641, 58.807341

Point (Lon/Lat)
18.525409, 59.215764

Point (Lon/Lat)
17.693789, 59.034453

Point (Lon/Lat)
17.467403, 62.292596

Point (Lon/Lat)
18.552132, 62.951008

Point (Lon/Lat)
18.361862, 63.056951

Point (Lon/Lat)
16.997148, 58.000617

Point (Lon/Lat)
17.933335, 62.630376

Point (Lon/Lat)
17.213988, 61.308269

Point (Lon/Lat)
11.998718, 57.686909

Accessibility level

Access to data through an external actor
Data are freely accessible

License

Homepage

Algal Blooms Sweden, GU project page

Algal Blooms Sweden on Facebook

This resource has the following relations

Is part of Ocean Data Factory

Related research data in SND's catalogue

Algal Blooms Sweden - 2021

Download metadata

DataCite

DDI 2.5

DDI 3.3

DCAT-AP-SE 2.0

JSON-LD

PDF

Citation (CLS)