

GNSS

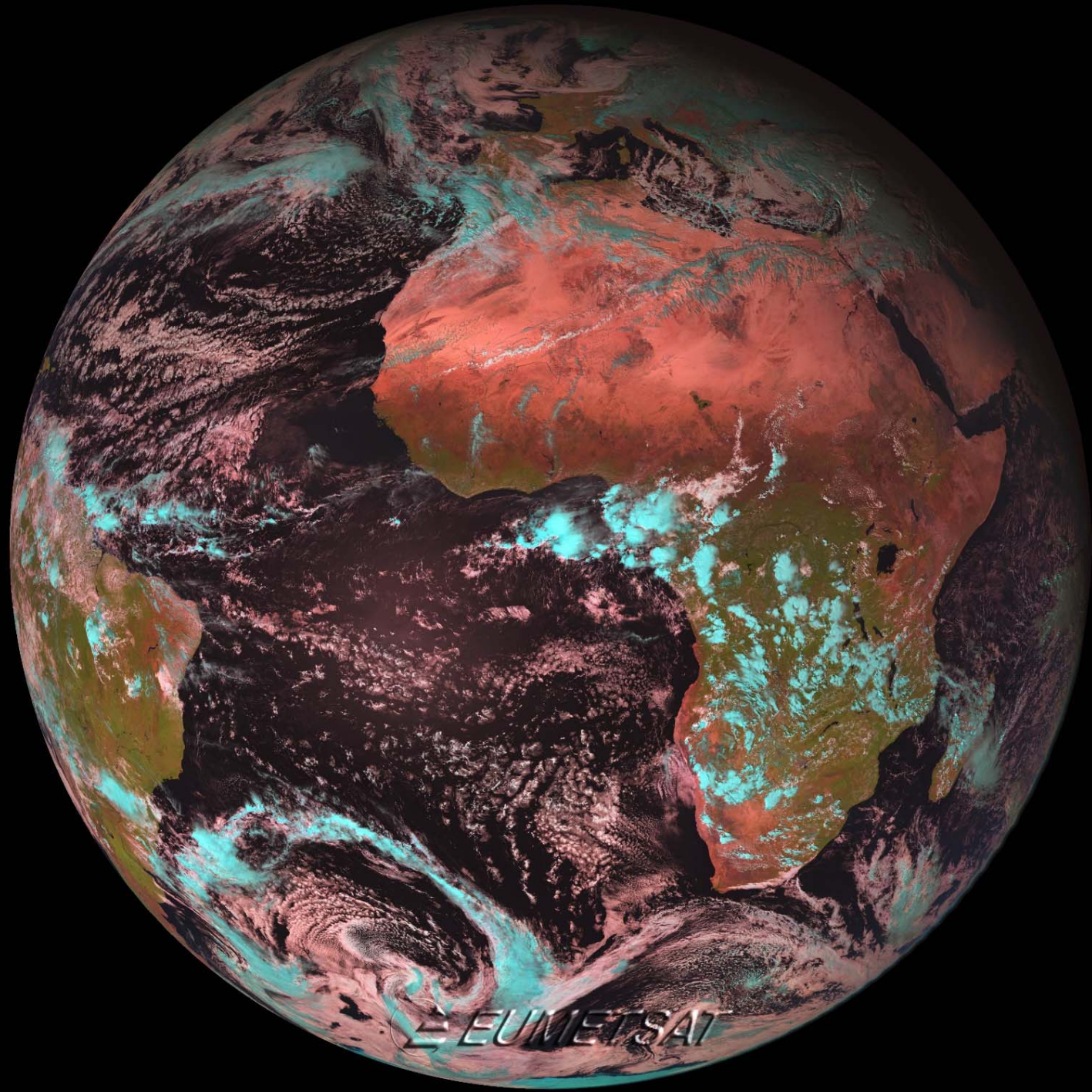


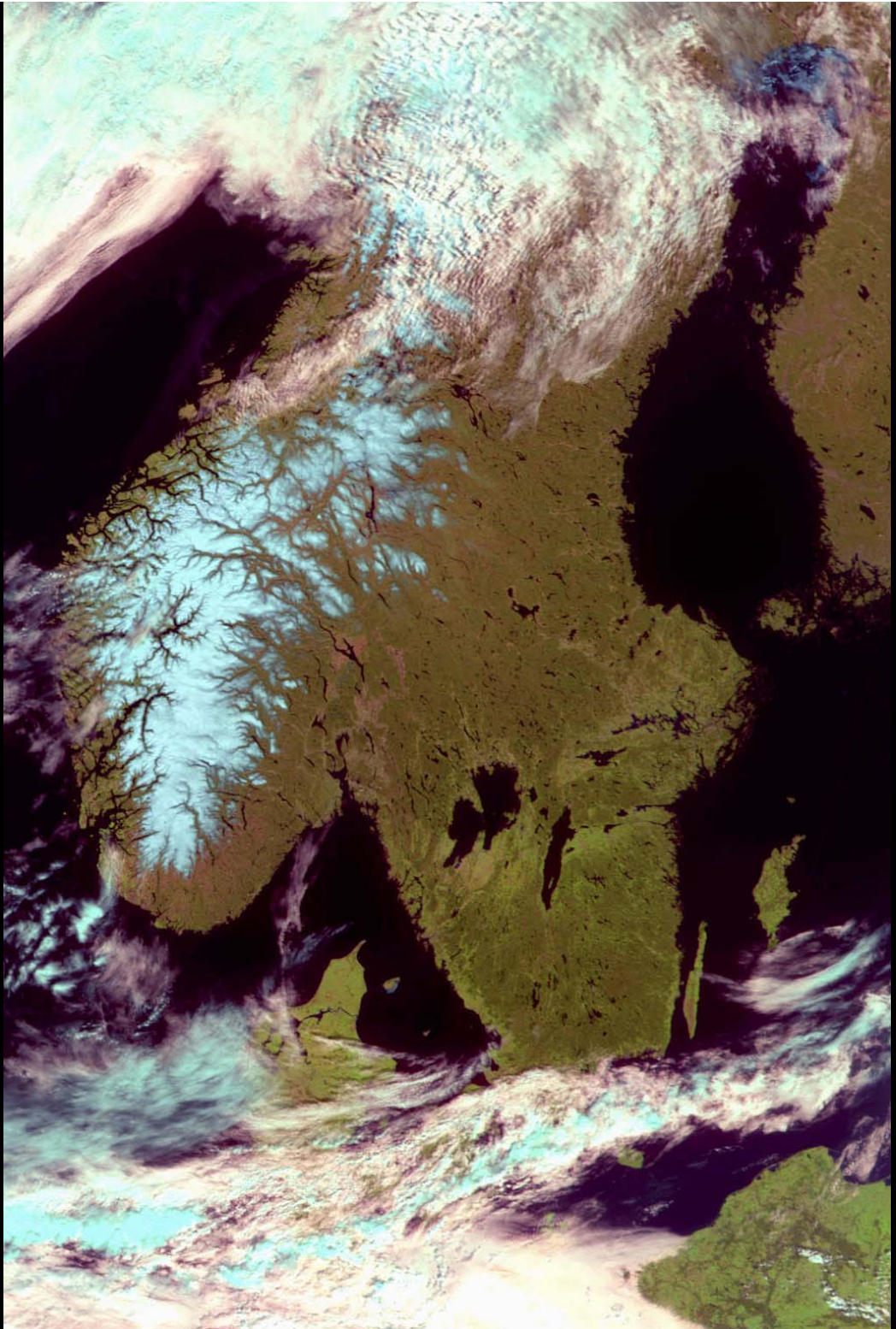
Telekom



Jordobservation



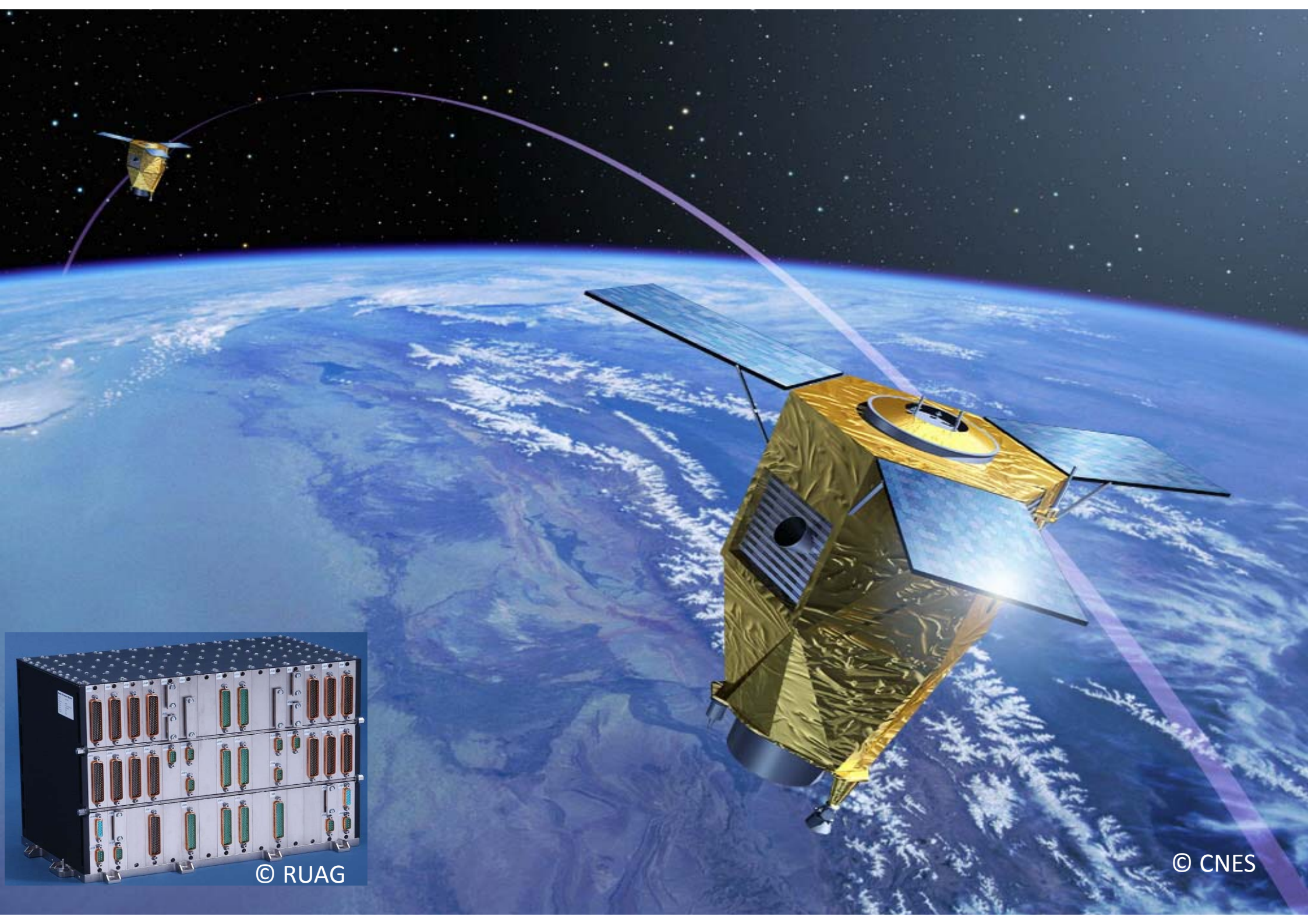








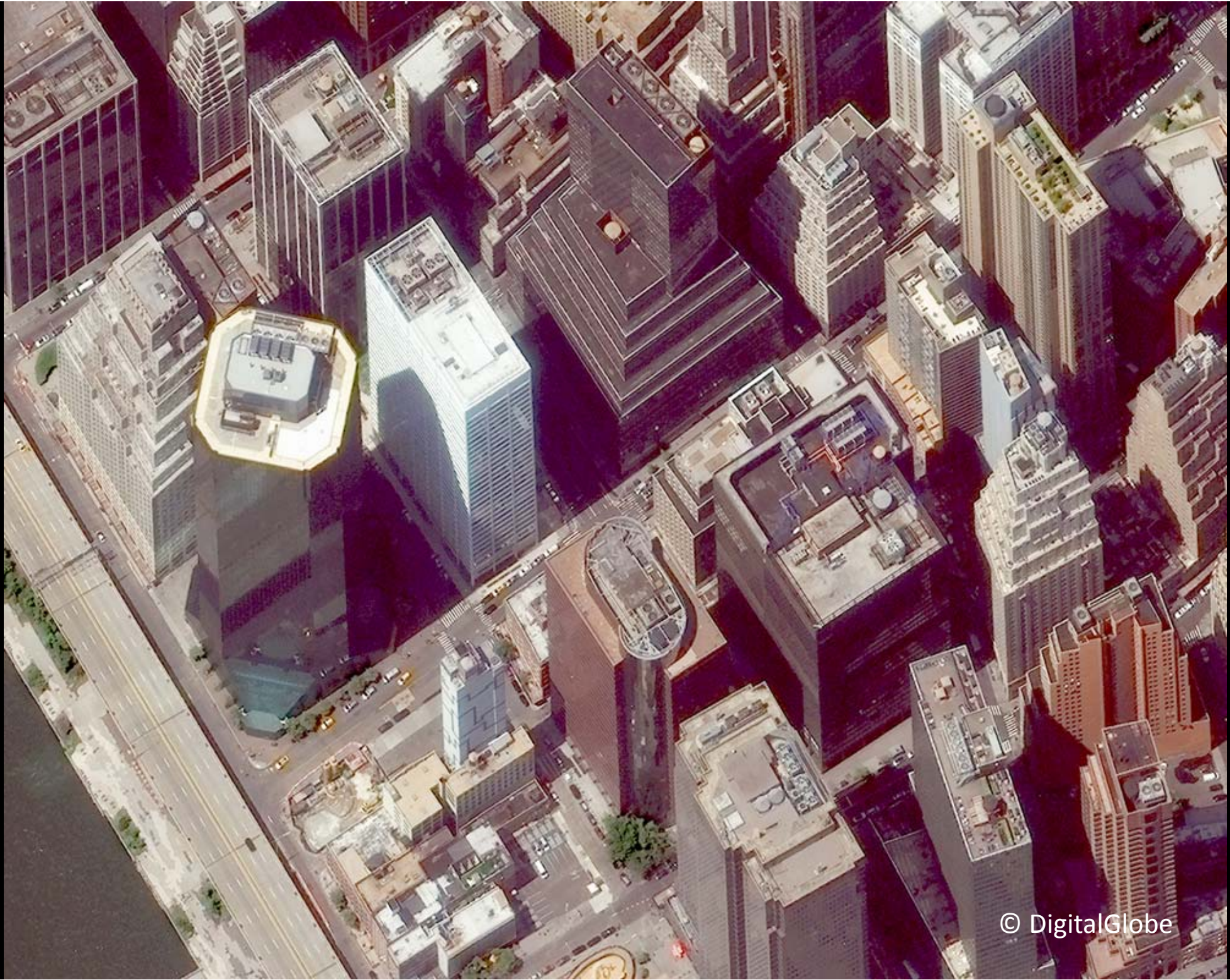


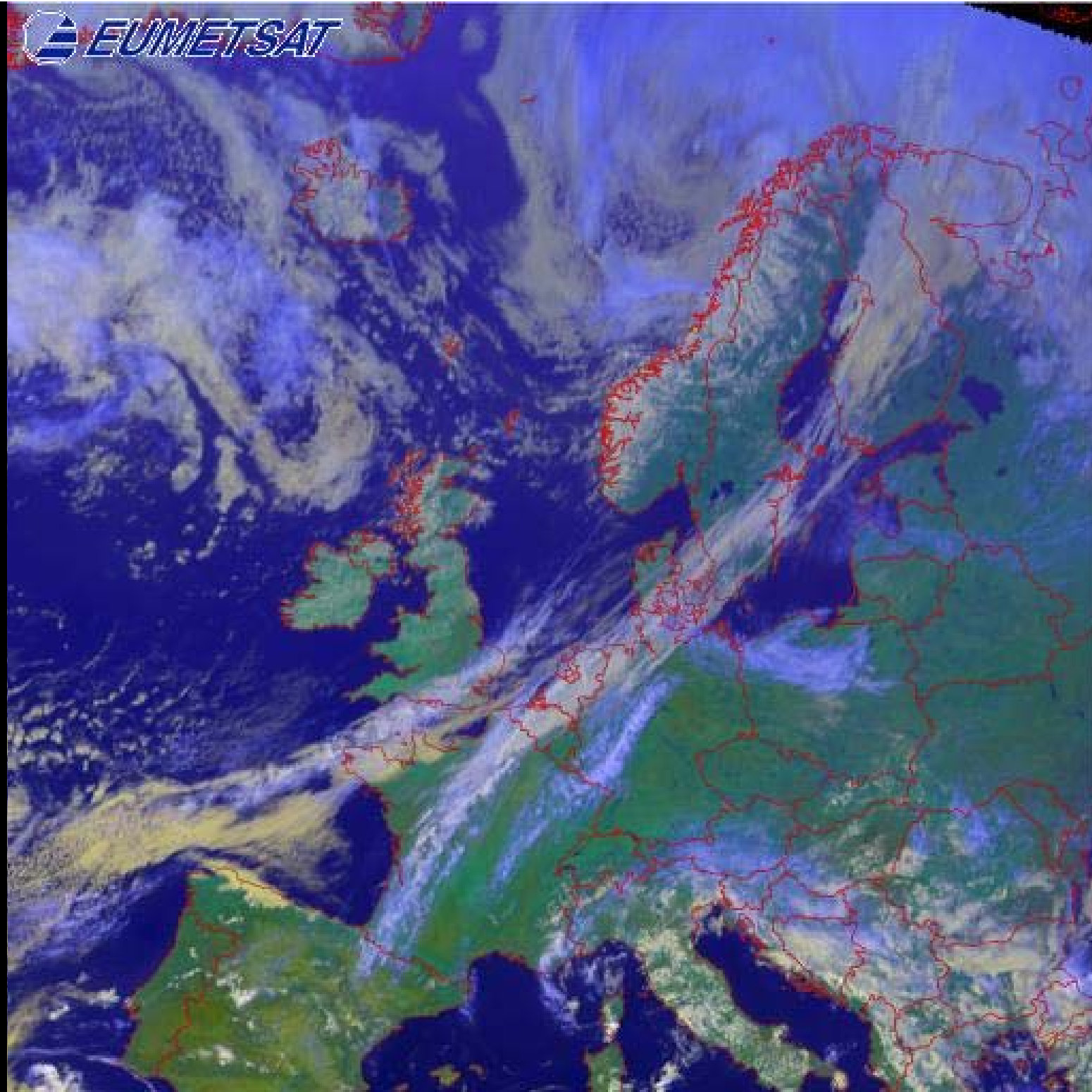


© RUAG

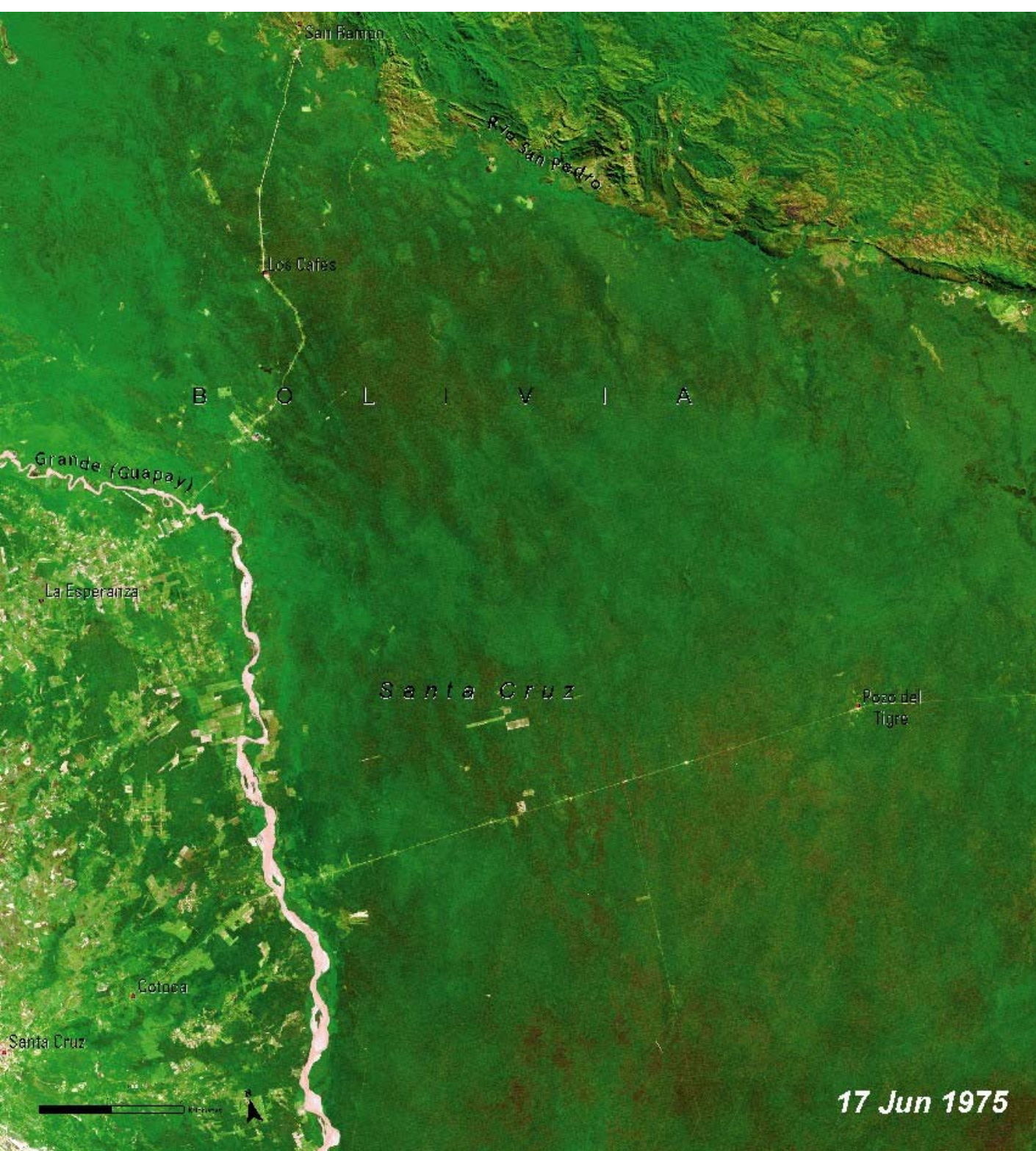
© CNES







# Bolivia 1975



# Bolivia 2003



Paraguay  
Brasilien  
Argentina

1973





Paraguay  
Brasilien  
Argentina  
2003

# Södra Spanien 1974



# Södra Spanien 2004



One Planet  
Many People  
Atlas of Our Changing  
Environment

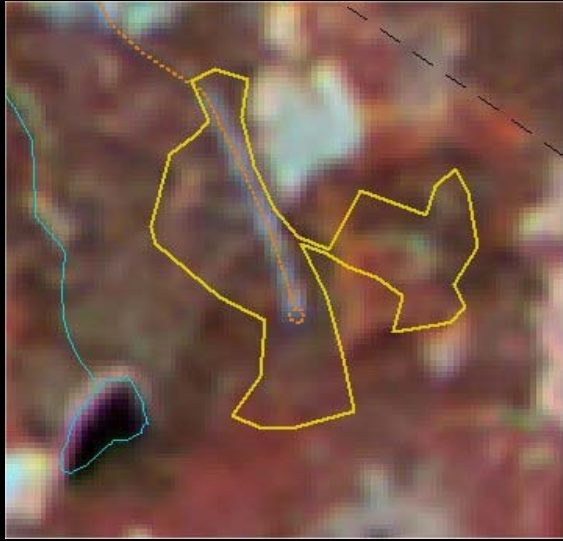
Boken kan laddas ner på:

<http://na.unep.net/atlas/onePlanetManyPeople/book.php>

18 Jul 2004

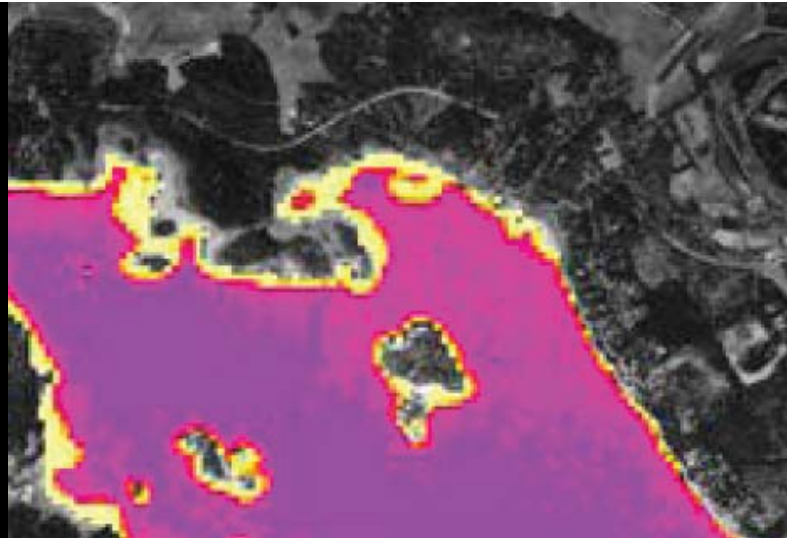




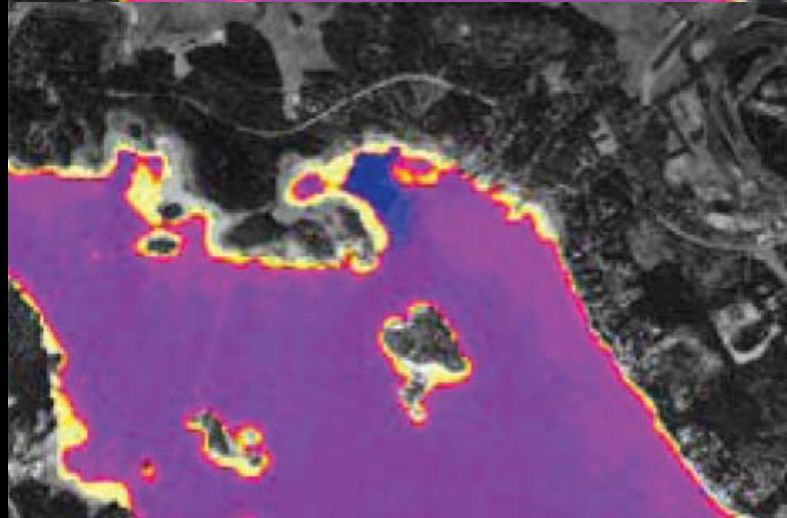




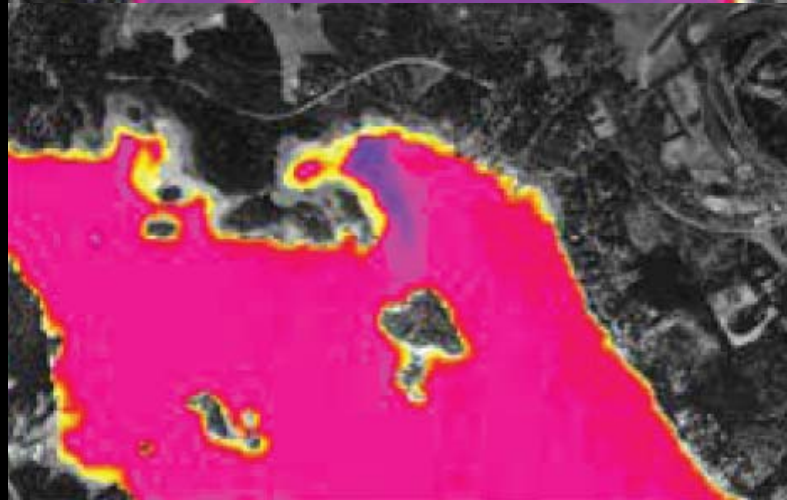
Saccess: <https://saccess.lantmateriet.se/>



2004



2005



2006

**Vädret i Sverige**

Varningar  
 Väderöversikt Sverige  
 (meteorologens kommentar)  
 Snödjup  
 UV-index idag  
 Årstidskarta  
 Brandriskprognos - 5 dygn  
 Observationer  
 Max/minvärdet  
 Vattenföring  
 Vattenstånd i de stora sjöarna  
 Vädret i Sverige (tidigare version)

**Nederbörd och molnighet**

Radar/blixt, Sverige  
 Radar, Norden  
 Satellit, Norden  
 Satellit, Europa  
 Satellit, Jorden

**Hav och kust**

Hav- och kustväder  
 Kustväder  
 Sjöväderprognos  
 Havsobservationer  
 Havsvattenstånd  
 Havsvågor  
 Kustobservationer

**Algsituationen**

Is till havs

**Luftkvalitet**

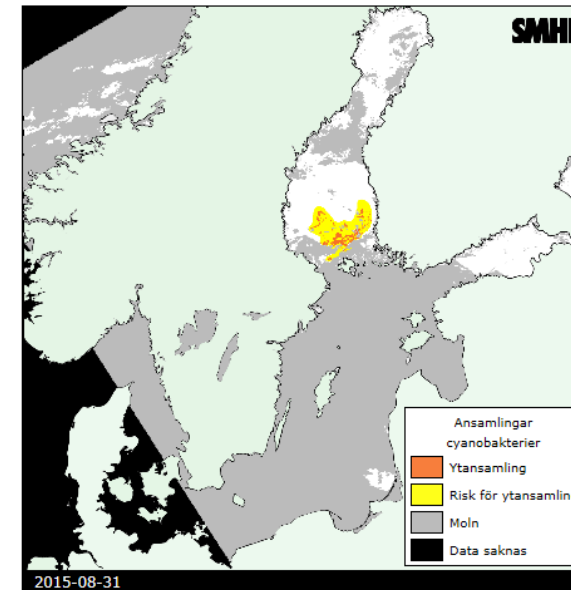
Marknära ozon

**Fjäll**

Fjällväder  
 Fjällobservationer

**Vädret i världen**

# Algsituationen

**OCEANOGRAFISK KOMMENTAR**

Algsituationen i Östersjön: Molntäckt från sydligaste Bottenhavet och söderut. Till havs i den molnfria delen av södra Bottenhavet syns ännu blomning med måttliga ytansamlingar. De dagliga rapporterna över cyanobakterieblomningarna kommer att fortsätta in i september så länge blomningar förekommer. J. Öberg

**DRIFTPROGNOS**

Förväntad drift det kommande dygnet: Ytansamlingarna i södra Bottenhavet väntas driva västerut.

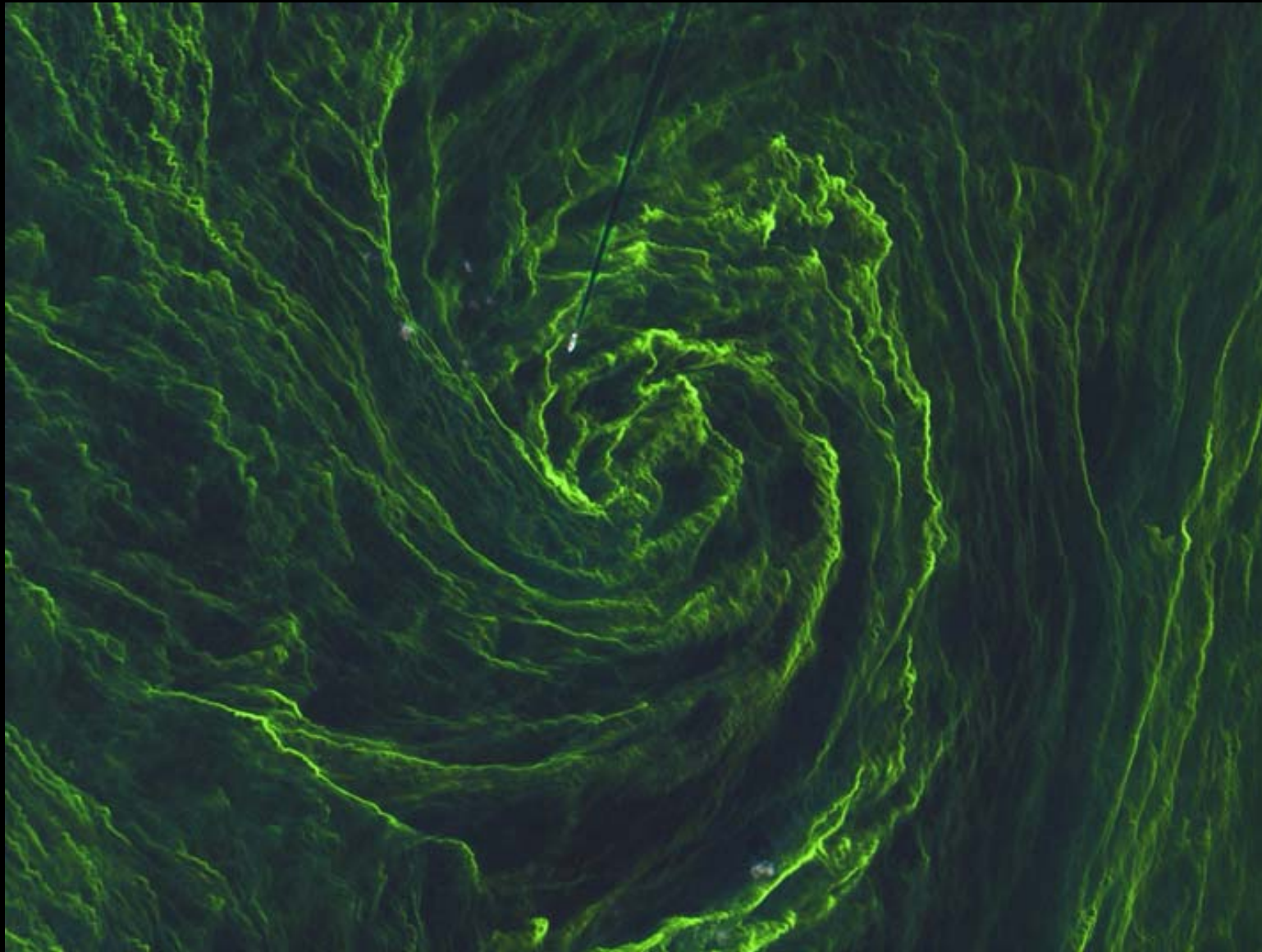
**YTANSAMLINGAR AV ALGER I ÖSTERSJÖN**

DAG	VECKA
2015-09-05	
2015-09-04	
2015-09-03	
2015-09-02	
2015-09-01	
<b>2015-08-31</b>	
2015-08-30	
2015-08-29	
2015-08-28	
2015-08-27	
2015-08-26	
2015-08-25	
2015-08-24	
2015-08-23	

För muspekaren över datumen för att se alginformationen. Under kartan visas information från oceanograf för valt datum. Uppdateras dagligen under algsäsongen.

För att se hur ytansamlingarna förväntas förflytta sig med strömmar och vind används Seatrack Web - en driftprognosmodell utvecklad av bl.a SMHI.

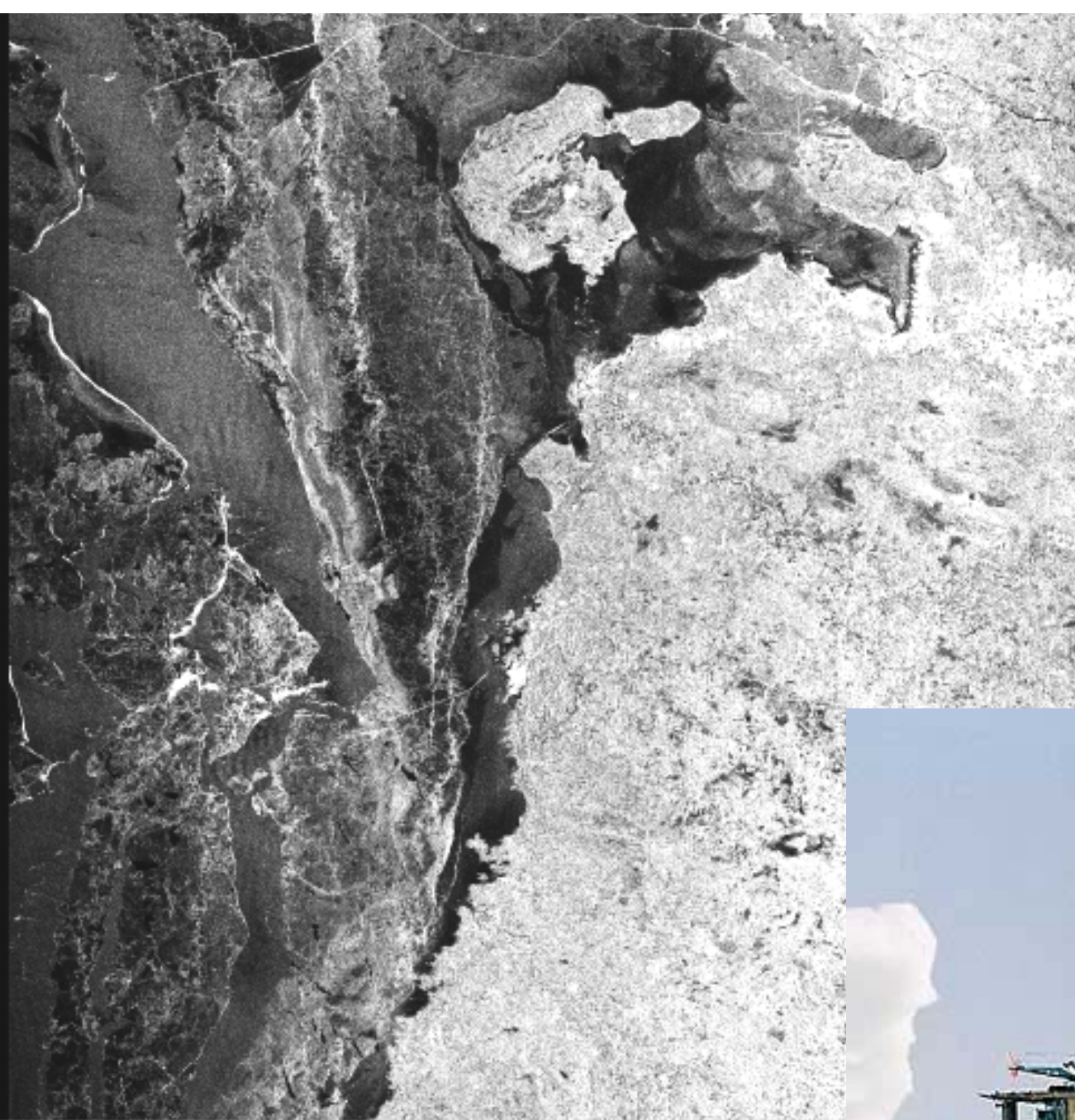




# Copernicus

Tematiska områden:  
Land  
Hav  
Atmosfär  
Klimatförändringar  
Katastrofhantering  
Säkerhet





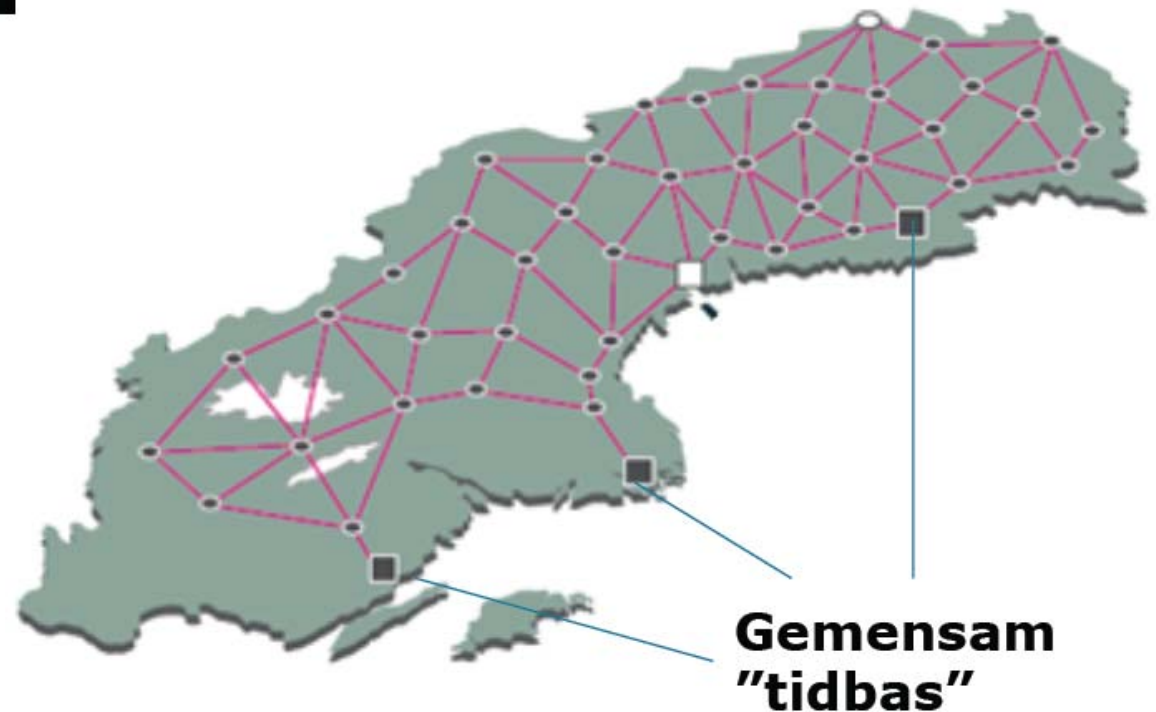






Satellitnavigeringssystem  
används vid  
lantmäteriarbete  
och  
byggen

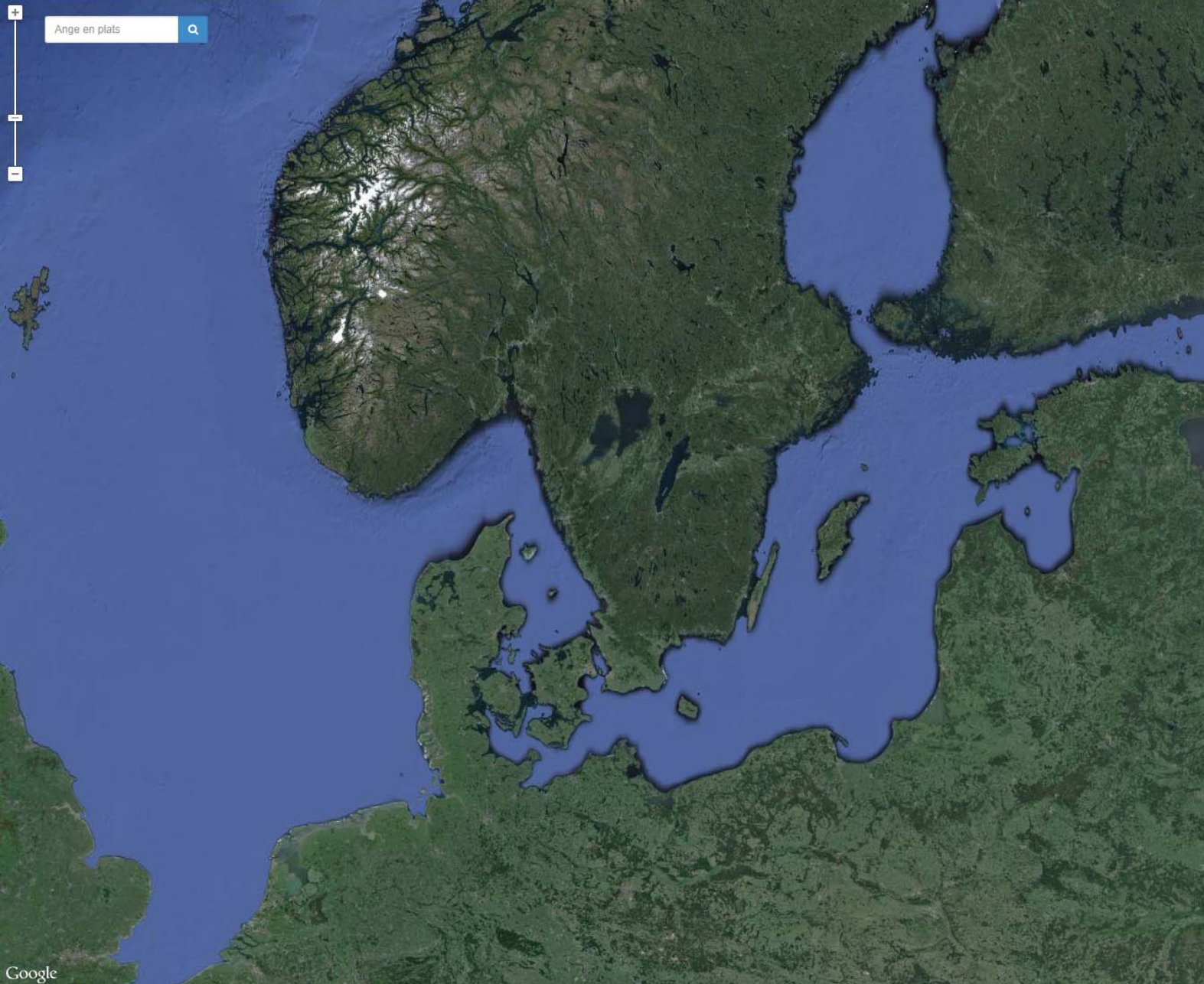
# Exempel



**För att elnätet ska "svänga i takt" i hela landet är det viktigt att kunna synkronisera tid över stora avstånd. Då används ofta GNSS.**







Gör en styrfil

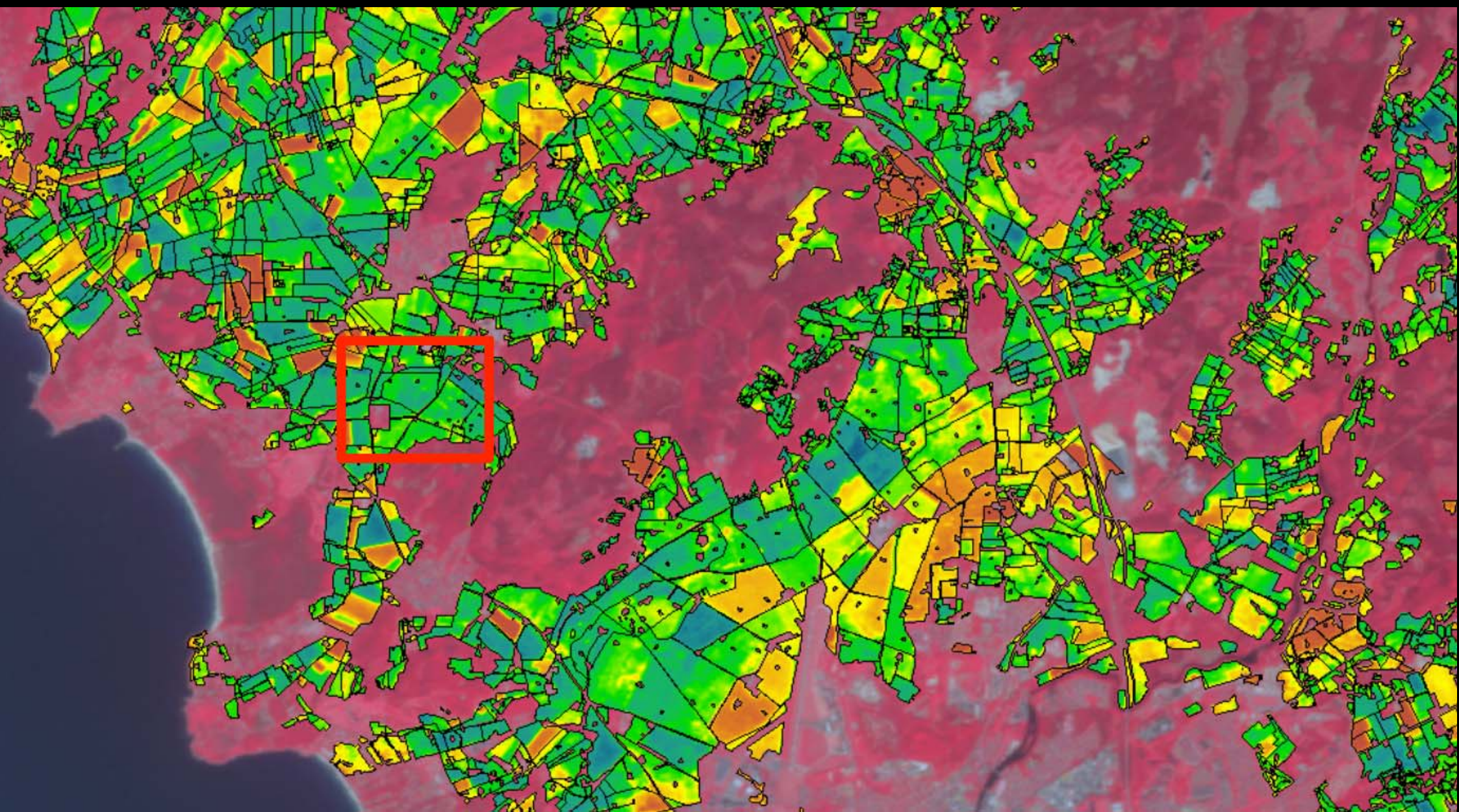
## Gör en styrfil för kvävegödsling

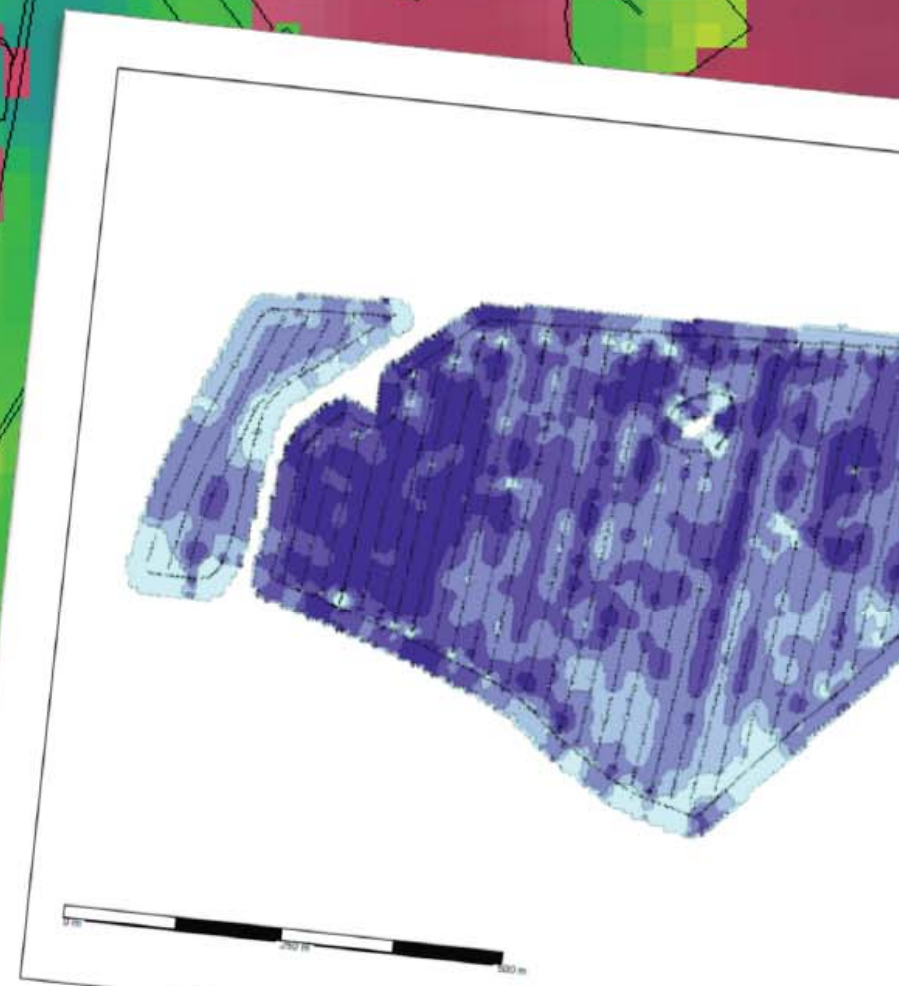
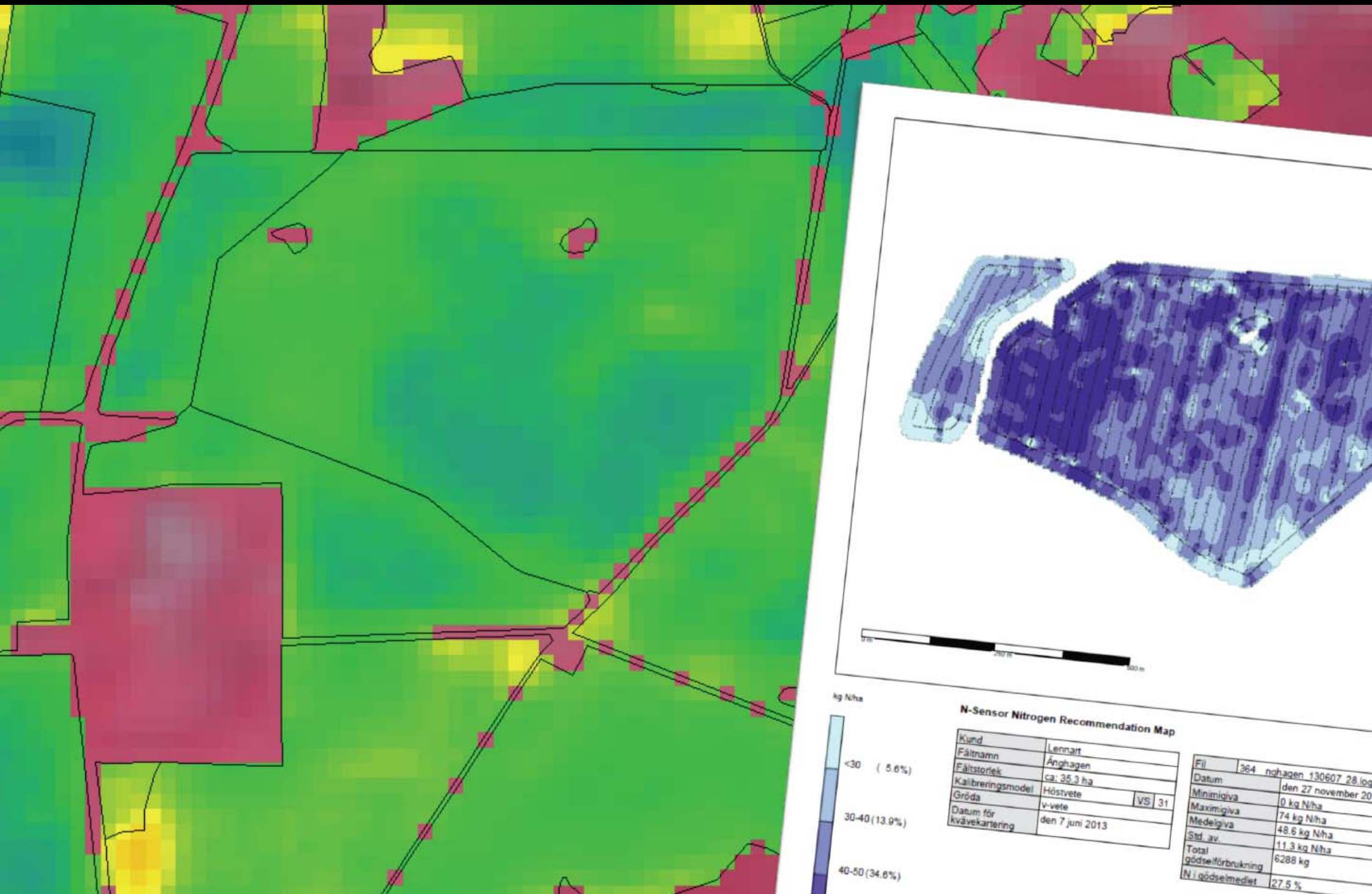
Kompletteringsgödsla kväve med hjälp av satellitbilder. Med vegetationsindexkartor ser du hur biomassen varierar inom dina fält. Bestäm hur du vill anpassa kvävegödslingen – och skapa en styrfil för varierad kvävegödsling. Välkommen till det nya jordbruket!

Detta är en del av ett utvecklingsprojekt finansierat av Stiftelsen Lantbruksforskning (SLF). Projektområdena är Skåne, Halland, Norra Götaland och Mälardalen. Målet är att det ska finnas aktuella satellitbilder under gödslingssäsongen 2014. Bilder från 2013 finns också att tillgå.

Projektgruppen består av Sveriges Lantbruksuniversitet, Hushållningssällskapet och Lantmännen. Webapplikationen har utvecklats av DataVäxt AB. Mer information på: [www.precisionsskolan.se](http://www.precisionsskolan.se)

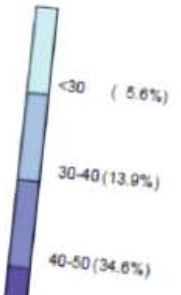
Användarvillkor Nästa





kg N/ha

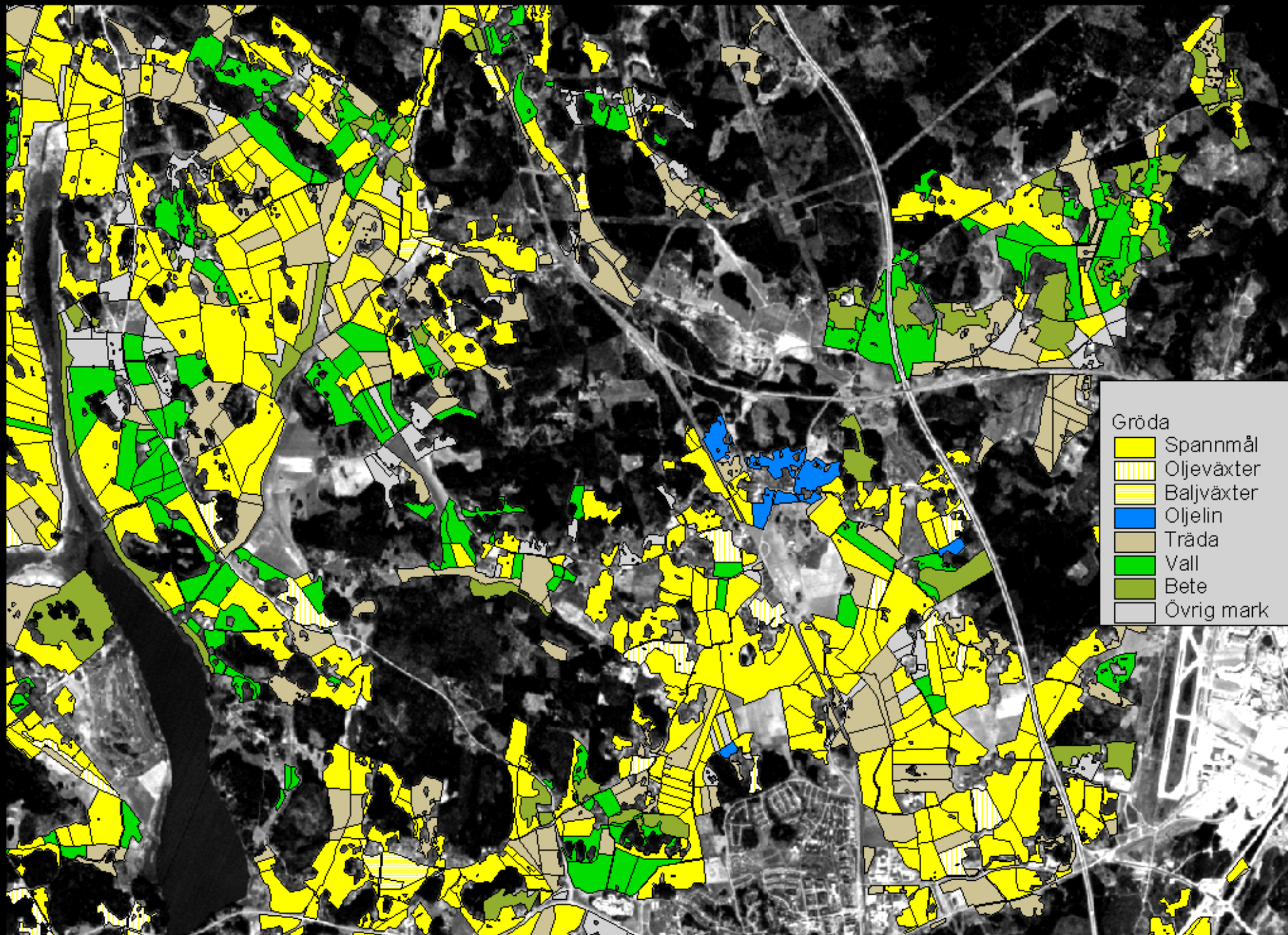
**N-Sensor Nitrogen Recommendation Map**



Kund	Lennart	
Fältnamn	Ånghagen	
Fältstorlek	ca: 35,3 ha	
Kalibreringsmodell	Höstvete	VS 31
Gröda	v-vete	
Datum för kvävekartering	den 7 juni 2013	

Fil	364_ånghagen_130607_28.log
Datum	den 27 november 2013
Minimigiva	0 kg N/ha
Maximigiva	74 kg N/ha
Medelgiva	48,6 kg N/ha
Std. av.	11,3 kg N/ha
Total gödselåterbrukning	6288 kg
N i gödselmedlet	27,5 %





- Gröda
- Spannmål
  - Oljevaxter
  - Baljvaxter
  - Oljelin
  - Träda
  - Vall
  - Bete
  - Övrig mark





# COPERNICUS EMERGENCY MANAGEMENT SERVICE

## GIO EMS - Mapping

Home | What is Copernicus | EMS - Mapping | EMS - Early Warning System

### EMS - MAPPING

- EMS - Mapping service
- Who can use the service
- How to use the service
- Products: Rush mode
- Products: Non-rush mode
- Quality control / Feedback
- User guide

### RUSH MODE

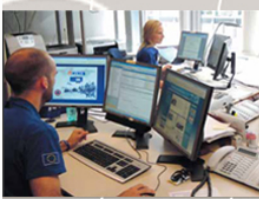
- List of Activations
- Map of Activations
- GeoRSS Feed 36 readers

### NON-RUSH MODE

- List of Activations
- Map of Activations
- GeoRSS Feed 15 readers

### OTHER

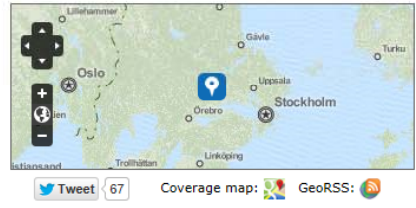
- Map of Activations of Other Organizations
- Meetings, workshops
- Citations
- Current event alerts



Follow @CopernicusEMS

## EMSR096: Fire in Sweden

**Event Time (UTC):** 2014-07-31 11:00  
**Event Time (LOC):** 2014-07-31 13:00  
**Event Type:** Forest fire, wild fire  
**Activation Time (UTC):** 2014-08-04 13:59  
**Reference maps:** 0  
**Delineation maps:** 4  
**Grading maps:** 0  
**Activation Status:** Open  
**Affected Countries:**  
 Kingdom of Sweden



**Area Descriptor:** The Swedish forests between Hallstahammar and Sala.  
**Authorized User:** Sweden|Swedish Civil Contingencies Agency (MSB)  
**Activation Reason:** There is an ongoing wildfire in the Swedish forests between Hallstahammar and Sala. The fire isn't under control. An area about 1000-1500 hectares is on fire and the firefighters haven't been able to hinder the fire. The fire have spread since Sunday afternoon (3rd of August). Weather conditions will worsen the situation in the coming days with temperatures above +30° C and stronger winds. In total the fire is burning approximately 10000 hectares.  
**Requested Product:** Reference and Delineation maps

**[EMSR096] VIRSBO: Delineation Map (Overview, Monitoring 1)**



*Published:* 2014-10-14 15:23 (UTC)  
*Product version:* v2  
*Map scale:* 1:50000  
*Status:* Production finished, quality approved

**Downloadable products**  
 JPEG: 100 DPI 200 DPI 300 DPI  
 PDF: 100 DPI 200 DPI 300 DPI  
 TIFF: 100 DPI 200 DPI 300 DPI  
 Vector package: ZIP

**[EMSR096] VIRSBO: Delineation Map (Overview, Monitoring 2)**



*Published:* 2014-08-16 19:44 (UTC)  
*Product version:* v1  
*Map scale:* 1:50000  
*Status:* Production finished, quality approved

**Downloadable products**  
 JPEG: 100 DPI 200 DPI 300 DPI  
 PDF: 100 DPI 200 DPI 300 DPI  
 TIFF: 100 DPI 200 DPI 300 DPI  
 Vector package: ZIP

**[EMSR096] VIRSBO: Delineation Map (Detail 1)**



*Published:* 2014-08-05 23:04 (UTC)  
*Product version:* v1  
*Map scale:* 1:17500  
*Status:* Production finished, quality approved

**Downloadable products**  
 JPEG: 100 DPI 200 DPI 300 DPI  
 PDF: 100 DPI 200 DPI 300 DPI  
 TIFF: 100 DPI 200 DPI 300 DPI  
 Vector package: ZIP

[ + ] Feedback

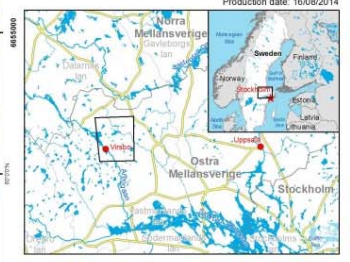


# Virso - SWEDEN

## Fire - 31/07/2014

### Delineation Map - Overview - Monit02

Production date: 16/08/2014



**Cartographic Information**

1:50000 Full color ISO A1, medium resolution (200 dpi)

0 1 2 3 4 km

Grid: WGS 1984 UTM Zone 33N map coordinate system  
Tick marks: WGS 84 geographical coordinate system

**Legend**

<b>Crisis Information</b>	<b>Settlements</b>	<b>Transportation</b>
Burnt Area (16/08/2014)	Residential Place	Station
General Information	Residential	Road
Area Of Interest - AOI	Industrial	Primary Road
Province	Recreational	Secondary Road
Not analysed	Point of Interest	Local Road
	Educational	Hydrology
	Religious	River
		Stream
		Lake
		River

**Consequences within the overview AOI on 16/08/2014**

	Affected	Total in AOI
Burnt area	ha 10802	
Estimated population	Inhabitants 0	5000
Settlements	Residential ha 0	259
	Industrial ha 0	13
	Recreational ha 0	4
Transportation	Primary roads km 0	8.3
	Secondary km 2.95	65.8
	Local roads km 108.72	792.3
	Railways km 0	123.8
	Stations No. 0	2

**Map Information**

The Swedish forests between Hallstahammar and Sala are affected by forest fires that are still uncontrolled. The fire started the 31st of July and spread more since the 3rd of August. Weather conditions may worsen the situation as the coming days with high temperatures and stronger winds. According to local authorities, the fire front extends over an area of approximately 10 x 10 km.

**Data Sources**

Inset map based on Administrative boundaries (JRC 2013, GISCO 2010, © EuroGeographics), Hydrology, Transportation (Natural Earth, 2012, CC BY-NC-SA), Settlements (GeoNames, 2013), Landuse & U.S. Geological Survey (acquired on 15/08/2014, GSD 15 m, 30% cloud coverage), provided under ESA GSC-DA-DWH License.  
 Pleiades © CNES 2014, Distribution Action Services/SPOT image S.A. (acquired on 16/08/2014, GSD 2.5 m, 18% cloud coverage), all rights reserved, provided under ESA GSC-DA-DWH License.  
 Base vector layers such as hydrology, settlements and transportation provided by Swedish Civil Contingencies Agency  
 GSD Terraplanet, 2014, Copyright Lantmateriet, GSD Översiktskartan 2014, Copyright Lantmateriet  
 Other layers such as toponyms and administrative boundaries based on GADM, Wikimedia.org and GeoNames (version: 1:15,000, extracted on 04/08/2014), refined by SIRS. Source information is included in vector data.  
 Production date: London 2010 © U/T BATTELLE, LLC.  
 All data sources are complete and with no gaps.

**Dissemination/Publication**

Delivery formats are GeoTIFF, GeoPDF, GeoJPEG and vectors (shapefile and KML formats).

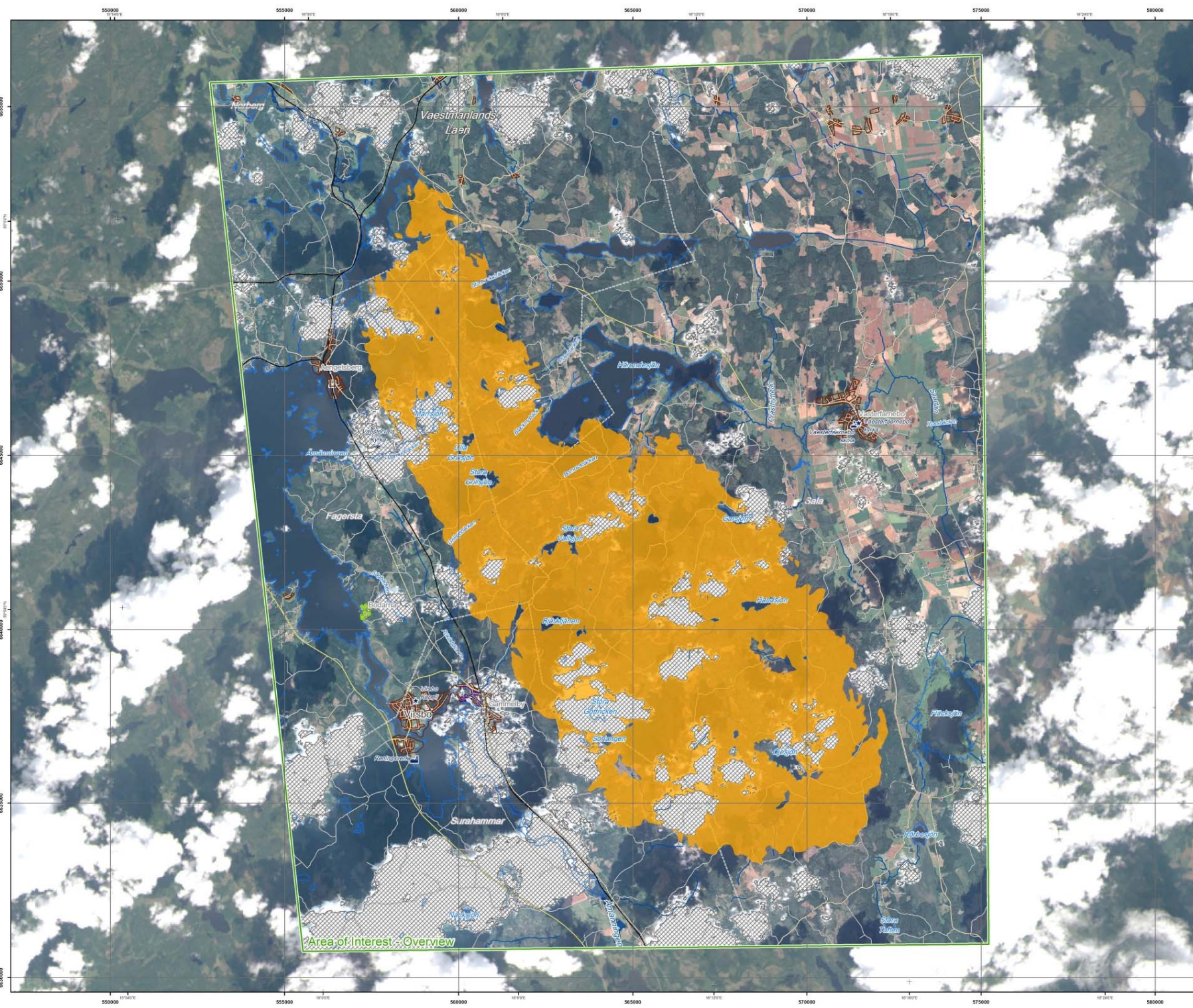
**Framework**

The products elaborated in the framework of current mapping in rush mode activation are realized to the best of our ability, within a very short time frame during a crisis, optimizing the available data and information. All geographic information has limitations due to scale, resolution, date and interpretation of the original data sources. The products are compliant with GIC-EMR-RUSH Product Portfolio specifications.

**Map Production**

The present map shows the fire delineation in the area of Virso (SWEDEN). The basic topographic features derived from public datasets are refined by means of visual interpretation of pre-event aerial orthorectified imagery.  
 The thematic layer, assessing the delineation of the event, has been derived from Pleiades (acquired on 16/08/2014) post-event imagery.  
 The satellite image has been radiometrically enhanced and orthorectified with RPC approach and co-registered to the pre-event imagery.  
 The estimated geometric accuracy of this product is 30 m CE90 or better, from national positional accuracy of the background satellite image.  
 The estimated thematic accuracy of this product is 70% or better, as it is based on visual interpretation of recognizable areas on high resolution optical imagery. Shaded areas are zones of lower interpretation accuracy due to the poorer image radiometry.  
 Only the area enclosed by the area of interest has been analyzed.  
 Map produced on 16/08/2014 by GAF AG under contract 237219 with the European Commission. All products are © of the European Commission.  
 Name of the release manager (quality control): GAF AG (GCO).  
 E-mail: rush@ems-gmes.eu

Map products available at <http://emergency.copernicus.eu/mapping/list-of-components/EMSR096>

Area of Interest - Overview





