

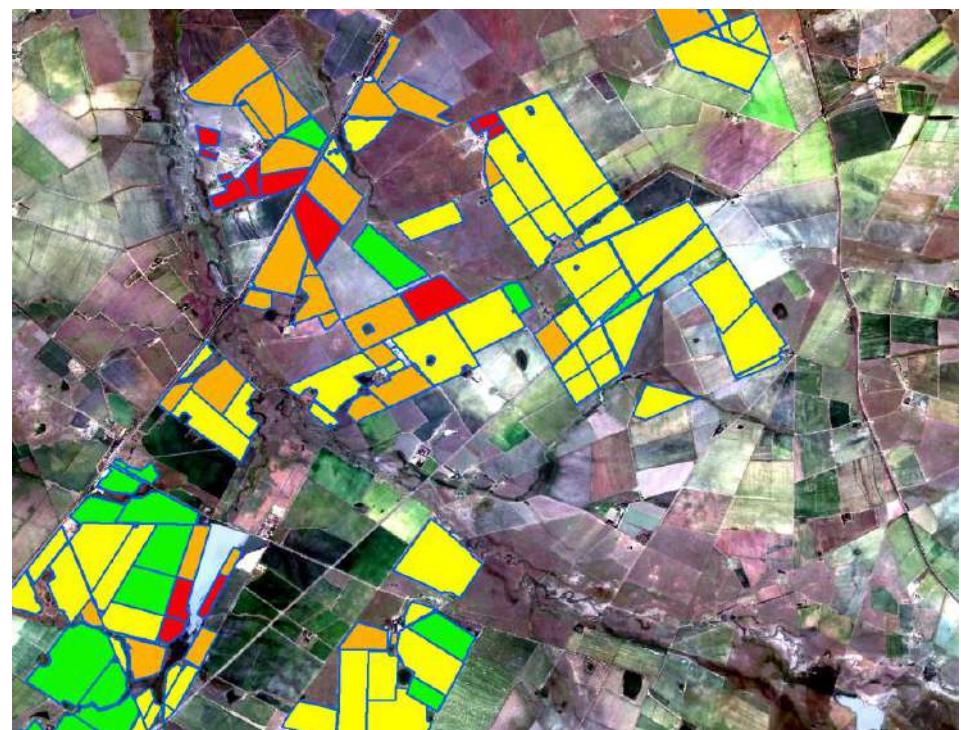


GAFAG

Technologies for Obtaining Data

Dr. Axel Relin, GAF AG

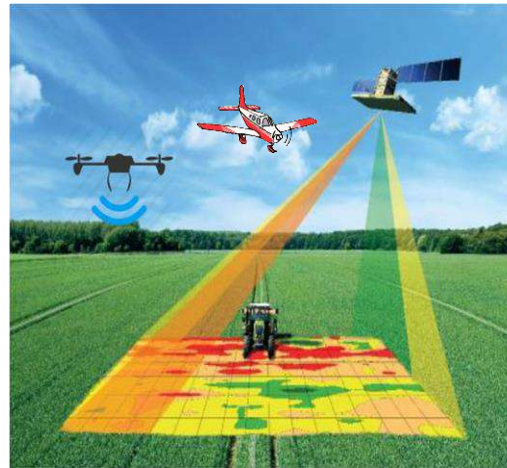
- Adequate Premium Rates
- Loss Event Management
- Improving Financing Access and Conditions
- Reduction of Adverse Selection & Moral Hazard



Spatial data → Location

Raster Data

- Maps
- Satellite
- Airplane
- Drones



Source: <http://cema-agri.org>

Vector Data

- Maps
- Legal Cadaster
- Parcel Cadaster..
- GPS



Metadata → Description

- Farmer/Parcel/Insurance ID
- Area/Crop/Applications..

> 1000 in Orbit

Weather

Communication

Navigation

Research

Astronomy

Remote Sensing

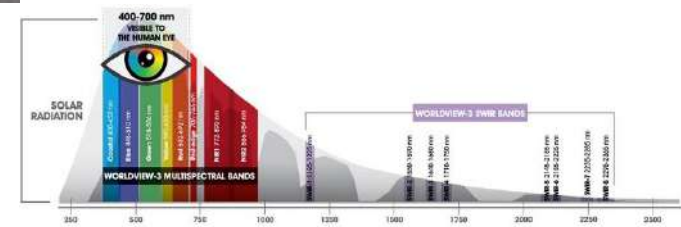
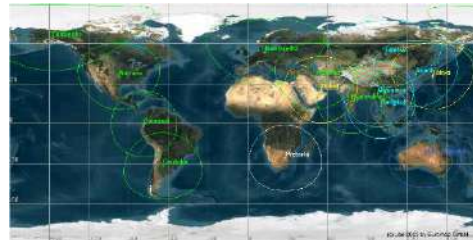


Source:ESA

DigitalGlobe

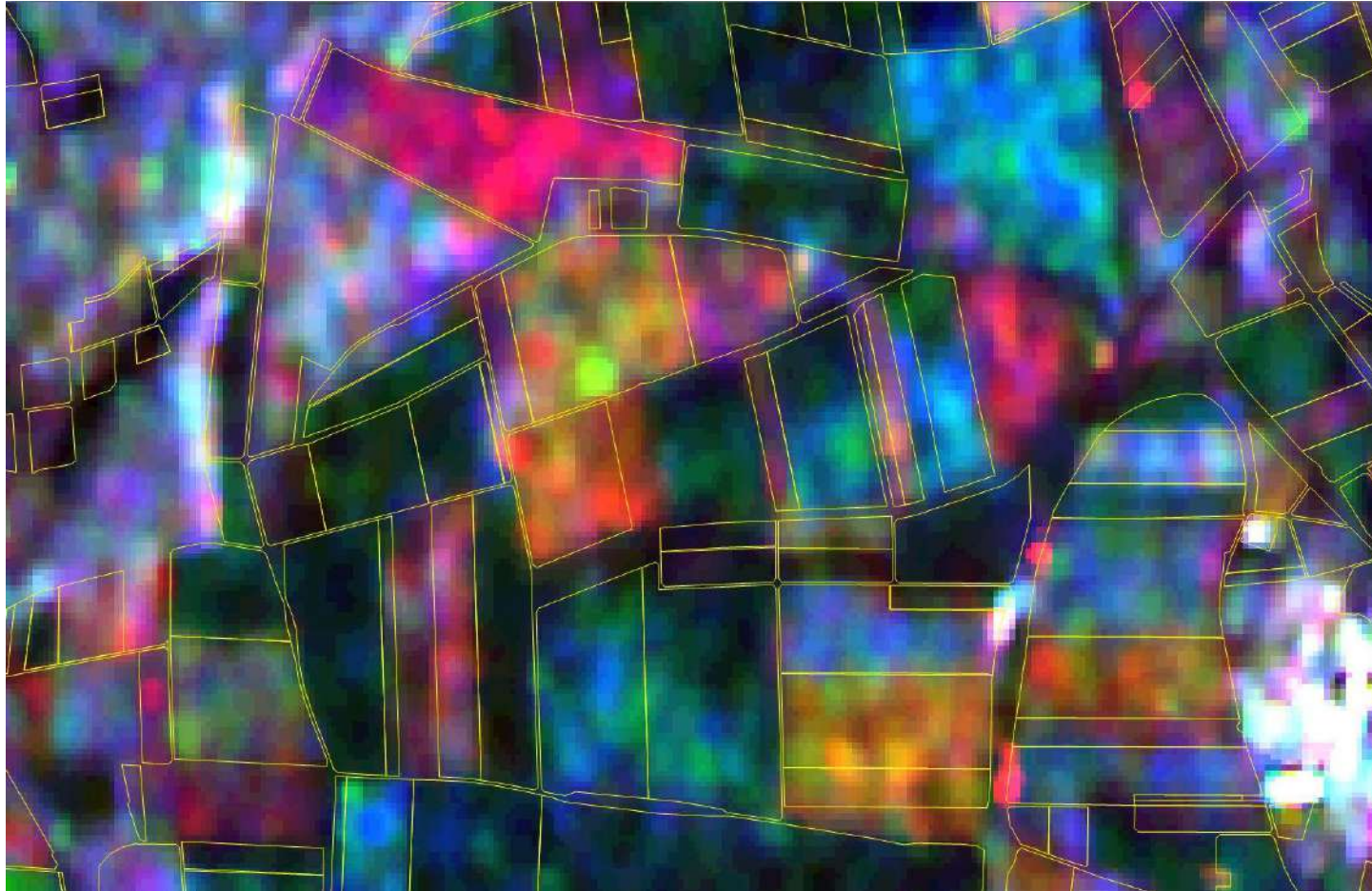


- Higher Spatial Resolution
- Higher Spectral Resolution
- Higher Availability
- Video
- Partly Cost Free



<http://www.firstimagery.skybox.com/hd-video/>





2016-06-01/07-07/07-19

Sentinel-1 10 m

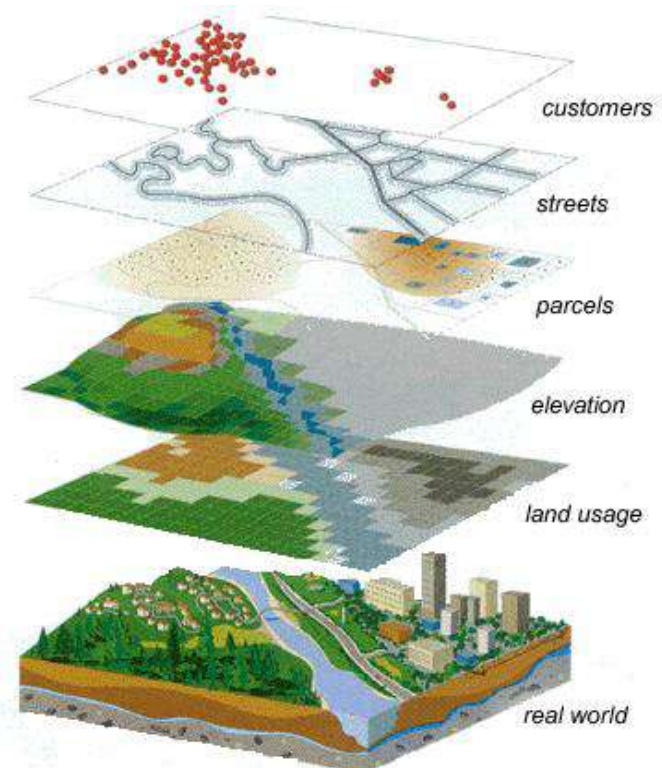
- Real-time Data Gathering & Processing
- Data Transfer to Tractor Terminal
- Event Monitoring, Precision Farming ..
- Various Commercial Products
- Issues: Restrictions, Training, Licenses



source: <https://www.service-drone.com>

Technology to answer spatial questions

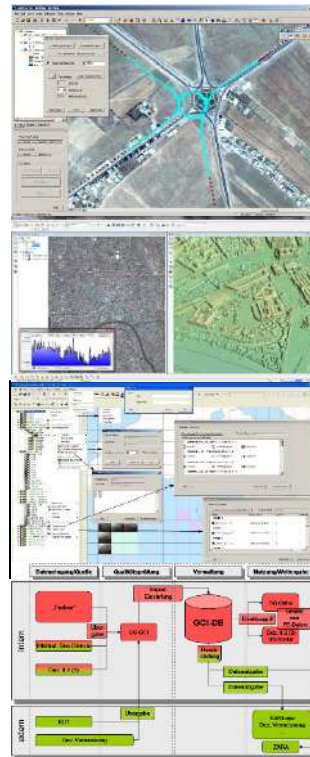
- Data input & capture
- Data storage & retrieval
- Data manipulation & analysis
- Data presentation & display



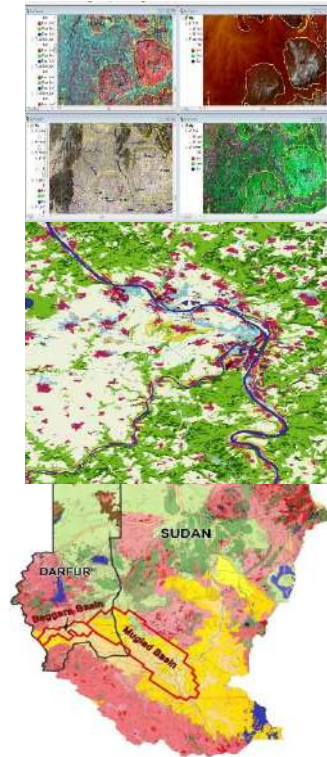
Data / Data Products



Application Software



Mapping/Monitoring/Analysis Information Extraction



JRC Scientific and Technical Reports

Geomatics in support of the Common Agricultural Policy

Proceedings of the 15th GeoCAP Annual Conference, 2009
Congress Centre, Taormina 18th-20th November 2009

Edited by: Beata Hejmanowska, Joanna Nowak, Vincenzo Angileri,
Wim Devos, Hervé Kerdiles and Philippe Loudjani



EU Budget: ~ € 130 bn/a

- Agriculture: ~ € 55 bn/a



IACS - Integrated Administration and Control System
in each Member State

- Payment Agency
- Parcel Identification System
- Manage & Control Payments

Con



Cadastre

A photograph of a blank, lined page from a notebook. The page is white with horizontal ruling lines and a vertical margin line on the left side. The page is slightly aged and shows some minor discoloration. The notebook's binding is visible on the left edge.

Declarations

Area and Crop Deviations

Fraudulent Declarations



Images

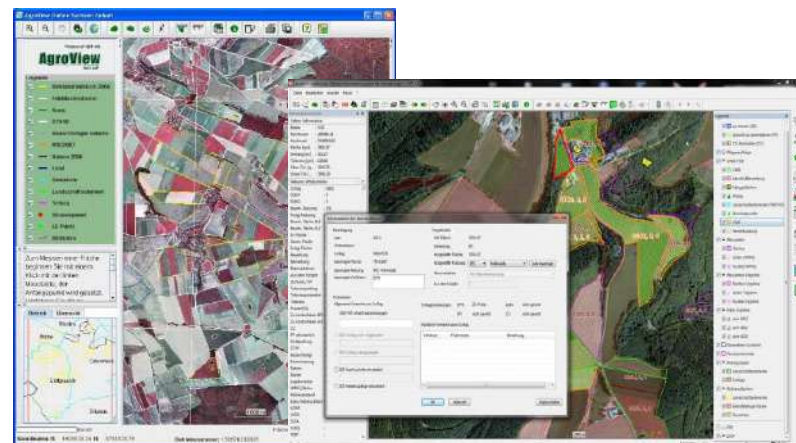


Additional data

[illegible]

RS & GIS since 2005 compulsory

- GIS Software for Farmers
- GIS Software for Administrations
- Implementation of Agricultural Reference Systems



Cadastral Parcels



Agricultural Parcels



Farmers' Blocks

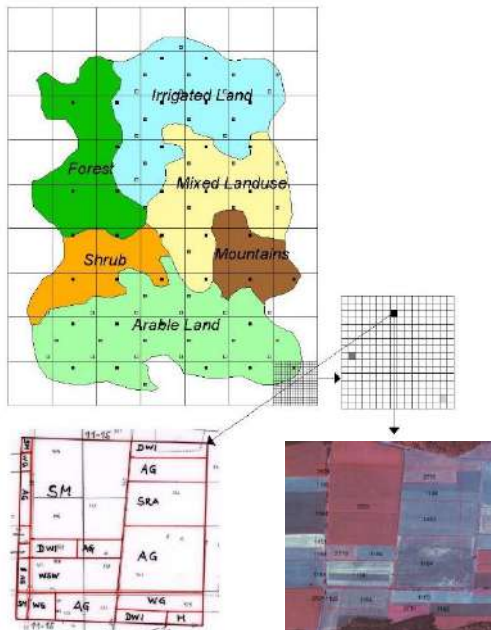


Physical Blocks

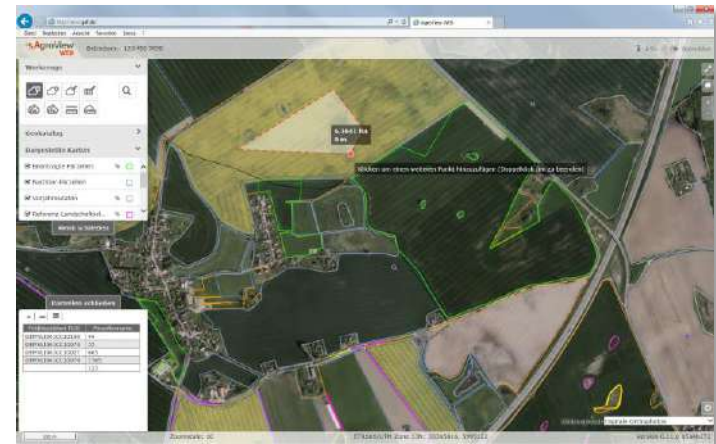
giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

Production Data



Web-GIS





Thank you very much
for your attention!

Contact:

Dr. Axel Relin

Email: axel.relin@gaf.de

GAF AG, Arnulfstr.199, D-80634 Munich, Germany

<http://www.gaf.de>, info@gaf.de