



AVT Airborne Sensing

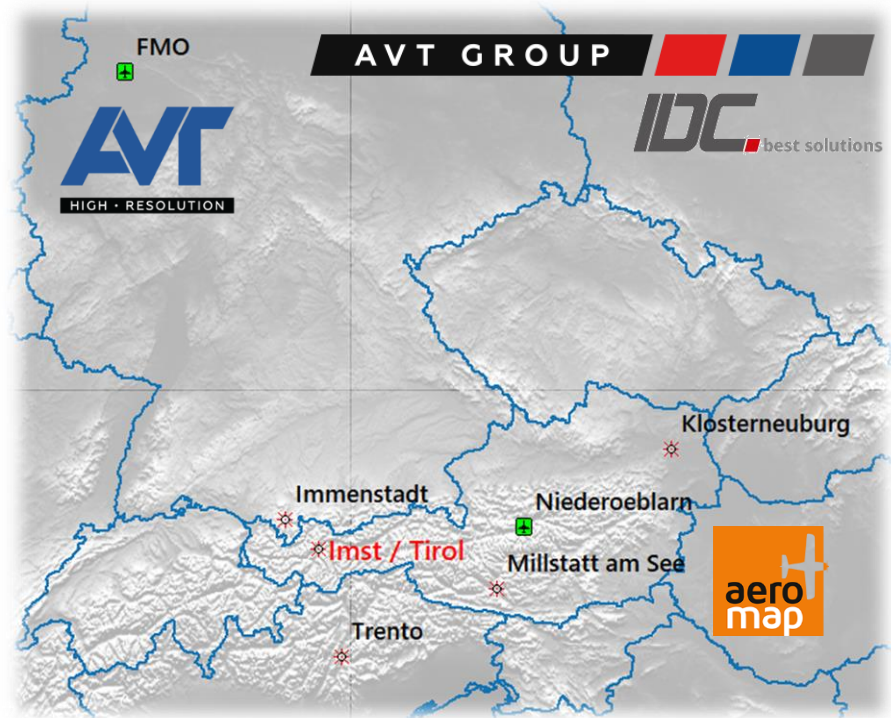
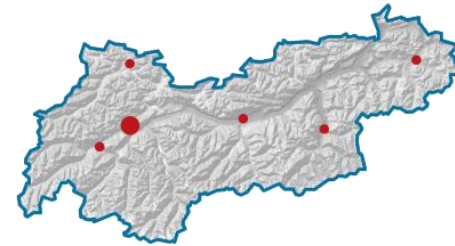
Raimund Gasser, r.gasser@avt.at



Introduction AVT (1/4)

AVT AS as part of AVT Group

- Founding AVT: 1970
- Headquater Imst/Tirol
- 7 offices in Austria
- 2018: purchase of weser
(Caspar Roerdinkholder)
- **Greven – FMO**
- Trento
- Aeromap – Styria
- IDC
- **Cultural clash AT/DE/IT**



Introduction AVT (2/4)



- **Image flights AVT Airborne Sensing**
 - Operating Europe
 - Aircrafts located in Northern Germany:
 - Airport Münster-Osnabrück (FMO)
 - Nadir, oblique, thermal, hyperspectral
 - No risk policy (business only in Europe)



Introduction AVT (3/4)



GENAU · RICHTIG

- Drone
 - Photogrammetry
 - Laserscanning



Introduction AVT (4/4)

- cadastral survey
 - „classical surveying“
- Geodesy
 - high-precision surveying
 - Cable car surveying
 - deformation surveying



AVT

GENAU · RICHTIG



Team of AVT Airborne Sensing



Sales & PM
Raimund Gasser
Rainer Krammer



CEO
Peter Trefalt



Owner: Vermessung AVT-ZT-GmbH



Ingo Spengler
Head of flight operations



Kjersti Moe
3D Technology & PM



Markus Bökhaus
Head of office FMO (Germany)



Dr. Daniela Poli
Head of office Trento (Italy)



Dr. Klaus Legat
Head of photogrammetry

We fly Europe

WE FLY EUROPE

WWW.AVT-AS.EU

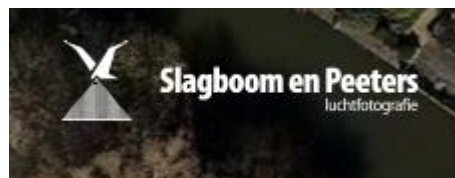
PRIMIS

bsf swissphoto 



2027 - 2030

- Retirement period ends – so looking for new staff
- Basic decision to take
 - Small operator – 1 aircraft – 1 sensor
 - Medium operator – 3 aircraft – 3 sensors
 - Big operator – about 8



- AVT -Step by step growing to categorie 3

Fleet at the airport Münster-Osnabrück



Further aircrafts



Ultralight aircraft

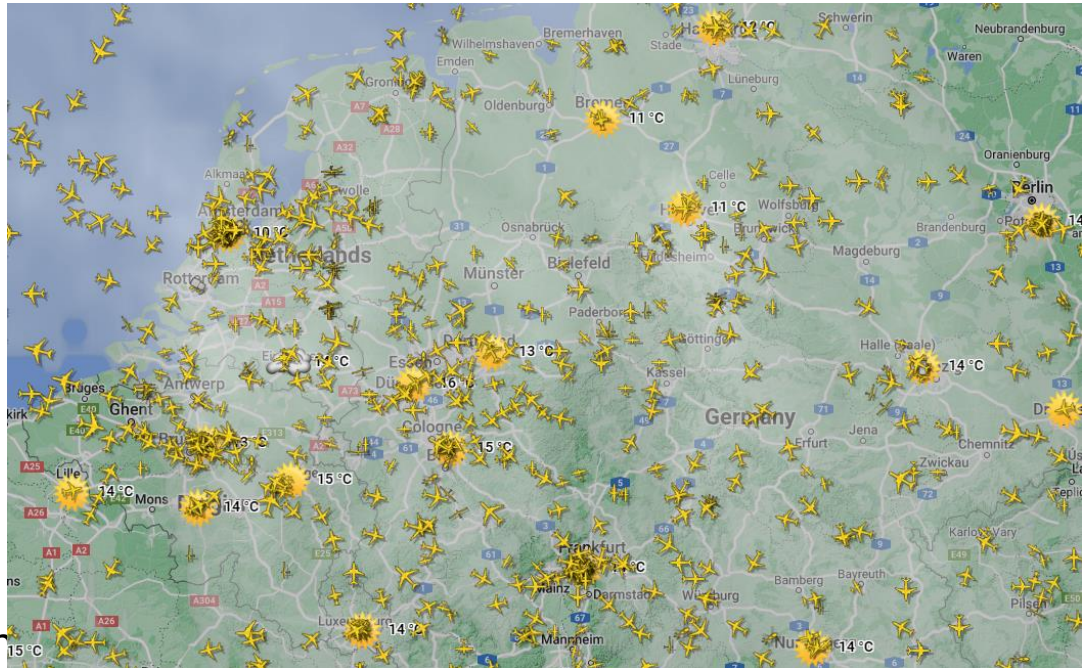


Chartered aircrafts



Further aircrafts

- Fleet in Europe – 40 to 50 years old
- Aviation – Industry not interested in new aircraft
- Alternative aircraft
 - P68 - Bioflight
 - Cessna 208 - RWE
 - Aviator - SVEGE
 - Tecnam - AHM
 - Diamond - GeoFly
 - Aztec/PA46- USA
 - AVGAS-availability
 - Ultralite - AeroMap
 - Single-person operation
- Alternative operators from outside EU



Looking for aircraft

- SVEGE: Photo D-ISGS AHM: D-IAHM GeoFly: Diamond MP62; AVIA - UR-CRV



Compensation Sustainability

- AVT Group is a carbon neutral company since 2021



L I K A N O

IBANDA
MAKERA
PROJECT

A Micro-Scale Voluntary Project Activity for the PoA African
Improved Cookstoves and Clean Water Programme

Gold Standard
Climate Integrity & Community Development



- The greenhouse gas emissions (Scope 1, 2 & 3) caused by the company were offset by the purchase and retirement of Gold Standard carbon credits to realize a project called "Ibanda-Makera Forest Cook Stove Project " in southeast of Rwanda
- Augenauswischerei

Sensors (1)

Vexcel UltraCam
Osprey 4.1



Vexcel UltraCam
EagleMark 2



Sensors of AVT AS

IGI DigiTherm



AISA Fenix



General tendency -companies

- Big players diminish (Geofoto, AeroData, Blom) – not enough profit
- Small companies do not want to go on (Geocart, Cyient/Aerofilms)
- Companies reduce markets ()
- Young modern companies come (Kavel10)
- Sensor manufacturers offer services (HxIP, VDP)
- **NEDERLANDS . Market needs are covered by local operators (5)**

Basic decisions to take

- Where to go – outside of Europe – with/without aircraft/sensor
- What to do – Aerial Images only or Airborne Laserscanning – problem reduced spring – later start of winter/vegetation fall down later
- We assume simultaneous/synchronous flights will come
 - Oblique images + Lidar
 - Not with Leica City Mapper
 - UltraCam + Riegl – double hatch aircraft needed
- Ultralite – corridors – GSD 1 cm – 100 pt/m²

Sensors (2)

Sensors of Aeromap



Riegl VUX 240



Phase One 150MP



Rented Sensor

Riegl VQ-780 II

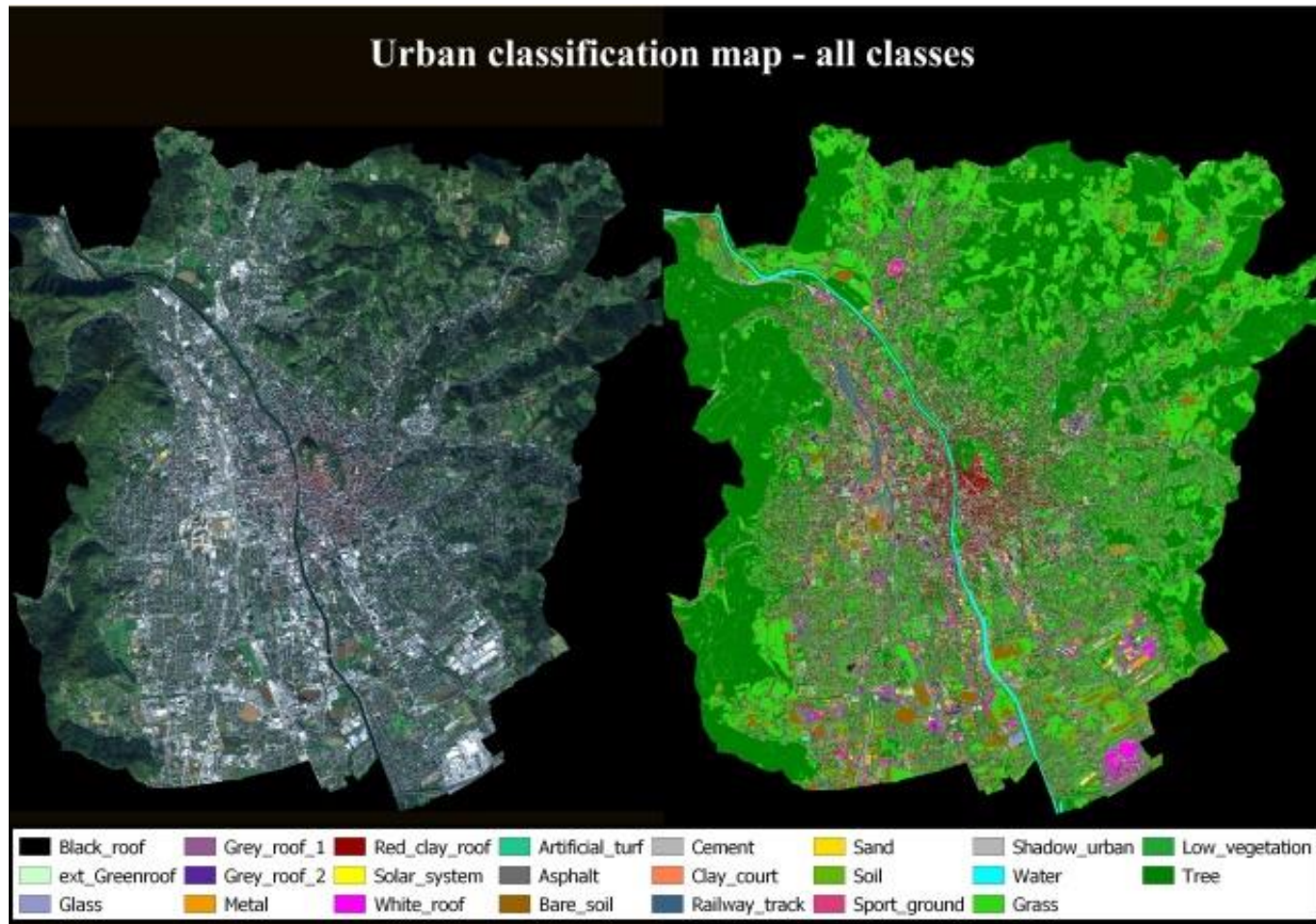


Criteria for the selection of the sensors

- personal relationship – Manufacturers by chance in Austria
- No Hexagon equipment:
 - basic decision because of competition

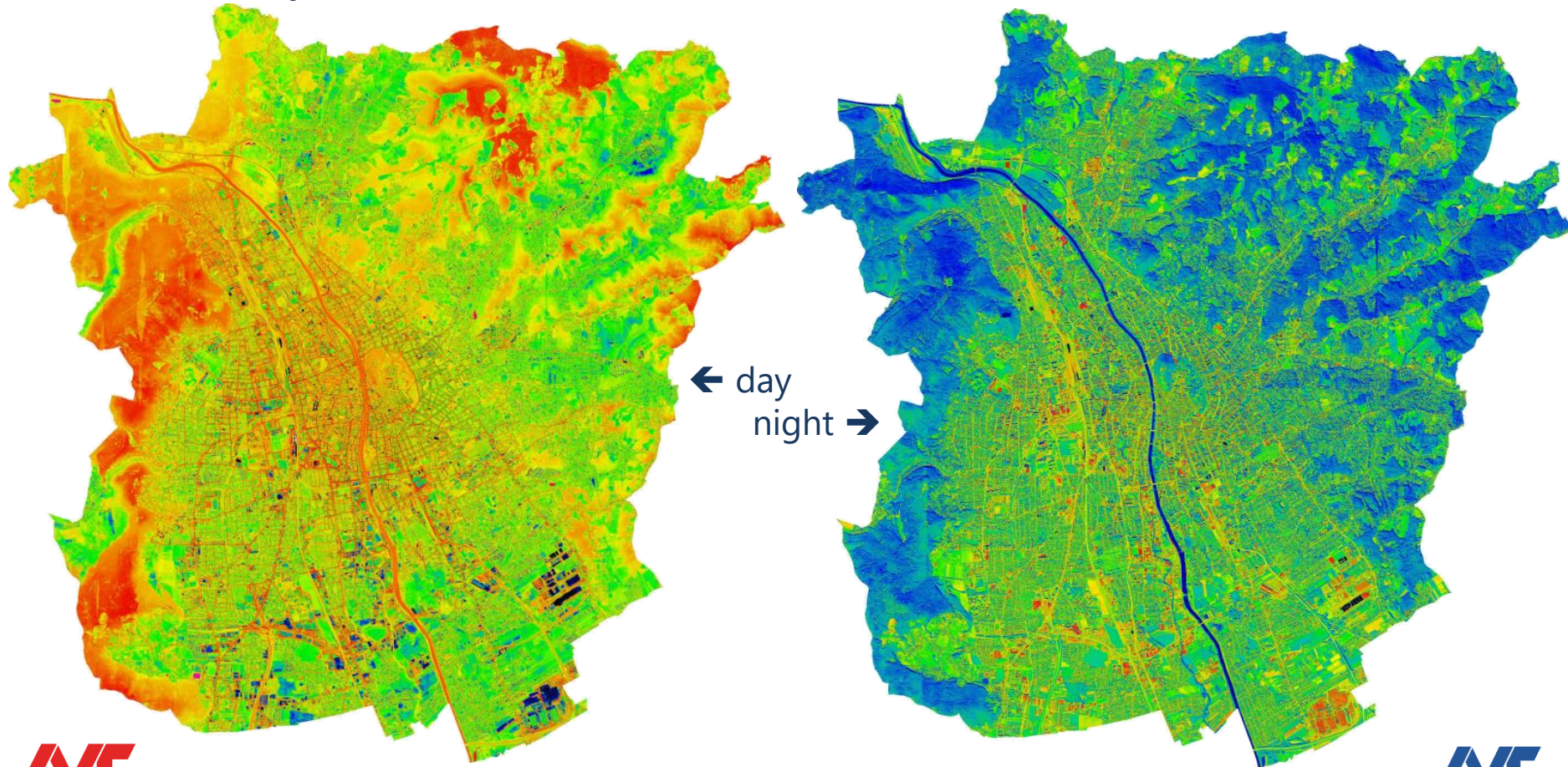
Hyperspectral

Hyperspectral, Graz



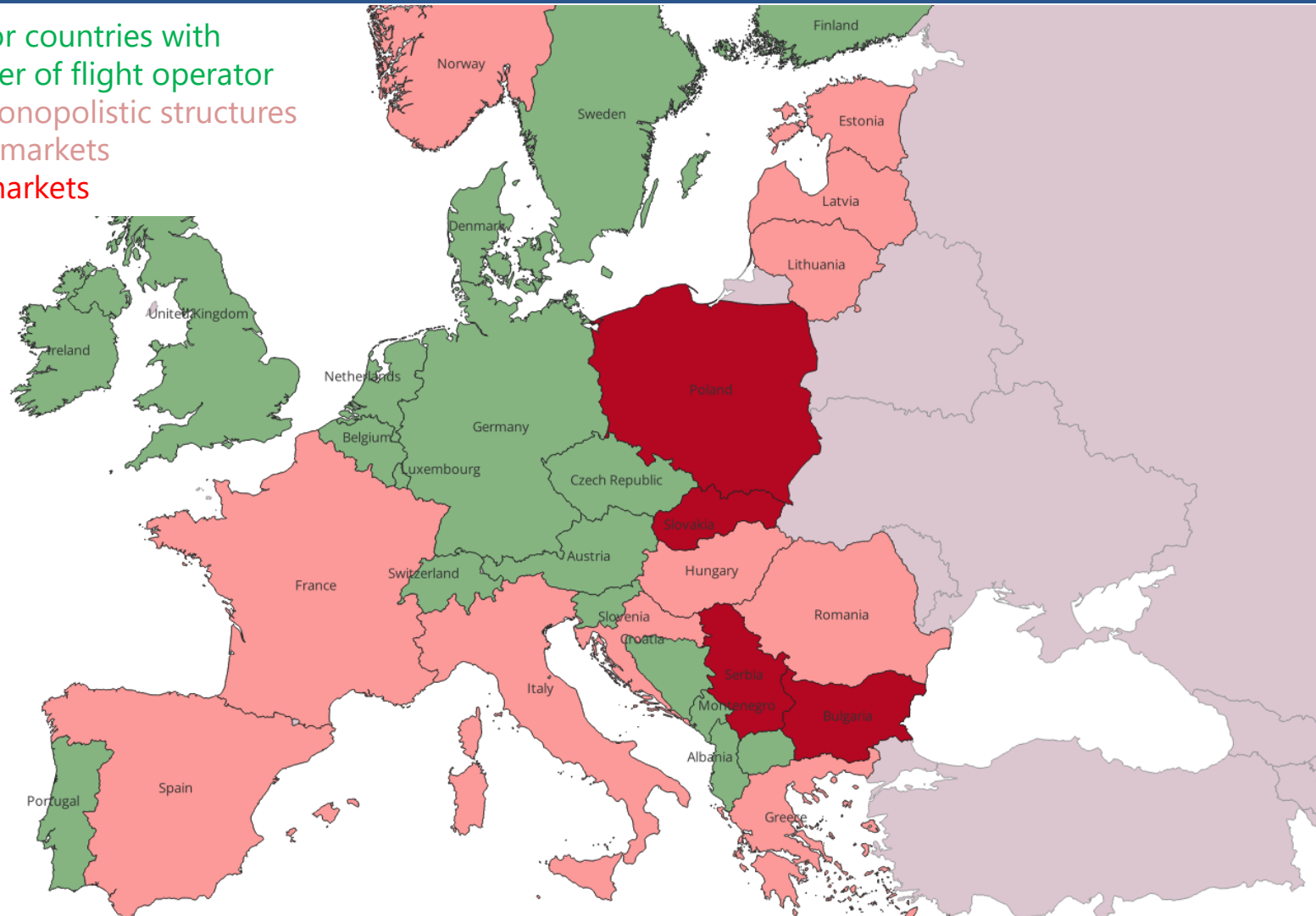
Thermal

Graz, 2021: ThermalKlima-
Informationssystem (KIS)

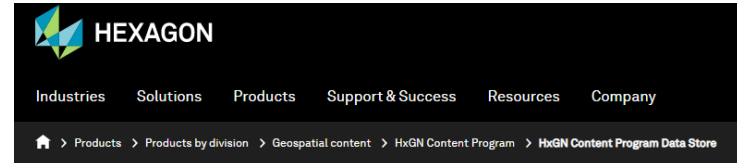


Market overview - Europe

- Open markets or countries with sufficient number of flight operator
- Markets with monopolistic structures or complicated markets
- Nearly closed markets



Content programm



HxGN Content Program Data Store

- Google – I do not know
- Important – because of dispersed flight operations
- Long period for data acquisition
- Helps to earn money for sensor/aircraft investment
- Clients - we cannot reach
- YES – although we have to be afraid or prudent

More questions? No? Have a safe bicycle ride

