

Activities of State Geodetic Administration in CROLIS

LIFE 19 GIC/HR/001270

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REPUBLIKA HRVATSKA
Ministarstvo gospodarstva
i održivog razvoja



AGENCIJA ZA
PLAĆANJA U
POLJOPRIVREDI,
RIBARSTVU I
RURALNOM
RAZVOJU

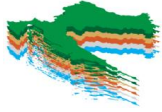


REPUBLIKA HRVATSKA
Državna geodetska uprava



FOND ZA ZAŠTITU OKOLIŠA I
ENERGETSKU UČINKOVITOST





Who we are?

National Mapping and Cadastre Agency for authoritative spatial data

Head Office in Zagreb
20 Regional Cadastral Offices
92 Branch Offices
Approx. 1200 employees

Zagreb: City Office for Cadaster and Geodetic activities

e-Građani Prilagodba pristupačnosti

REPUBLIKA HRVATSKA
Državna geodetska uprava

Pretražite stranice

Vijesti O nama Dokumenti Pristup informacijama Istaknute teme Proizvodi i usluge Geodetsko informatički rječnik Pretraga OIG Kontakti

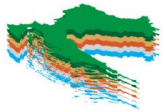
GEOHRVATSKA
Nacionalna infrastruktura prostornih podataka
Svatko može lako pronaći, razumjeti i koristiti prostorne podatke!

Potpisan Okvirni sporazum i Ugovor za aerofotogrametrijsko snimanje i izradu digitalnih ortofotokarata 1:5000 (DOF5)
Dana 6. srpnja 2023. godine u Državnoj geodetskoj upravi potpisan je Okvirni sporazum za usluge aerofotogrametrijskog snimanja i izrade digitalnih ortofotokarata u mjerilu 1:5000 (DOF5) u 2023. i 2024. godini za područje Republike Hrvatske i prvi Ugovor za usluge aerofotogrametrijskog snimanja i izrade digitalnih ortofotokarata u mjerilu 1:5000 (DOF5) u 2023. godini za istočni i južni dio Republike Hrvatske.
06.07.2023.

Održan je sastanak između predstavnika Državne geodetske uprave i Comité de Liaison des Géomètres Européens (CLGE)
Dana 6. srpnja 2023. u prostorijama Državne geodetske uprave održan je sastanak između predstavnika Državne geodetske uprave i Comité de Liaison des Géomètres Européens (CLGE).
06.07.2023.

Otvoreno je Savjetovanje sa zainteresiranom javnošću o Obrascu prethodne procjene za Zakon o izmjenama i dopunama Zakona o državnoj izmjeri i katastru nekretnina
Dana 28. lipnja 2023. godine na portalu e-Savjetovanje objavljeno je Savjetovanje sa zainteresiranom javnošću o Obrascu prethodne procjene za Zakon o izmjenama i dopunama Zakona o državnoj izmjeri i katastru nekretnina.
29.06.2023.



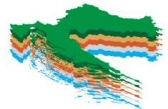


What is our business?

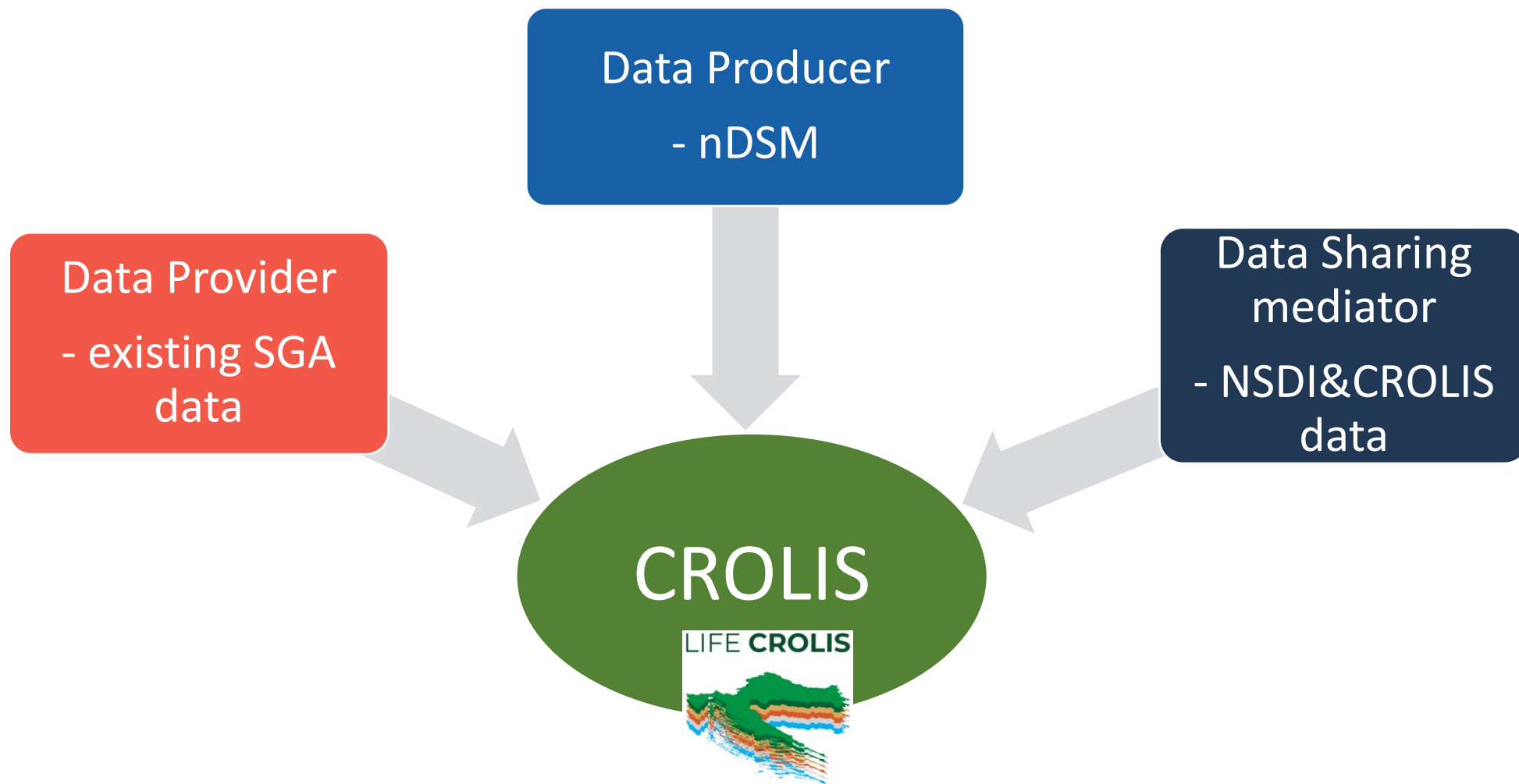
Create authoritative spatial data on National level

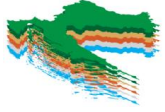
- Real-estate cadastre
- State survey
- Register of Spatial Units
- Register of Geographical Names
- Register of Buildings
- Infrastructure cadastre
- ...
- National Spatial Data Infrastructure





SGA role in CROLIS

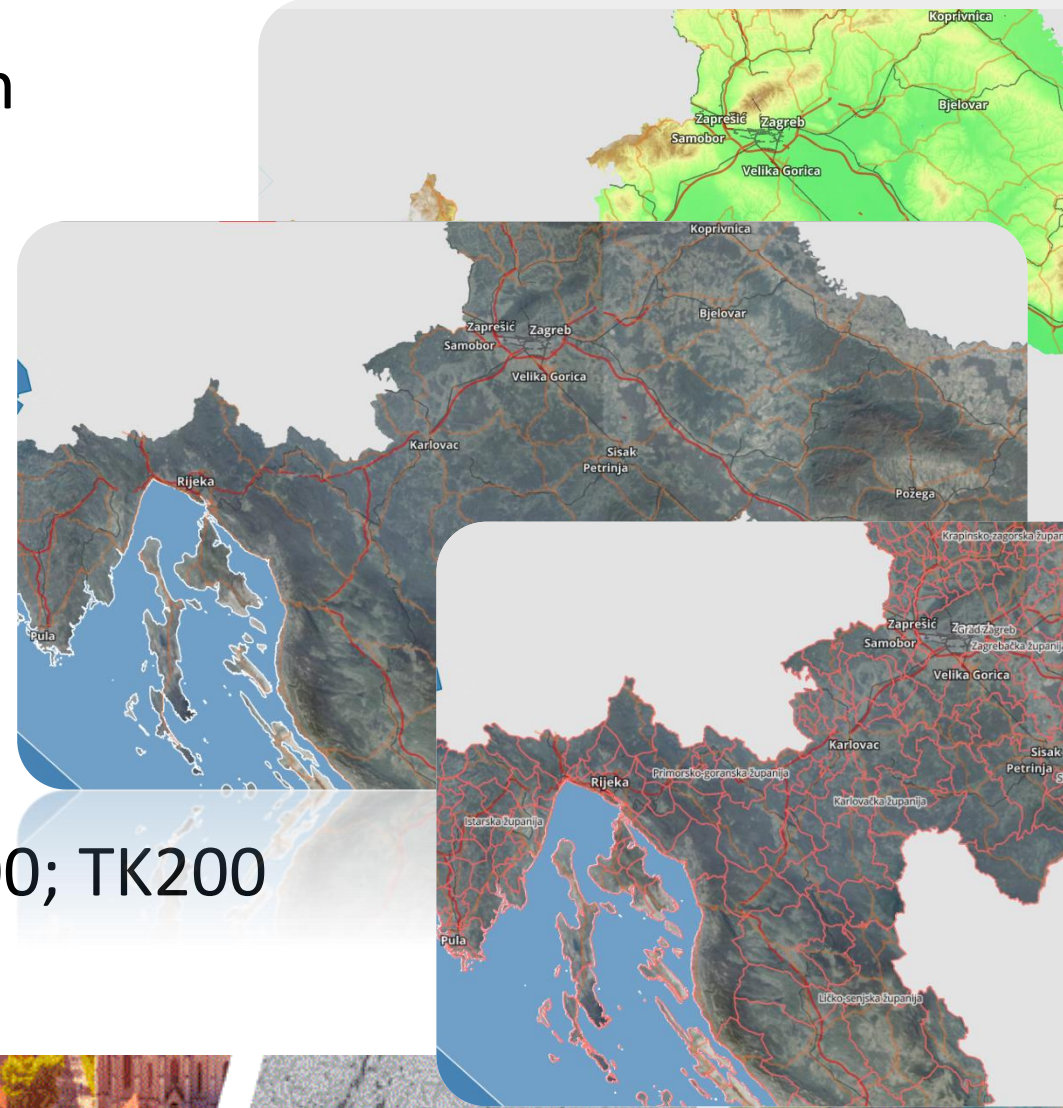


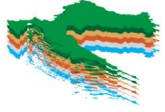


Data Provider

Basic layers in CROLIS information system

- Digital orthophoto; DOF5
- Aerial photos; 1968
- Digital Terrain Model; DTM
- Digital Surface Model; DSM
- Register of spatial units
- Digital Cadastral Plan; DCP
- Basic topographic database; BTT
- Detailed topographic maps; TK25; TK100; TK200



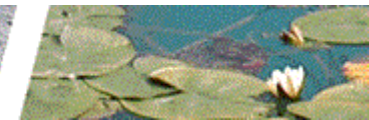
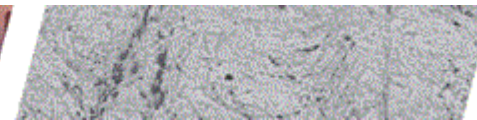
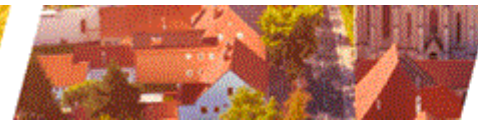
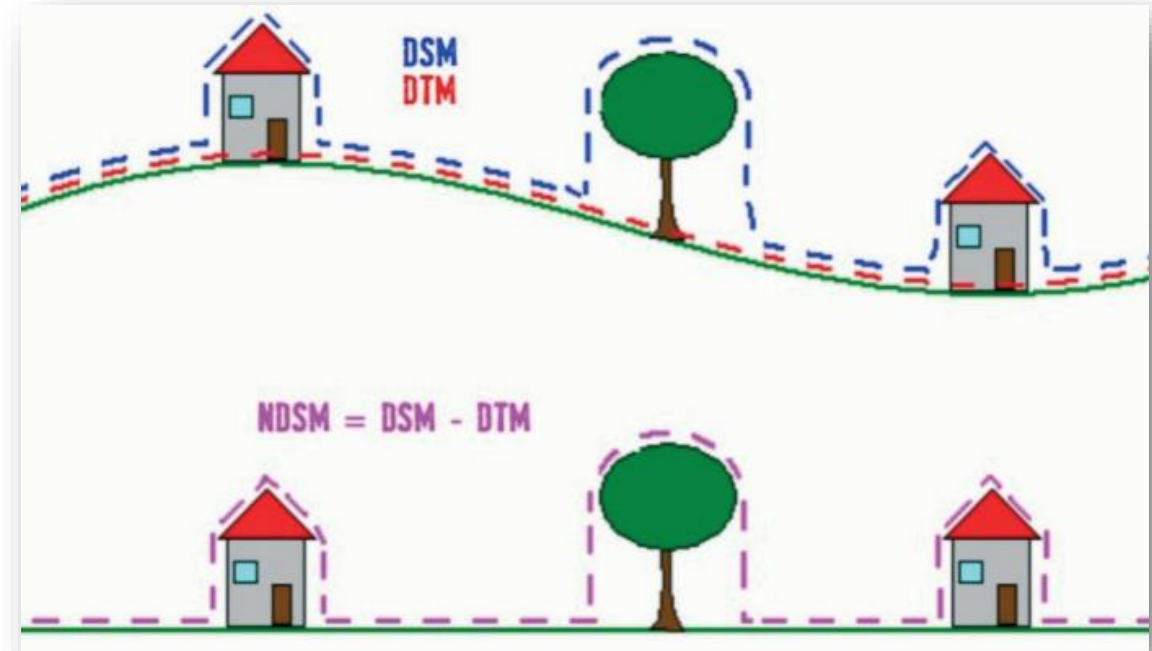


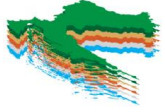
Data Producer

Normalised Digital Surface Model (nDSM)

Difference between DSM and DTM
(DMR)

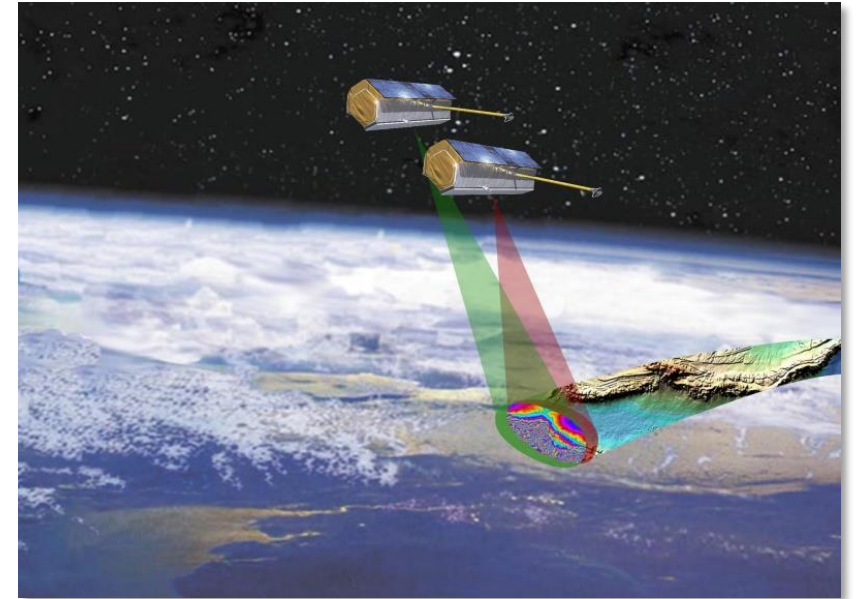
Emphasizes objects in relative relation to the ground (artificial objects and vegetation; trees or bushes) or objects on the ground (flat areas, road,...)

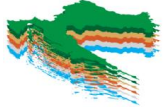




Input data: Digital Surface Model

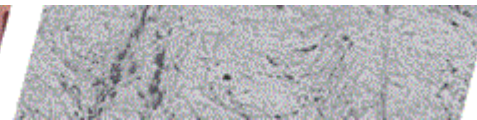
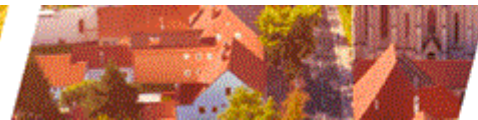
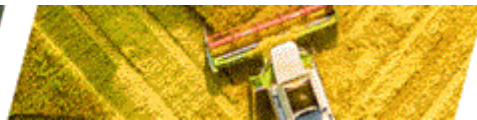
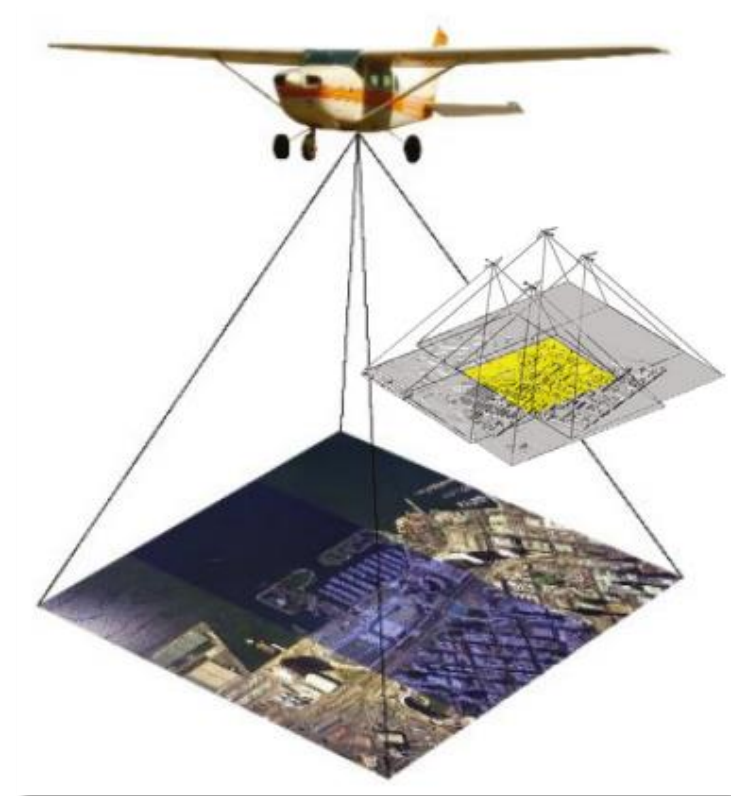
- TREx program
- TanDEM-X the only one of its kind capable of producing altitude data at this quality and resolution on a global scale.
- IFSAR (Interferometric synthetic aperture radar) – regardless of the time of day and night and regardless of the weather

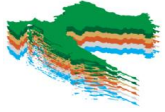




Input data: Digital Terrain Model

- Aerial Photogrammetry
- High Quality Data: points, lines, break lines
- Regularly updated with stereo photogrammetry methods
- Covers national needs





Input Data Characteristics

DSM

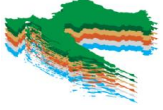
- Format: 32 bit GeoTIFF sheets (1°x1°)
- Grid Resolution: 12x12 m
- Height accuracy DSM: relative < 2m, absolute < 10m
- Horizontal reference system : WGS84
- Vertical reference system : EMG2008
- Time period: 2010 – 2014

DTM

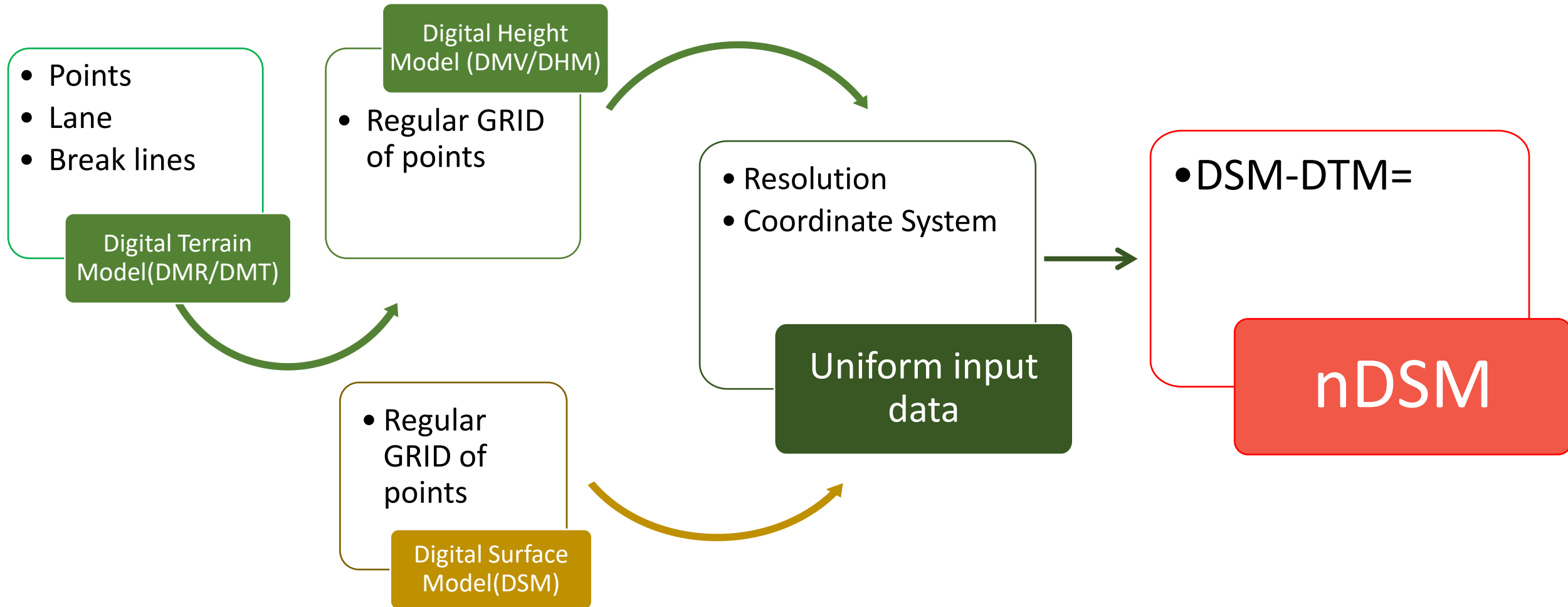
- Format: dgn / dwg
- Horizontal accuracy : 1m
- Height accuracy : 1,5 m
- Horizontal reference system : HTRS96
- Vertical reference system : HVRS71
- Last update: 2018. – 2019.

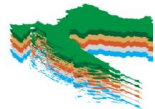
• NoData vrijednost: -32 767.0



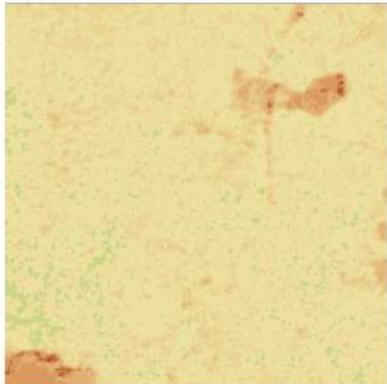


nDSM workflow





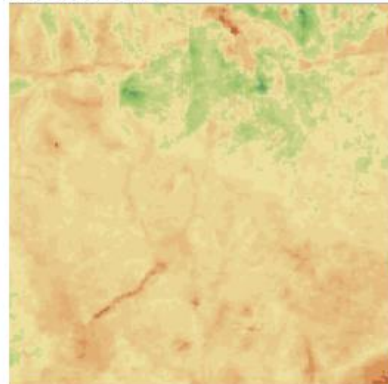
Pilot područje 1



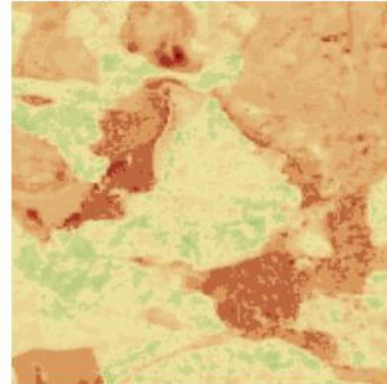
Pilot područje 2



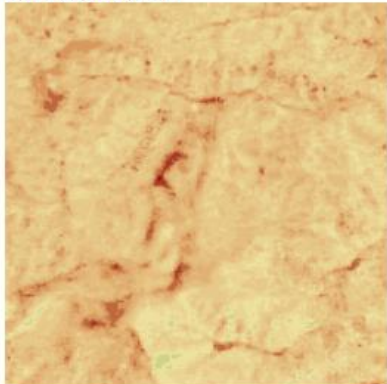
Pilot područje 3



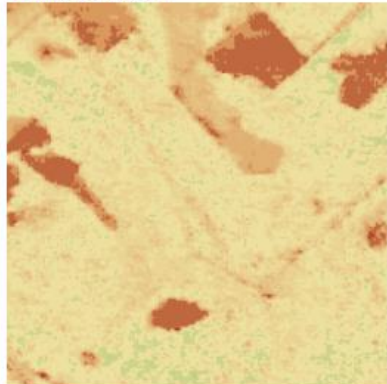
Pilot područje 4



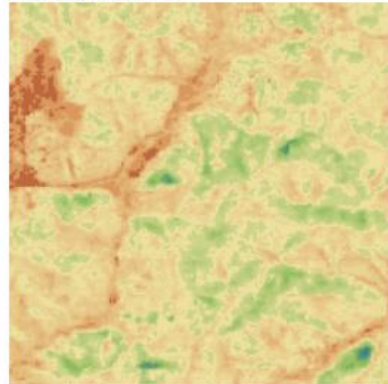
Pilot područje 5



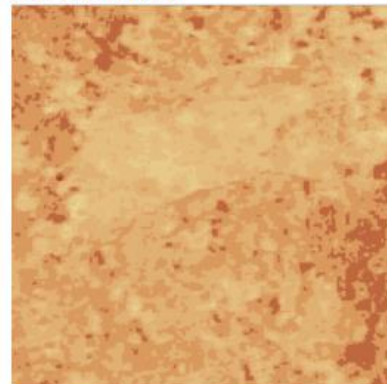
Pilot područje 6



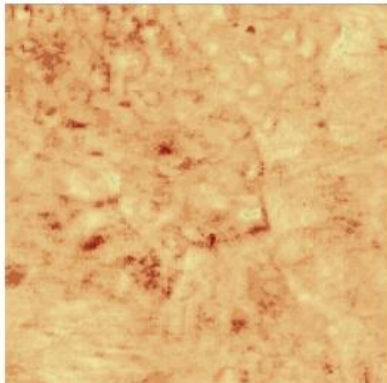
Pilot područje 7



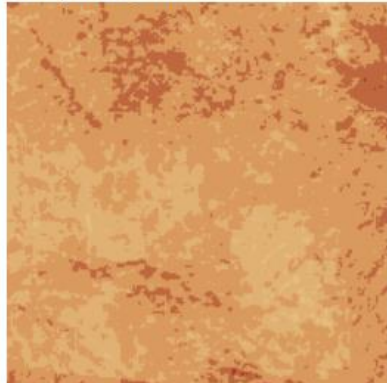
Pilot područje 8



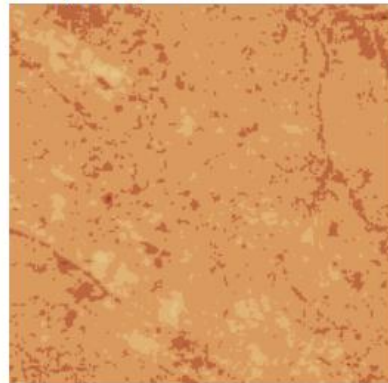
Pilot područje 9



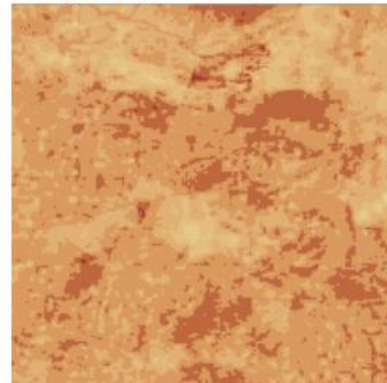
Pilot područje 10



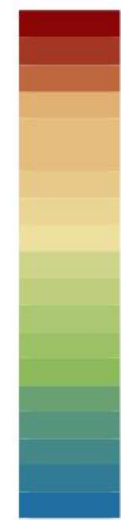
Pilot područje 11



Pilot područje 12

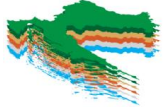


LEGENDA:



- od -15 do -10 metara
- od -10 do -5 metara
- od -5 do 0 metara
- od 0 do 5 metara
- od 5 do 10 metara
- od 10 do 15 metara
- od 15 do 20 metara
- od 20 do 25 metara
- od 25 do 30 metara
- od 30 do 35 metara
- od 35 do 40 metara
- od 40 do 45 metara
- od 45 do 50 metara
- od 50 do 55 metara
- od 55 do 60 metara
- od 60 do 65 metara
- od 65 do 70 metara
- od 70 do 75 metara
- od 75 do 80 metara

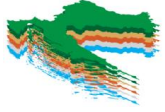




Open Questions

- In some places unrealistic deviations. Do such individual deviations affect the methodology and how much?
- The data of the TreX program is not complete: Is the entire data set really needed for the purposes of developing the methodology?

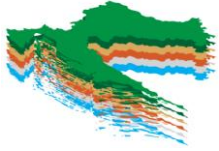




Conclusions

- SGA provided already existing data to CROLIS system
- nDSM production still questionable
- LIDAR data available January/February 2024
- Recruitment:
 - 2 jobs turned into one: Recruitment with some positive ending near the end





Thanks you for your attention!



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