

JSC URALGEOINFORM

From PhaseOne's aerial imagery to TrueOrtho and 3D



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Aerial System PAS 190MP (210)









Comparative analysis of the 2018-2019 seasons

Year of survey	Volume of works, sq. km
2018	15 850.0
2019	42 990.5
Increase in volume of works by 270%	

Control of aerial imagery :

Visual assessment of the quality of materials

Aerial imagery clearly identify objects:

- linear character (marking on roads, etc., coastline, land pipelines, etc.)



- local character (supports and poles of power lines and shadows from them, hatches of wells in the built-up territories, details of roofs of buildings, a marking of pedestrian crossings on highways, etc.)

Photogrammetrical processing of aerial imagery



Experiments and tests

- **Processing in PHOTOMOD** of the results of aerial photography in order to create a three-dimensional, highly detailed model - a prototype of laser scanning. The aerial photography altitude is 500m, resolution 5cm.
- **Testing PHOTOMOD capabilities** to create a TrueOrto based on aerial photography with a longitudinal overlap of 80%.

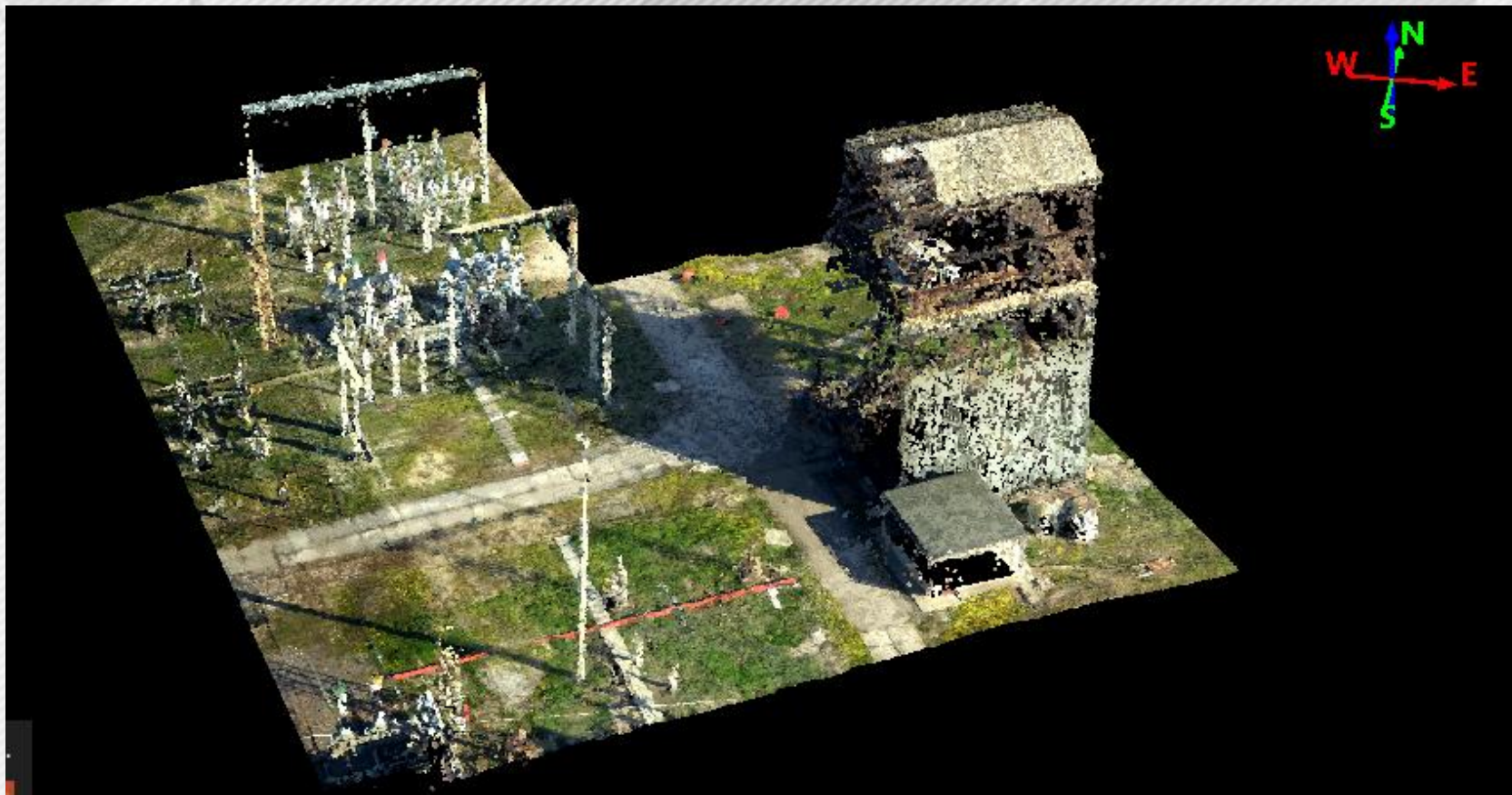
3D model of electric substation was created in PHOTOMOD 6.43 by automode

Aerial photography

altitude is 500m

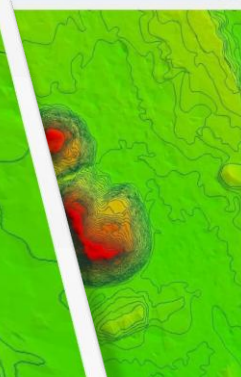
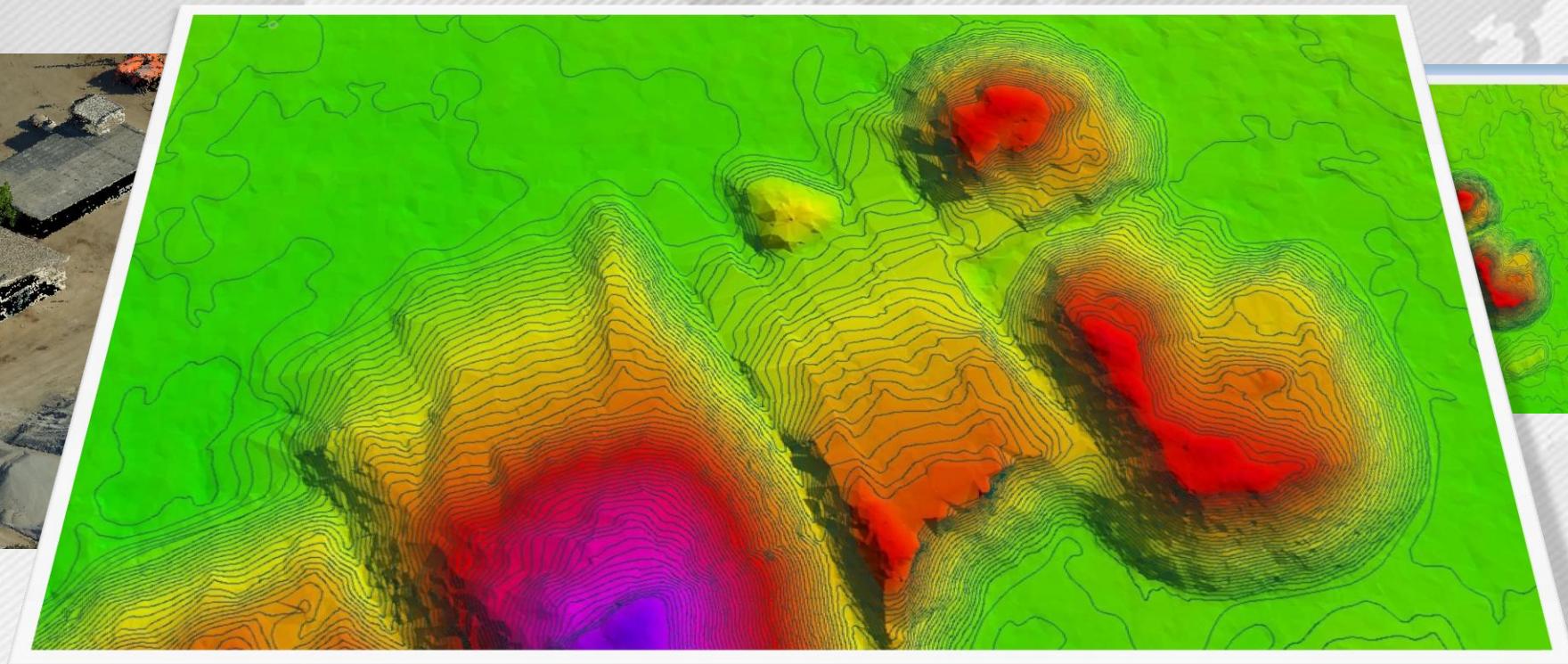
resolution 5cm

overlap 80x40%





Surface with a high density of height and detailed relief forms



Solid waste quarry Samara region, point cloud

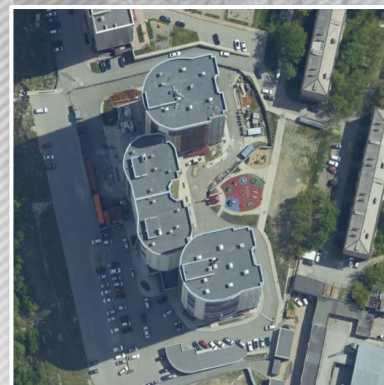
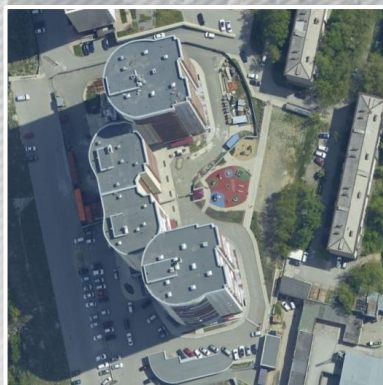
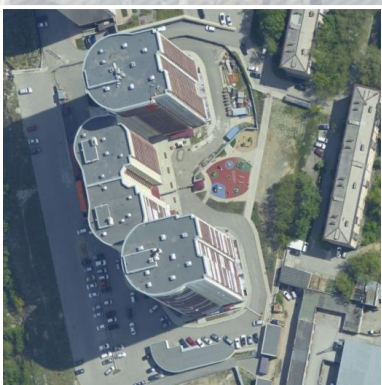
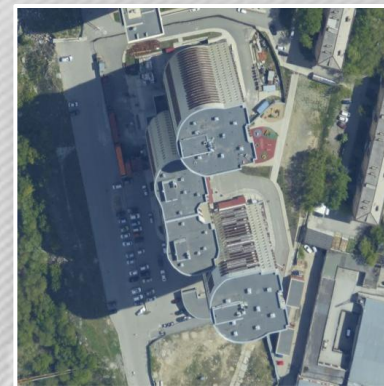
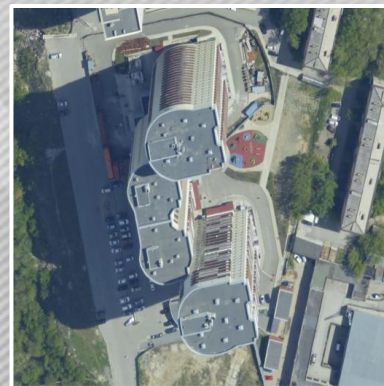
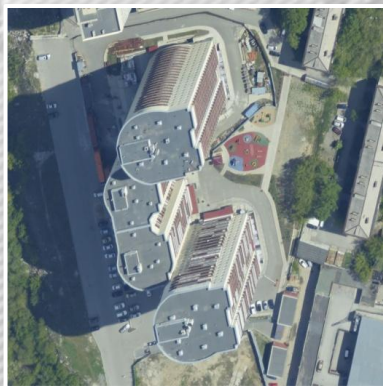


Digital 3d model of the quarry



Creating of TrueOrtho from various aerial photographs.

Novosibirsk city







Creating of TrueOrtho from various aerial photographs. Samara city





Thank you for your attention

당신의 주의를 당신을 감사하십시오

Спасибо за внимание



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