



TMG Dronity

**Detection of vitality
and health of grass
on golf courses**

TMG Group, Ltd.

- Division TMG Digitality
- Division TMG Dronity

12 x UAV (copters, UAV aircrafts) – own aircraft fleet



Pilots with licences + own service crew

Own software solution for data processing



Licence from Transport Authority
Licence from Department of Defense



- **Monitoring of golf resort construction**
- Monitoring of environmental threats
- Inspection of power lines
- Thermo inspection of buildings
- Measurement – distance, length, volume, area
- Revision of buildings
- Precise agriculture
- Dron construction
- Monitoring of highways construction

Orthophoto map - Golf Resort (200 ha) Comparison – MARCH/JULY 2016

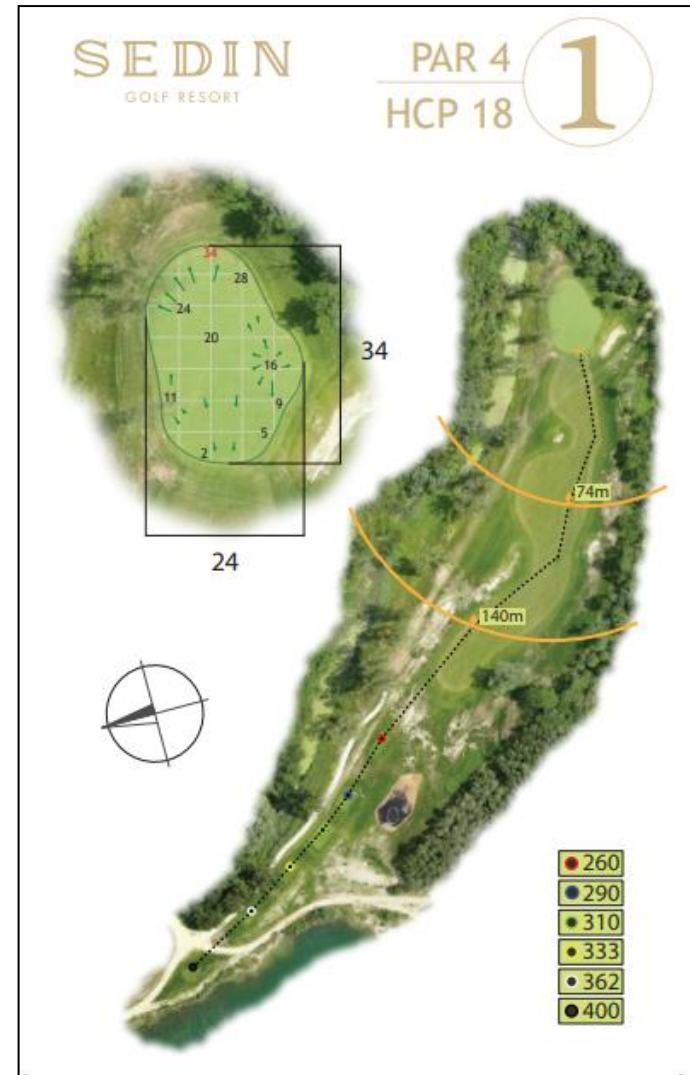
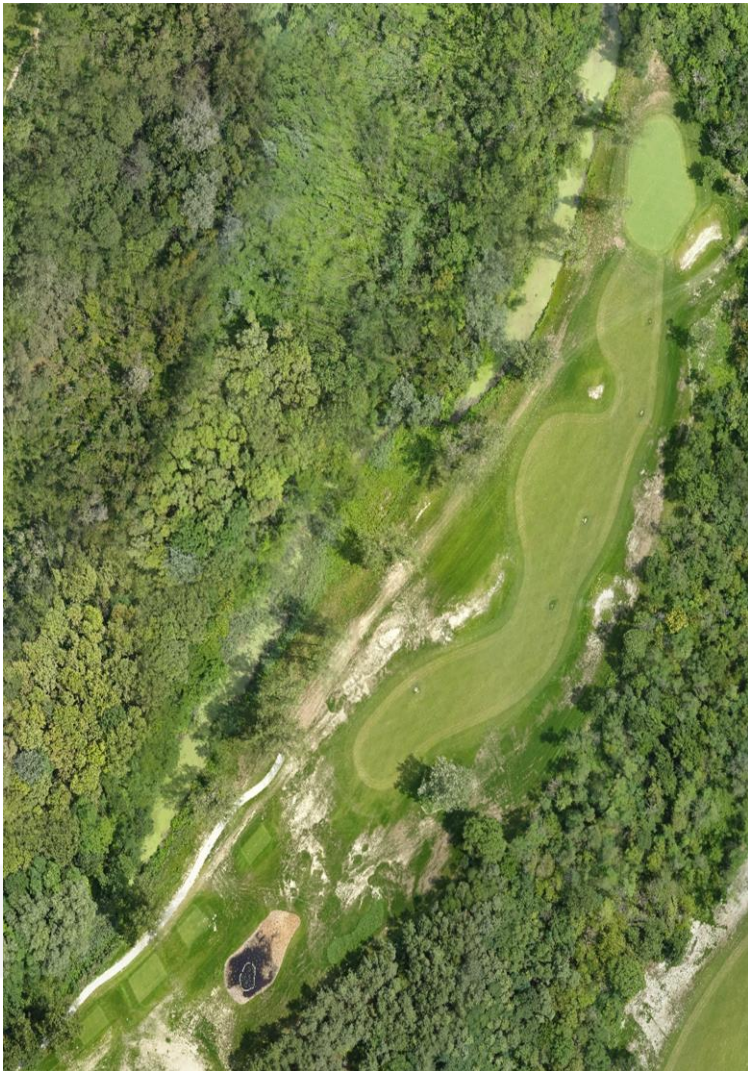


GPS survey maps, design maps and “as-built” drawings...

Resolution of images up to 1,5 cm/pix

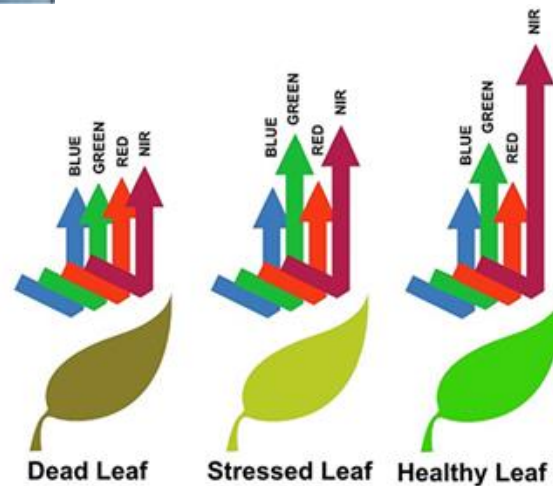
Detail of the Golf Course Sedin (green)





Characterize and document the site - soils, plants, areas, irrigation system (greens, tees, fairways, roughs, landscapes, cart paths, lakes, etc.)

Collection of multispectral invisible data from vegetation leaves, crops etc.

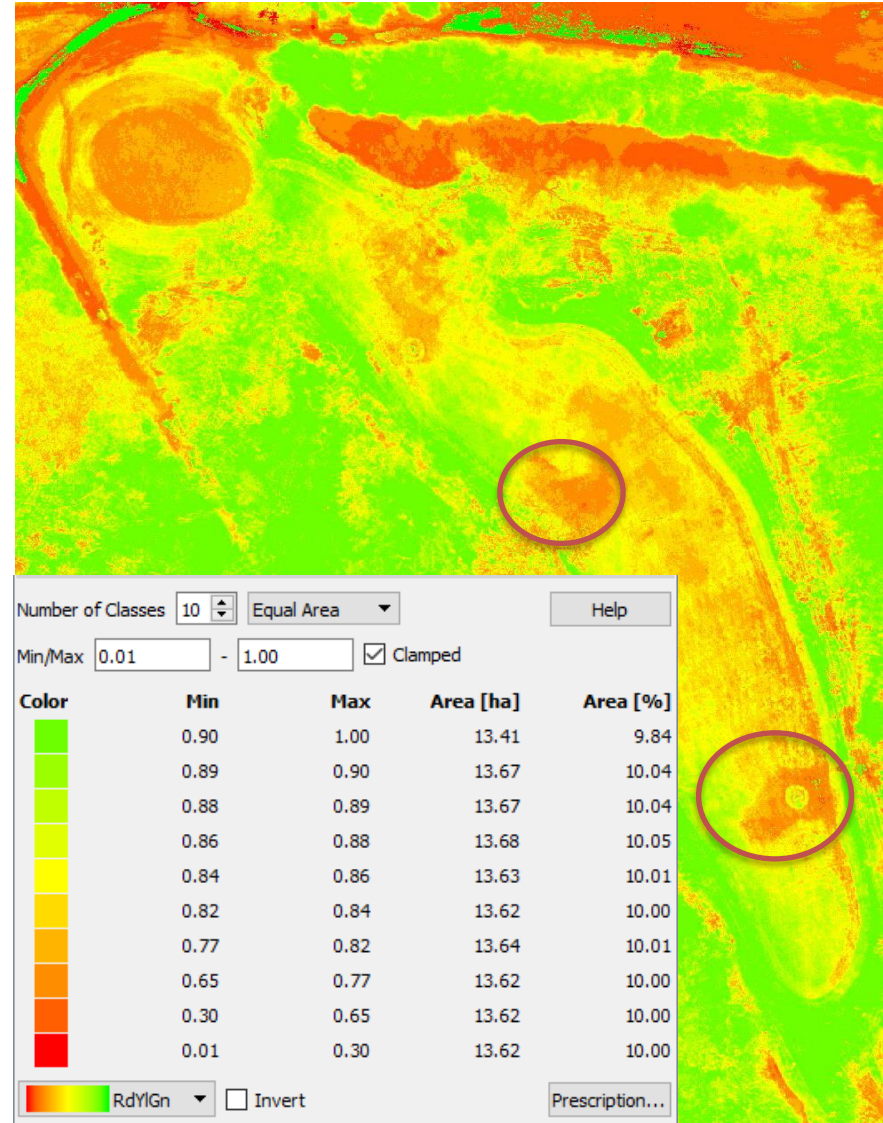


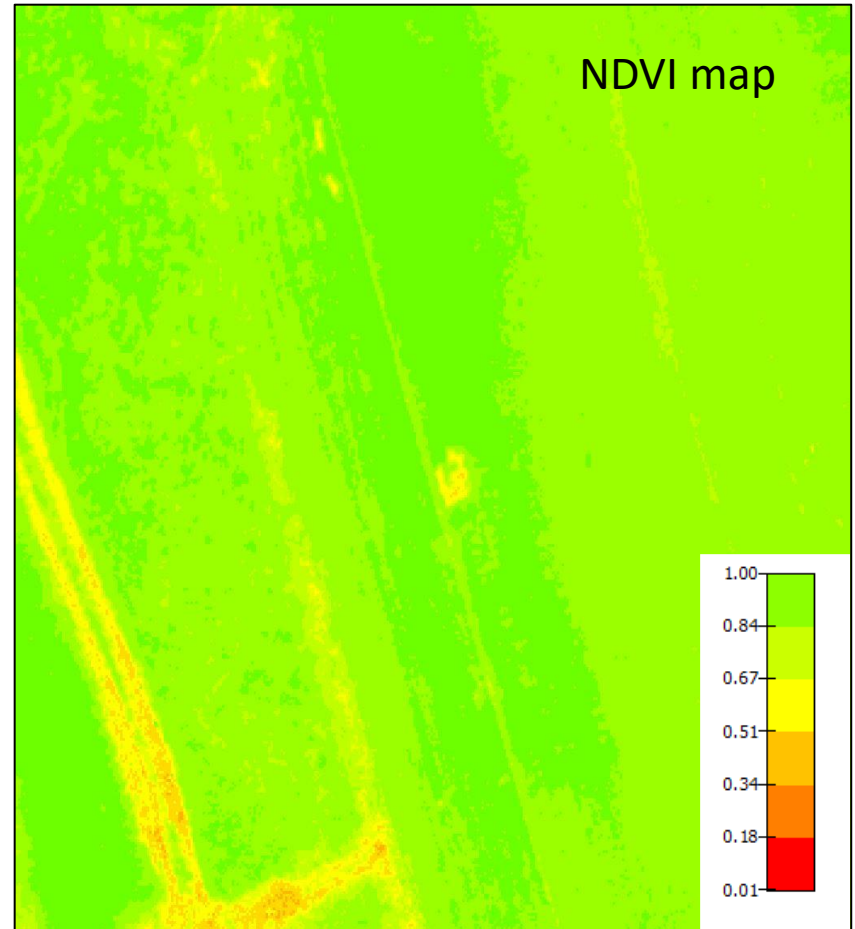
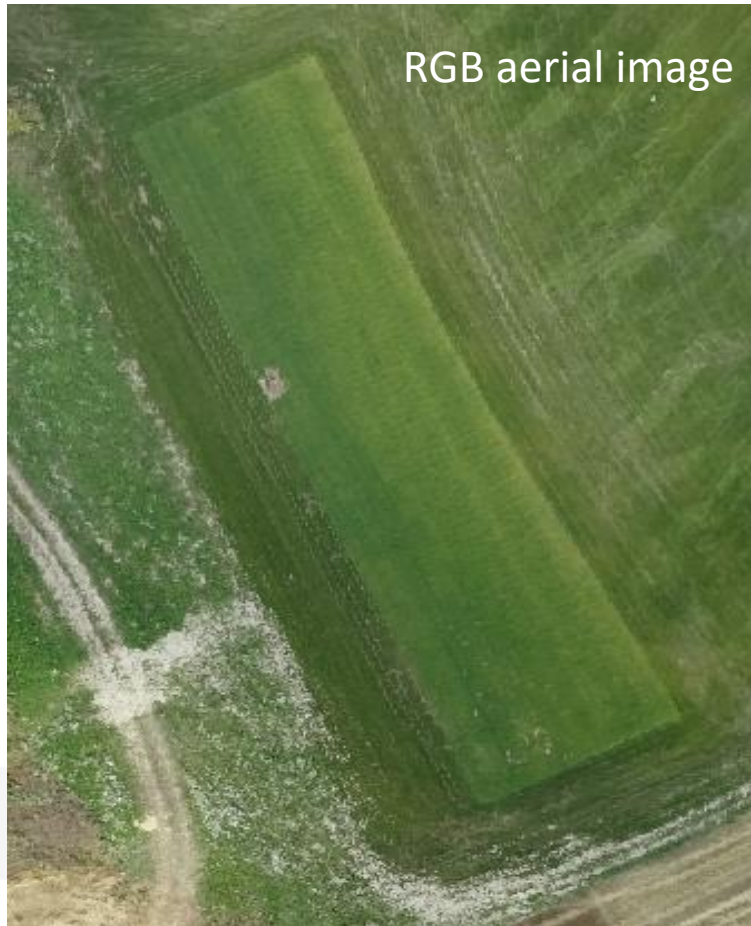
Identification by vegetation indices – NDVI, NDRE, GNDVI, GRVI...

Aerial RGB image



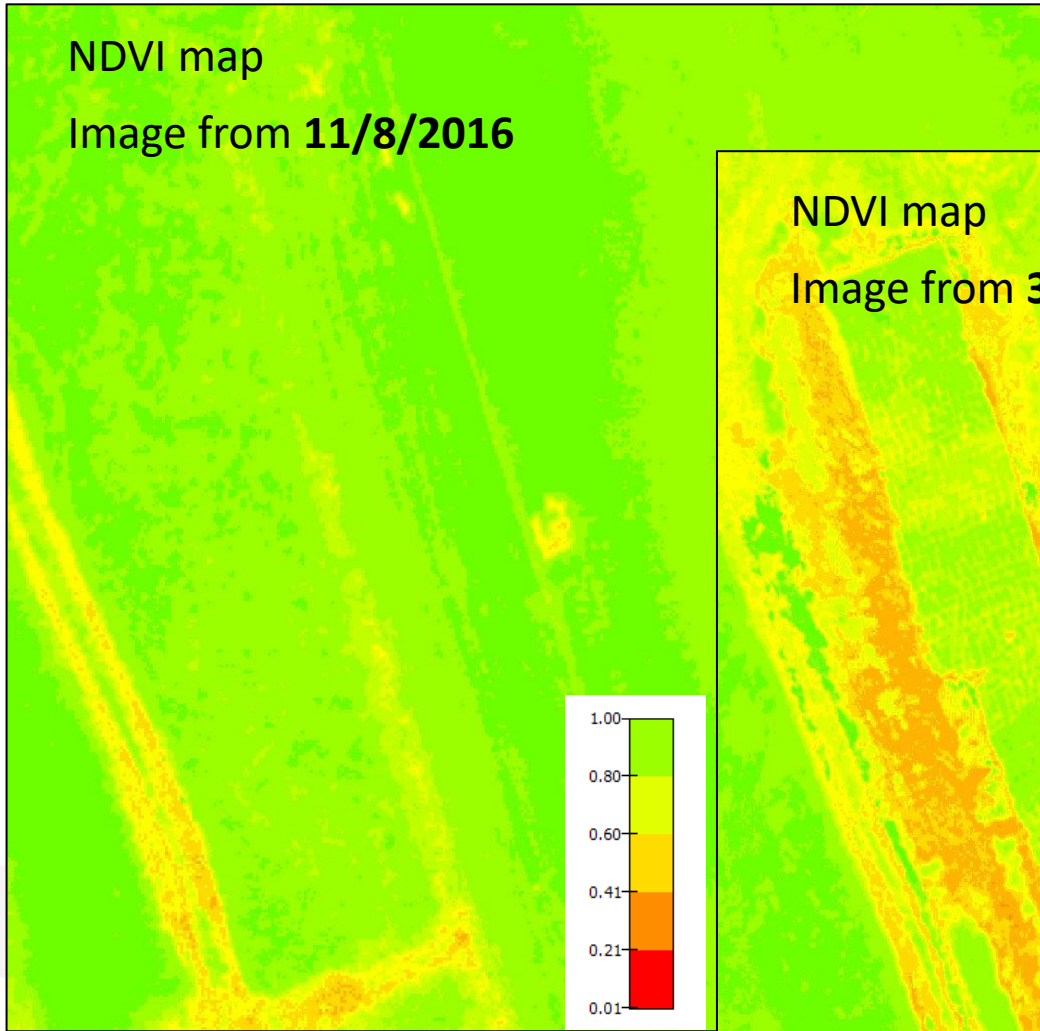
Aerial multispectral image (NDVI)





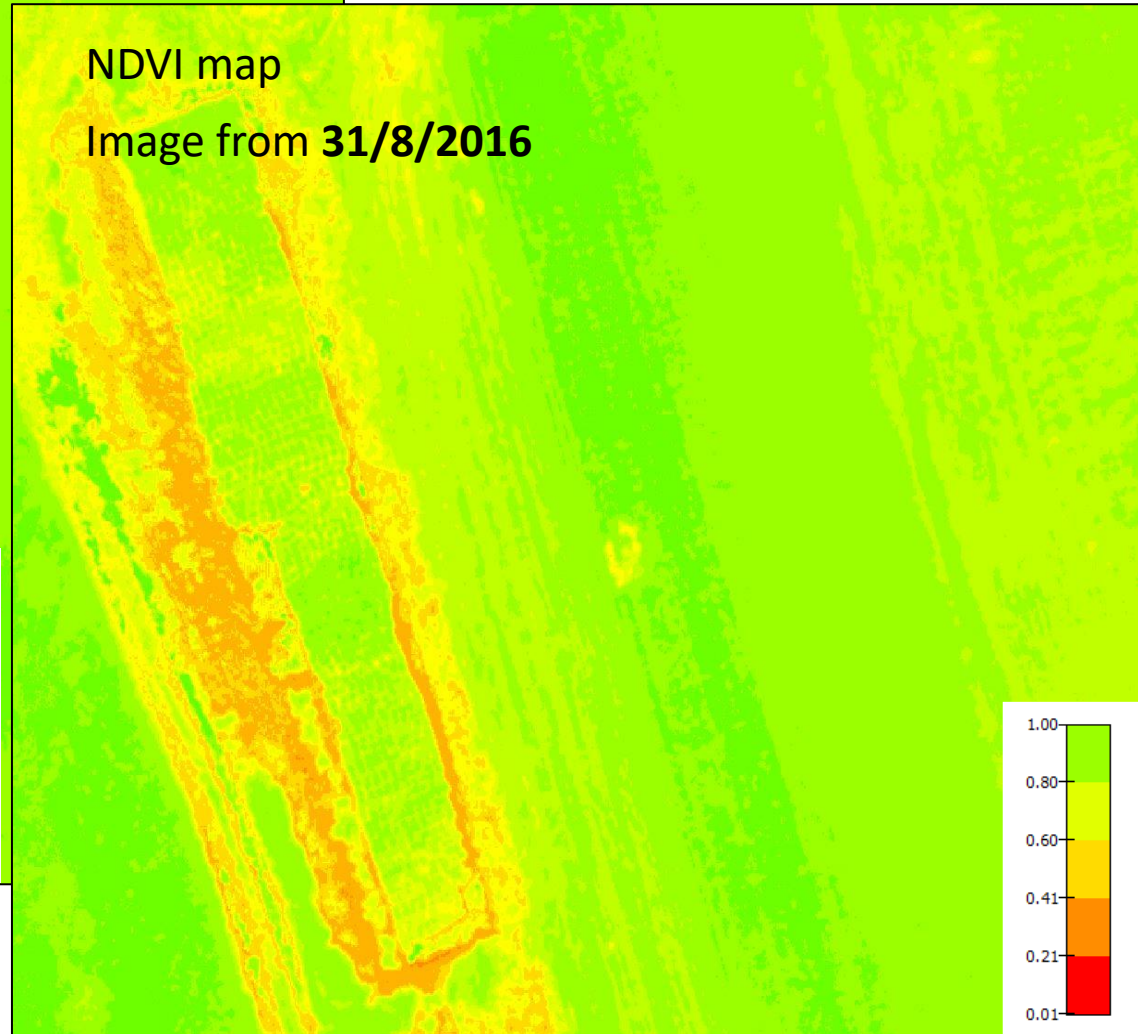
NDVI map

Image from **11/8/2016**

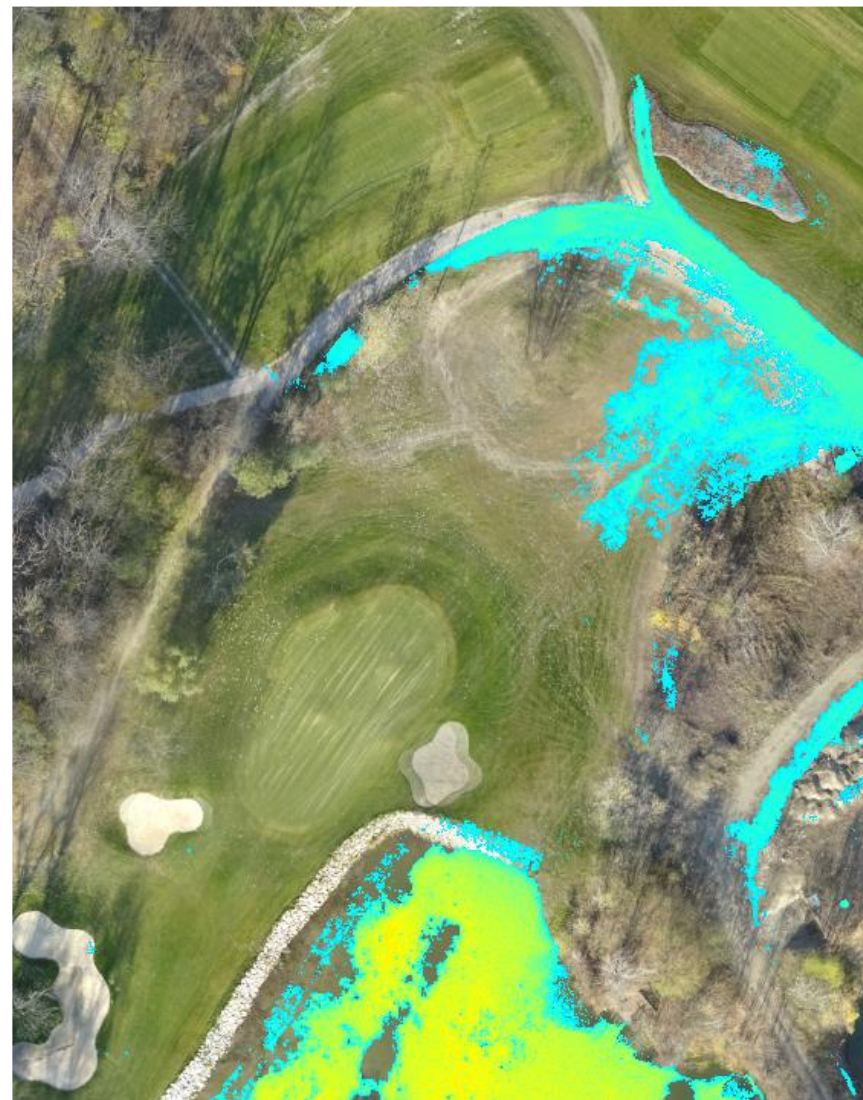


NDVI map

Image from **31/8/2016**



NDWI is most appropriate for water body mapping and for detection of water



-0.835

-0.658

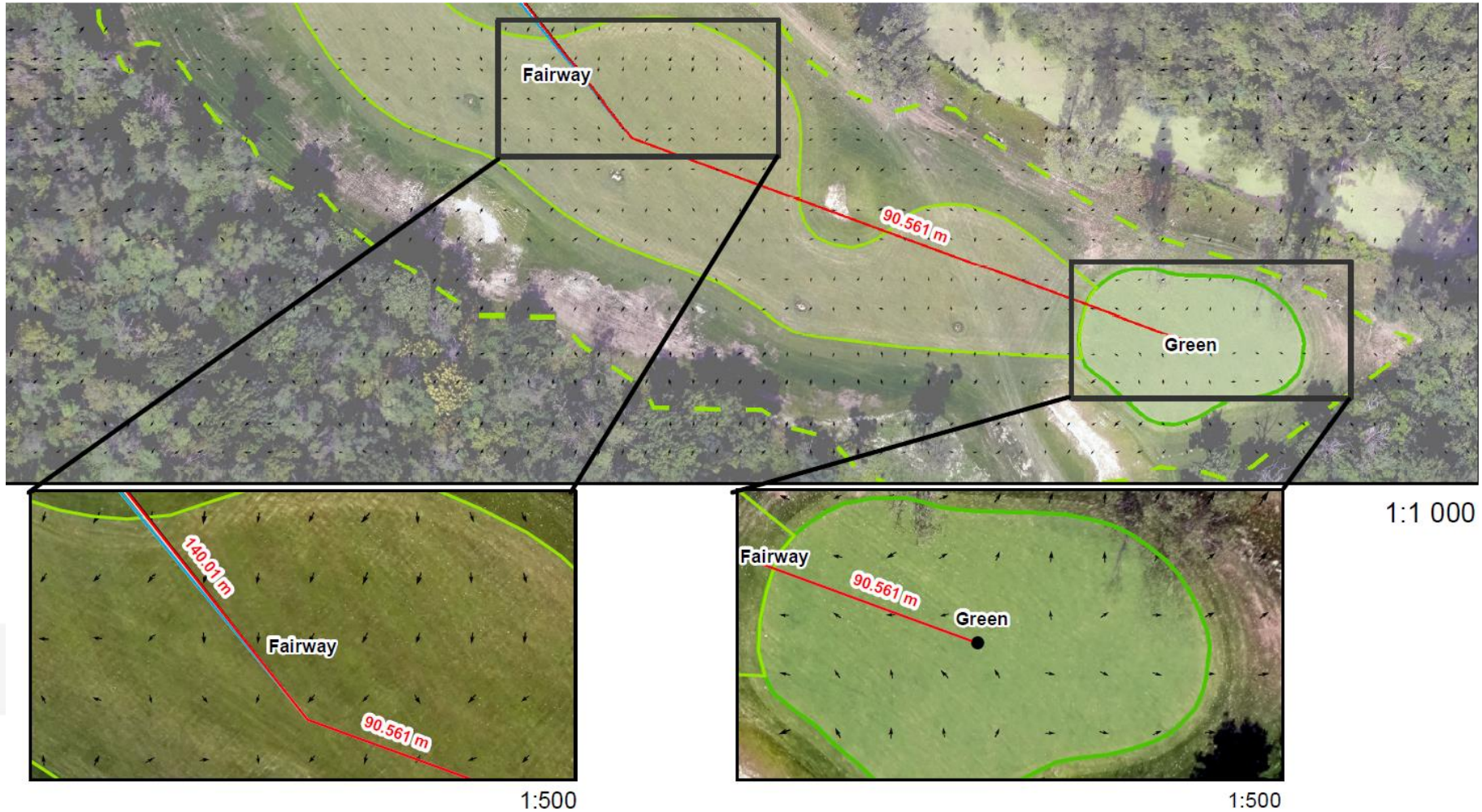
-0.481

-0.304

-0.127

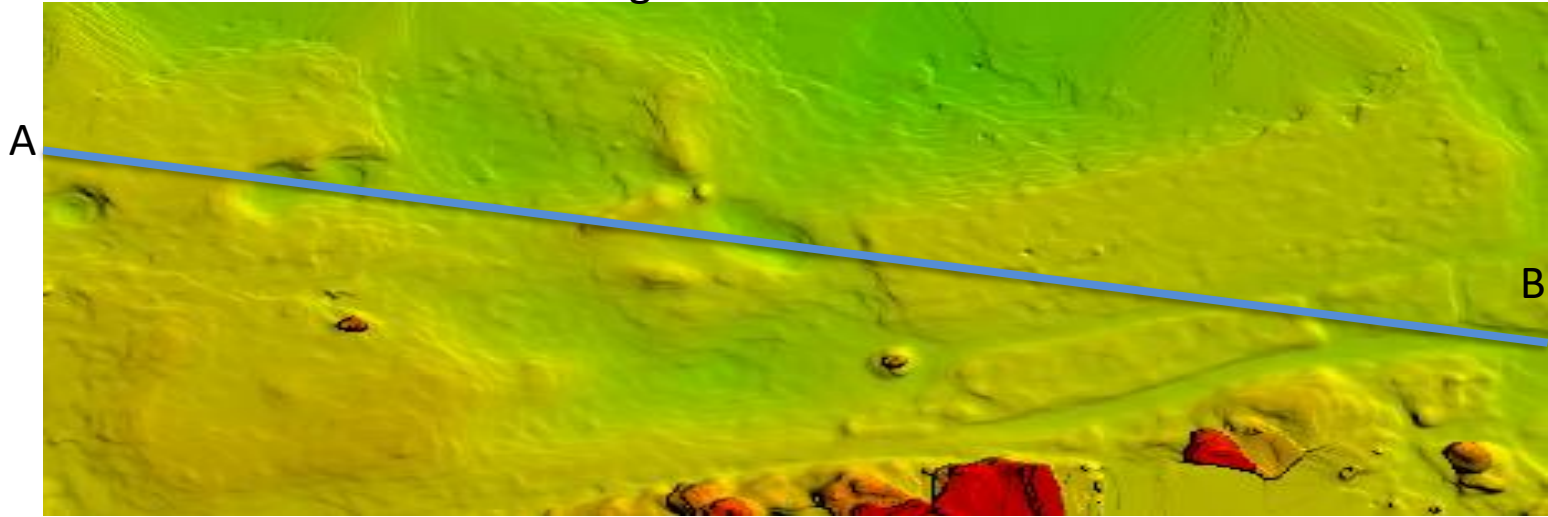
0.050

0.228

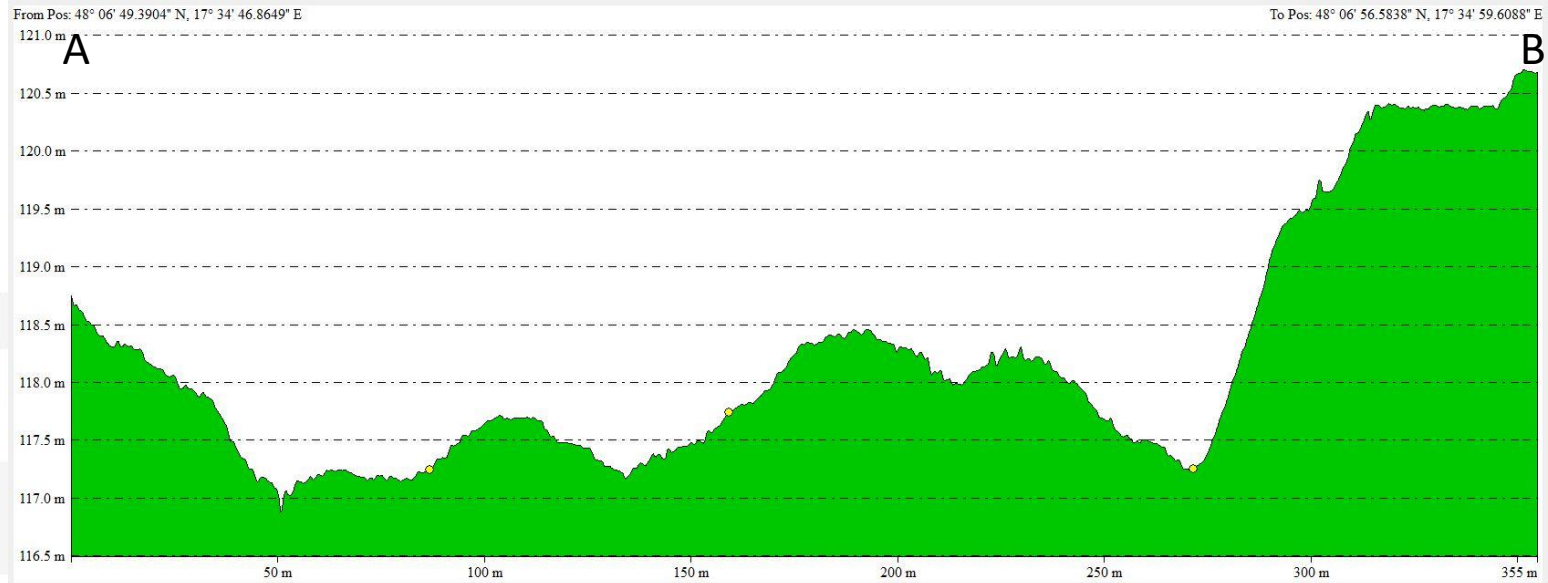


Map of slopes, digital elevation models

Digital terrain model



Altimetry of fairway



- Map of drainage lines**
- Presentation videos**
- Aerial virtual panorama**
- Aerial images**



Visit the **AGRO Inspector application** and see the detail of grass damages in golf resort using vegetation indices

Available at




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App Store



Get it on
Google play



Desktop web app
AGRO Inspector



Thank you for your
attention

TMG Group, s. r. o.
Gagarinova 19
821 03 Bratislava
Slovakia

Tel: 02/ 4341 5042

E-mail: info@tmgggroup.sk

www.tmgdronity.com

www.tmgdigitality.sk

www.tmggroup.sk



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