

We do whatever it takes to make your  
maps perfect

## OCAD - What's New for You?



# Agenda

- OCAD Sketch App
- New OCAD Mapping Features
- New OCAD Course Setting Features

# OCAD Sketch-App



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OCAD - What's New for You?  
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**OCAD**<sup>+</sup>  
the smart software  
for cartography

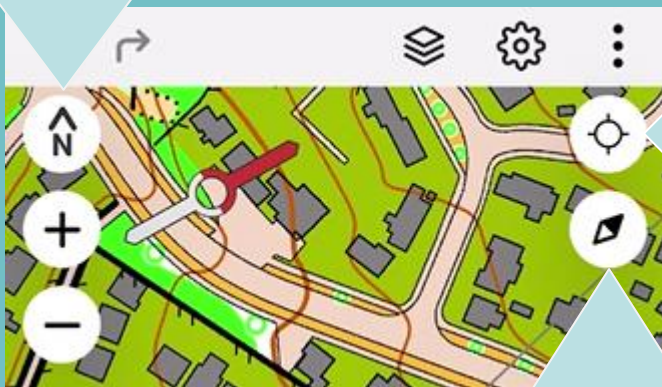
# OCAD Sketch-App – Tips & Tricks



Rotate map so north is towards the top of the screen



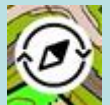
Appears when map is north orientated – will Zoom out to map extent



First-tap: Pan to your current location  
Double-tap: Map will pan automatically to keep itself centred on your current position

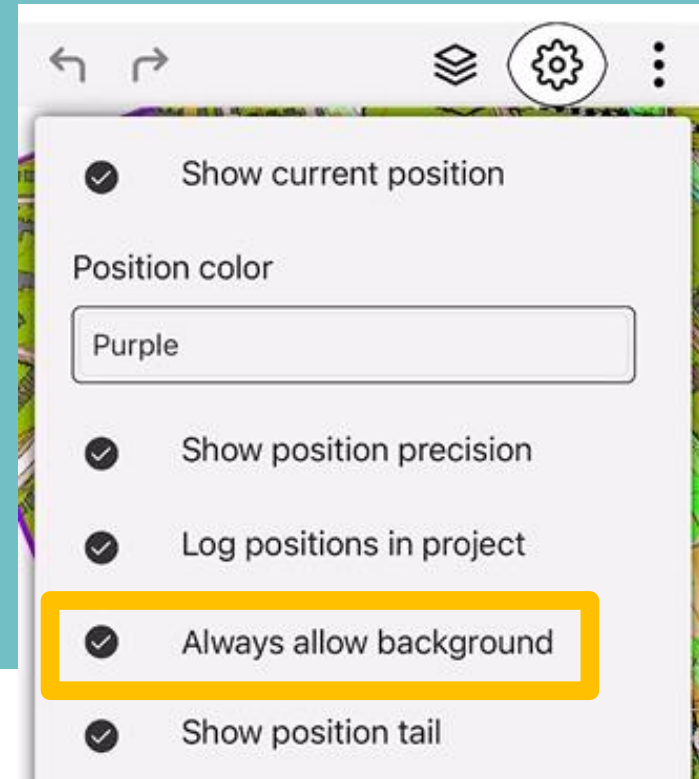


First-tap: Map rotates to be aligned to north  
Double-tap: Map will rotate automatically to keep itself orientated to north



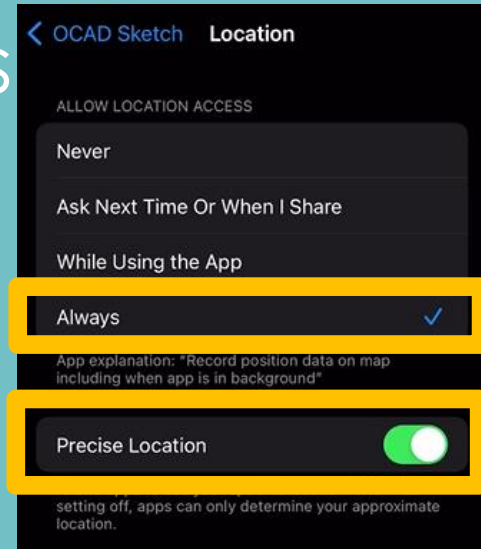
# OCAD Sketch-App – New Things

- Scale Bar
- Background position logging
  - Can be used for both:
    - Position logging
    - Geometry creation
  - Technical issues for some older devices
    - May not be supported
    - May work this way automatically

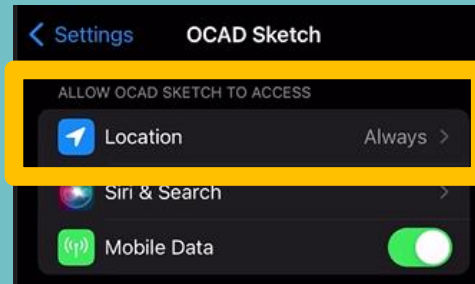


# OCAD Sketch-App – New Things

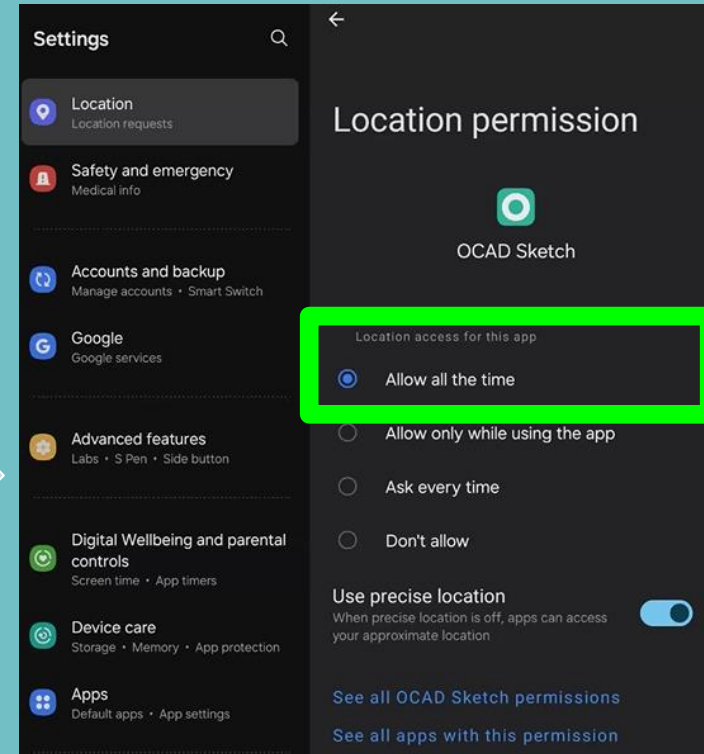
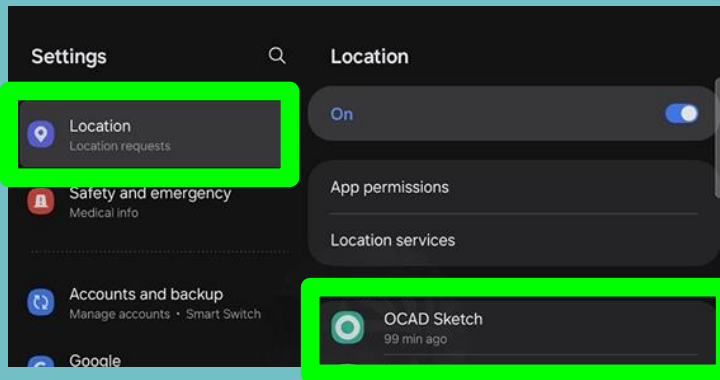
- Background position logging
  - Technical issues:
    - On some devices the interface to the device settings is difficult for OCAD Sketch App to communicate with – so you may need to set this manually to turn on and off



ios



Android



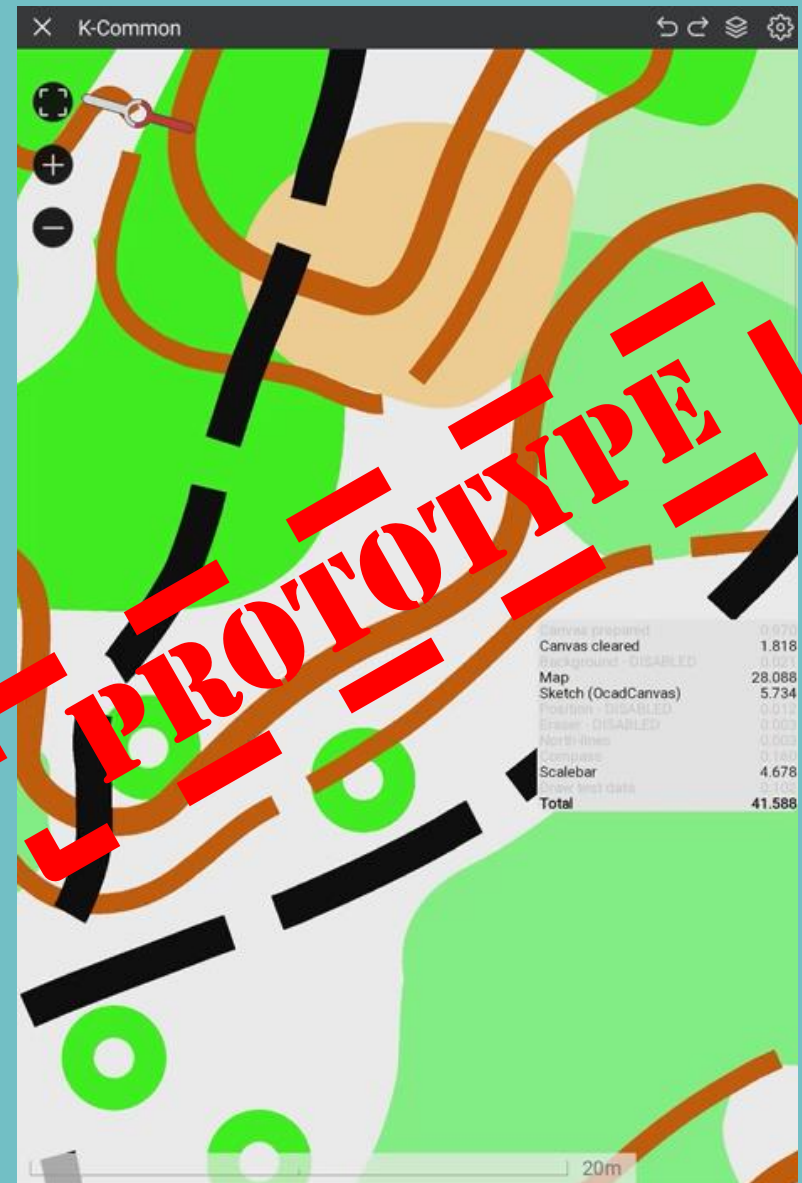


# OCAD Sketch-App – Looking Ahead

- Sketch-App was written with tools which are to be deprecated by Microsoft this year
- We have started building a new App using newer technologies
- Some of the challenges
  - Editing – more than just sketches
  - Designing an intuitive user interface and experience
  - Cross-platform:
    - iOS and Android,
    - Maybe even Windows and MAC later!
  - Multi-language
  - Light/dark modes
  - ...

# OCAD Sketch-App – Looking Ahead

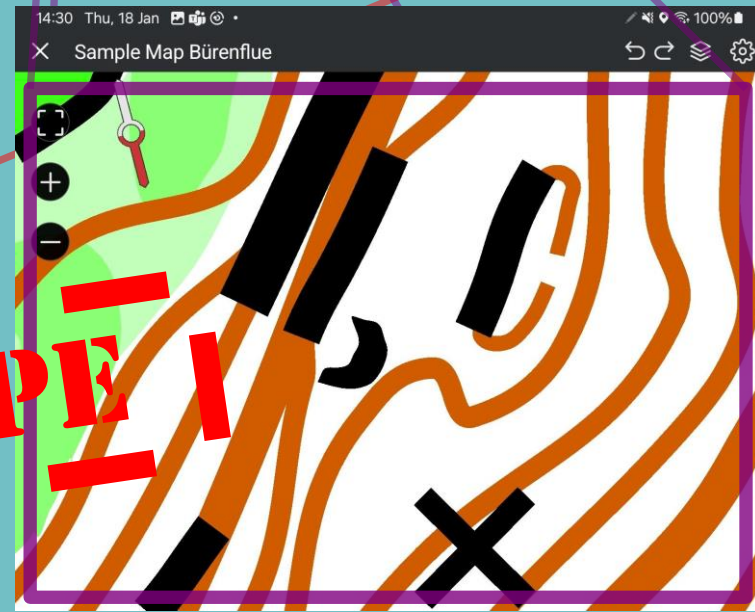
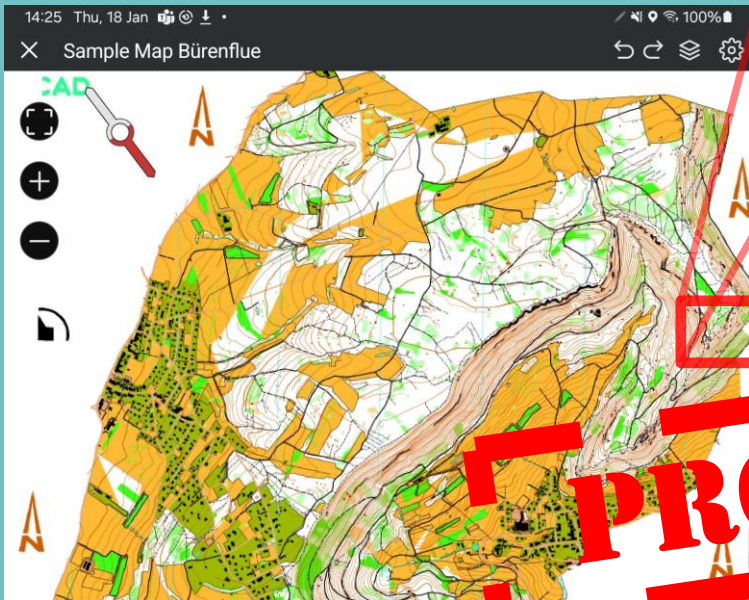
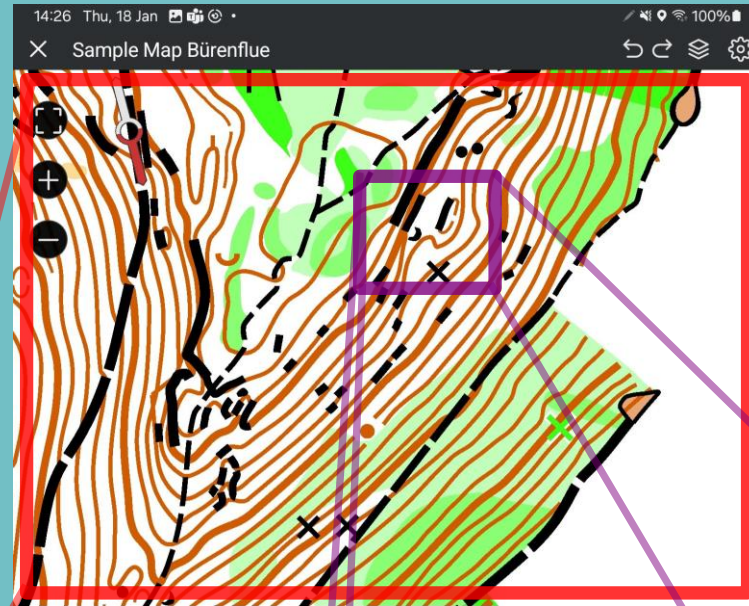
- Some of the challenges
  - Using vector geometry graphically





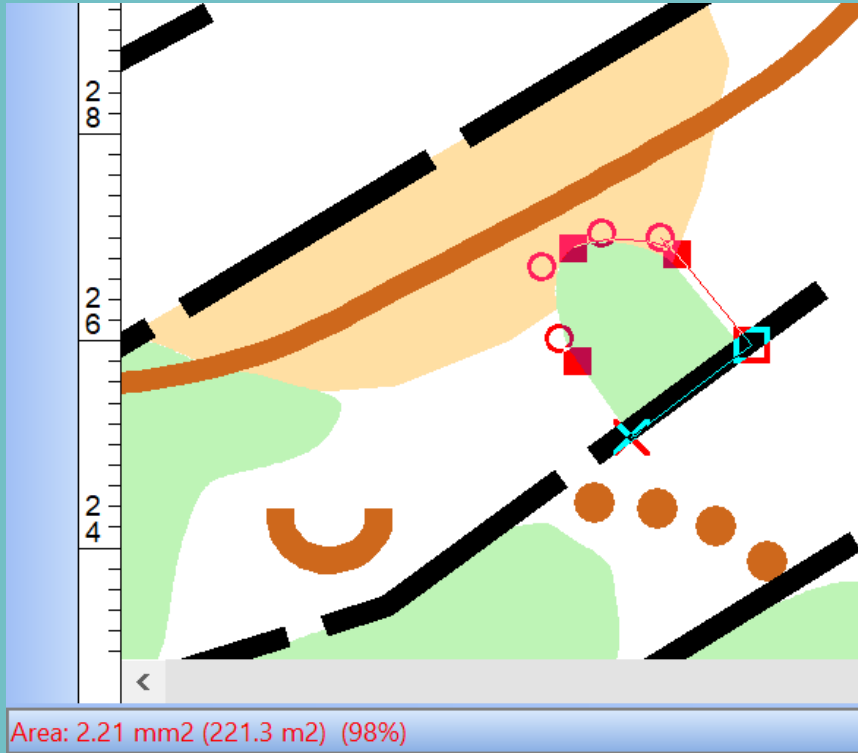
# OCAD Sketch-App – Looking Ahead

- Some of the challenges
  - Managing large OCAD files



**PROTOTYPE**

# New Mapping Features in OCAD



Büren (SO)

**bürenflue**

massstab 1:10'000  
äquidistanz 5m  
stand 2012

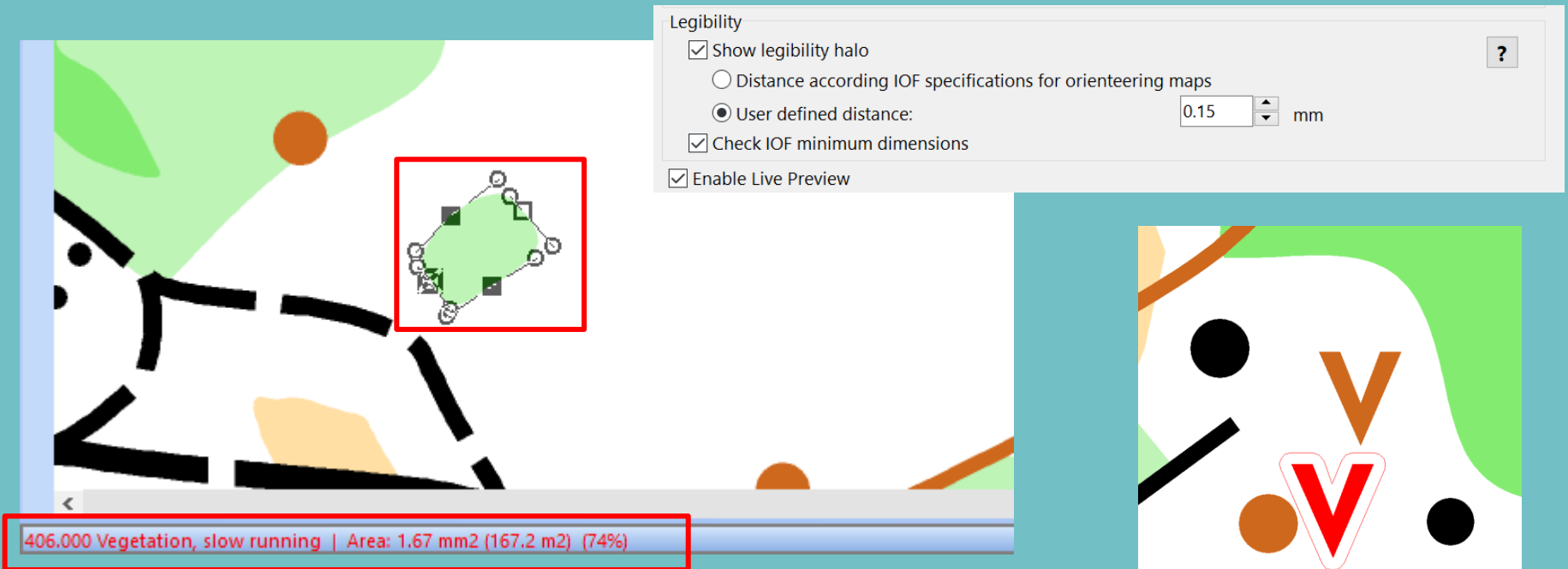
Koordinaten 616/256  
Kartografie Simon Guldimann  
Grundlagen DTM/DOM SOGIS  
Software OCAD 10/11  
Druck frey-print & design, birr  
Bezug www.rolv-nws.ch

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www.rolv-nws.ch  
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**FOCUS WATER**

# Check IOF Minimum Dimensions / Legibility Halo

- OCAD shows in the status bar (bottom left) while drawing if the area minimum size according IOF specifications is ok.



406.000 Vegetation, slow running | Area: 1.67 mm<sup>2</sup> (167.2 m<sup>2</sup>) (74%)

Legibility

- Show legibility halo
- Distance according IOF specifications for orienteering maps
- User defined distance: 0.15 mm
- Check IOF minimum dimensions
- Enable Live Preview

# Check Legibility - Contours

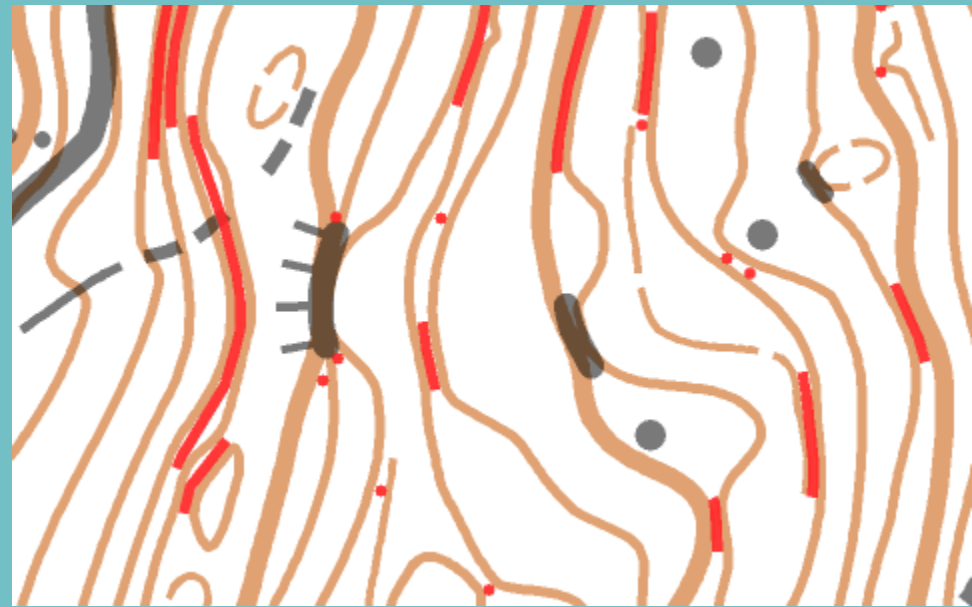
- Option added to check the distance between Contours
- *Map* → *Check Legibility...*

Check distance between objects

Minimum distance:  mm

Check distance only between object from the same color group

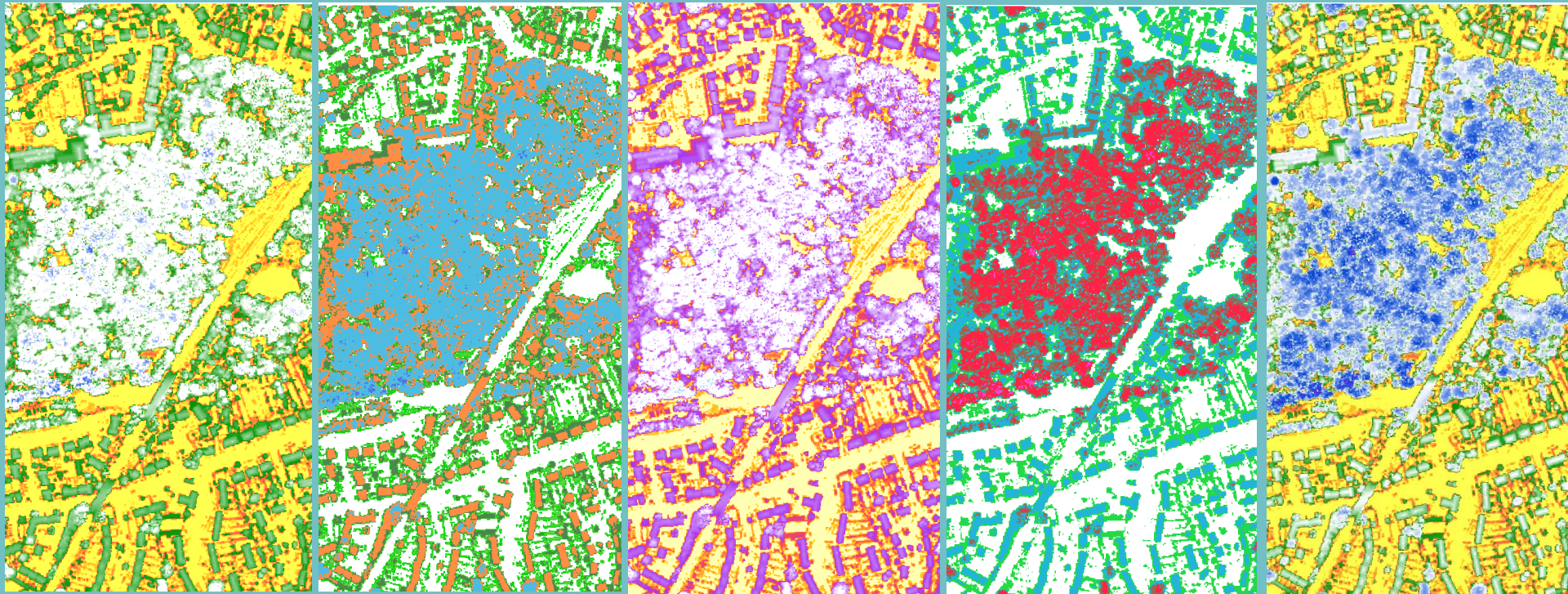
Check distance between contours





# Vegetation Height Map Profiles

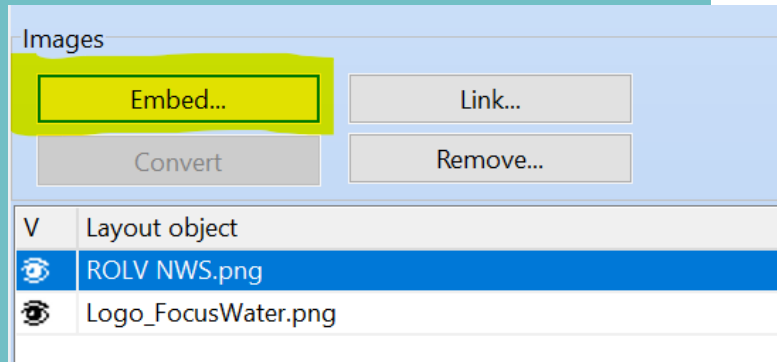
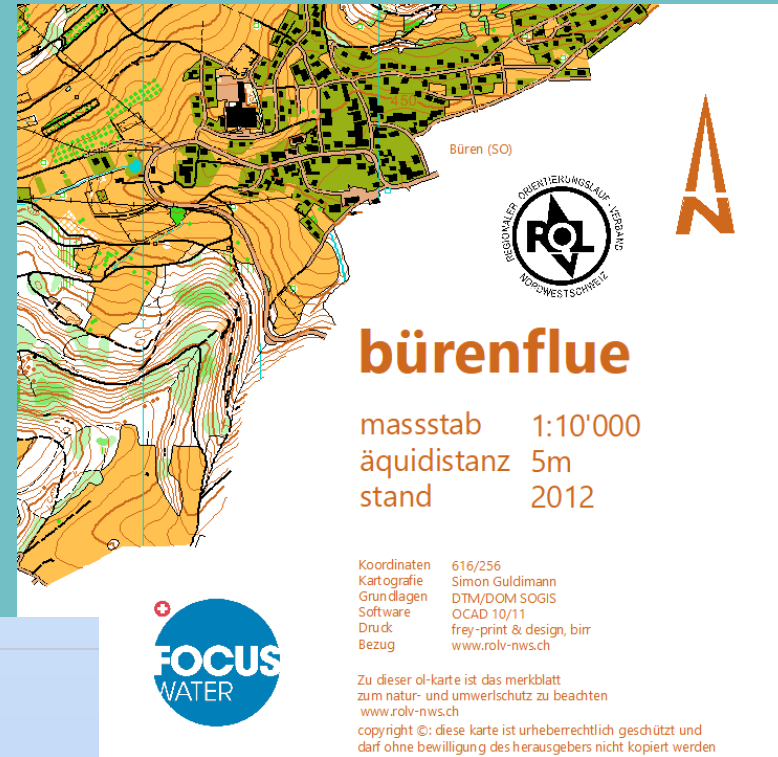
- Additional pre-defined color profiles  
→ Load...





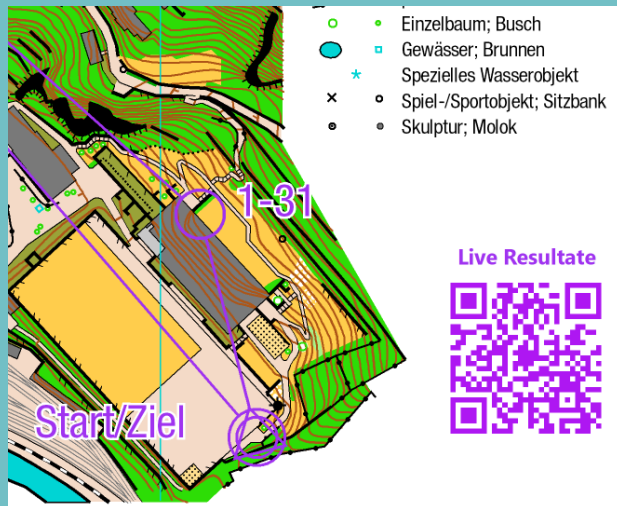
# Embedded Layout Images

- Embed Raster images (e. g. PNG files) instead of just linking them  
→ No missing files when sharing maps and course setting projects  
→ Larger OCAD file size (check image resolution)



# QR Code Generator

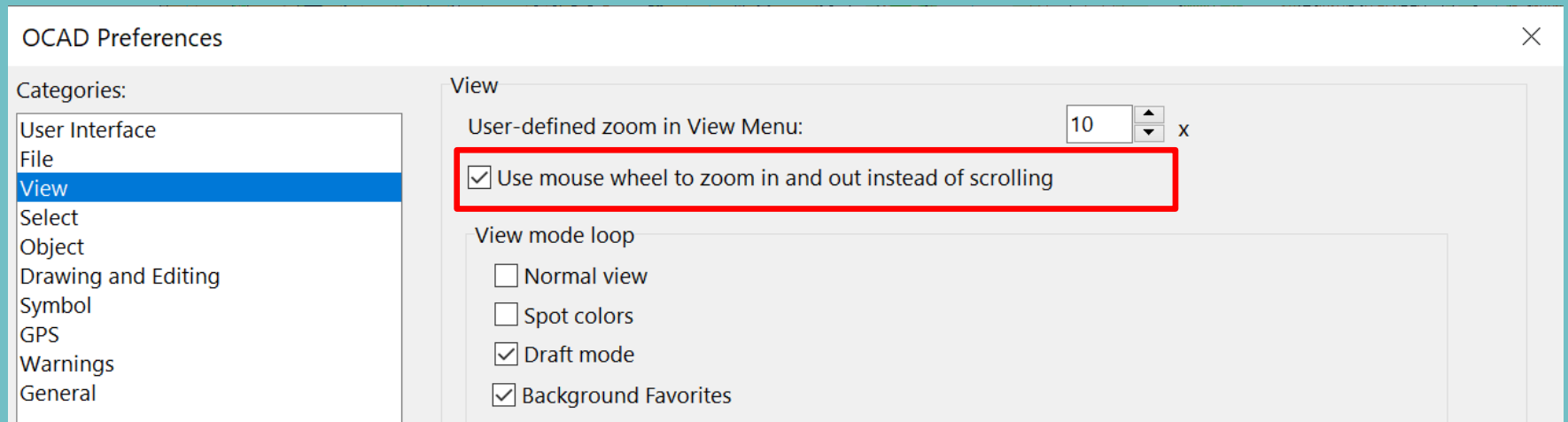
- *Layout -> Create QR-Code*
- Can be used to add links on the map (e.g. Live results)



*OCAD Wiki – Generate QR Code*

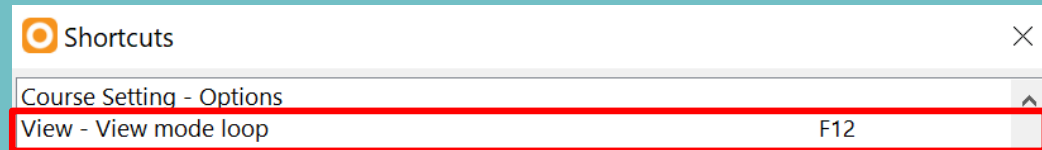
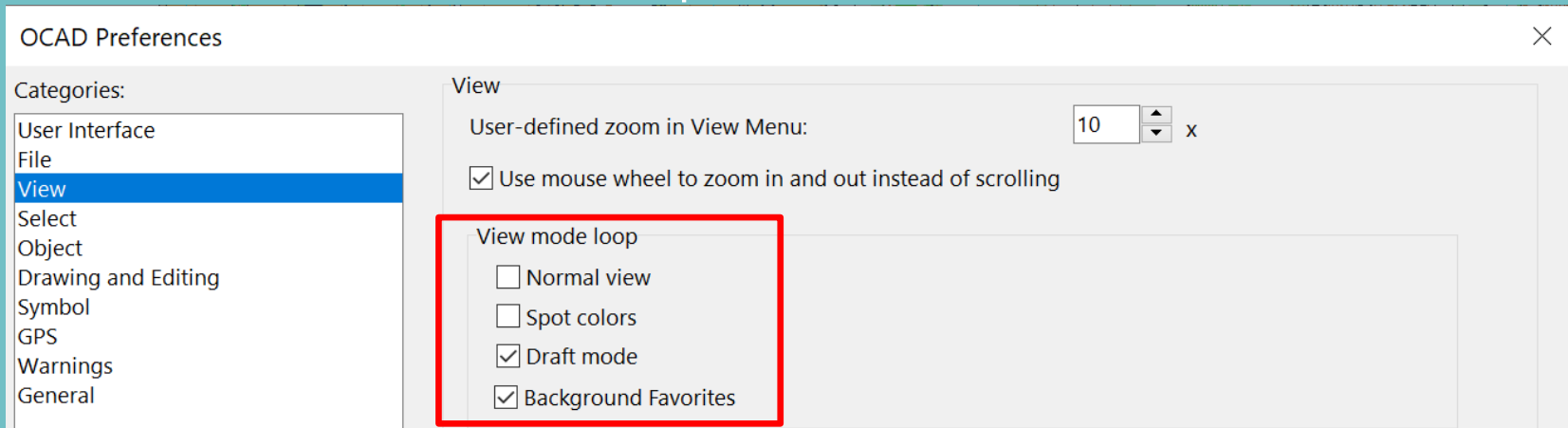
# New Zoom View Option

- Option to zoom in/out with mouse wheel  
(Options → OCAD Preferences)



# Old but rarely known...

- Toggle background (favorites) with a shortcut on View mode loop



The screenshot shows the 'Manage Background Maps' dialog box with a table of background maps. The first two columns, 'V' and 'F', are highlighted with a red box.

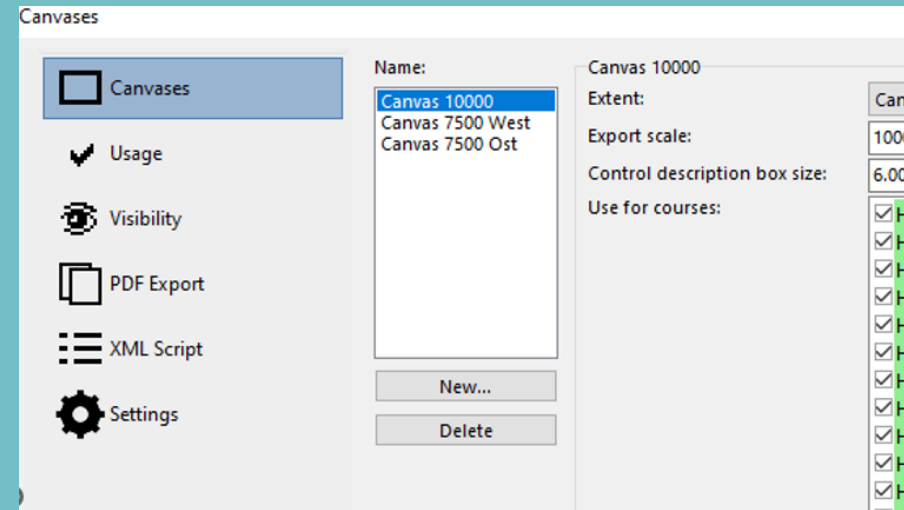
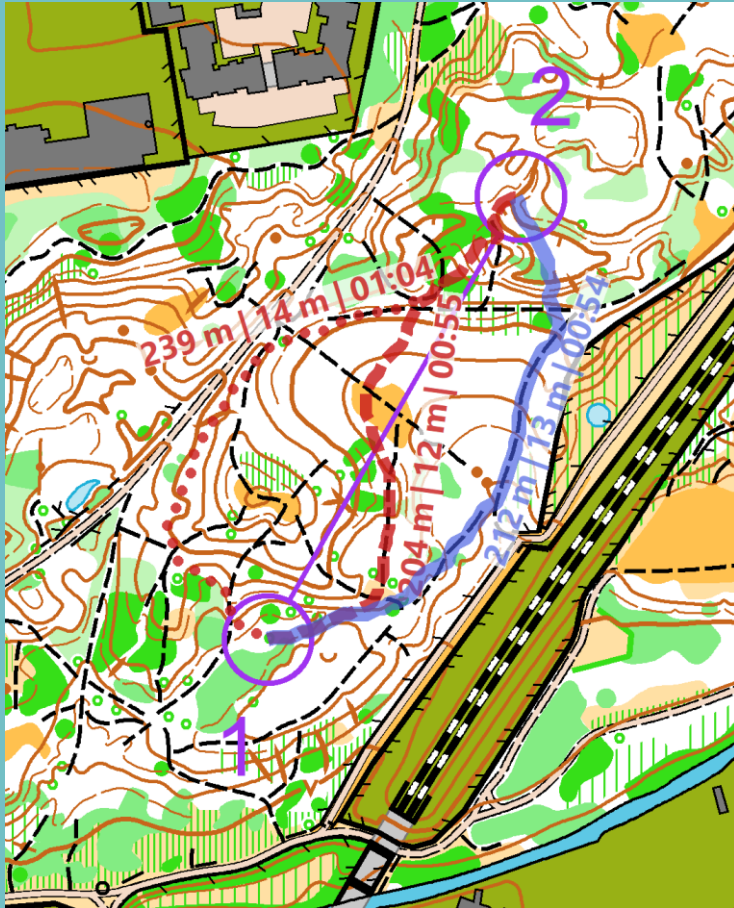
V	F	Dim	T	Assign to spot color	B	File name	I
		0		-	-	Contours2.5m.ocd	
		30				GMphoto.jpg	
		0				EPSG_27700_13_429481_273280.png	
		0				Laz 2m 2018 VegetationBaseMap.pna	

# Support for Latest IOF Specifications

- ISOM 2017-2
- ISSprOM 2019-2
- ISMTBOM 2022
  
- *Map → Update symbol set...*

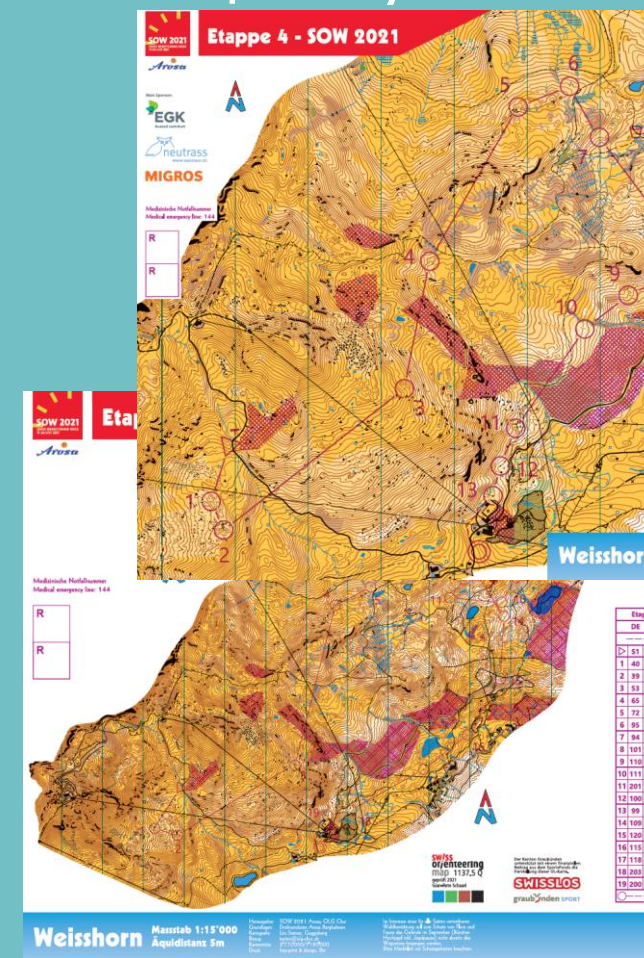
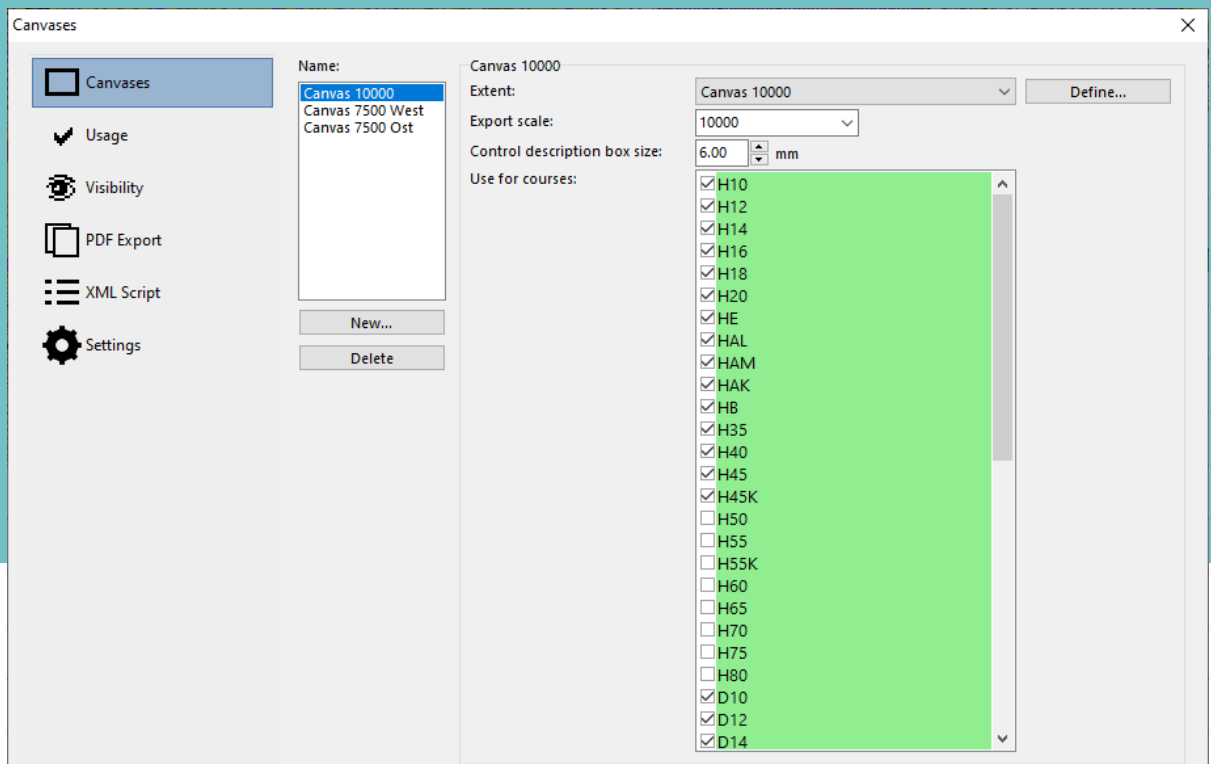


# New Course Planning Features in OCAD



# Course Canvas For Printing (PDF Export)

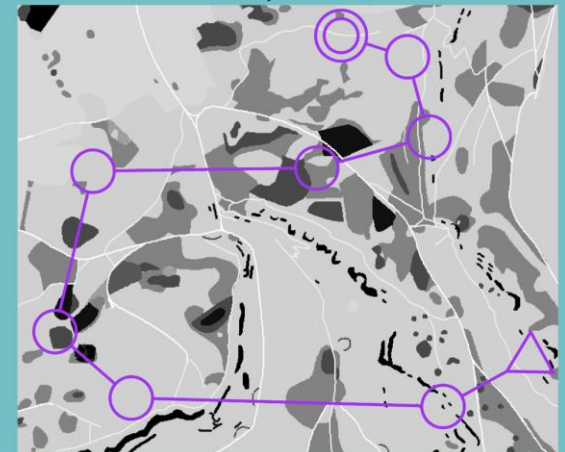
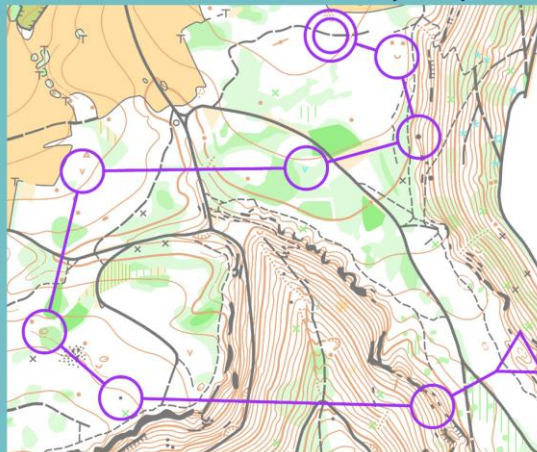
- Events on multiple scales:
- 1:15'000 / 1:10'000 / 1:7500 or 1:4000 / 1:3000
  - Limited paper format for digital printing
  - Different map layout
  - Big number of courses for large events



Source: SOW 2021 Arosa

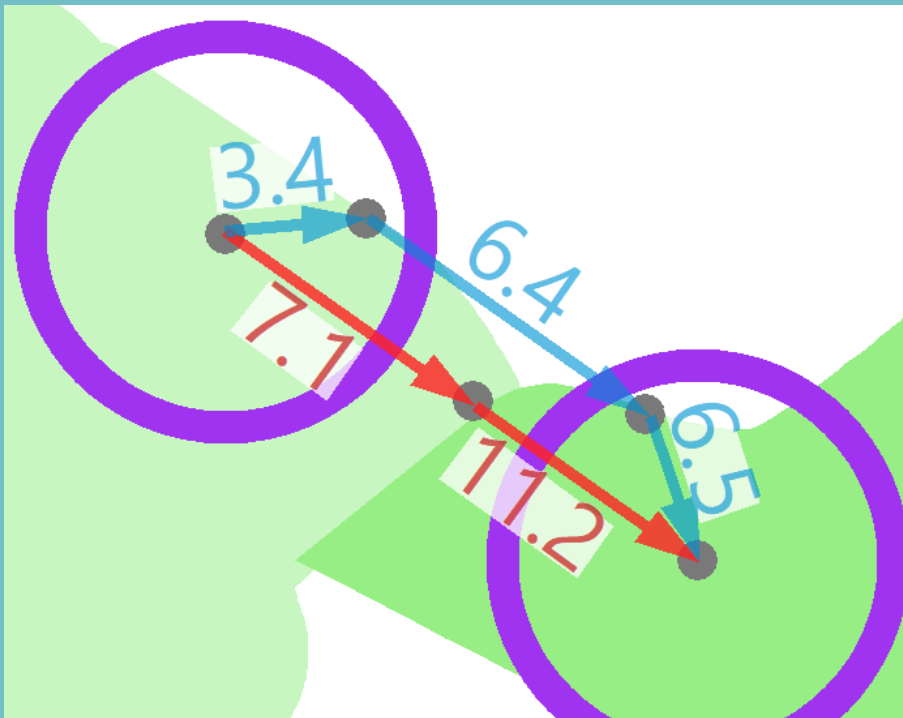
# Route Analyzer 2.0

- Calculates the *fastest* route considering **distance**, **relief** and **runnability**
- Uses a *weighted* graph routing network with an *estimated* running time instead of the distance as decisive factor



# Route Analyzer 2.0

- Illustration of fastest route calculation

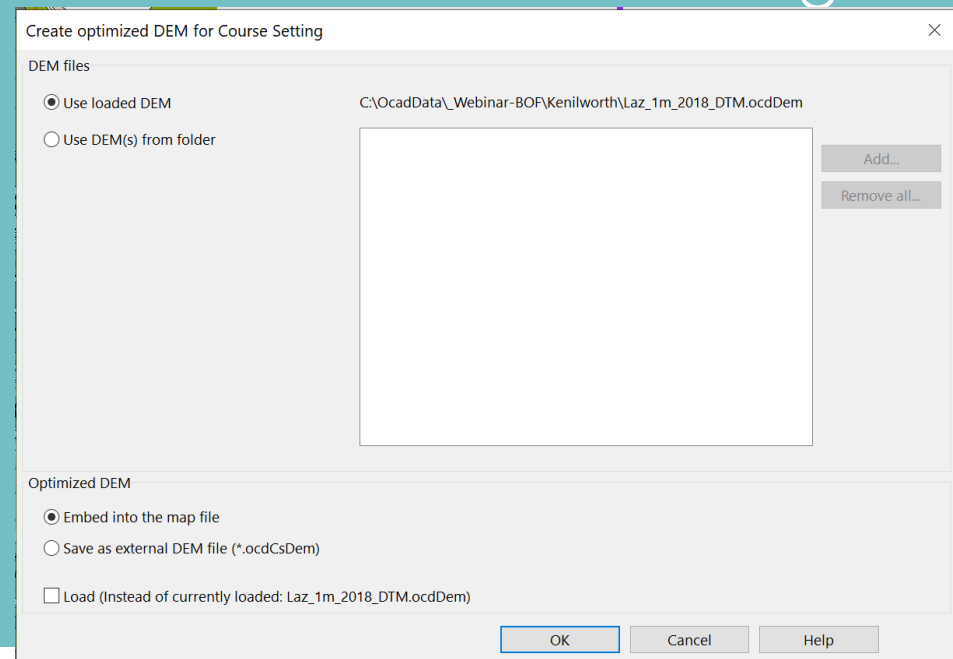


	Distance [m]	Runnability [%]	Time (sec)
Edge 1	23.0	65	7.1
Edge 2	20.7	37	11.2
Total	43.7	102	18.3

	Distance [m]	Runnability [%]	Time (sec)
Edge 1	10.9	65	3.4
Edge 2	26.4	83	6.4
Edge 3	12.0	37	6.5
Total	49.3	185	16.2

# Route Analyzer 2.0

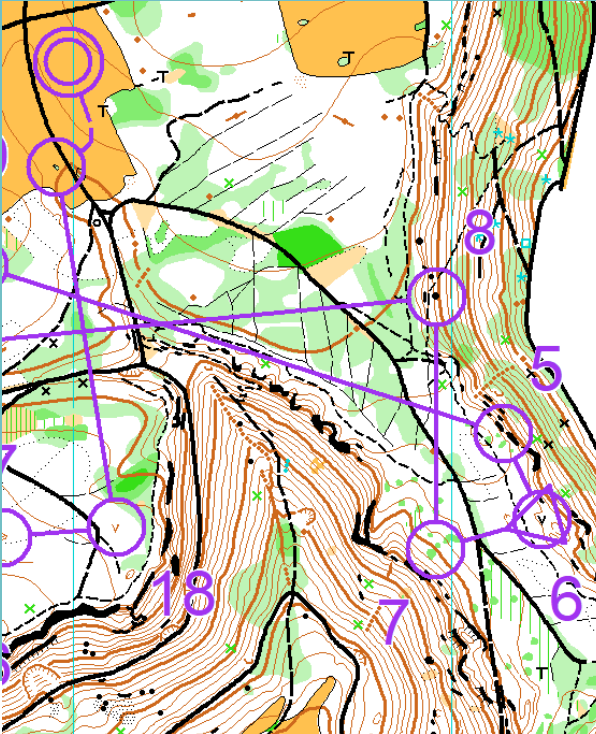
- DEM required
- Sharing the DEM becomes easier with the new *Optimized and compressed Dem for Course Setting* which can be **embedded** into the map file





# Latest IOF Specifications

- ISCD 2024 Control descriptions (e. g. Map flip)
- Black as default color for control description



**Course Setting Example**

M45				
Map Flip	8.1 km	50 m		
--- 130 m --->△				
△				
1	36	▽		⊙
2	37	▨		✓
3	61	●		
4	62	⊕		
5	54	▩ ▩		⊖
6	53	▽ ▲		⊙
□ ↶				
△				
7	52	▩ ▩		⊖

# Q & A

- Questions?
- Anything you'd like demonstrated?



Thanks to Bruce Bryant (OD & NE.W-Maps ) for help with supply and preparation of some of today's demo-data.