

# Semi-automatisk deteksjon av gravhauger i lidardata

Detaljert kartlegging av vikinggravfeltet på  
Vang, Oppdal

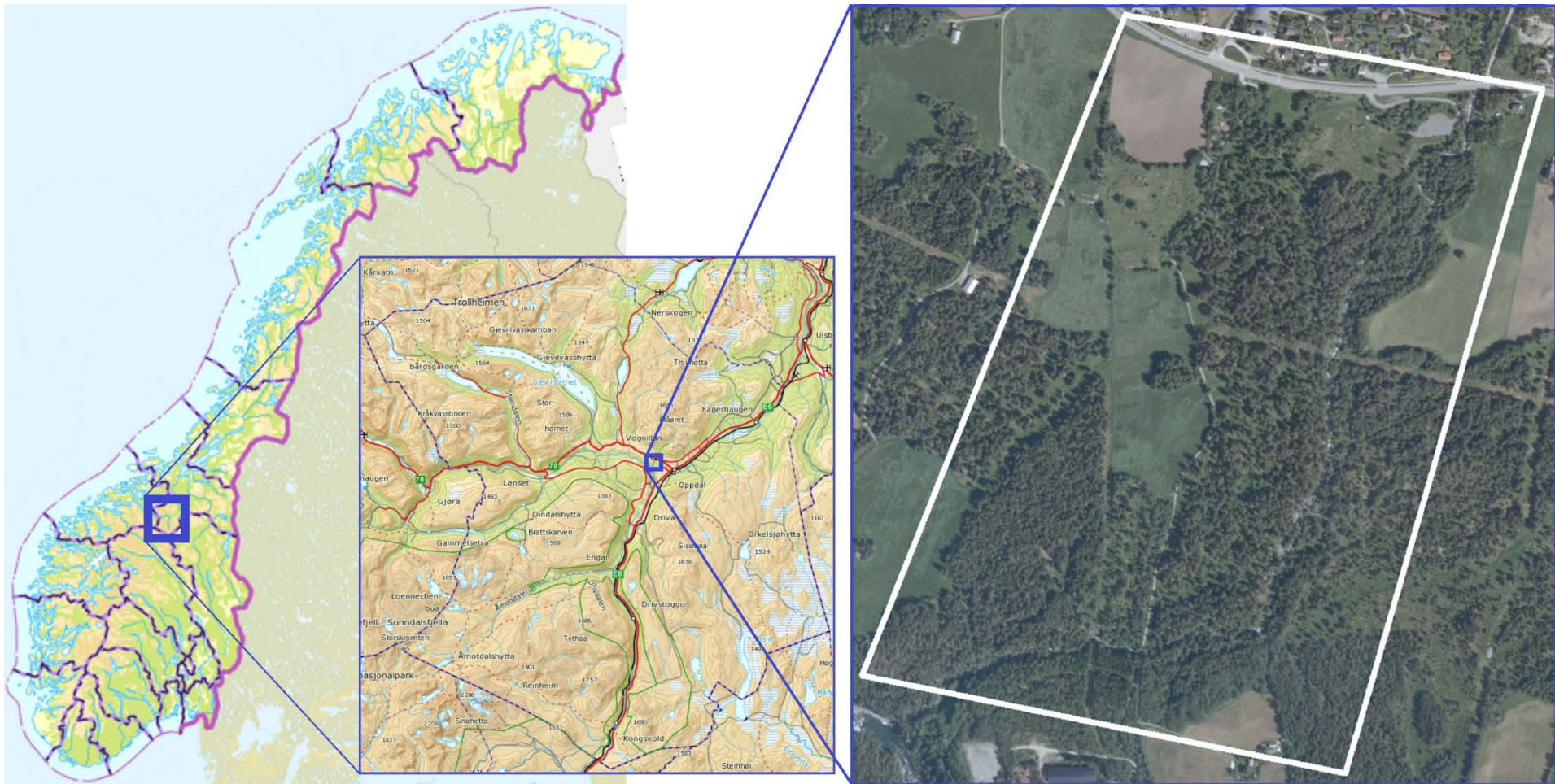
Øivind Due Trier (NR)

Hans Marius Johansen (STFK)

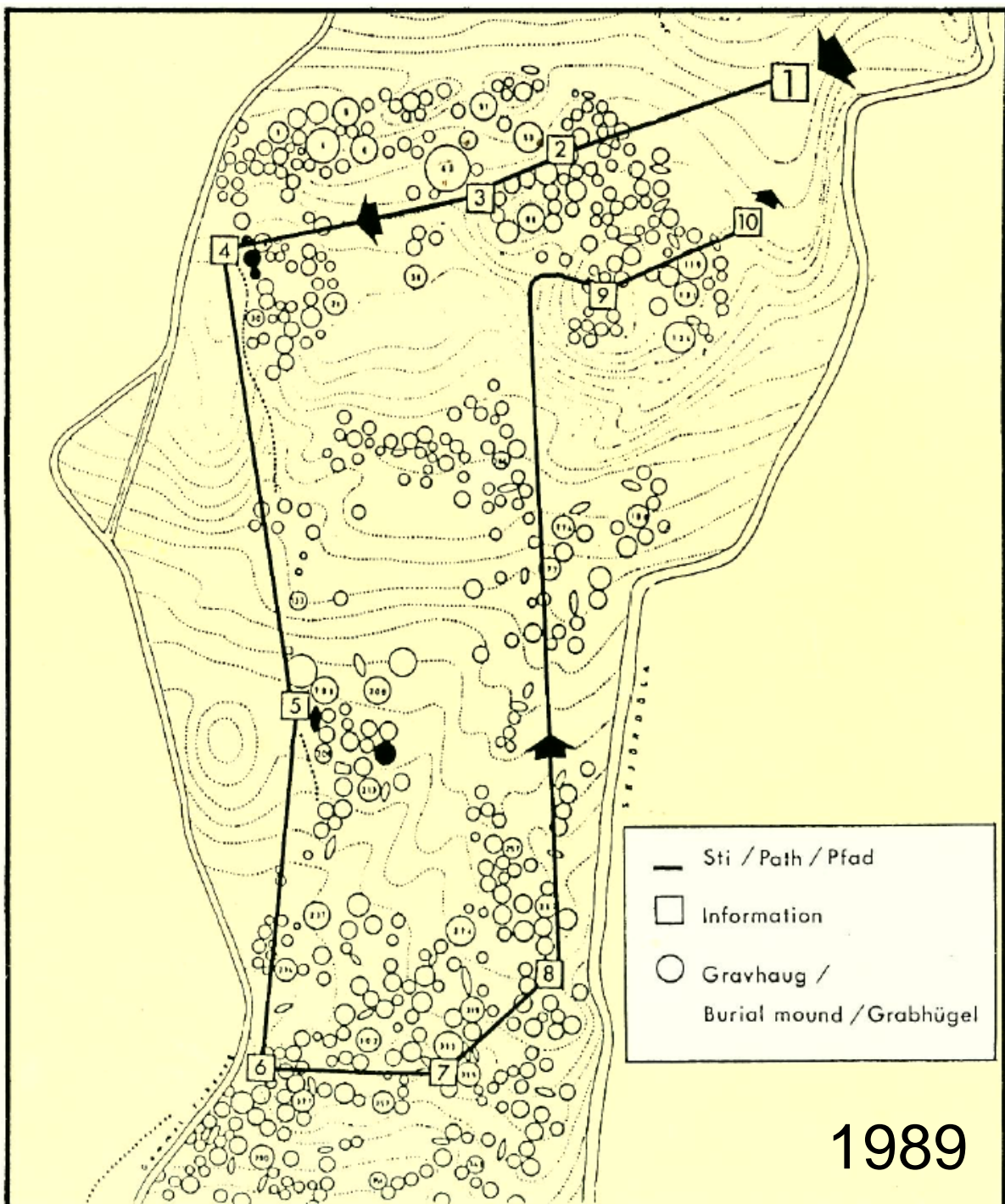
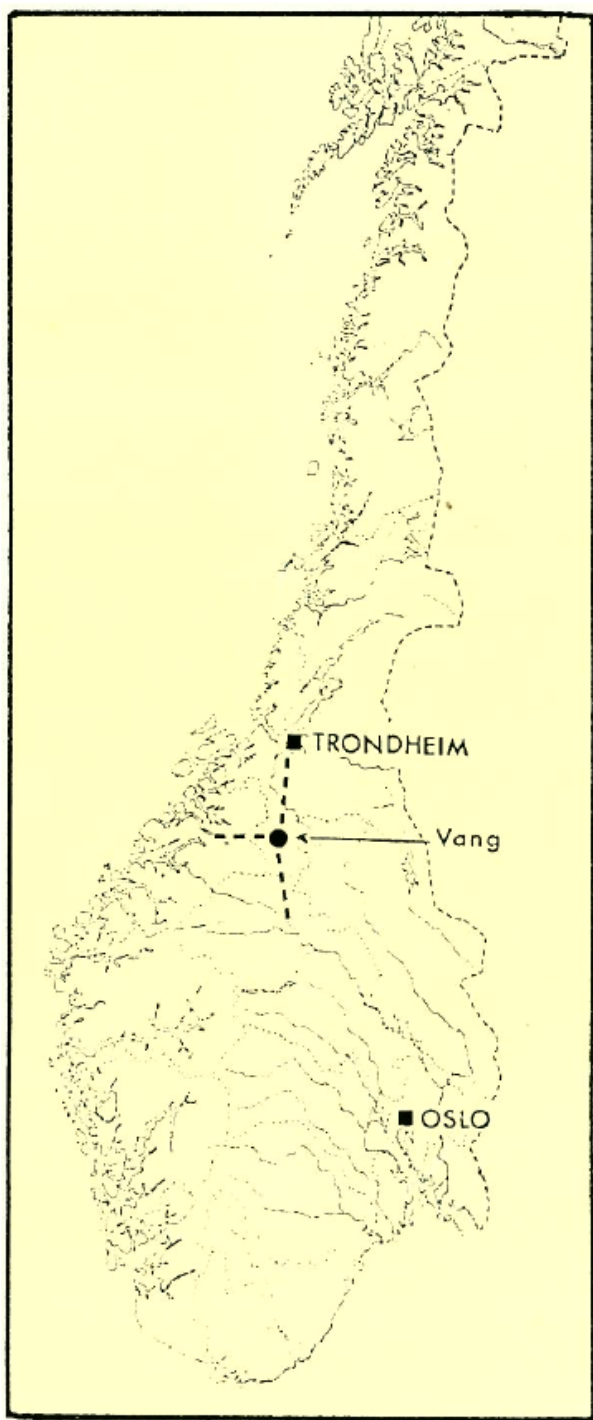
CAA-Norge 13. oktober 2014



# Vang, Oppdal







1989

# Ny kartlegging

- ▶ Nye informasjonsskilt til publikumsstien på gravfeltet
- ▶ Innlegging av enkelthauger i Askeladden



# Digitalisering

- ▶ Laserdata (TerraTec 12.09.2012), 12 punkt/m<sup>2</sup>
  - Skyggelagt terrengmodell
  - Automatiske deteksjoner

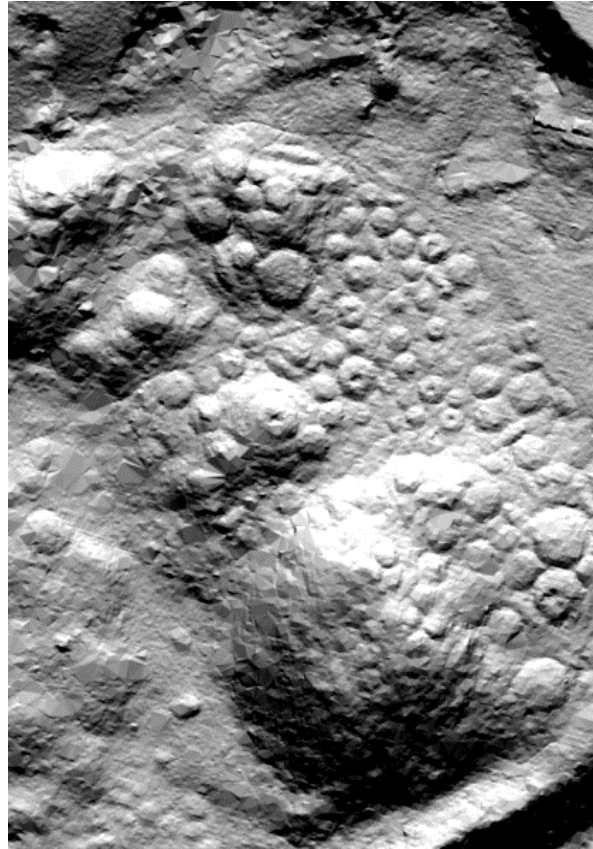
# Korreksjon og kontroll

- ▶ Arkeologisk kart (1936, 1967)
- ▶ Ortofoto
- ▶ Høydekurver , 20 cm ekvidistanse
- ▶ Feltarbeid (ikke ferdig)

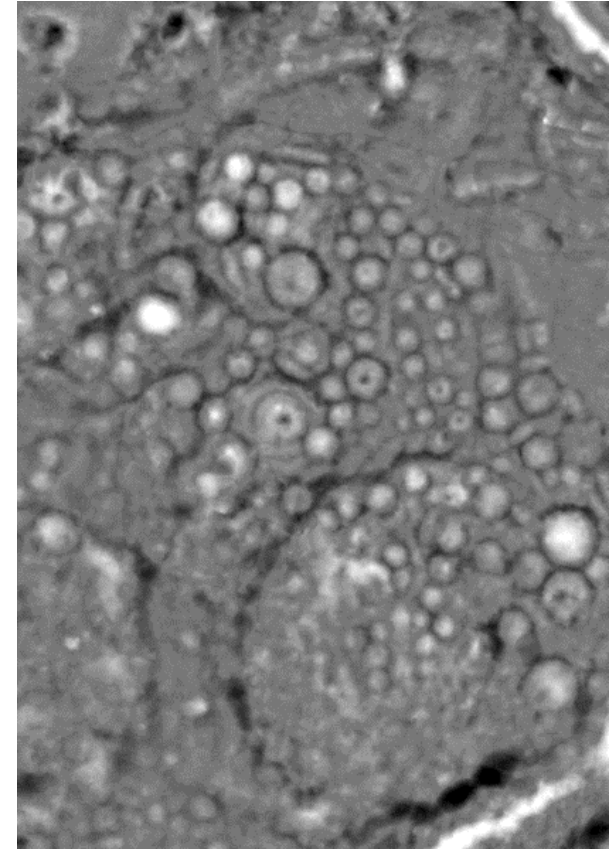
# Visualisering



Flybilde

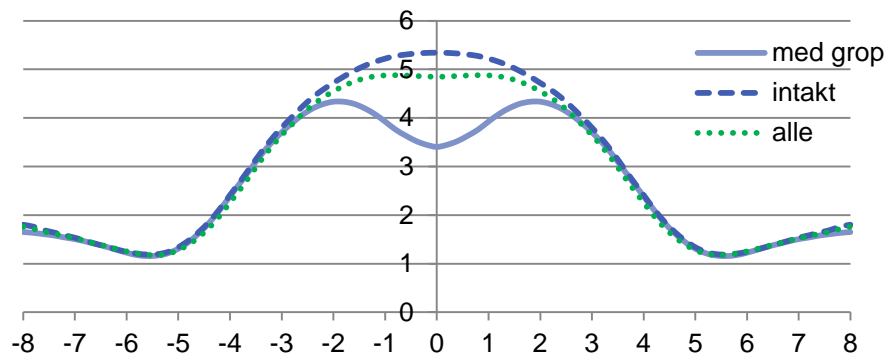
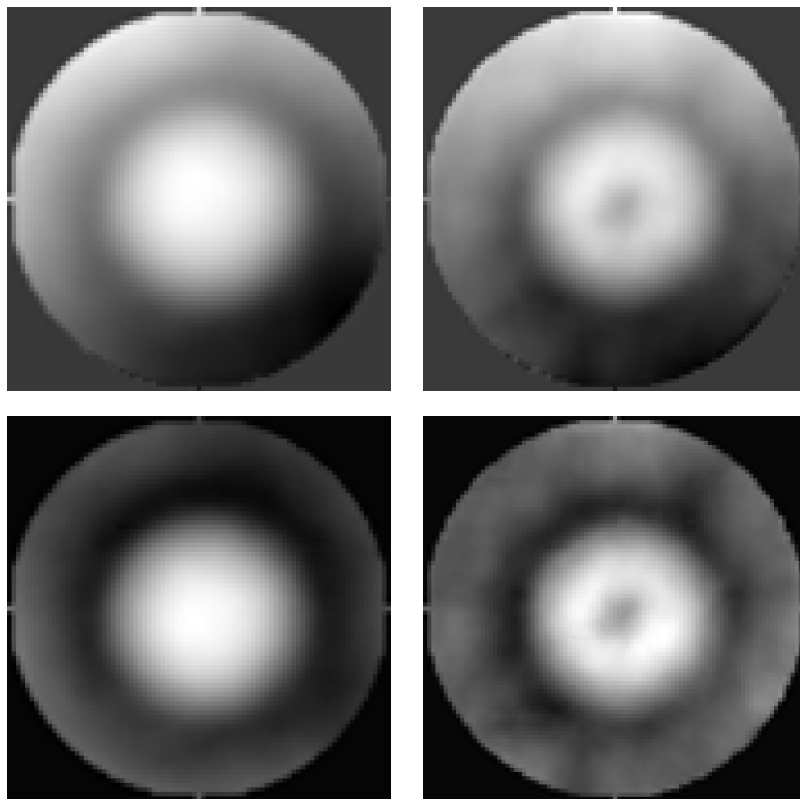


Lidar, skyggelagt



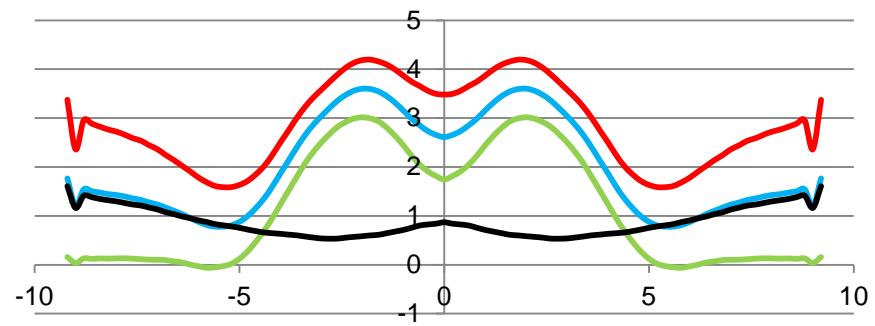
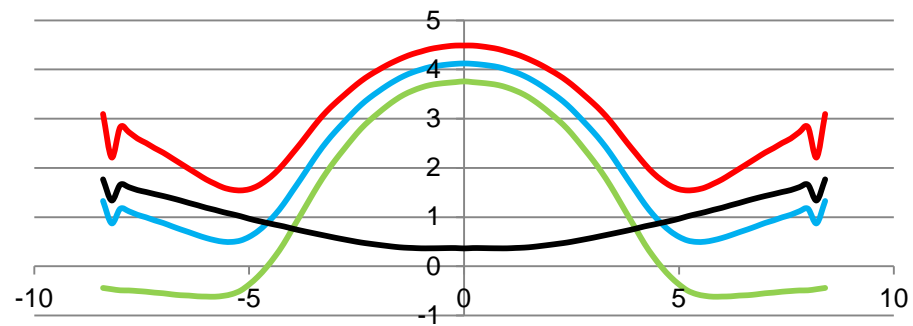
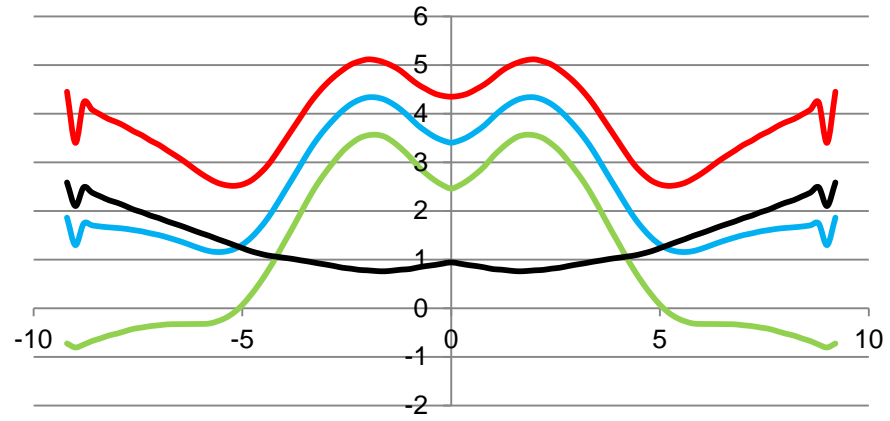
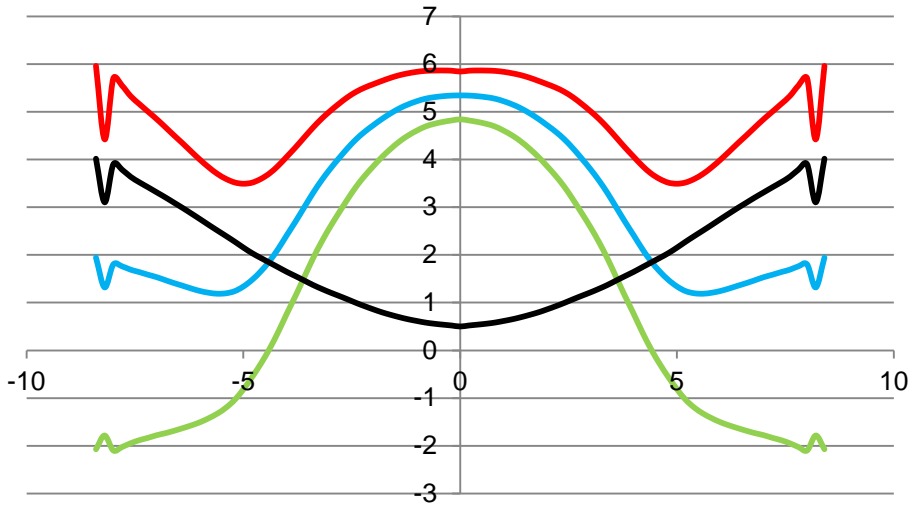
Lokal relieffmodell

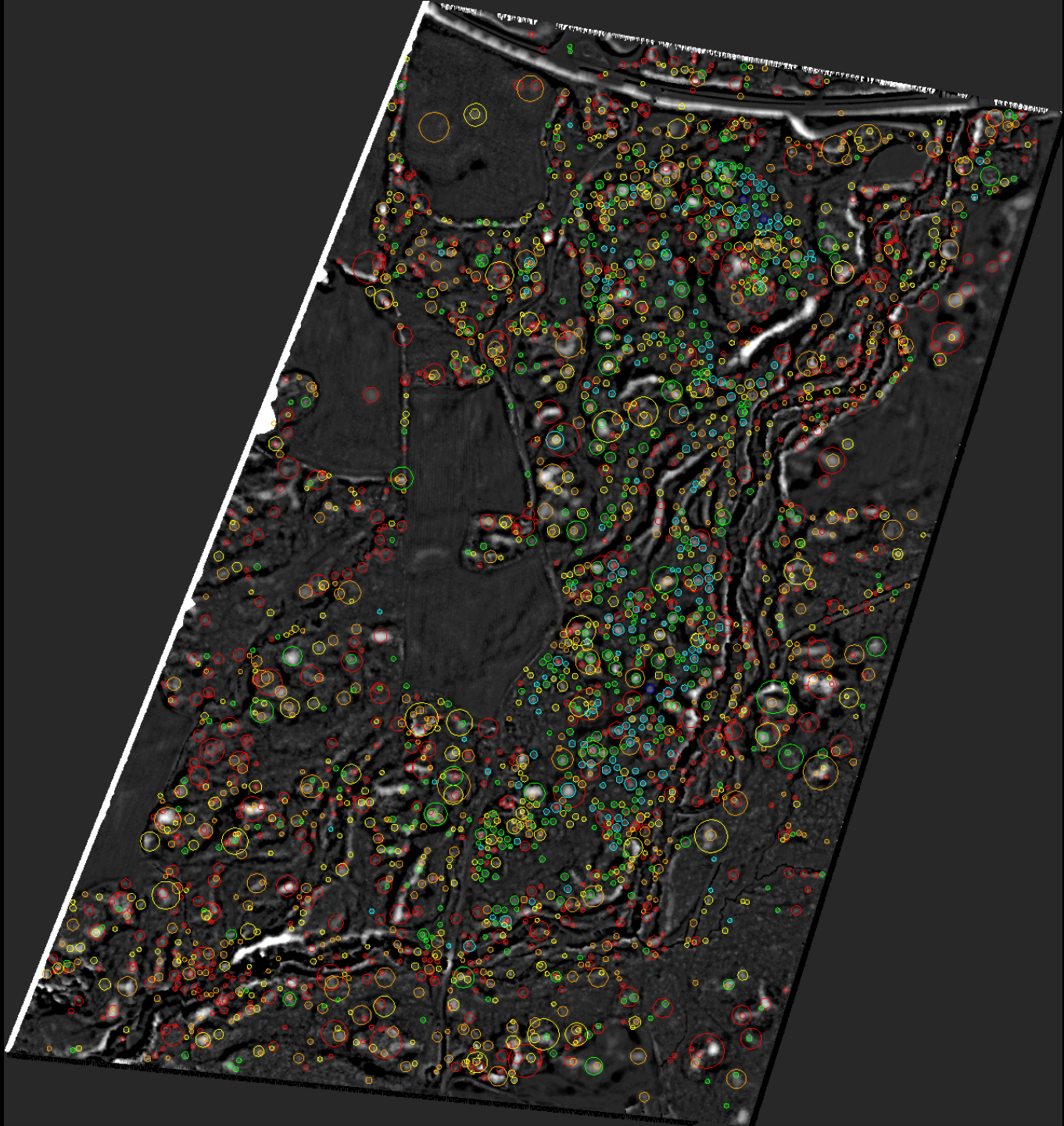
# Gjennomsnittlig gravhaug

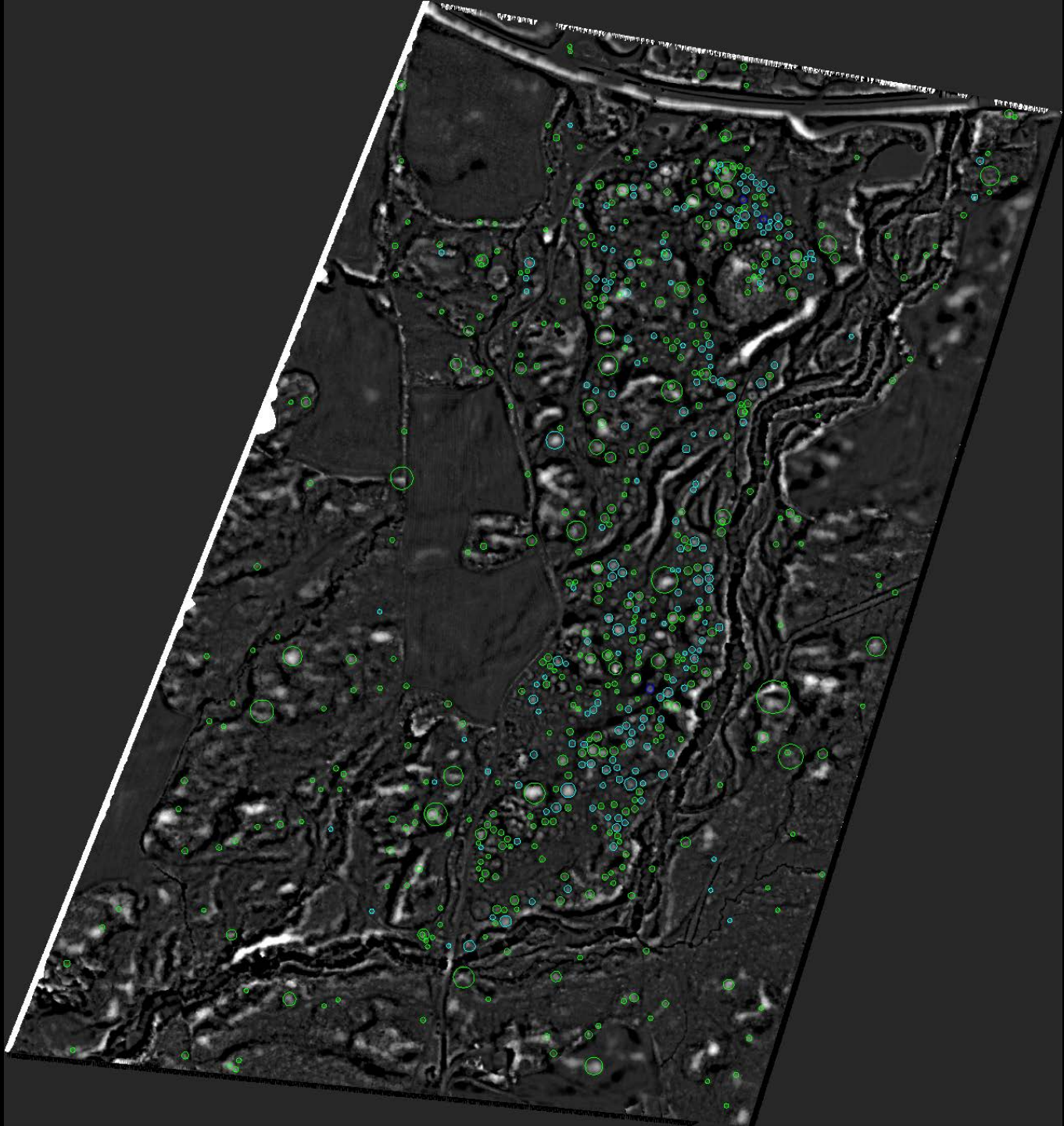


Gjennomsnitt:  
Høyde: 1,38 m  
Radius: 6,27 m

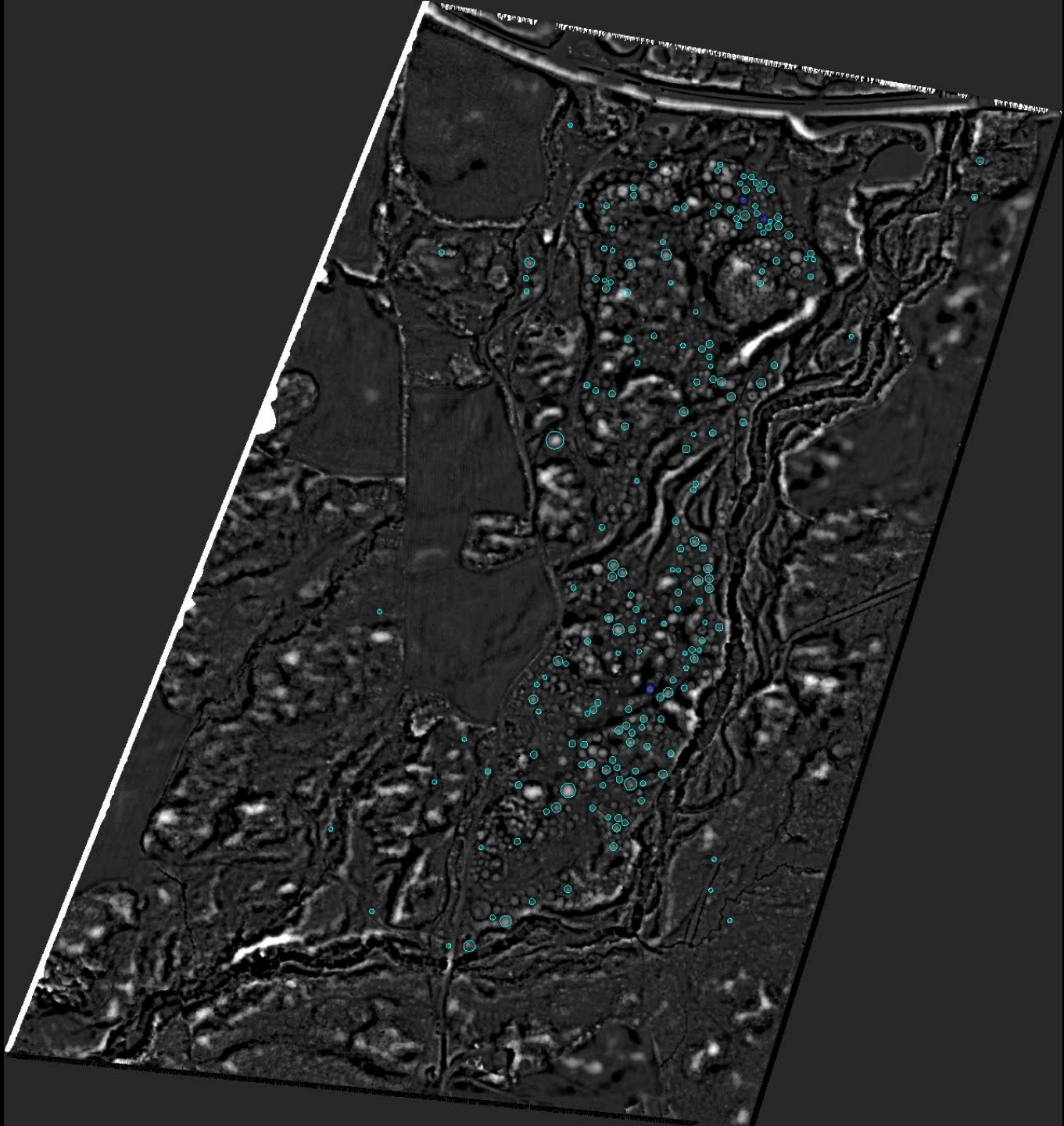


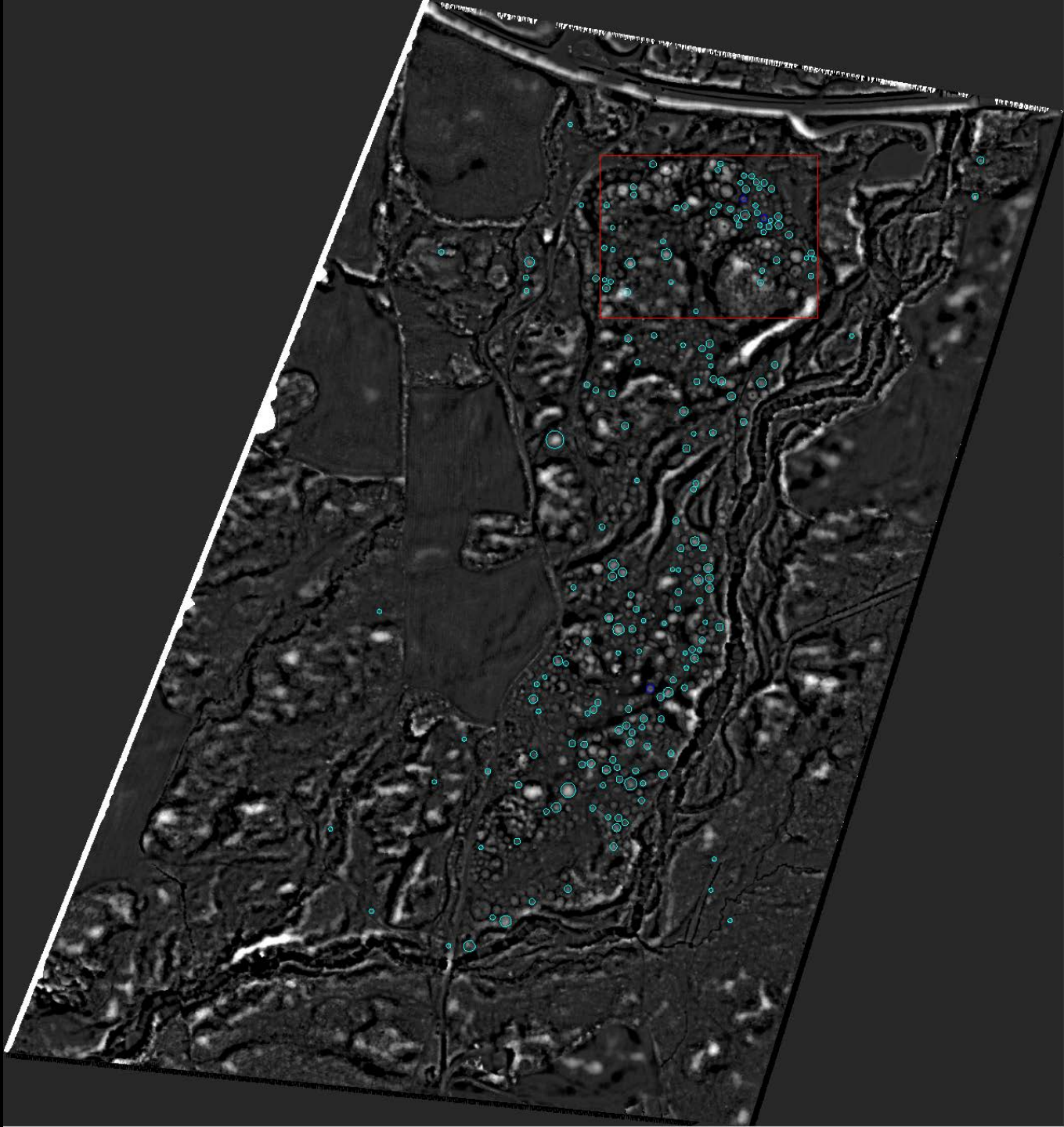




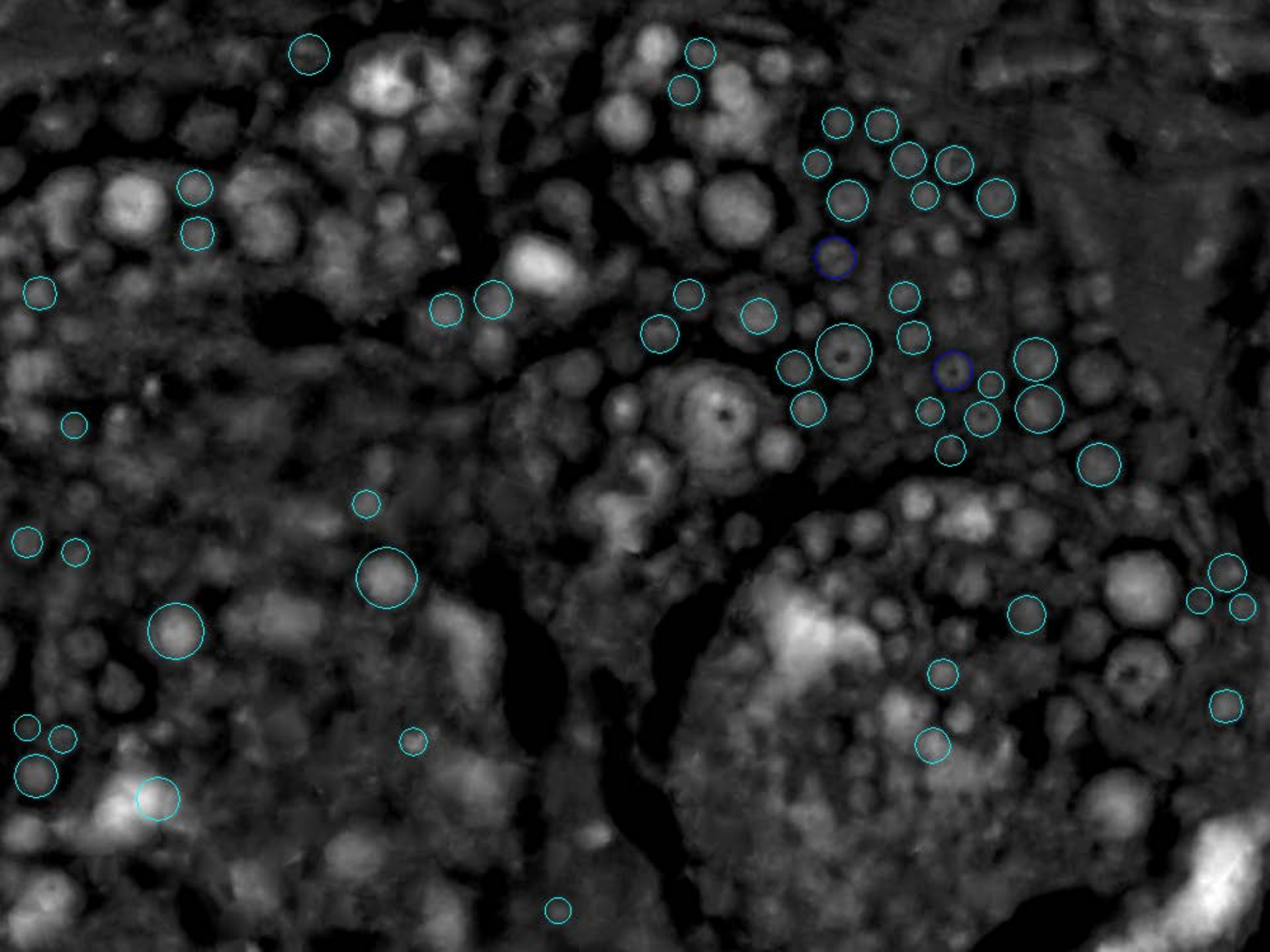




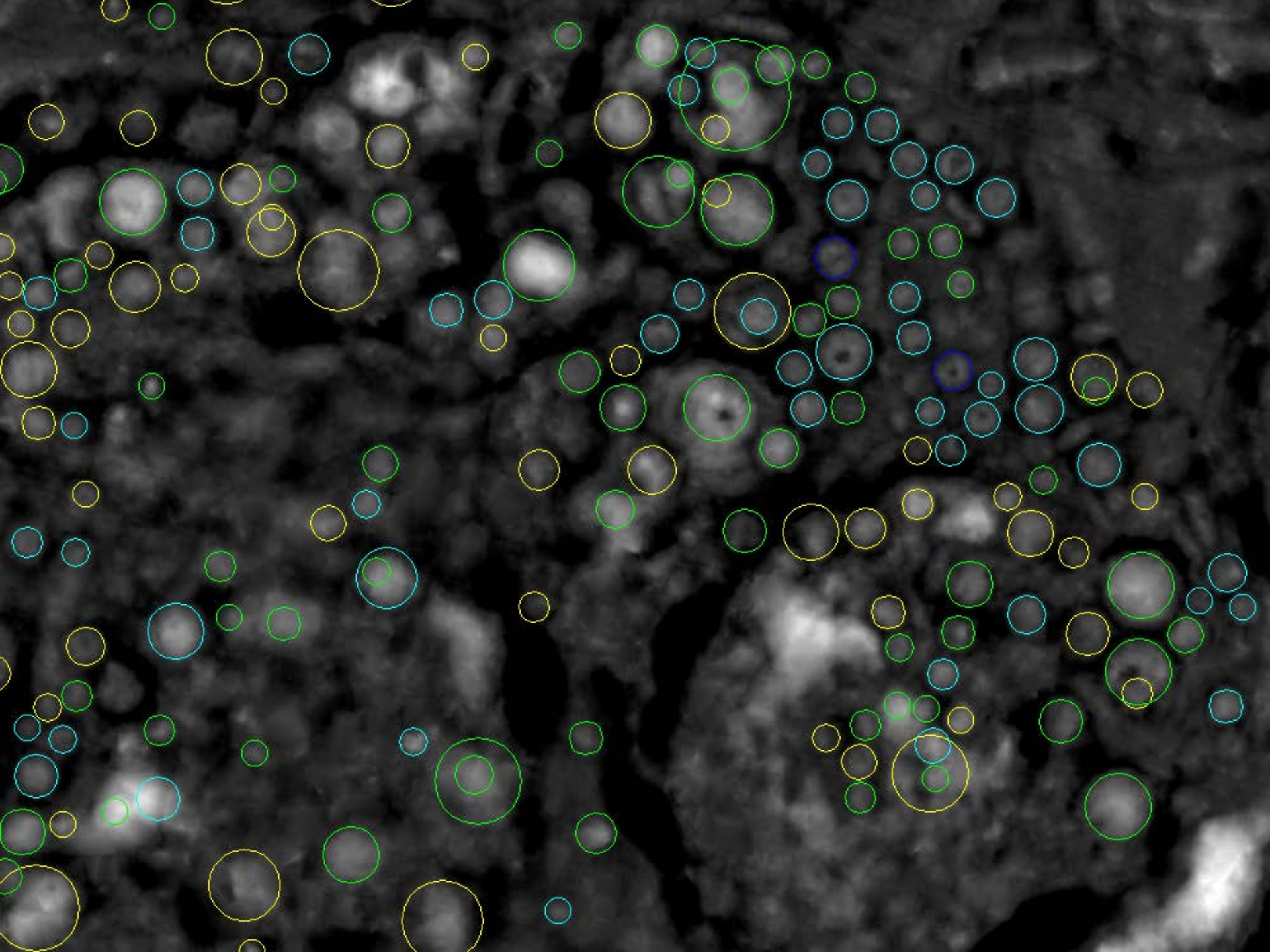




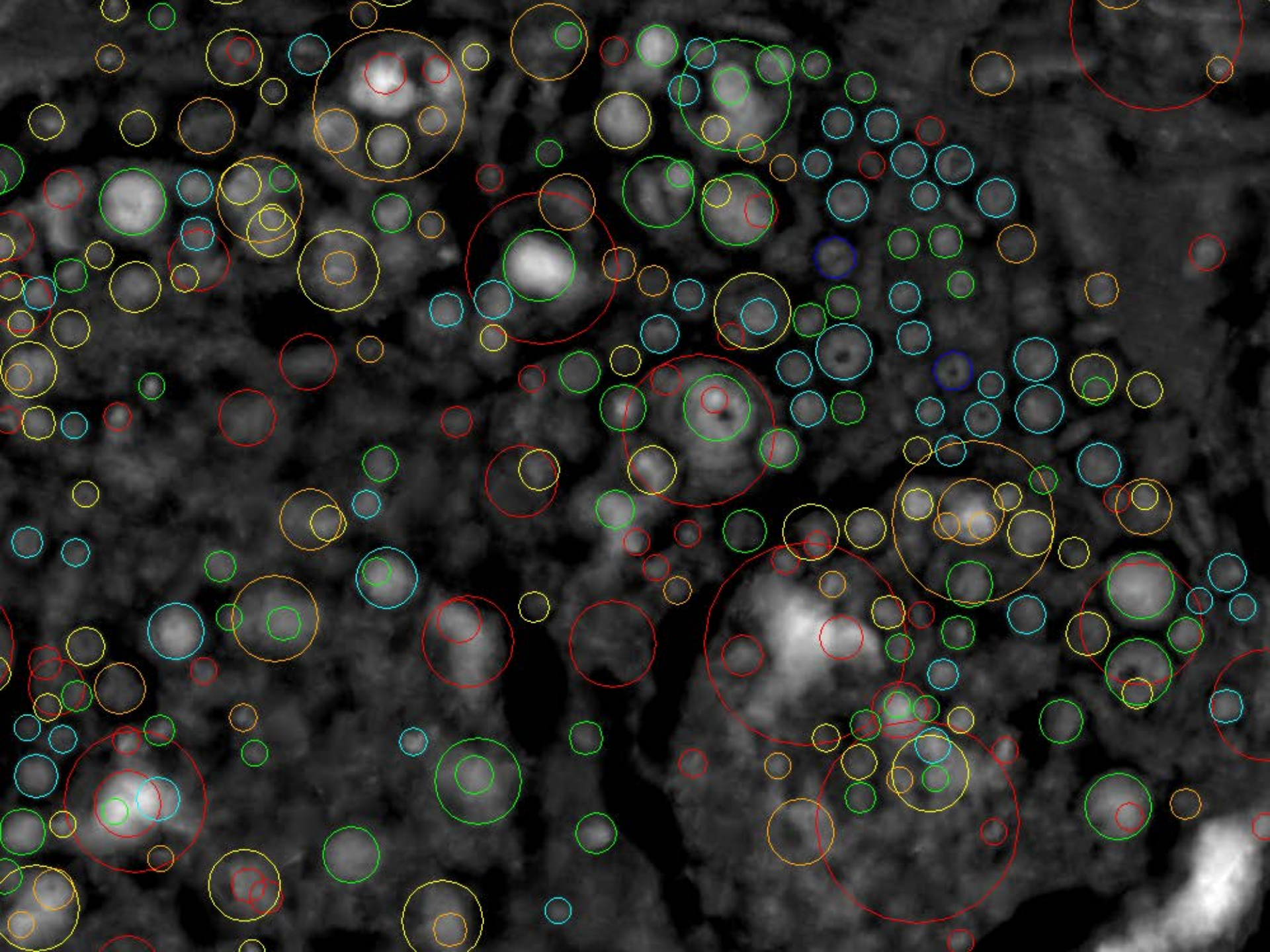




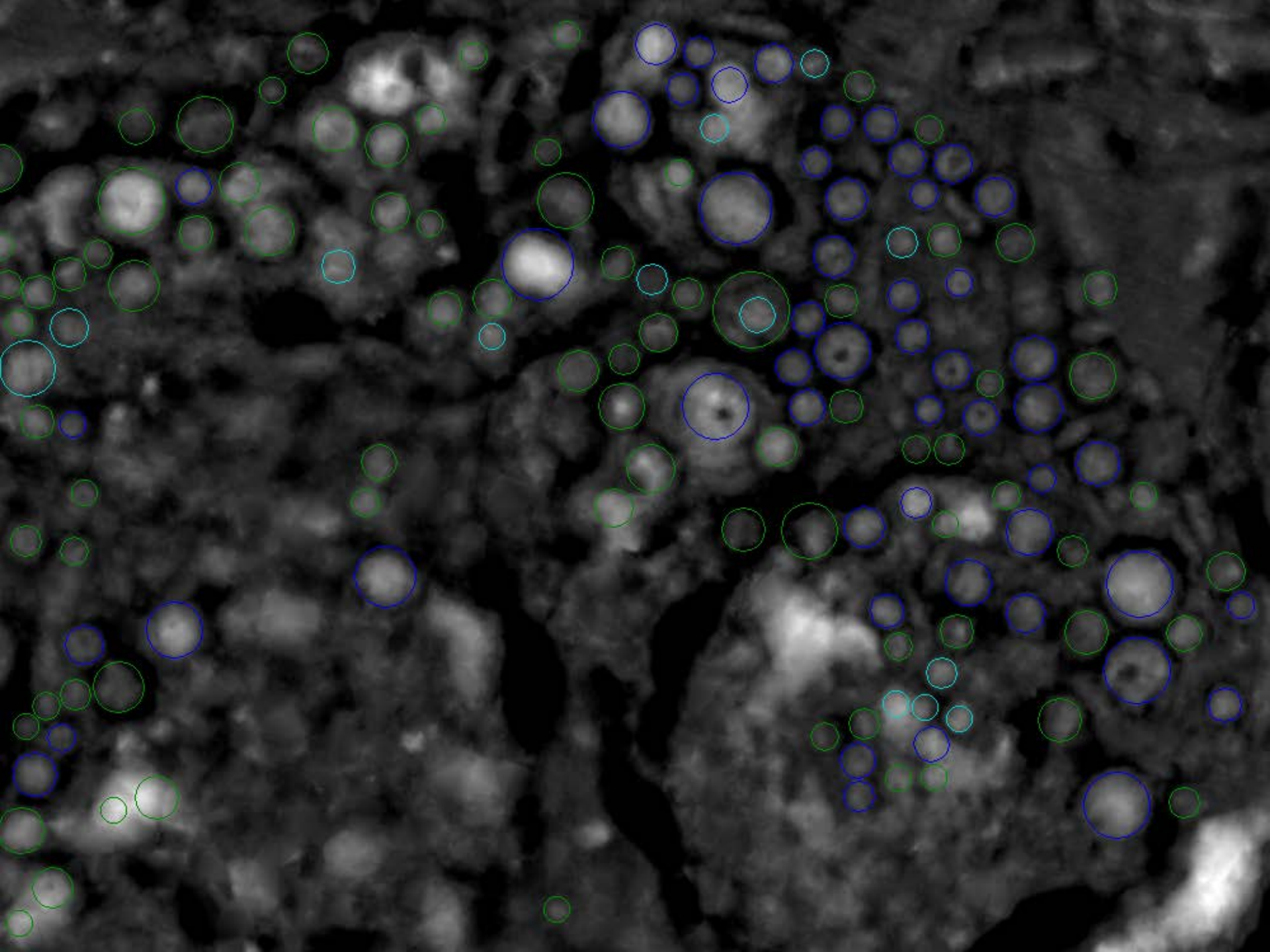




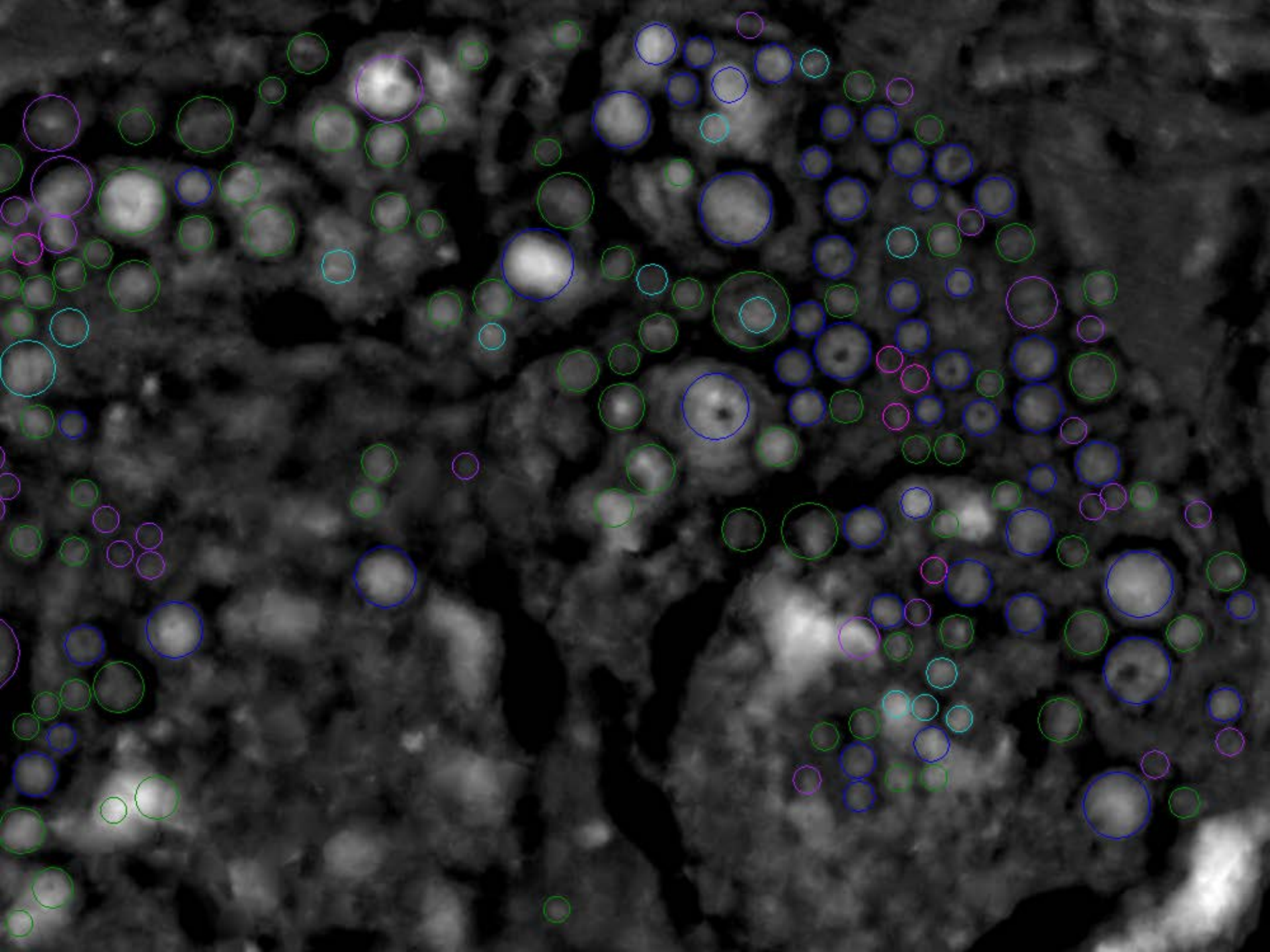


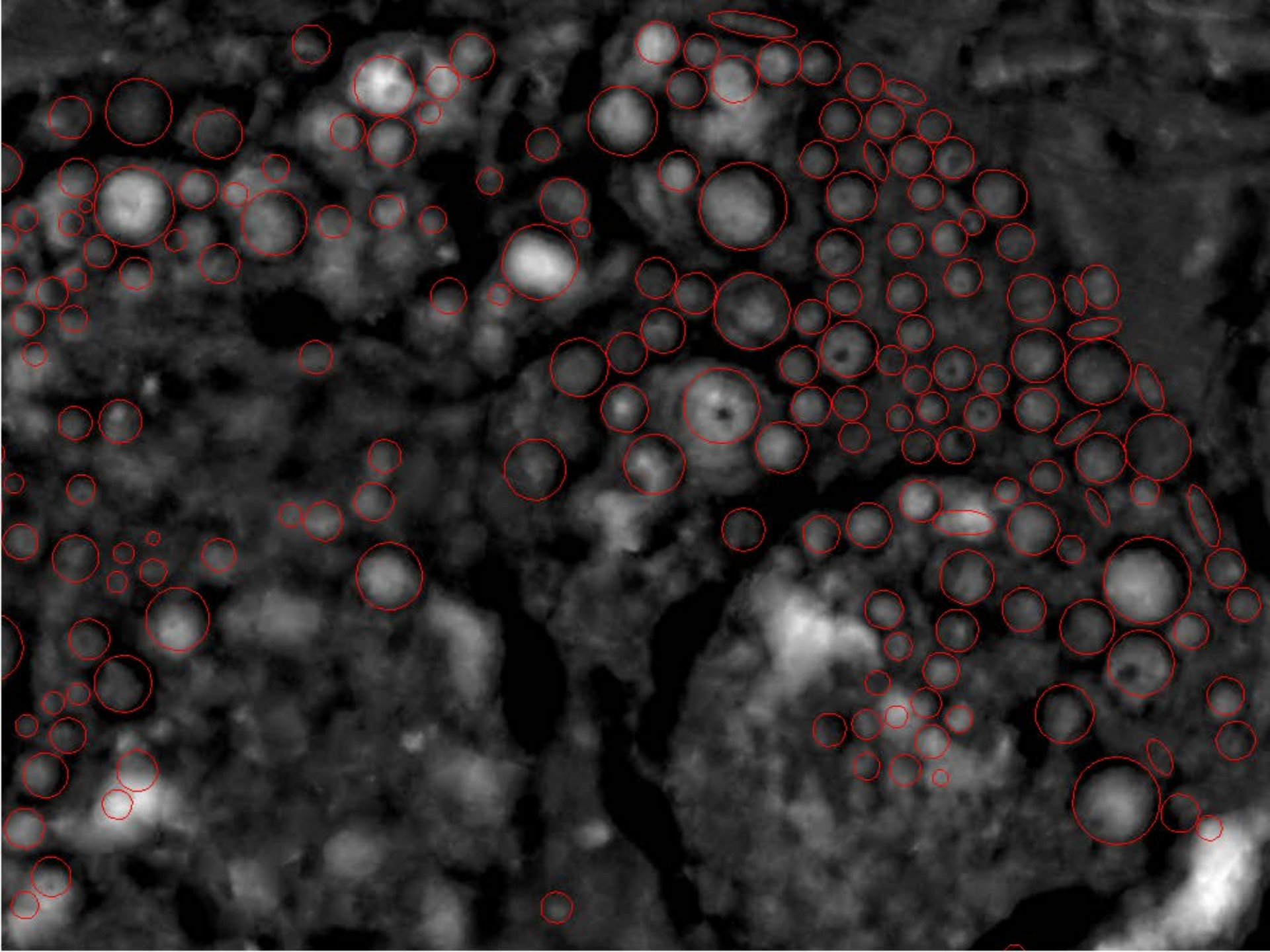




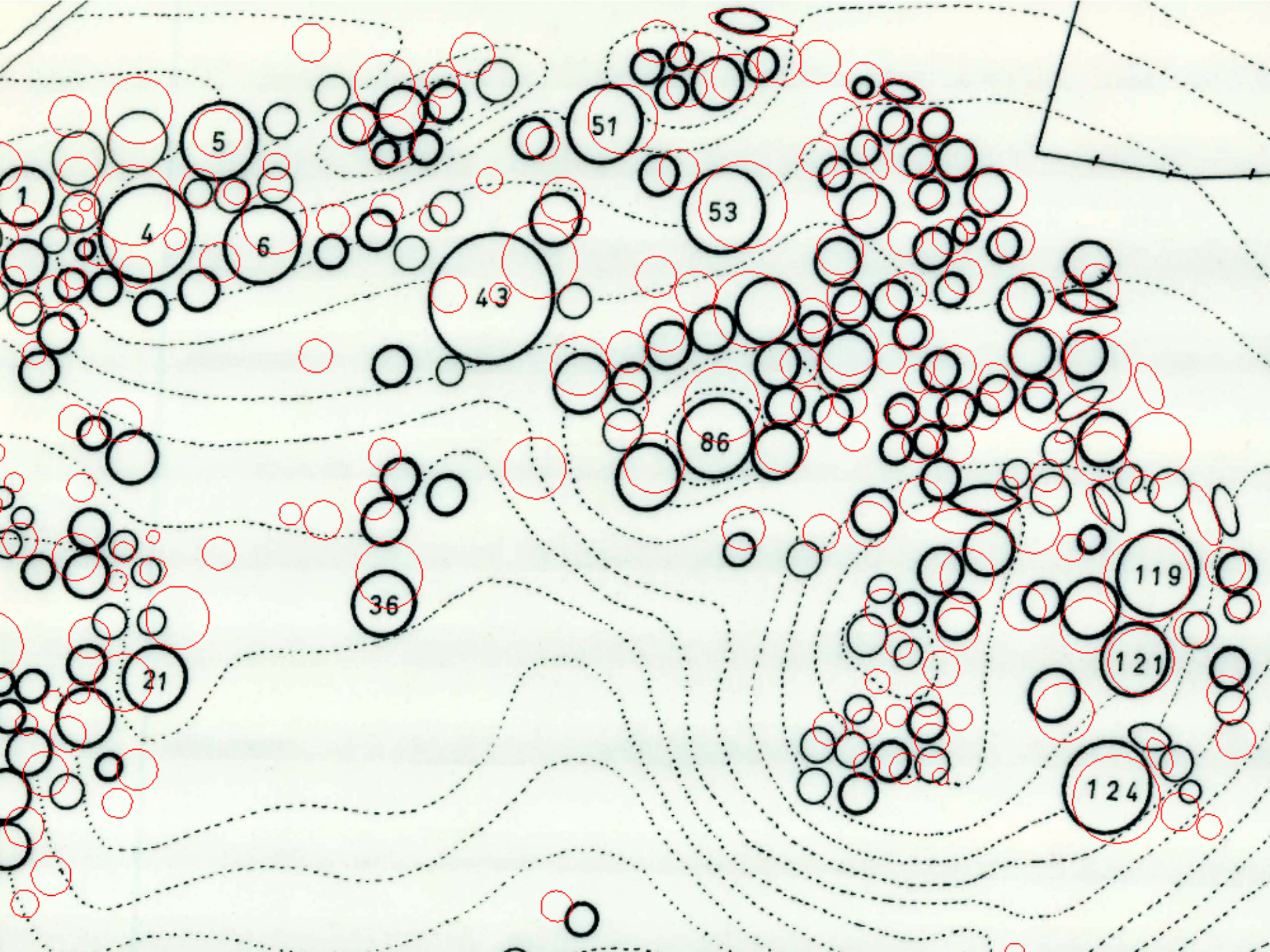




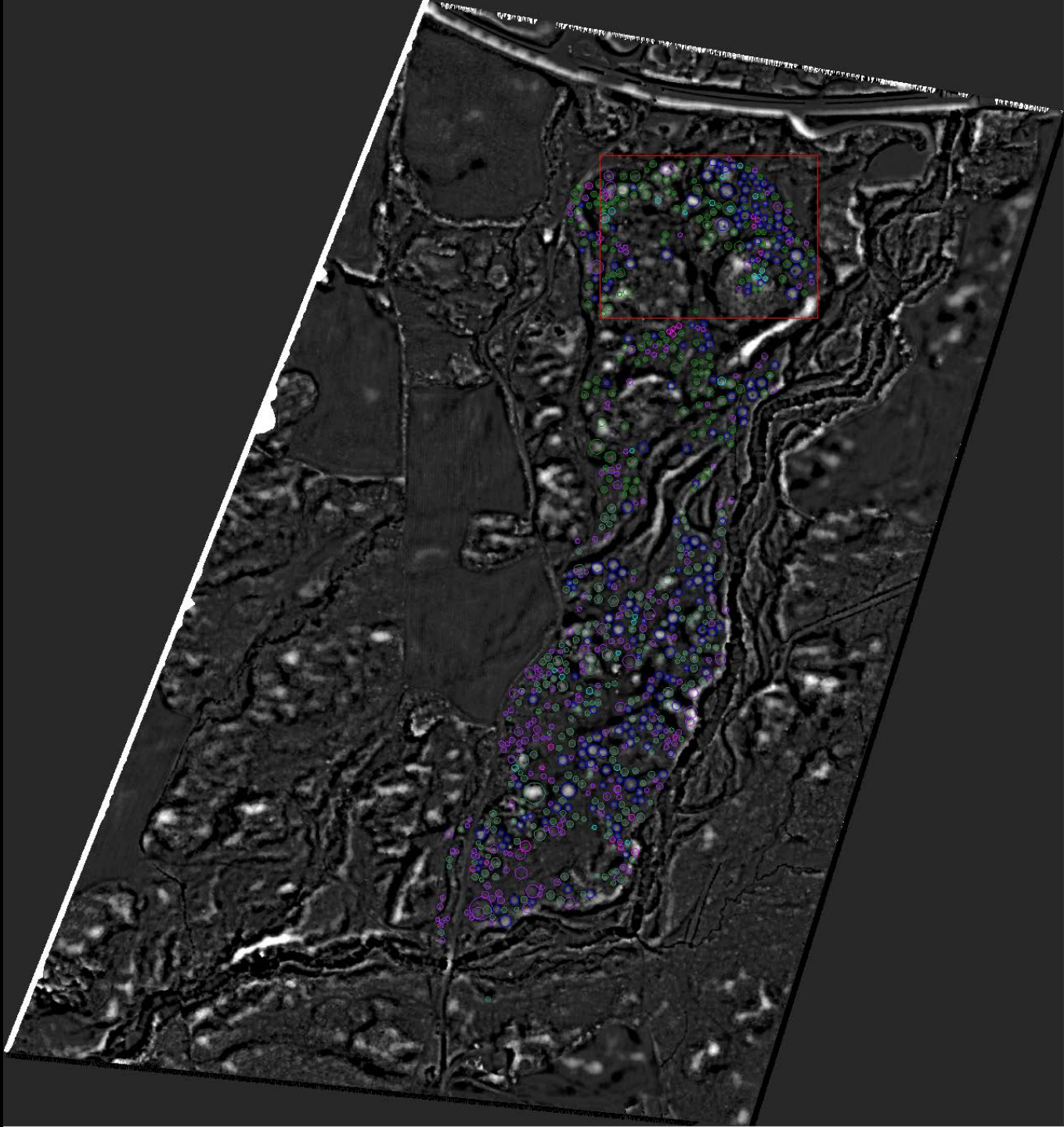


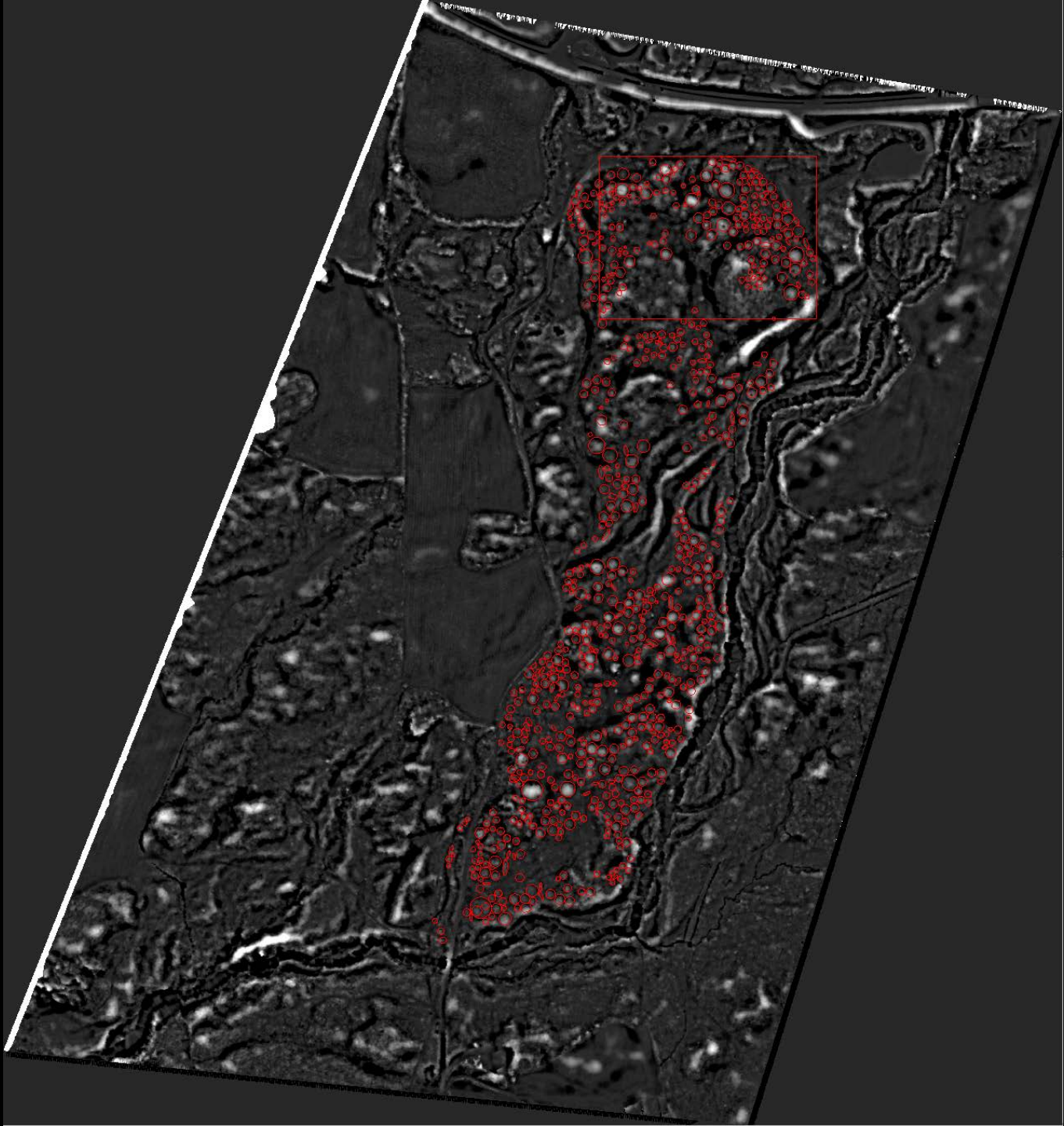








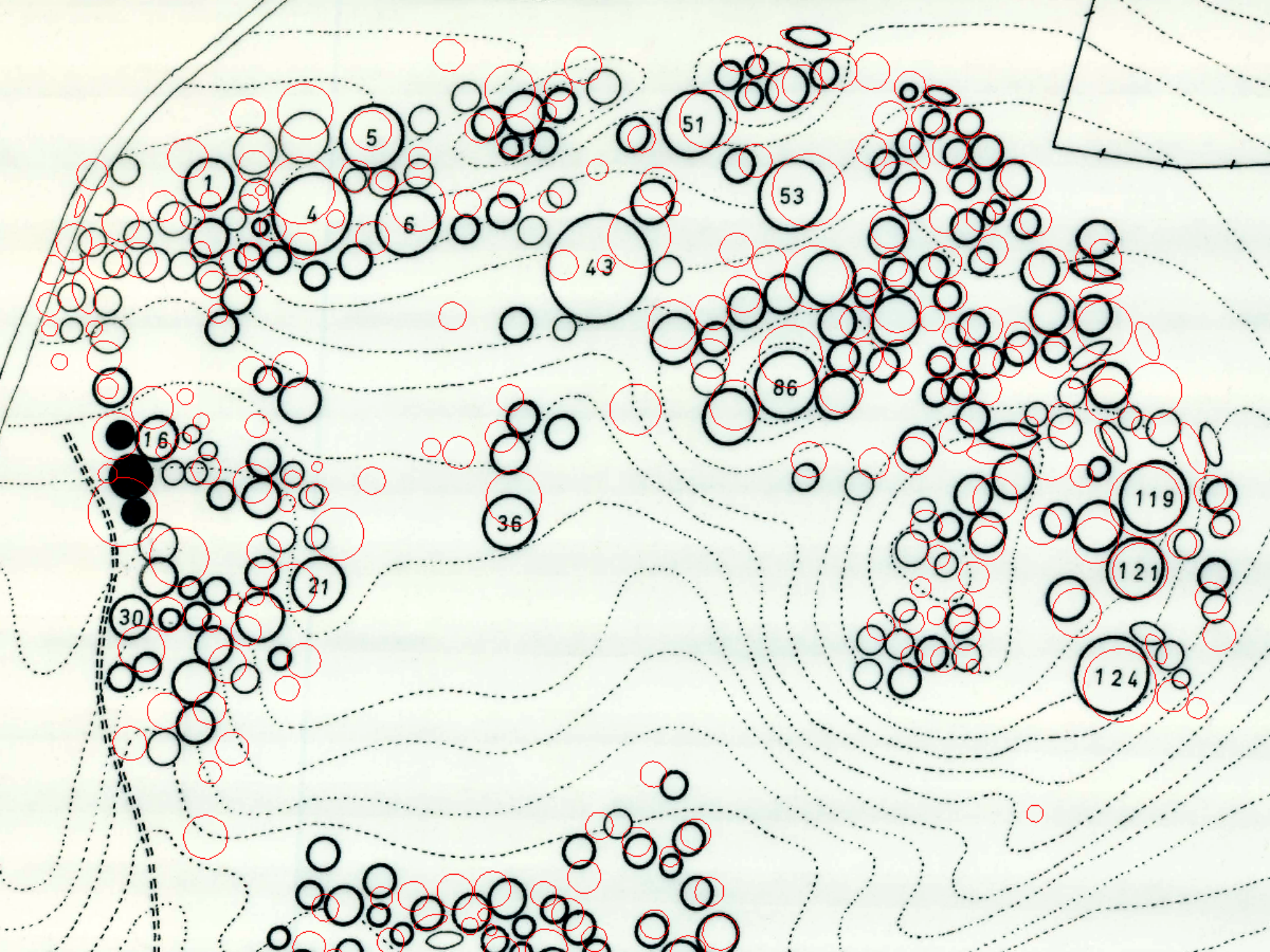




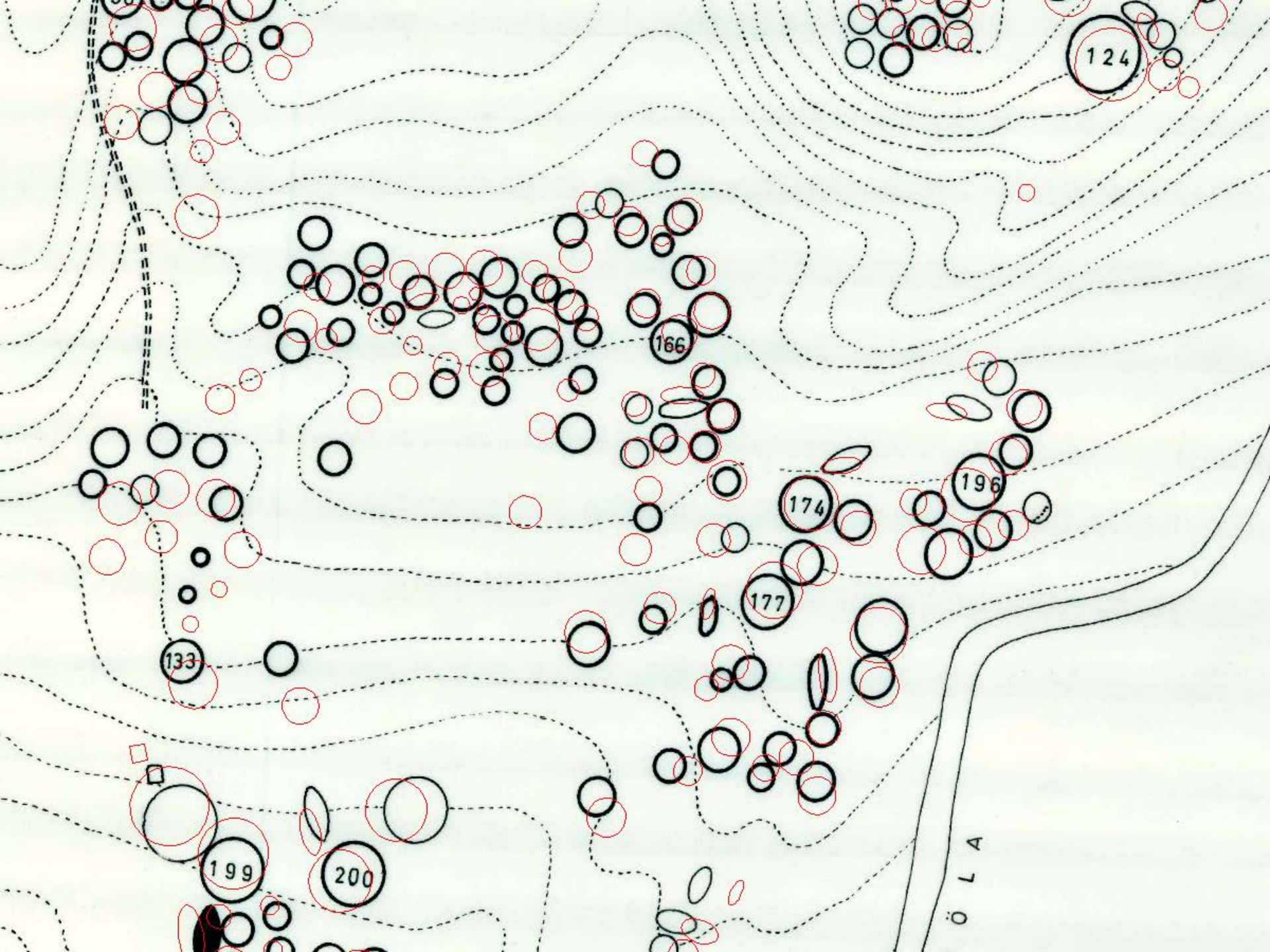




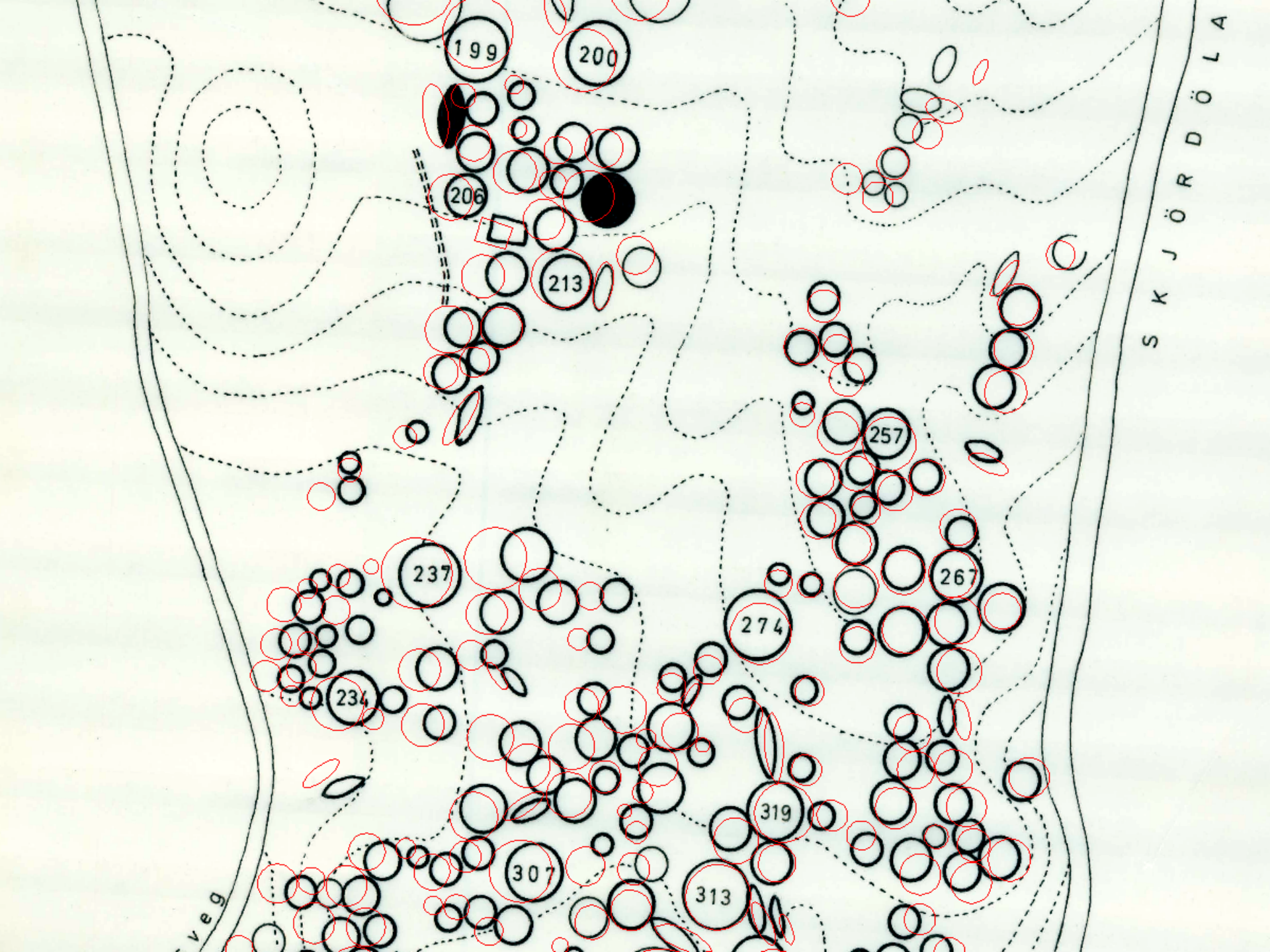




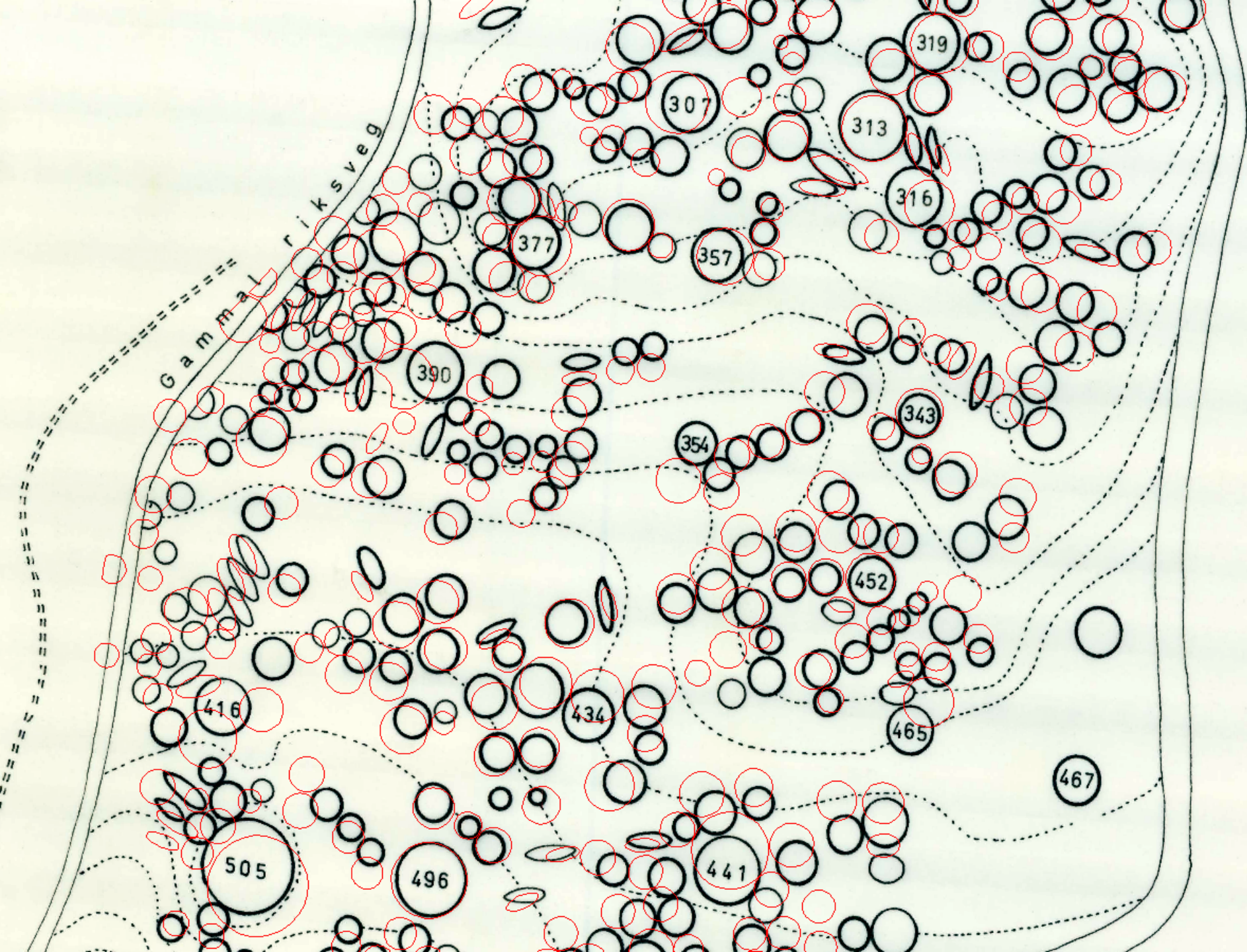




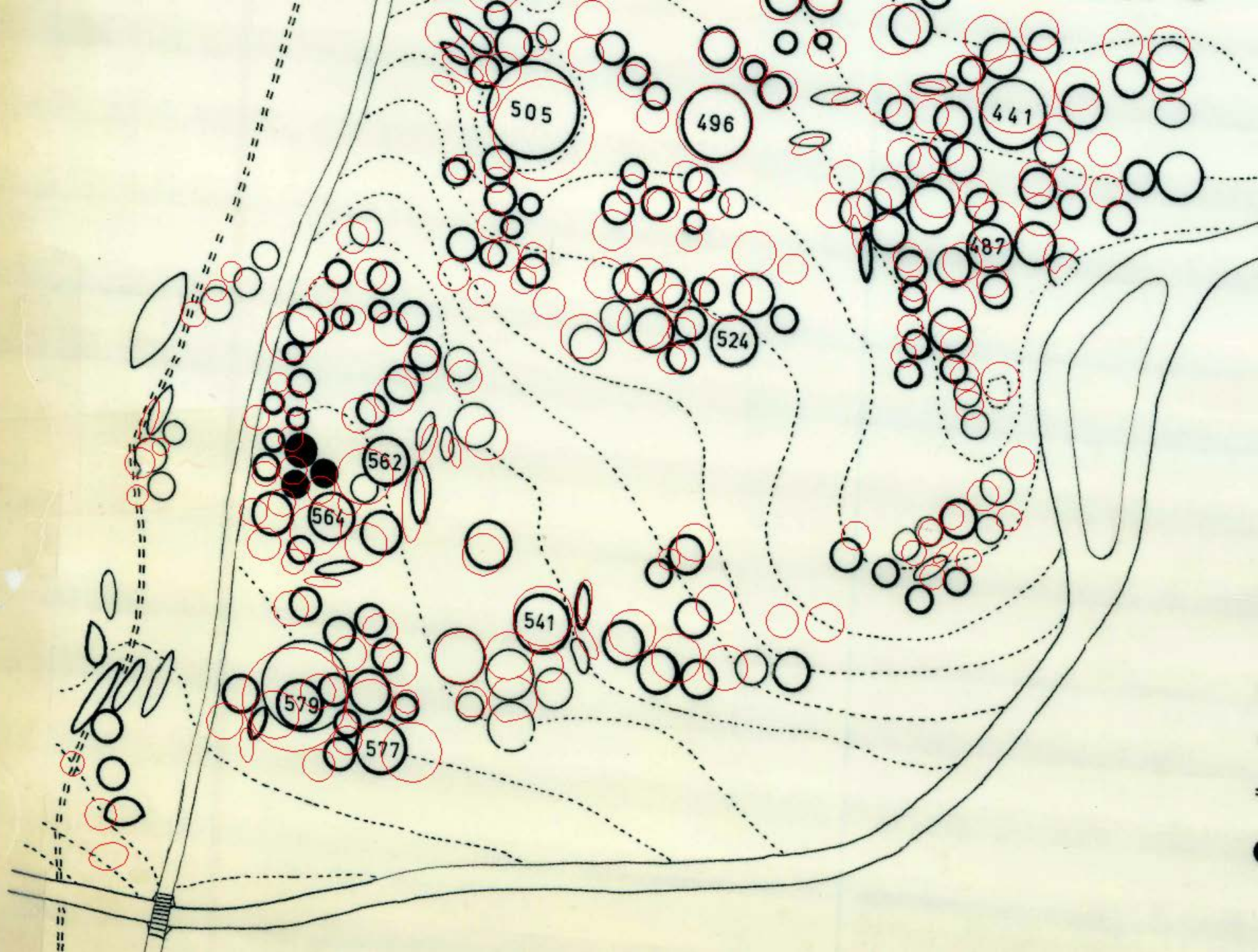






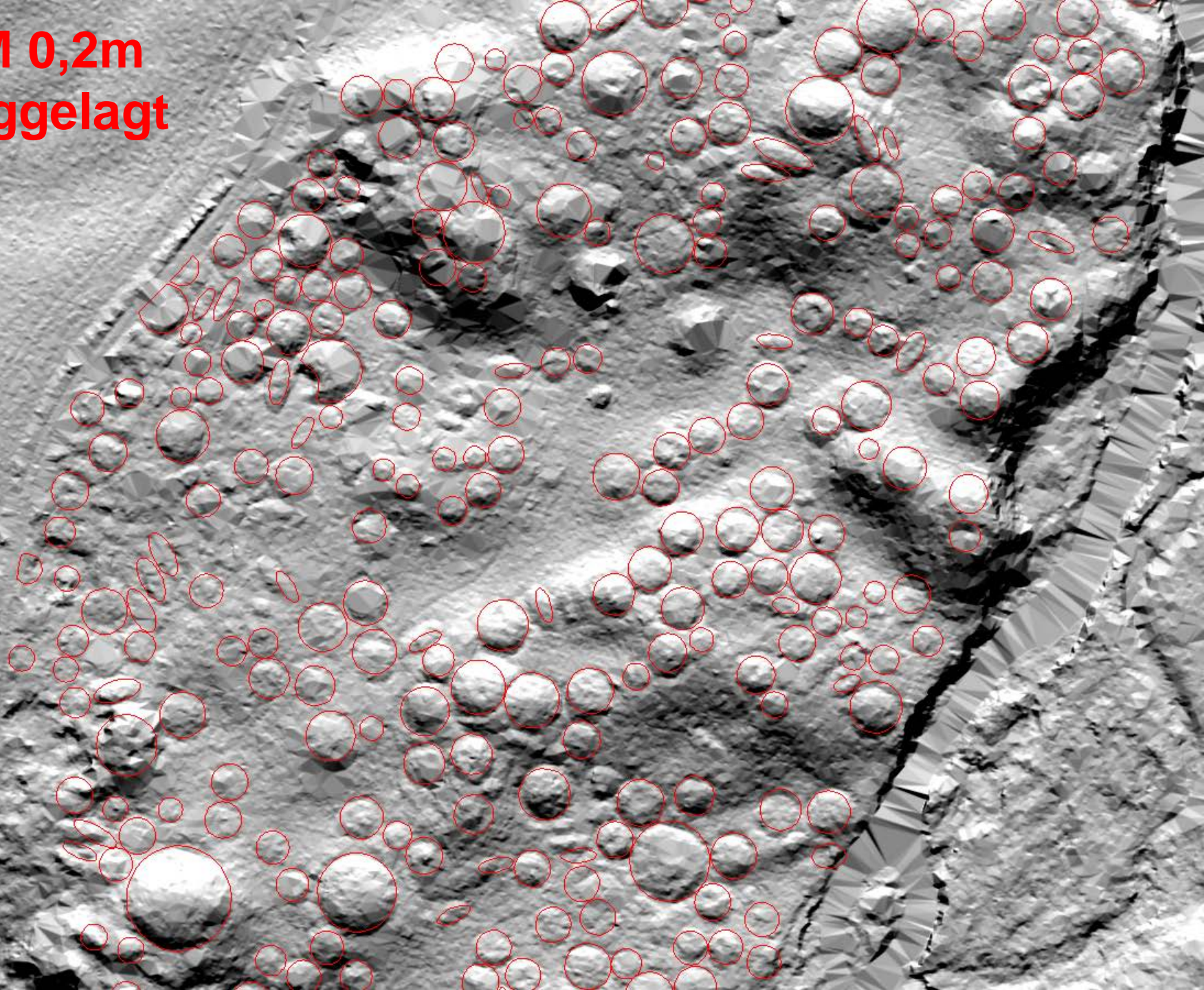






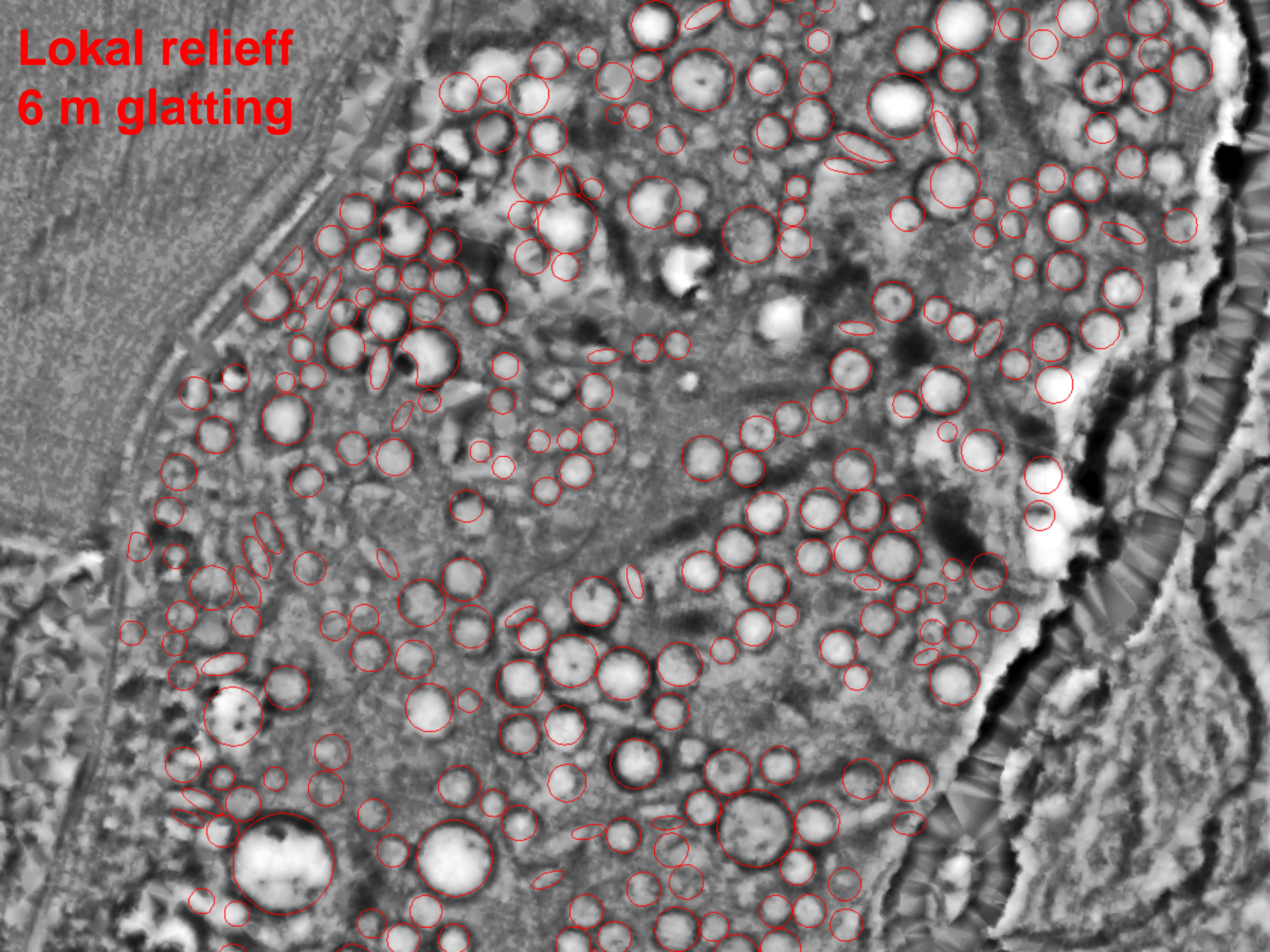


**DTM 0,2m  
skyggelagt**



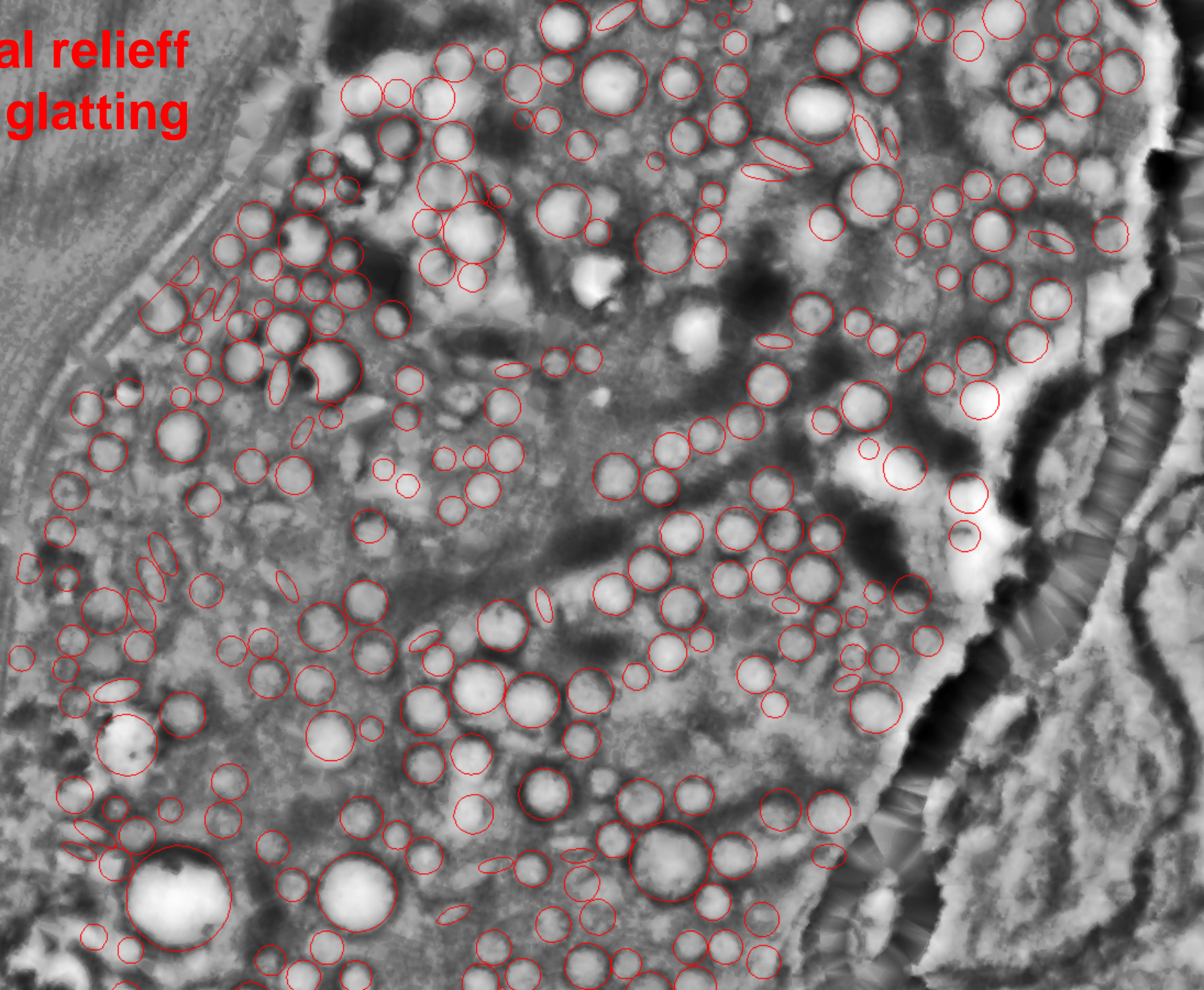


**Lokal relieff  
6 m glatting**



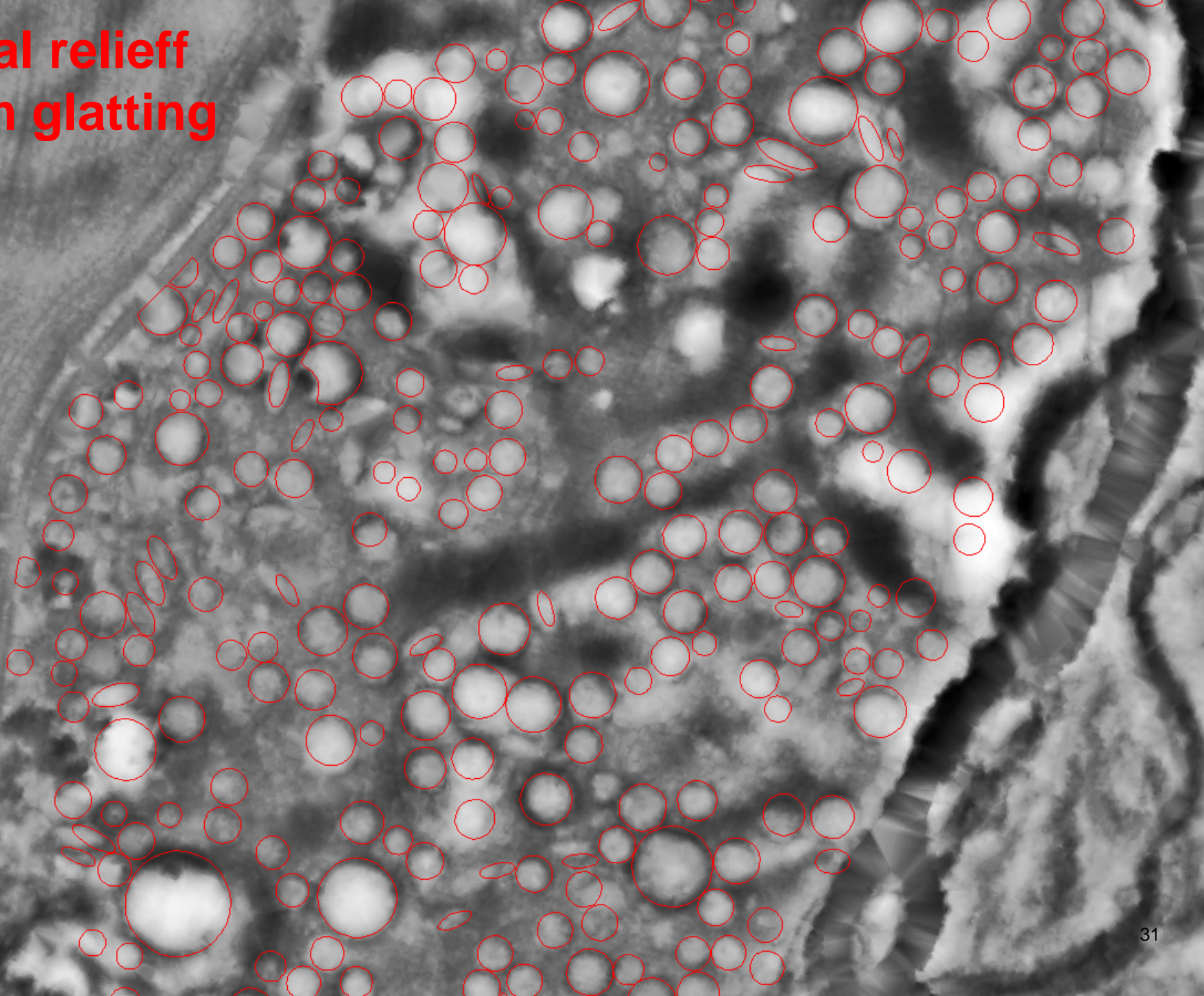


**Lokal relieff  
9 m glatting**

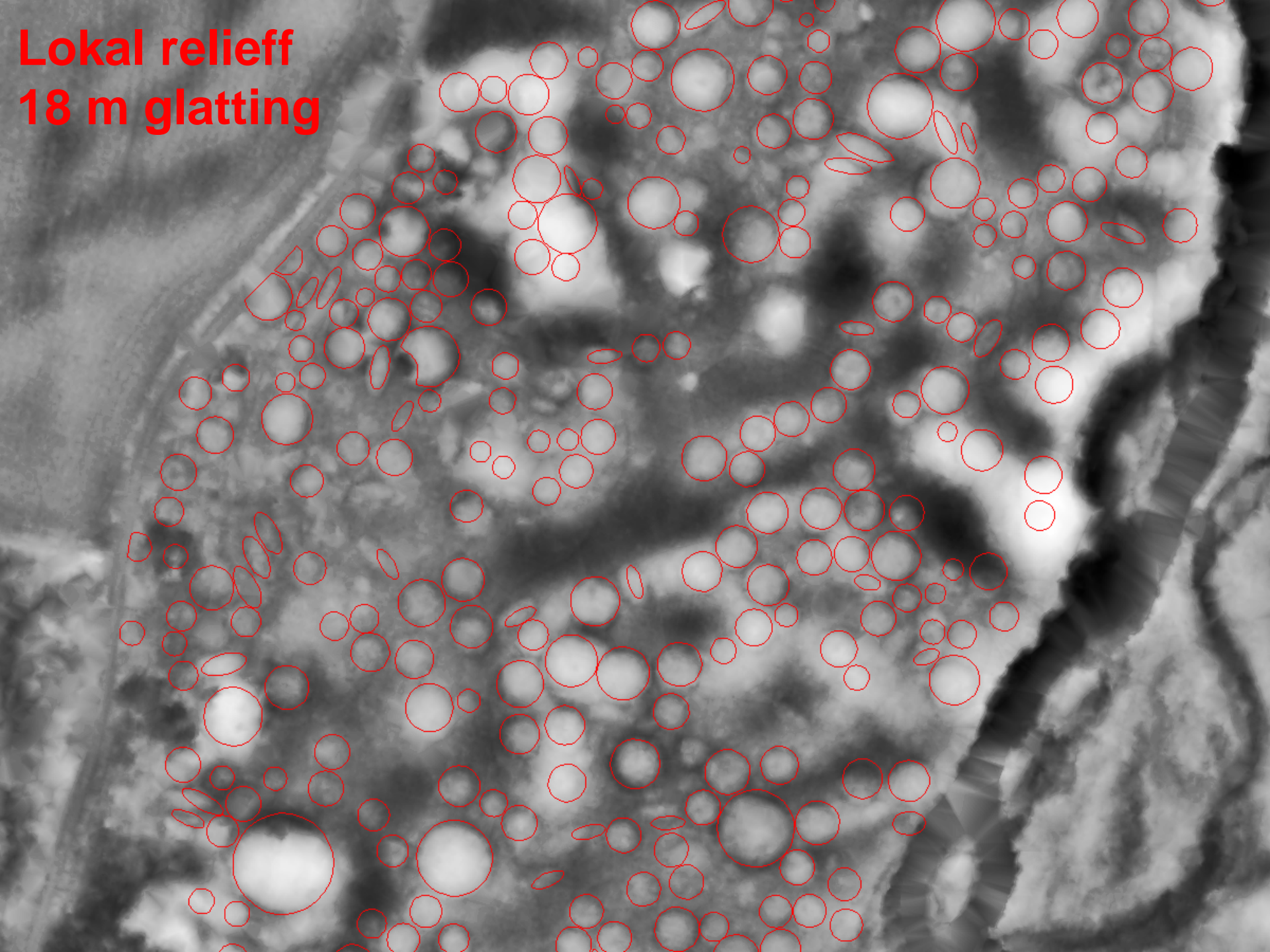




**Lokal relieff**  
**12 m glatting**

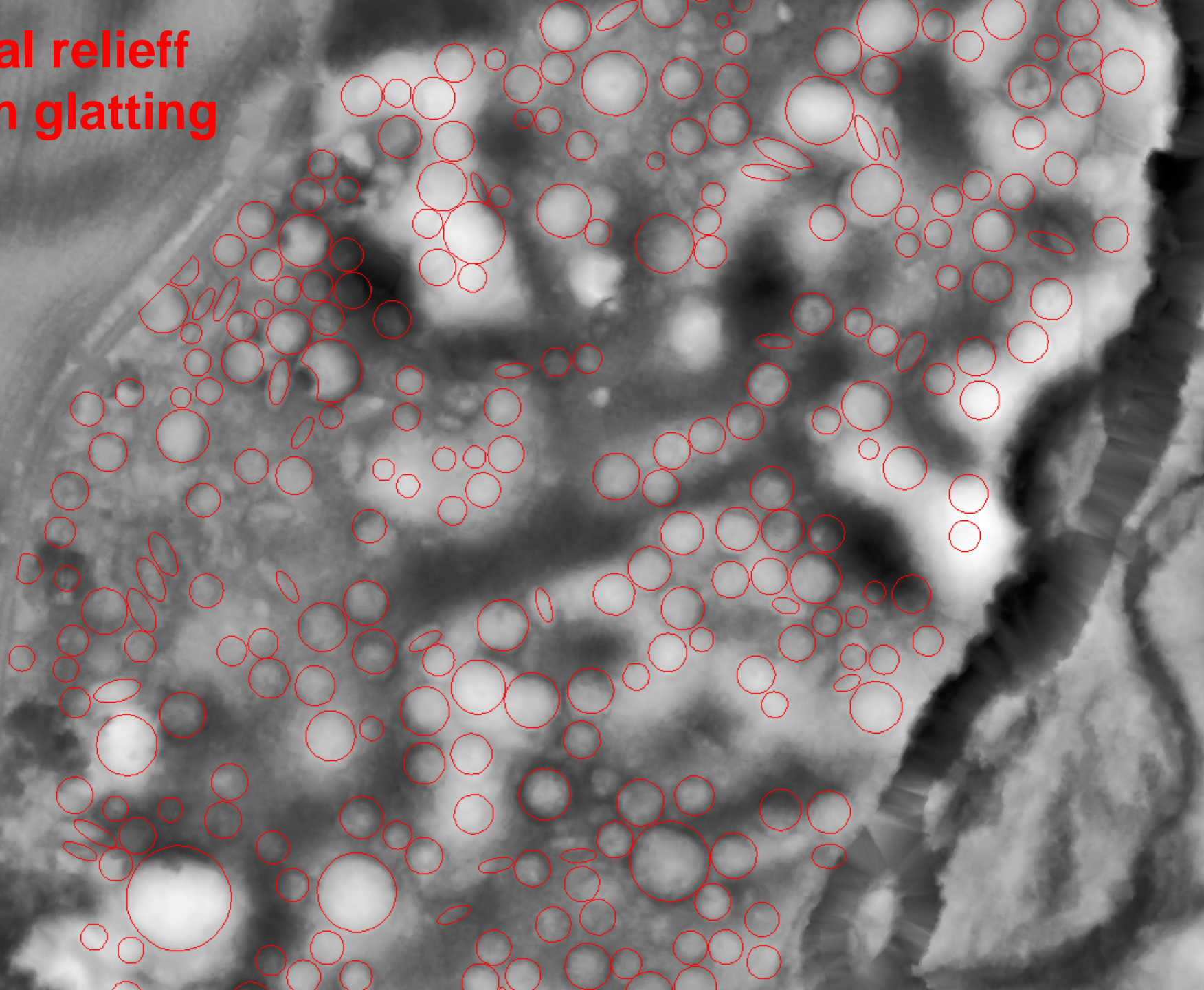


**Lokal relieff**  
**18 m glatting**

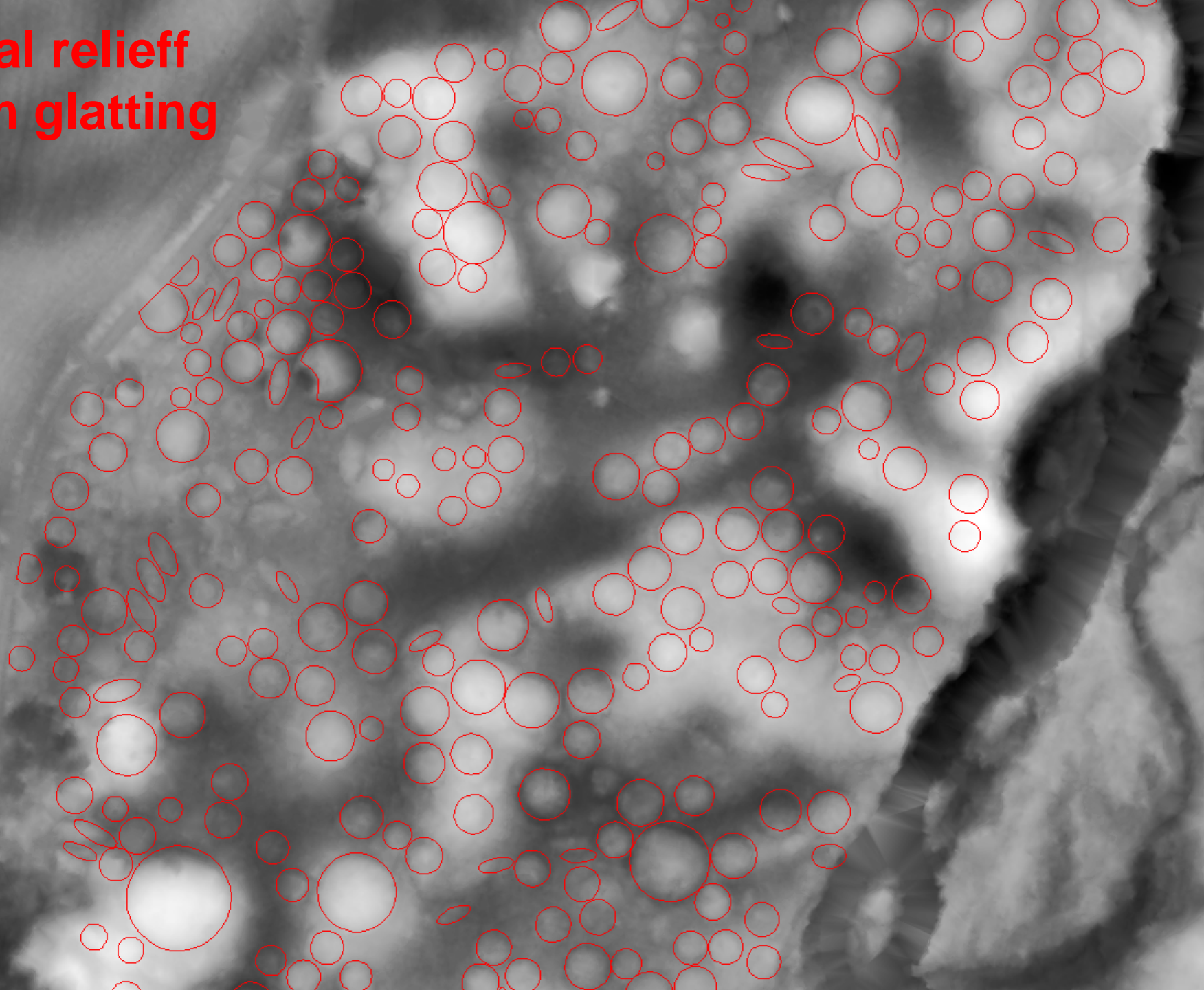




**Lokal relieff**  
**24 m glatting**

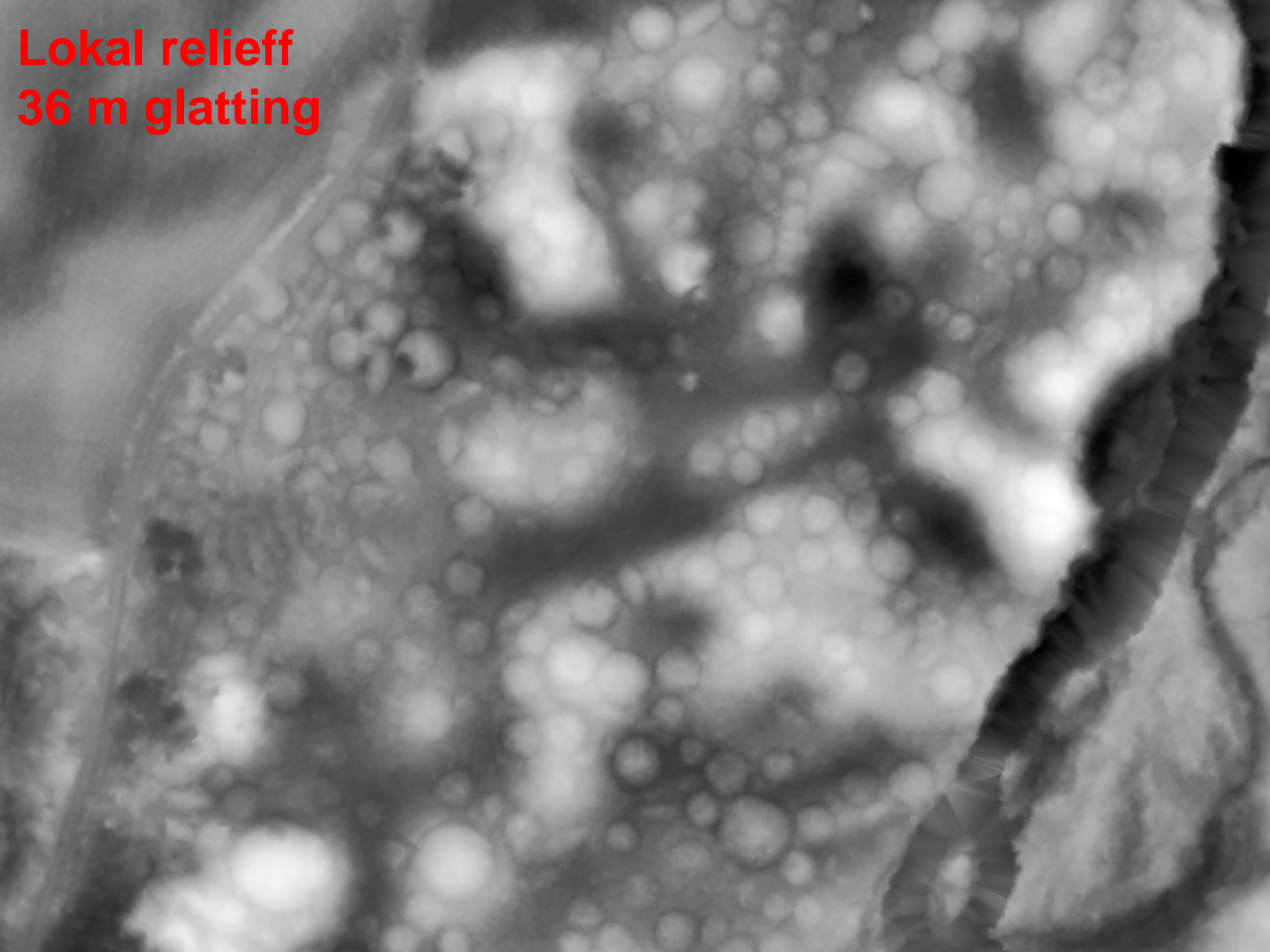


**Lokal relieff**  
**36 m glatting**

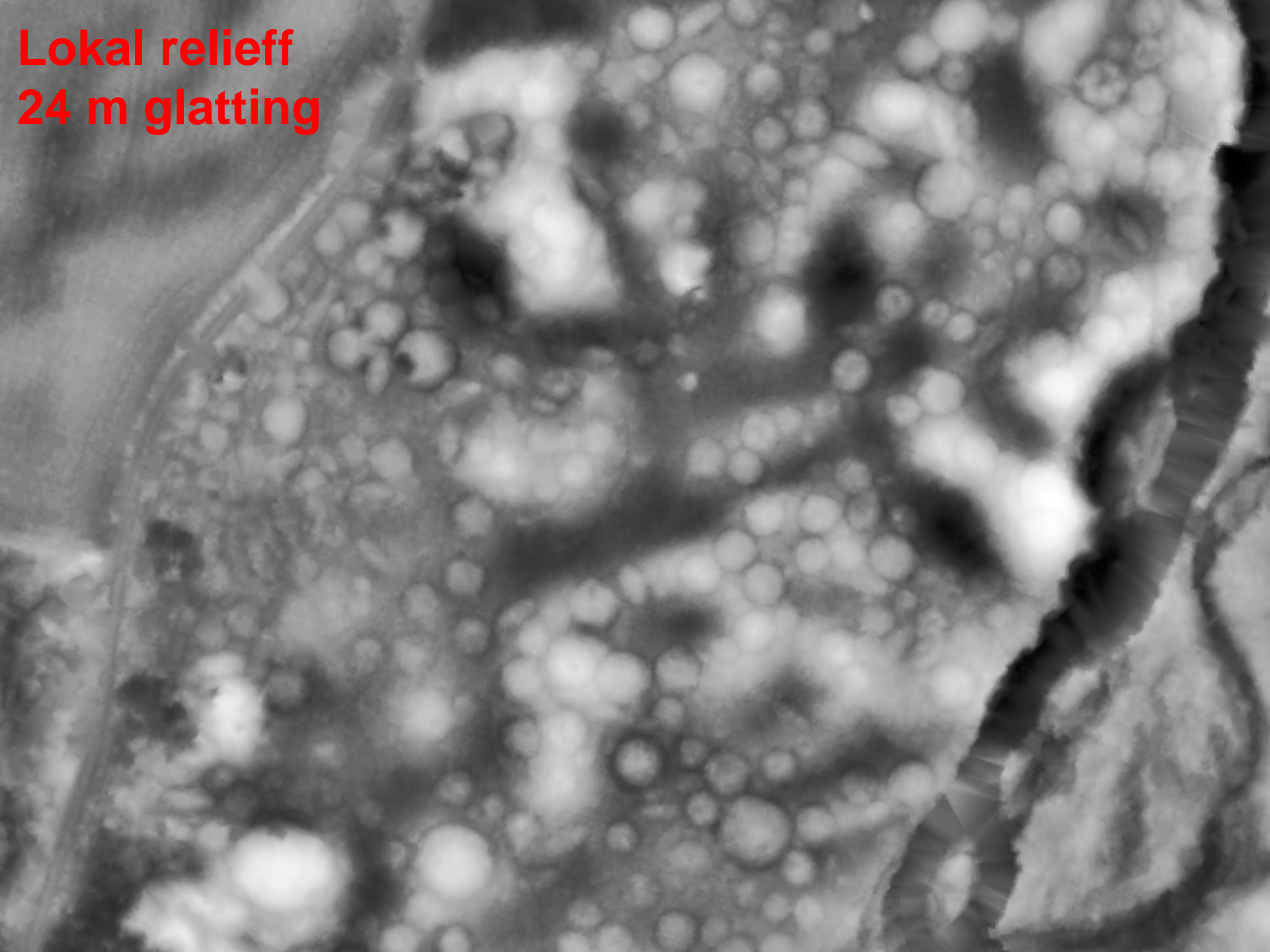




Lokal relieff  
36 m glatting

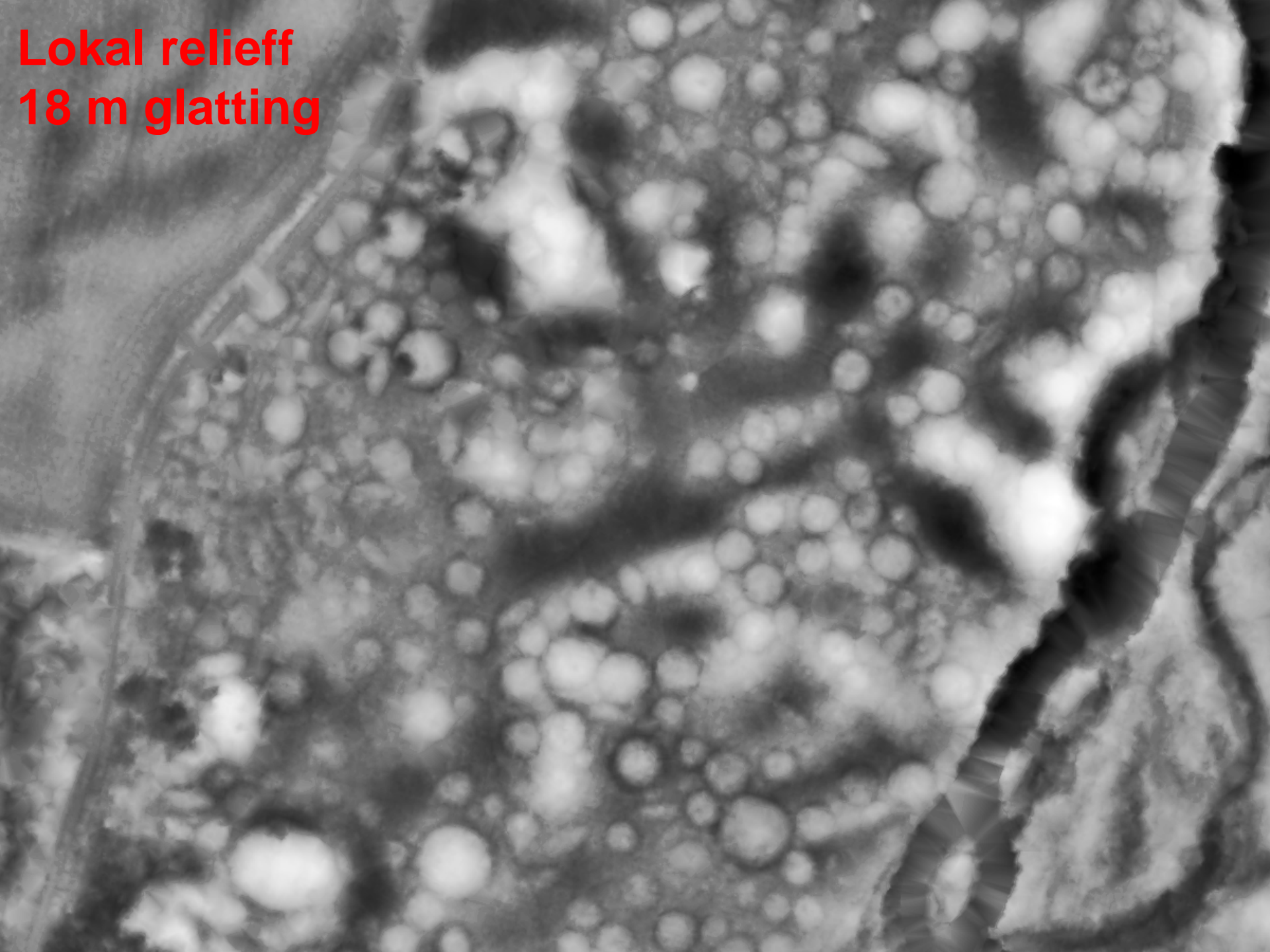


**Lokal relieff**  
**24 m glatting**

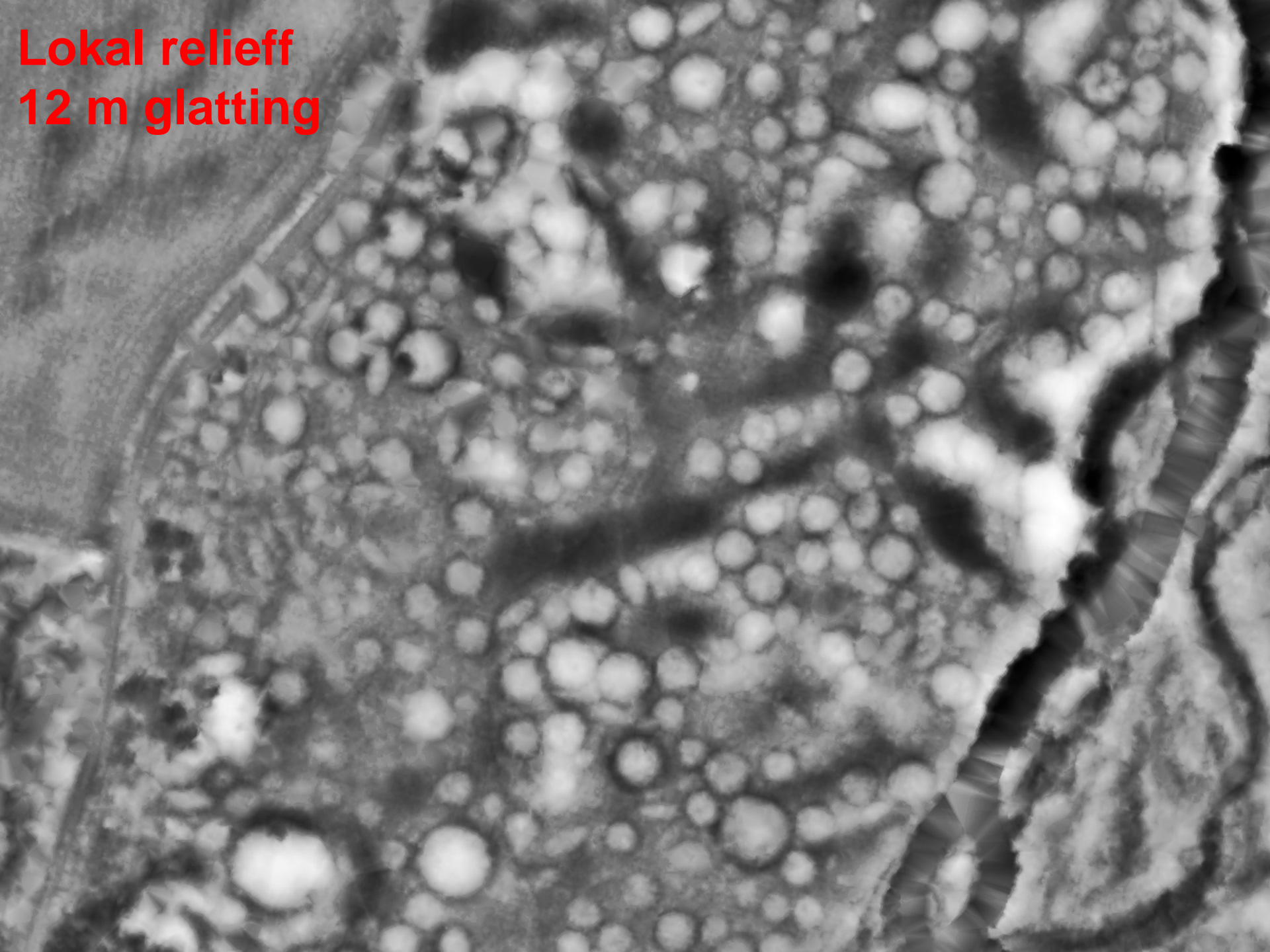




Lokal relieff  
18 m glatting

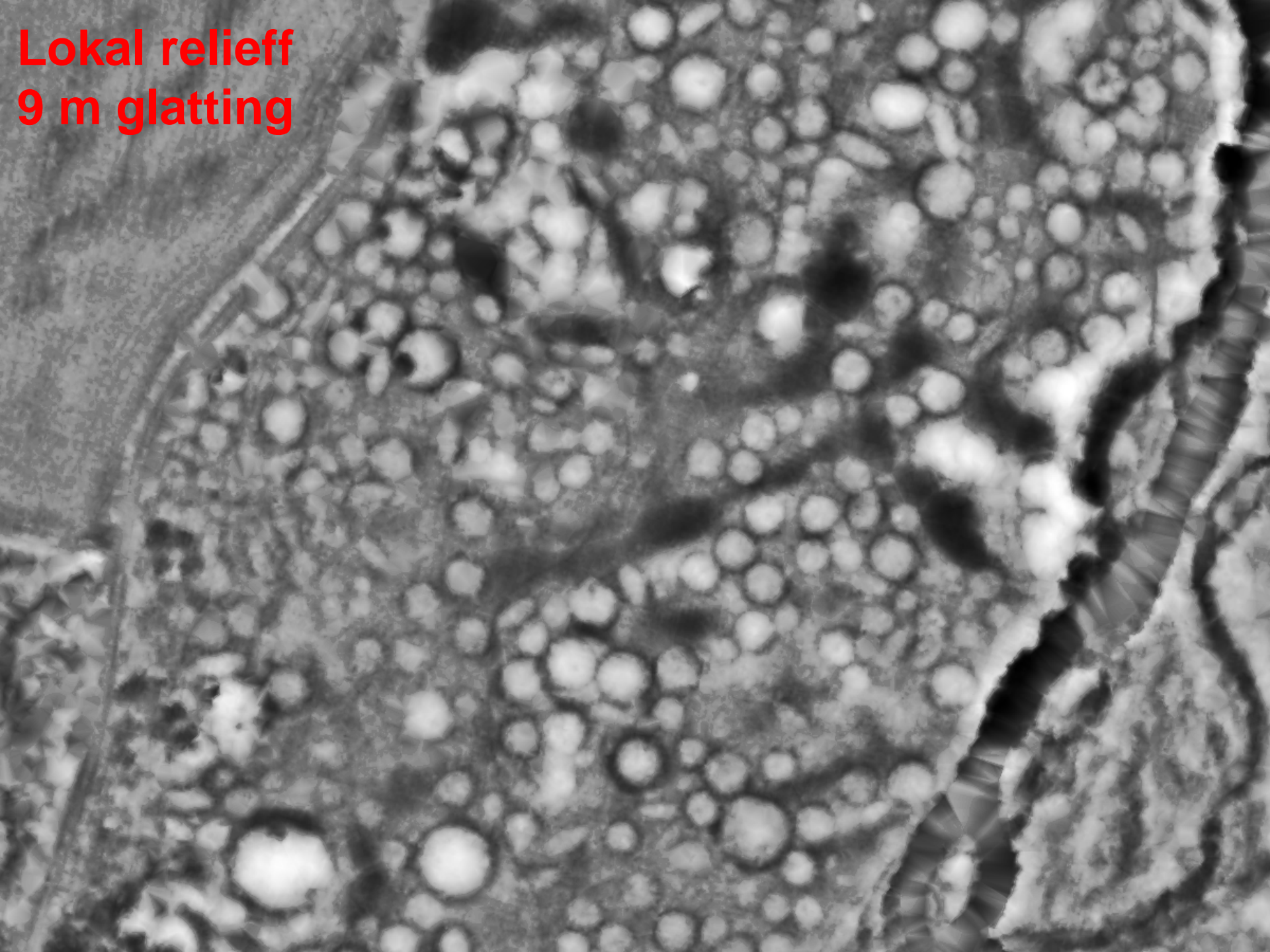


Lokal relieff  
12 m glatting

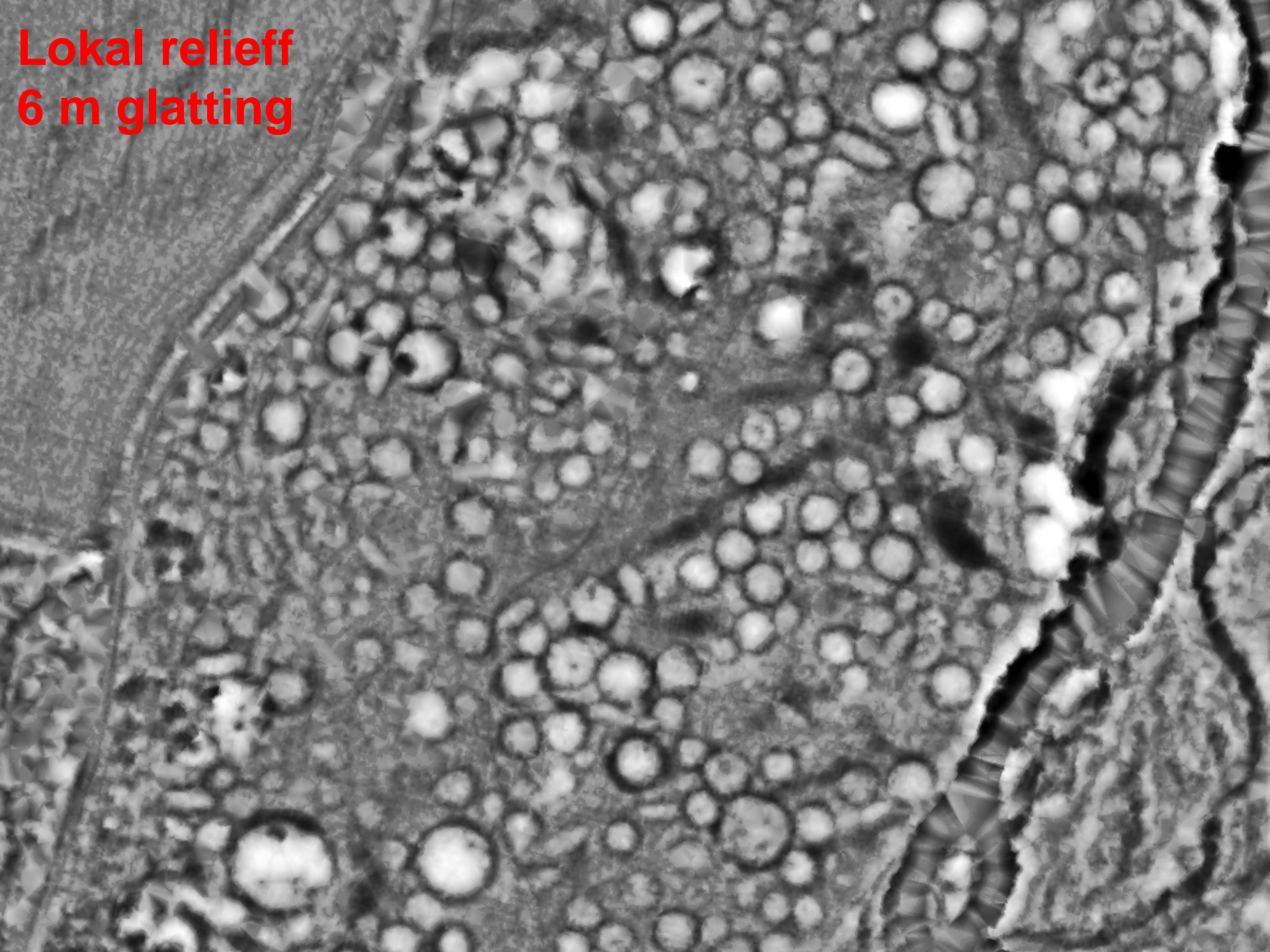




**Lokal relieff  
9 m glatting**



Lokal relieff  
6 m glatting





# Takksigelser

- ▶ Prosjektet finansieres av Riksantikvaren



## Prosjektdeltagere:

- Riksantikvaren
- Norsk Regnesentral
- Oppland, Vestfold og Sør-Trøndelag fylkeskommuner
- NIKU
- Kulturhistorisk museum

