

Rilievo UAV

DJI MAVIC 3M



Volo Nadirale

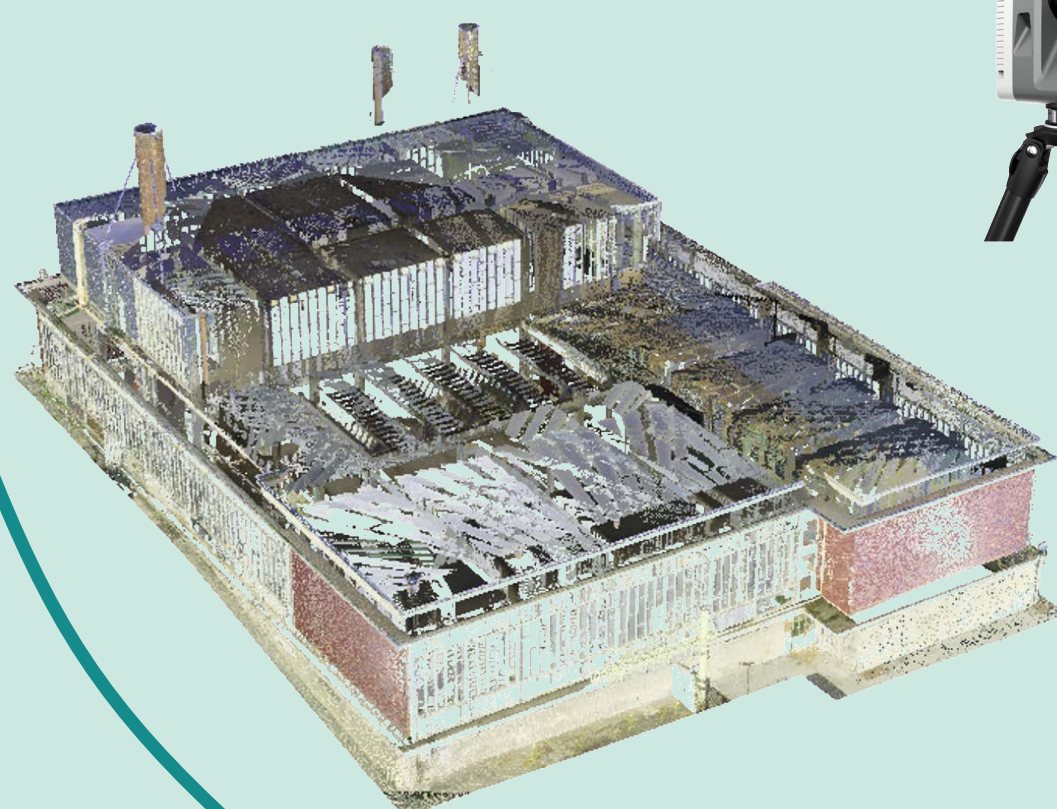
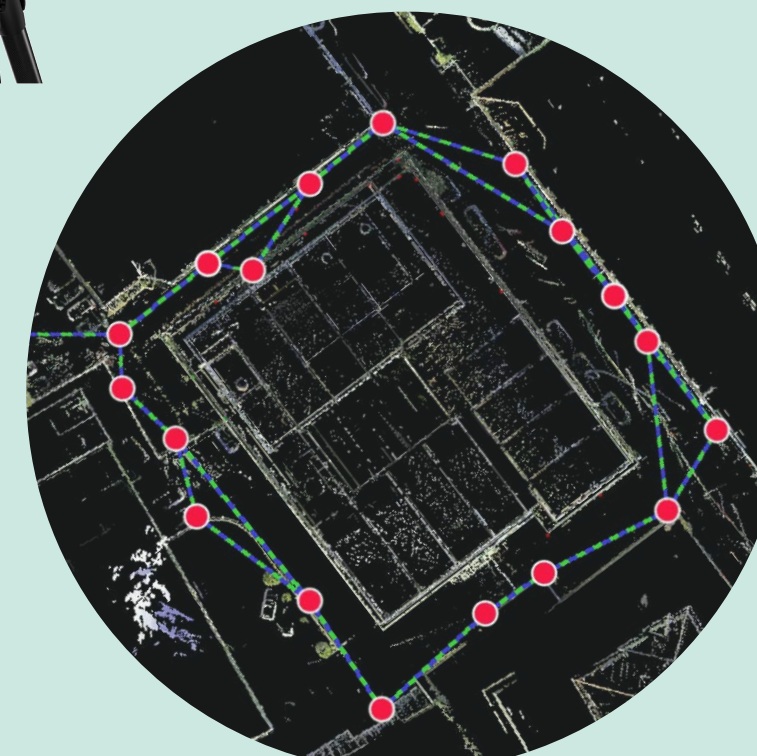


Volo 45°

Nuova di punti
errore 0.5 cm < 1 cm (1:50)

Rilievo LiDAR

Leica RTC360

Nuova di punti
errore 0.9 cm < 1 cm (1:50)Rete delle scansioni
19 scansioni in totali

Scan-to-BIM

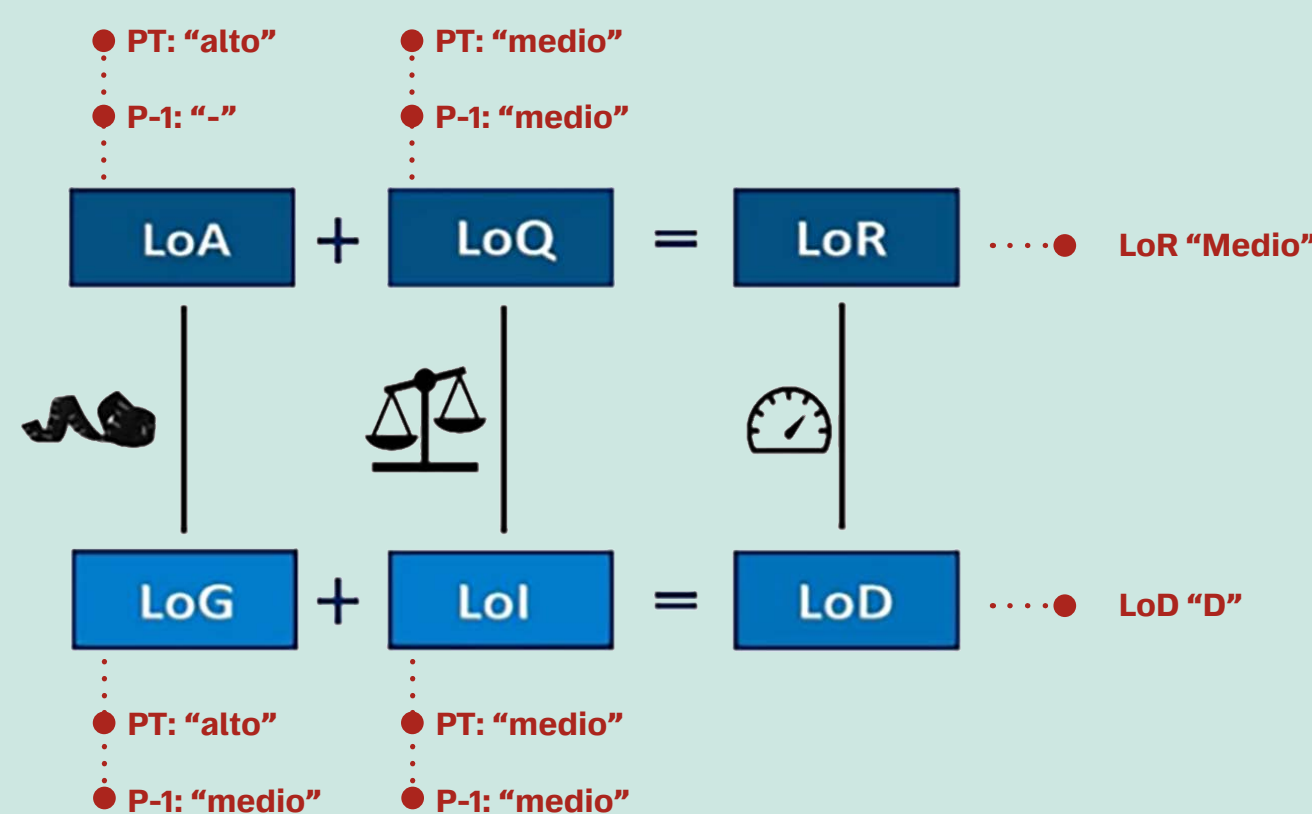
Nuvola di punti

- Livello di dettaglio:
- Esterno: elevato
 - Interno PT: medio
 - Interno P-1: nullo

Non è stato autorizzato l'accesso all'interno dell'edificio, rendendo più difficile il rilievo delle strutture del PT e impossibile quello del piano seminterrato

Indagine d'archivio

360 disegni tecnici

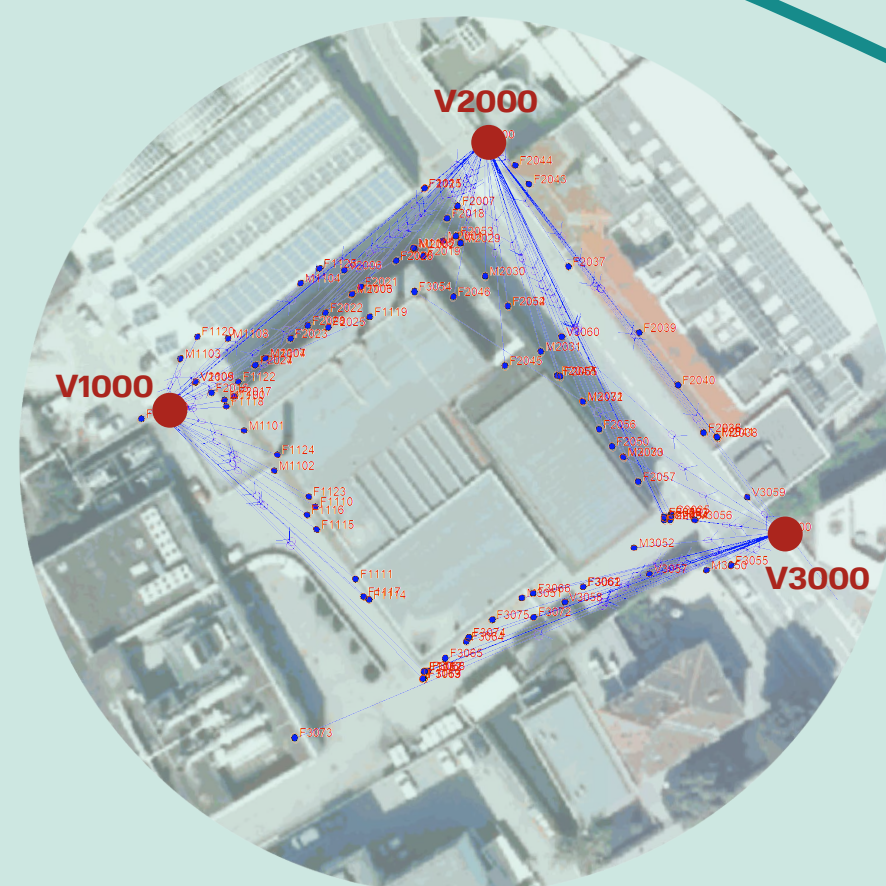


Rilievo topografico



UTM | WGS84 | 32N

Vertici	Easting	Northing	Elevation
1000	411842.601	5034637.097	243.303
3000	411927.932	5034620.58	238.985
2000	411887.2787	5034674.376	242.80426
...	...	...	...



Fotogrammetria terrestre

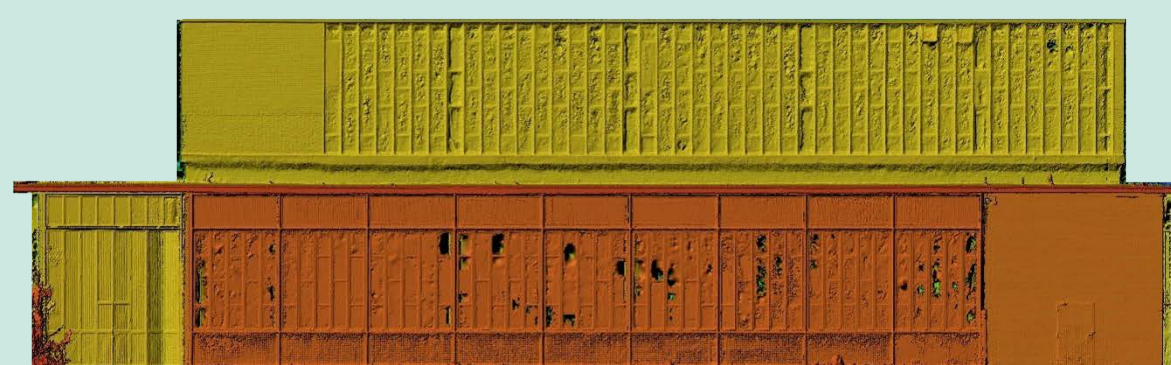
Nuvola di punti

LIDAR (h < 6 m)

Nuvola di punti

UAV (h > 6 m)

DEM

DEM
risoluzione 1 cm/px

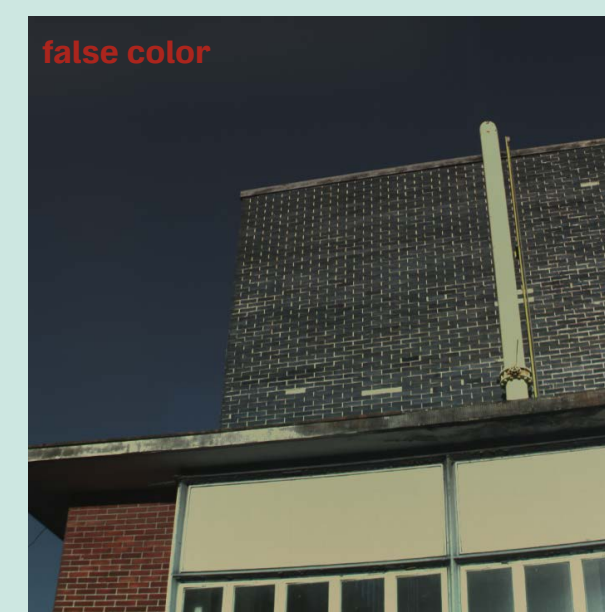
FUJIFILM GFX100 II

Fotogrammi
terrestri

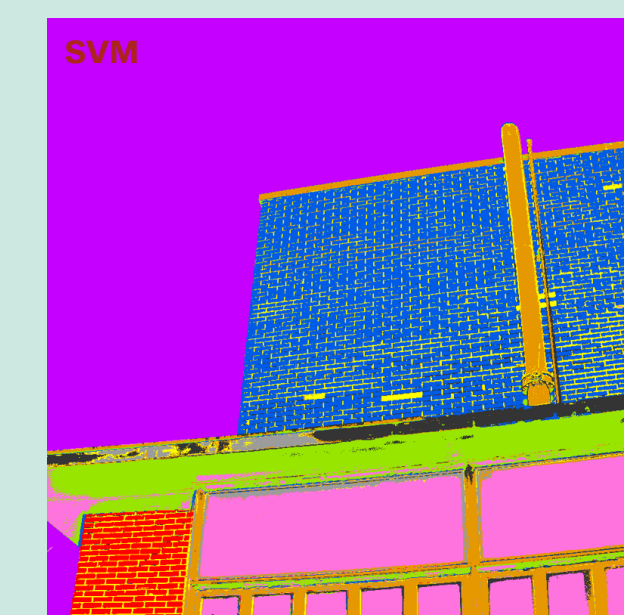
.....

Ortofoto
errore 1 cm < 1 cm (1:50)

Facciata Ovest

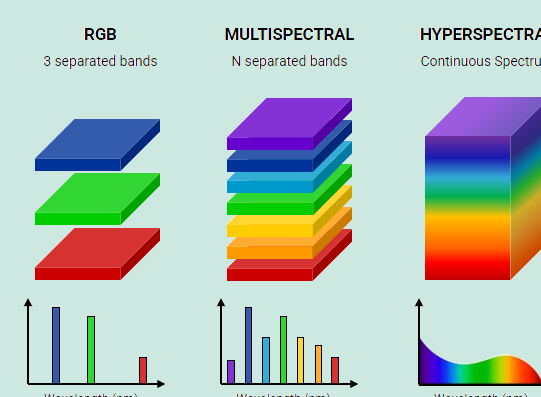


Classificazione supervisionata



Support Vector Machines (Accu = 0.935)
Maximum Likelihood (Accu = 0.920)
K-Nearest Neighbours (Accu = 0.859)
Random Trees (Accu = 0.793)

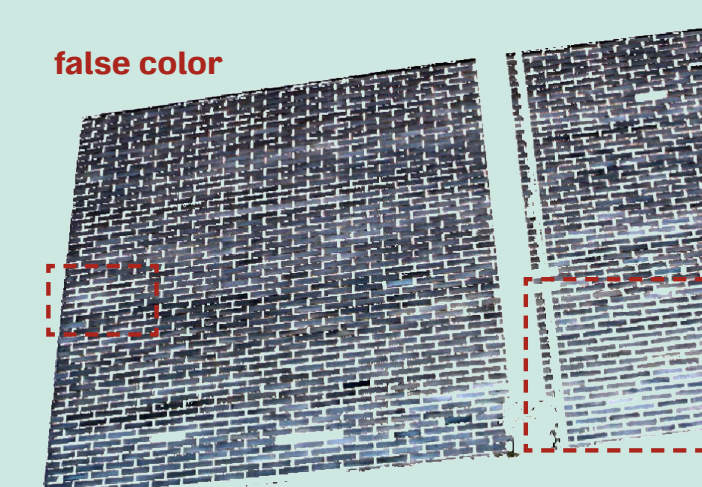
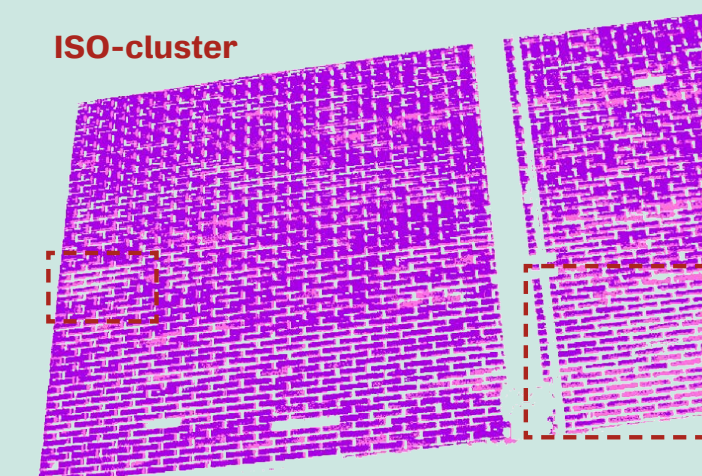
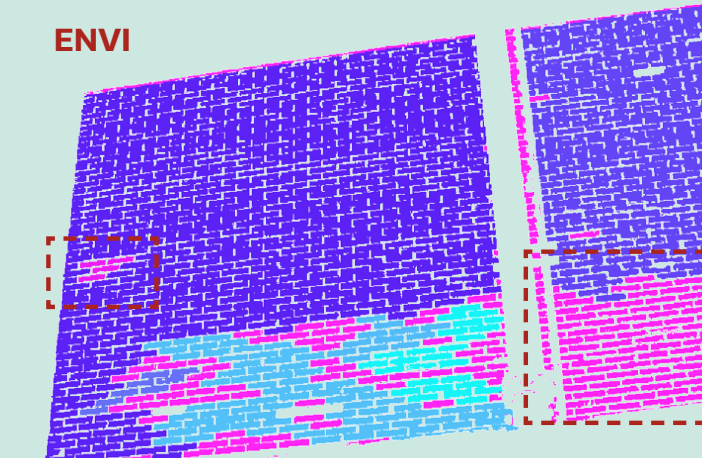
- Klinker blu
- Klinker rosso
- Vetro
- Mosaico Alterato
- Cielo
- Malta
- Metallo
- Mosaico
- Intonaco



Rikola di Senop

- 100 frequenze
- 506.31 nm - 902.39 nm
- passo 3.96 nm

Segmentazione non supervisionata



Immagini Iperspettrali