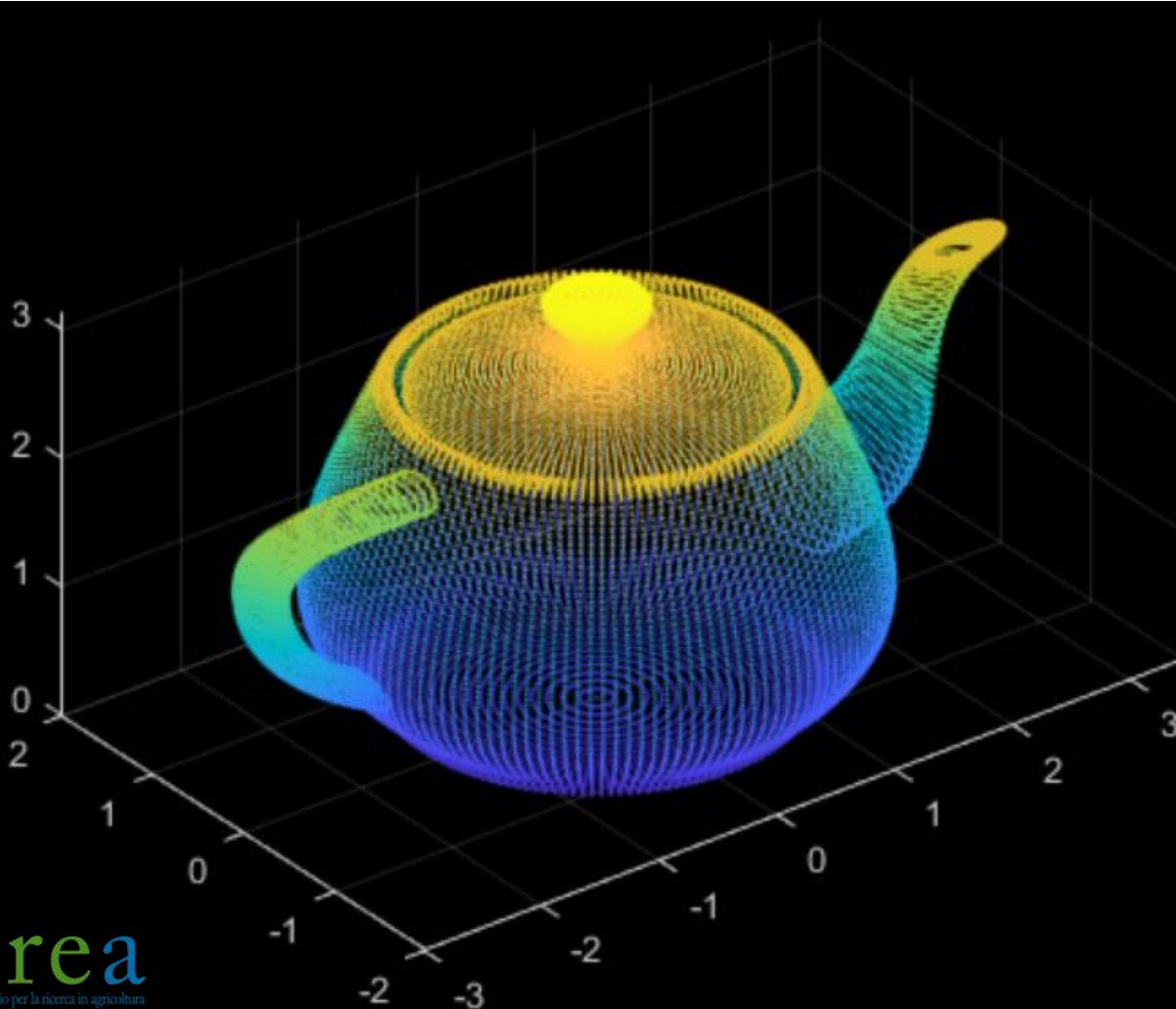


Acquisizione e processamento dati tramite TLS statico e mobile

Nicola PULETTI

COSA É UNA POINT CLOUD

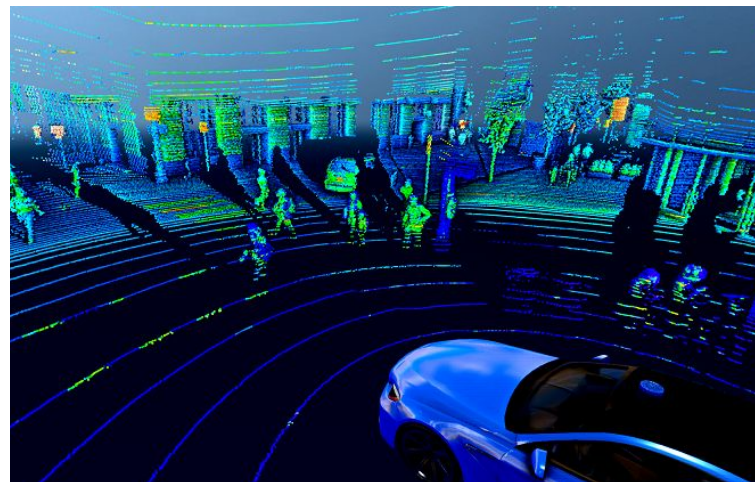
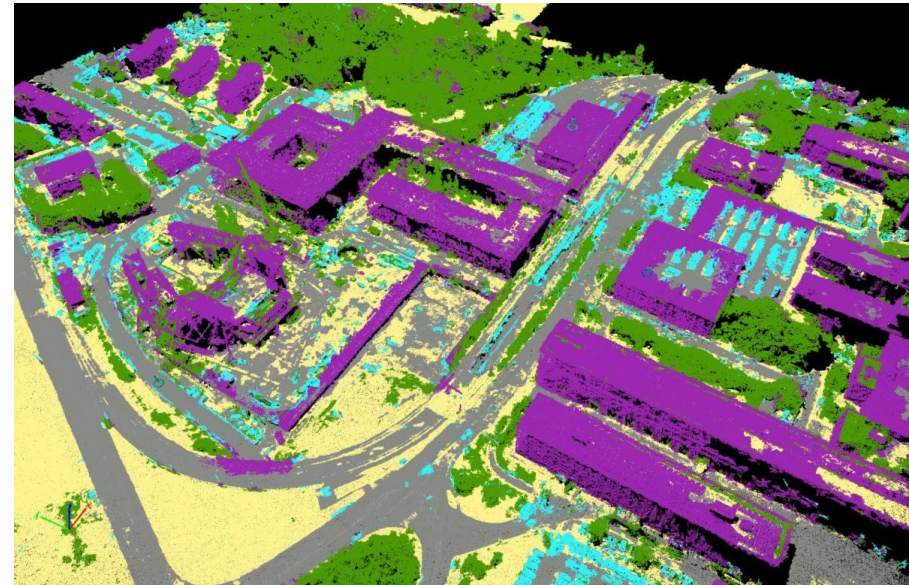
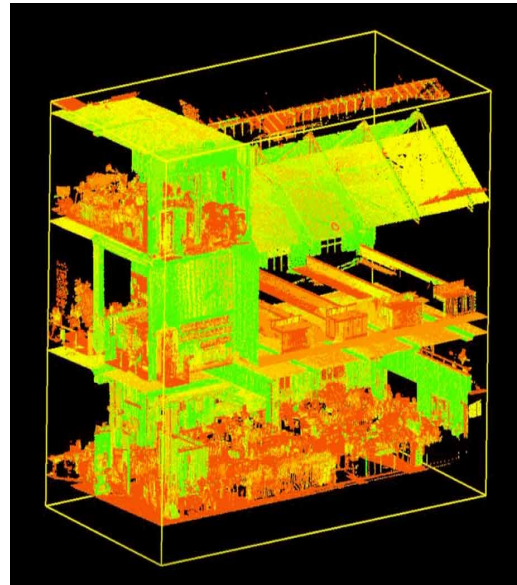
COSA É UNA POINT CLOUD



**insieme di punti
nello spazio** ognuno
dei quali definito
nella loro **posizione**
secondo gli assi X, Y,
Z in un determinato
sistema di
coordinate e
caratterizzati da
eventuali valori di
intensità (RGB o altre
lunghezze scalari) ad
essi associati

COSA É UNA POINT CLOUD

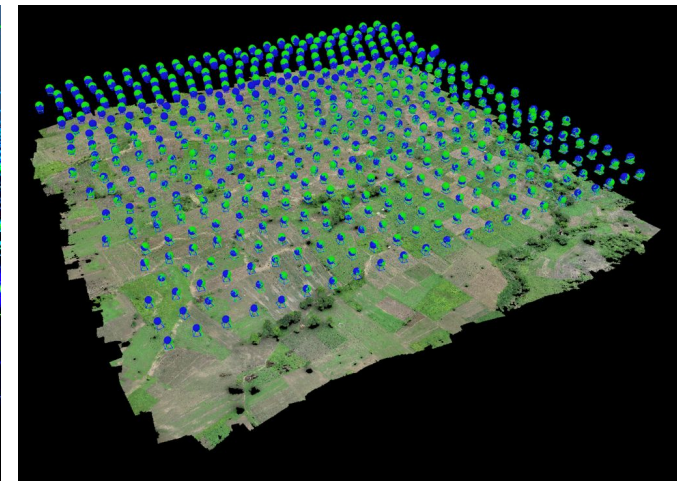
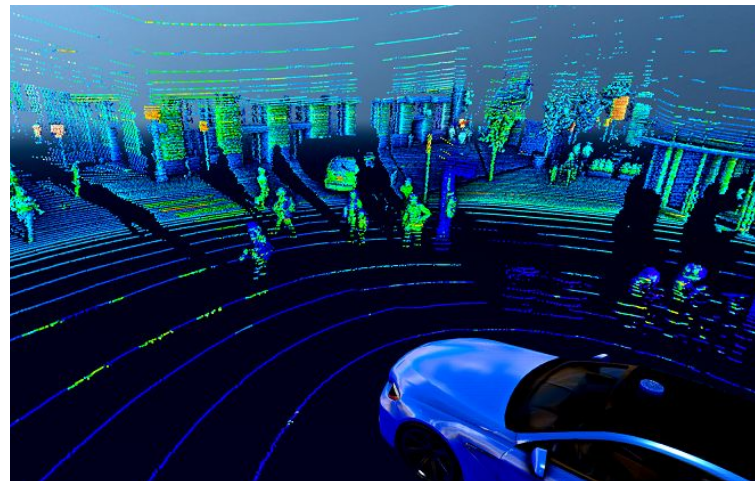
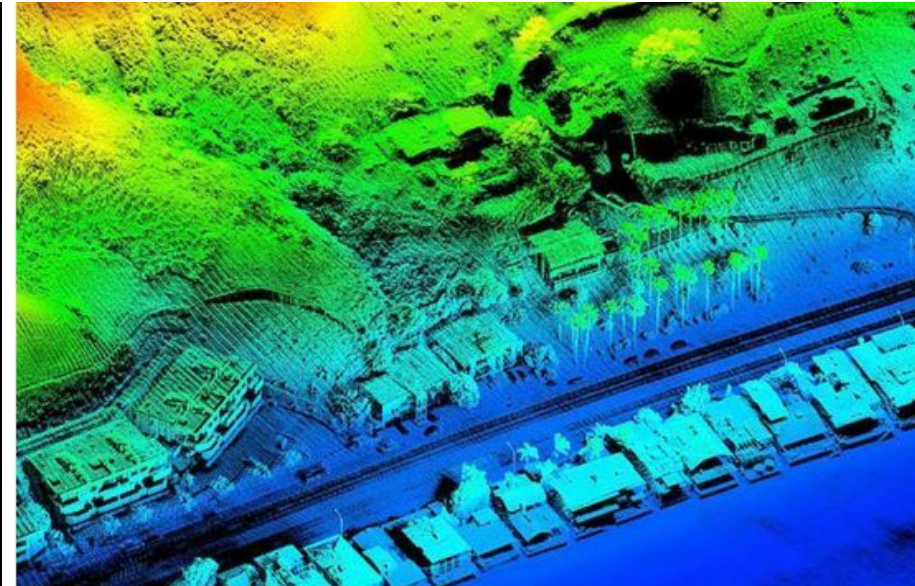
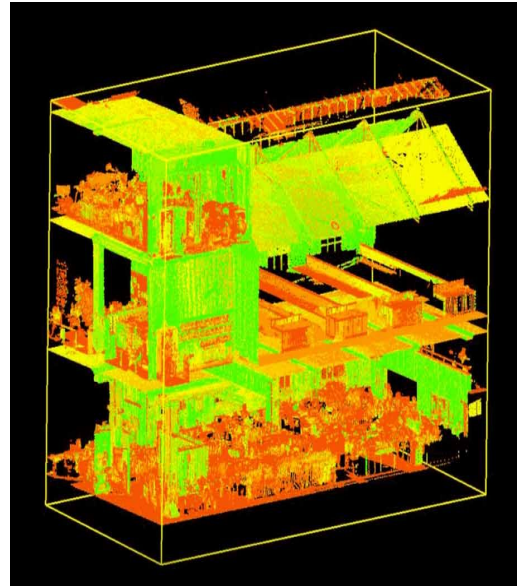
sono il risultato
dell'utilizzo di
strumenti LIDAR



COSA É UNA POINT CLOUD

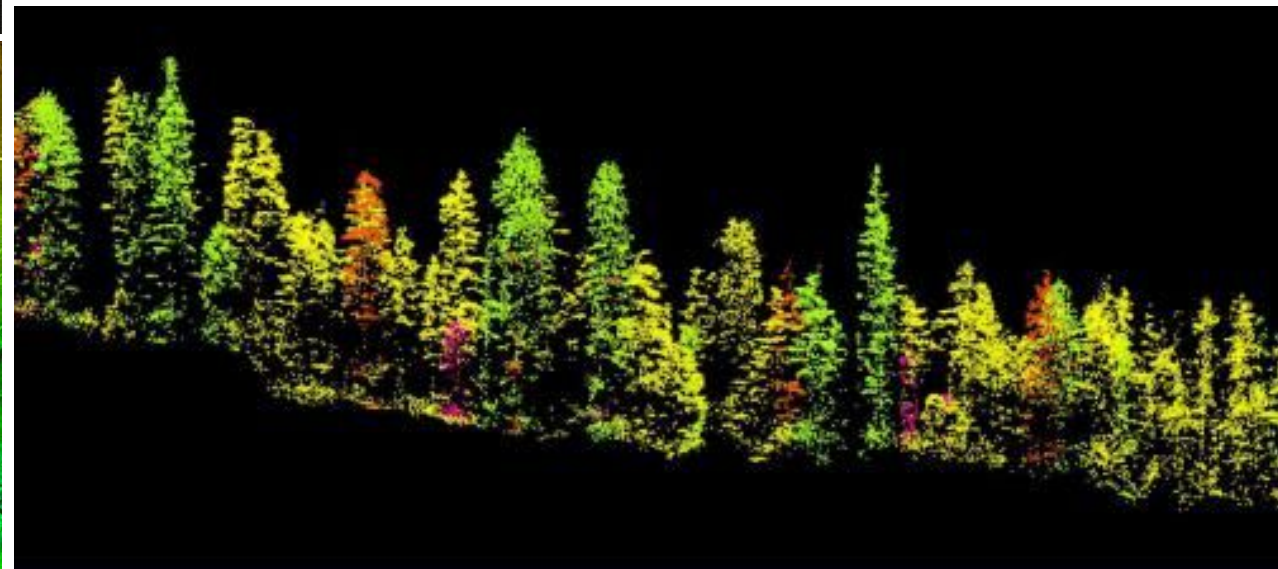
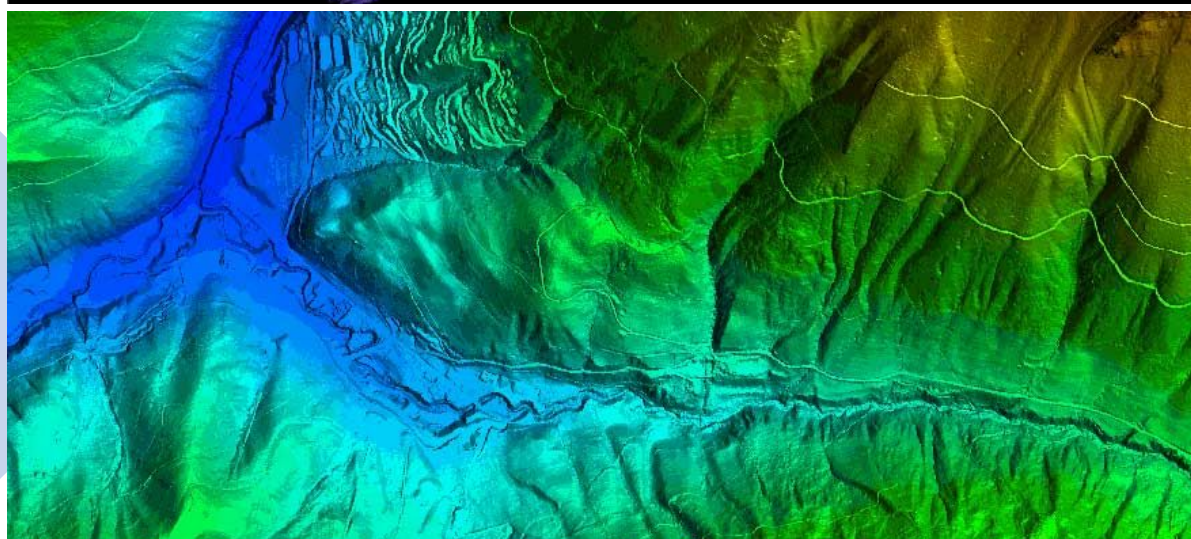
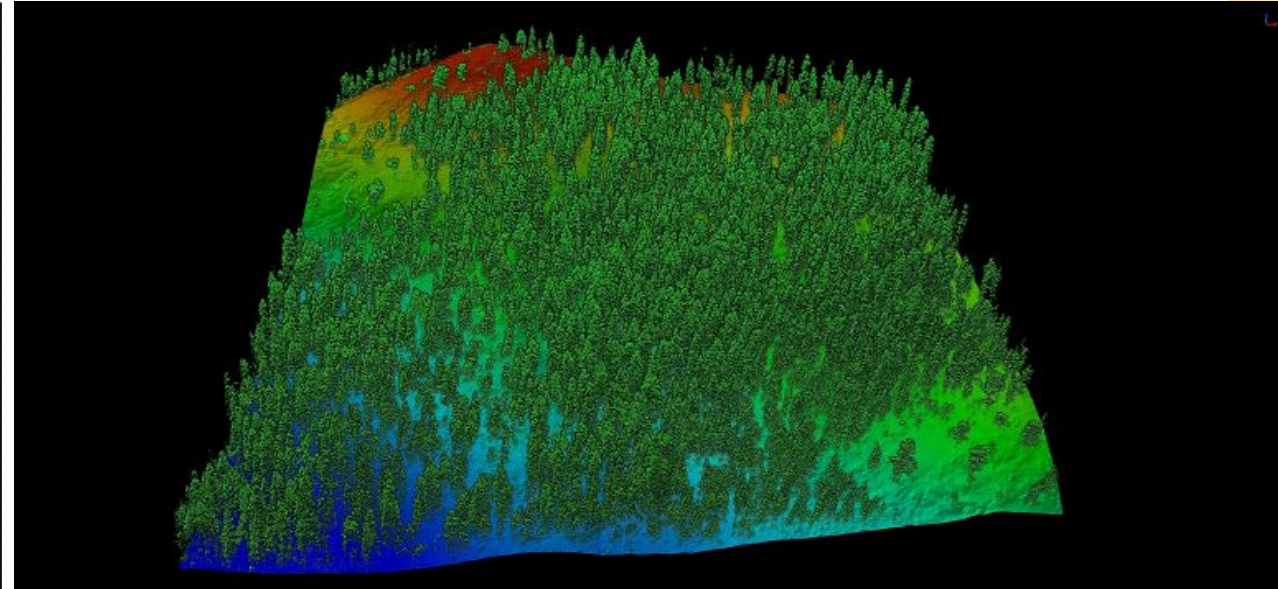
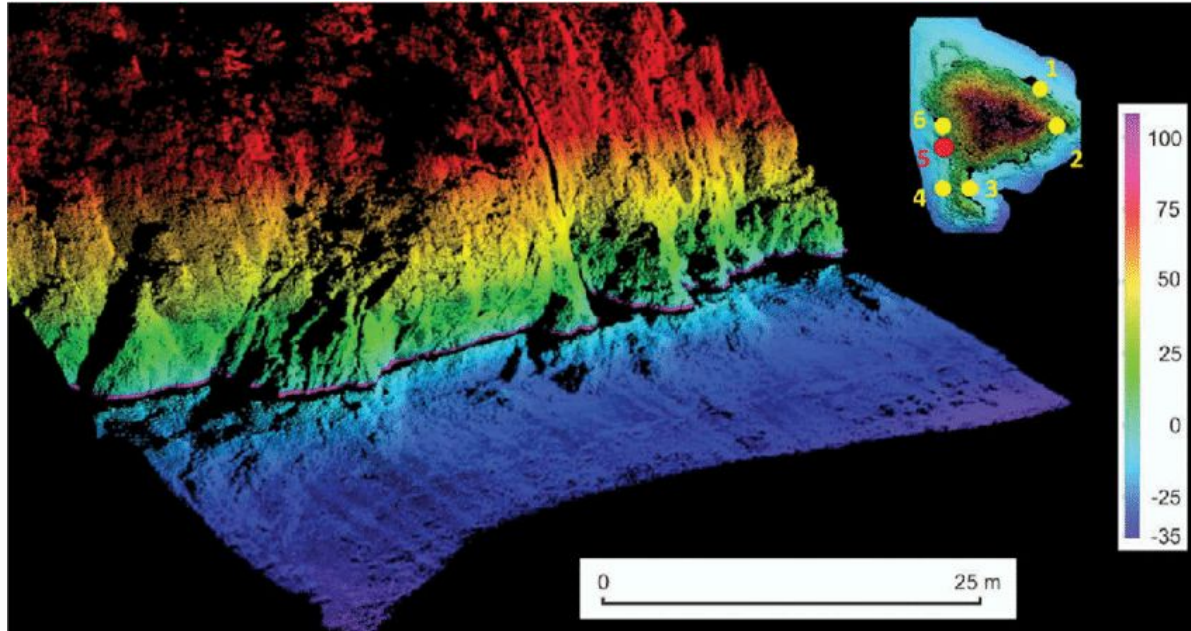
sono il risultato
dell'utilizzo di
strumenti LIDAR,

ma possono essere
ottenute anche
attraverso altre
tecniche quali la
fotogrammetria

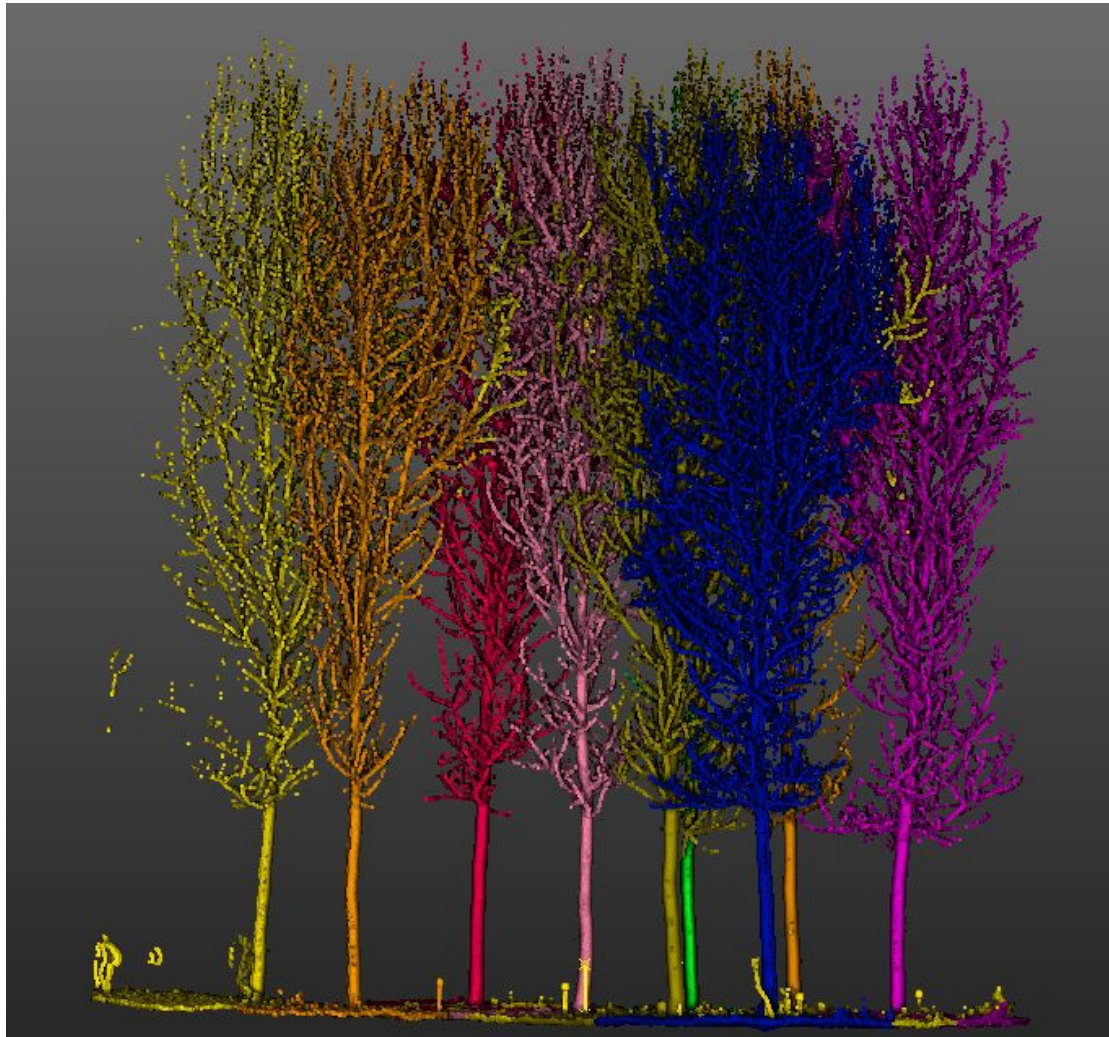


POINT CLOUD

applicazioni nel settore ambientale



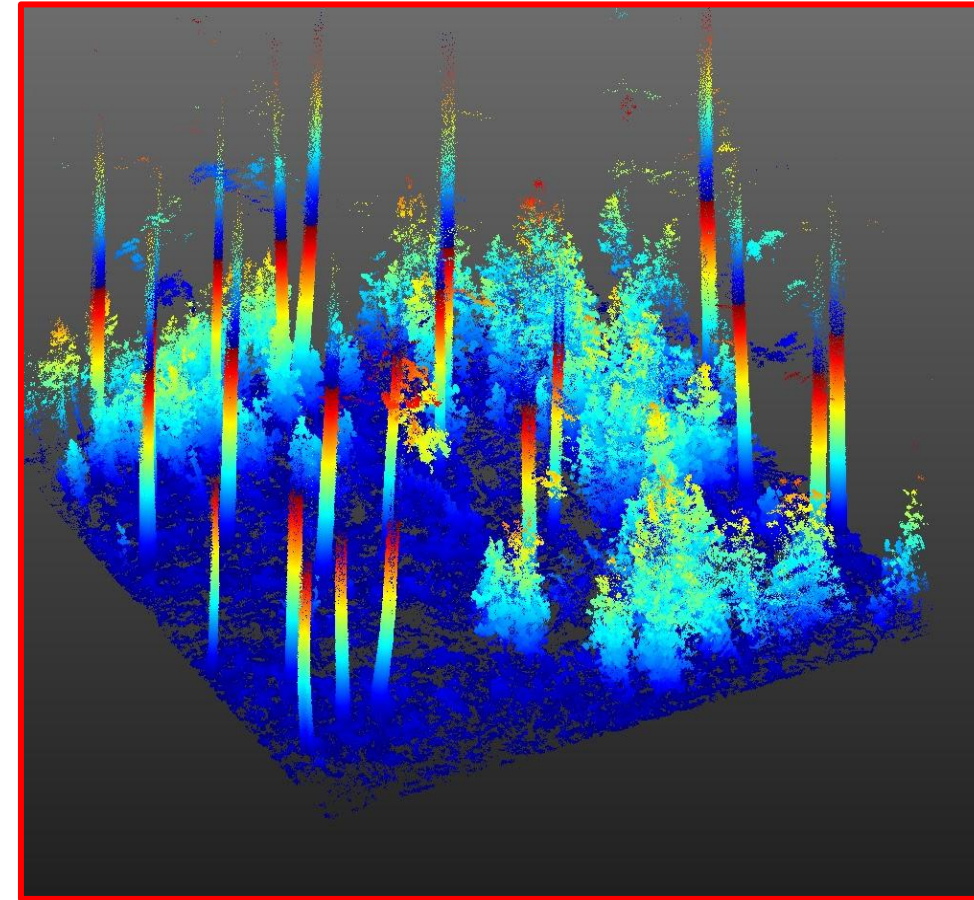
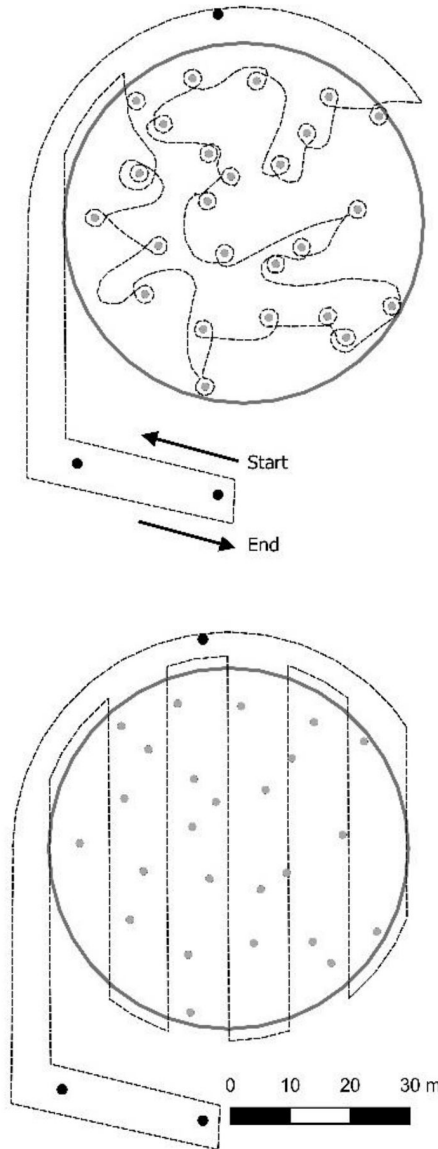
POINT CLOUD DA *laser scanner terrestre* IN PIOPPICOLTURA



Strumenti TLS



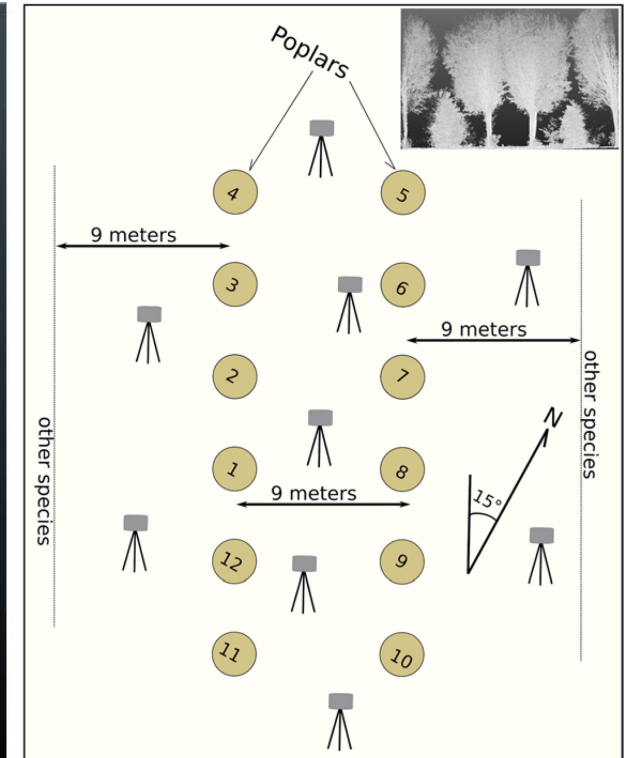
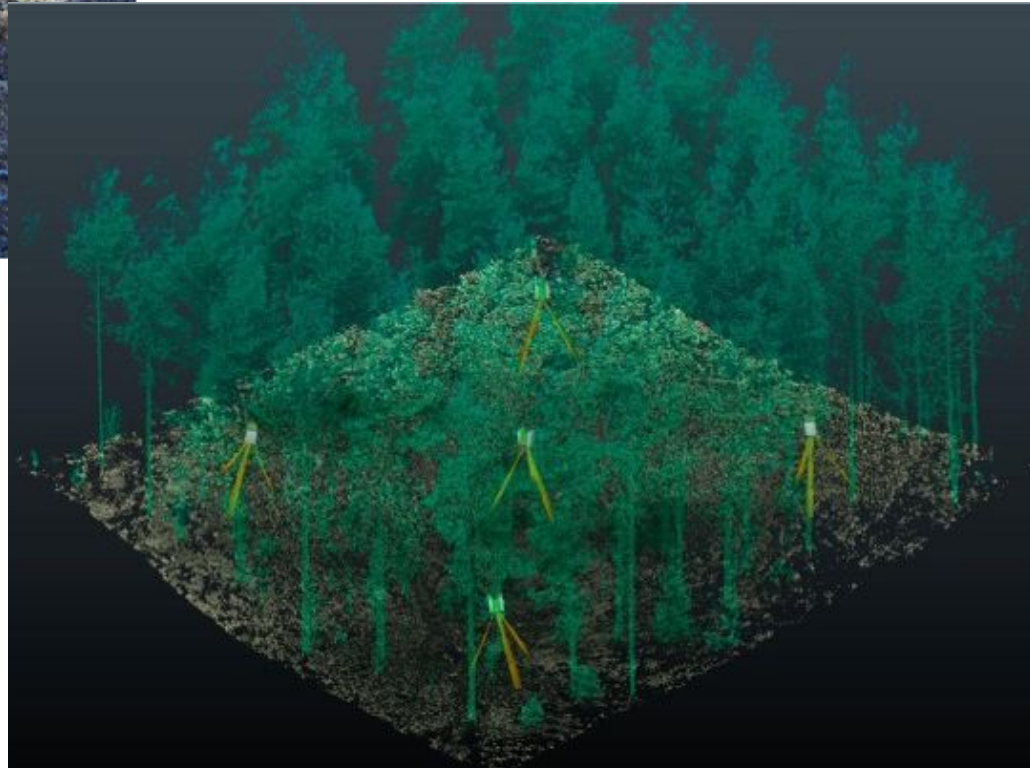
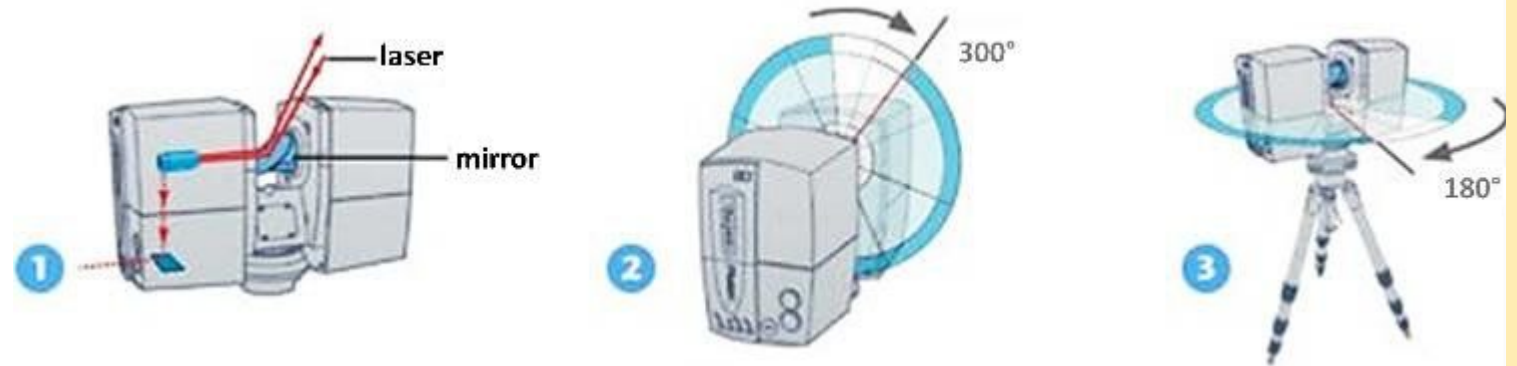
Laser scanner “mobile”



Strumenti TLS

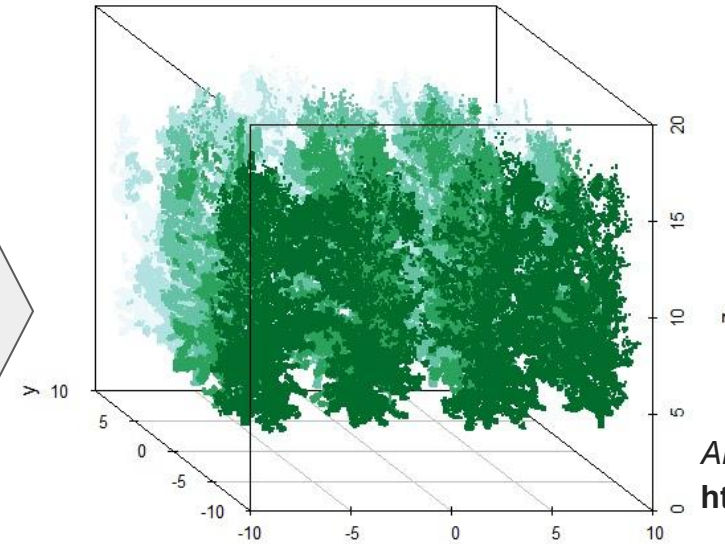
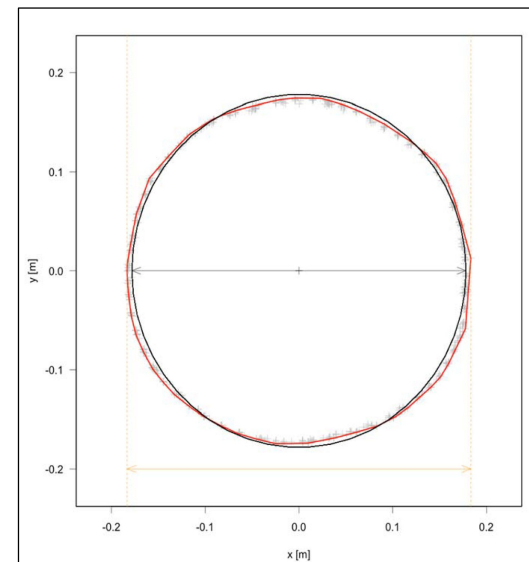
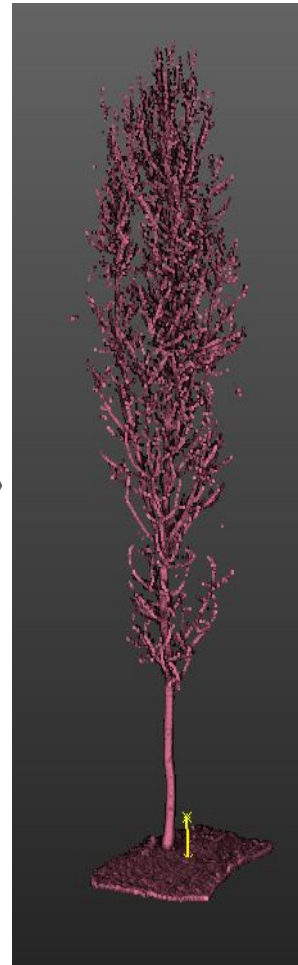
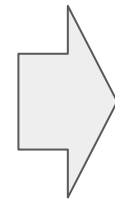
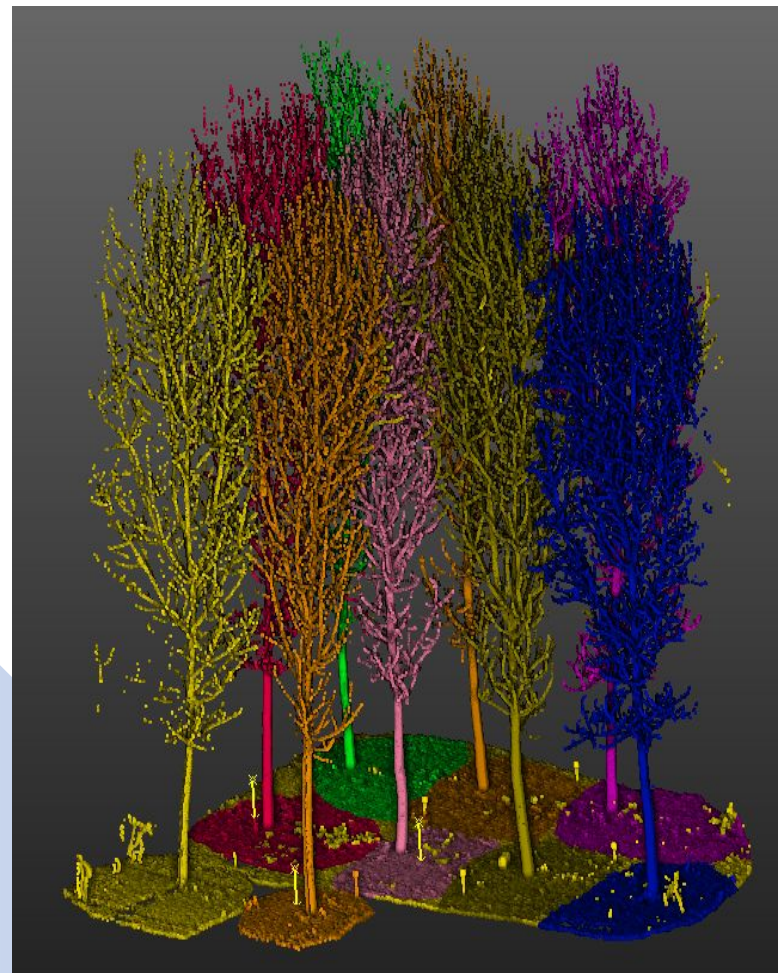


Laser scanner “fisso”





APPLICAZIONI

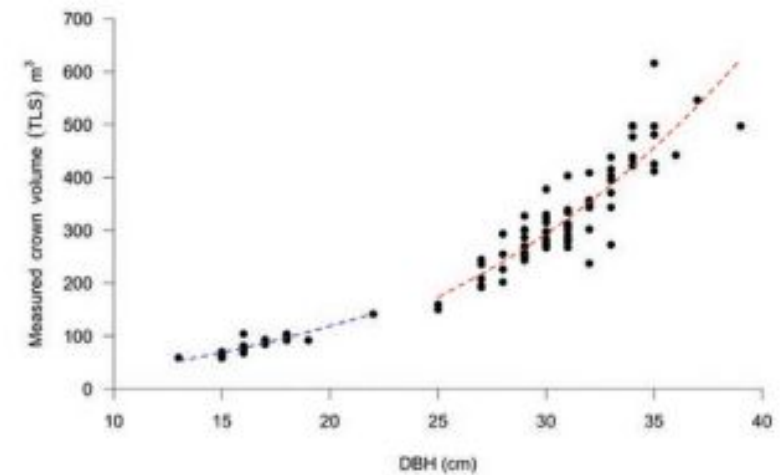
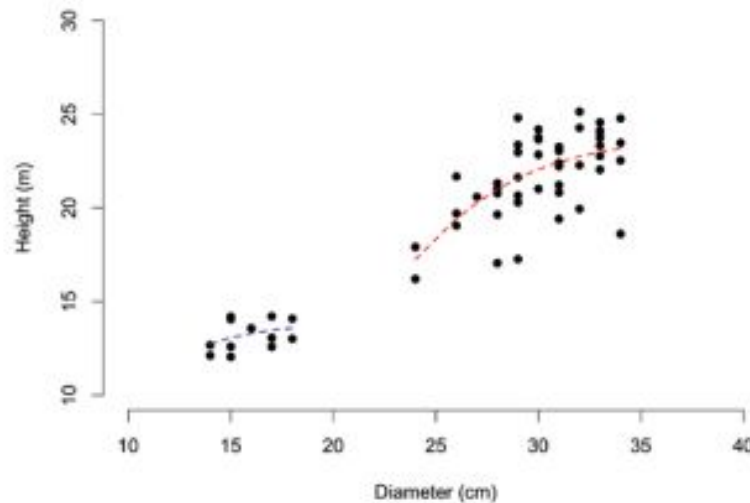
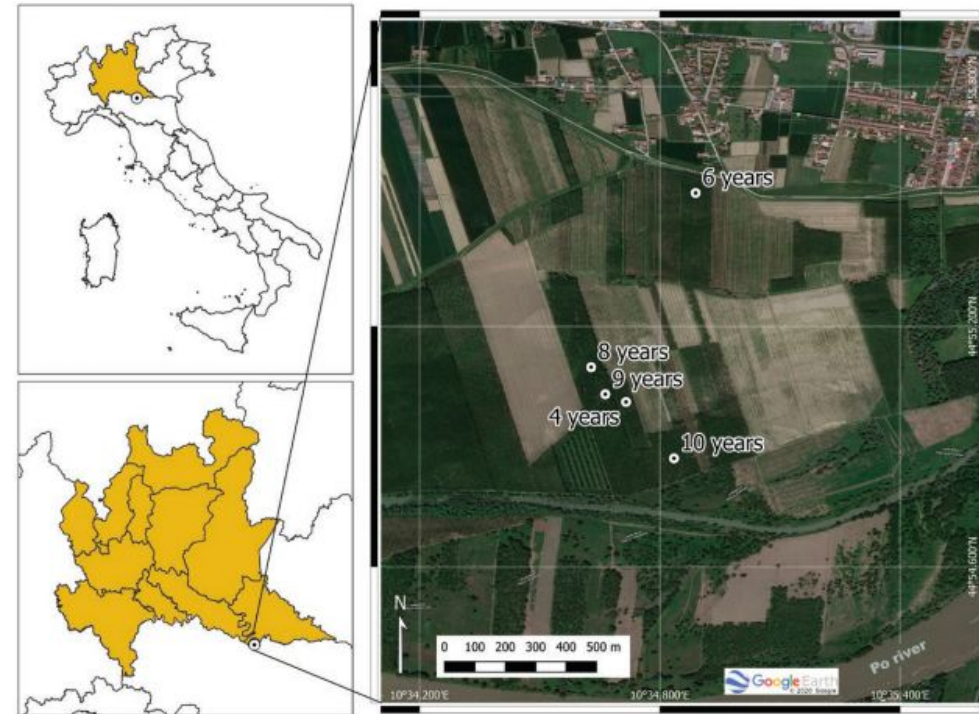
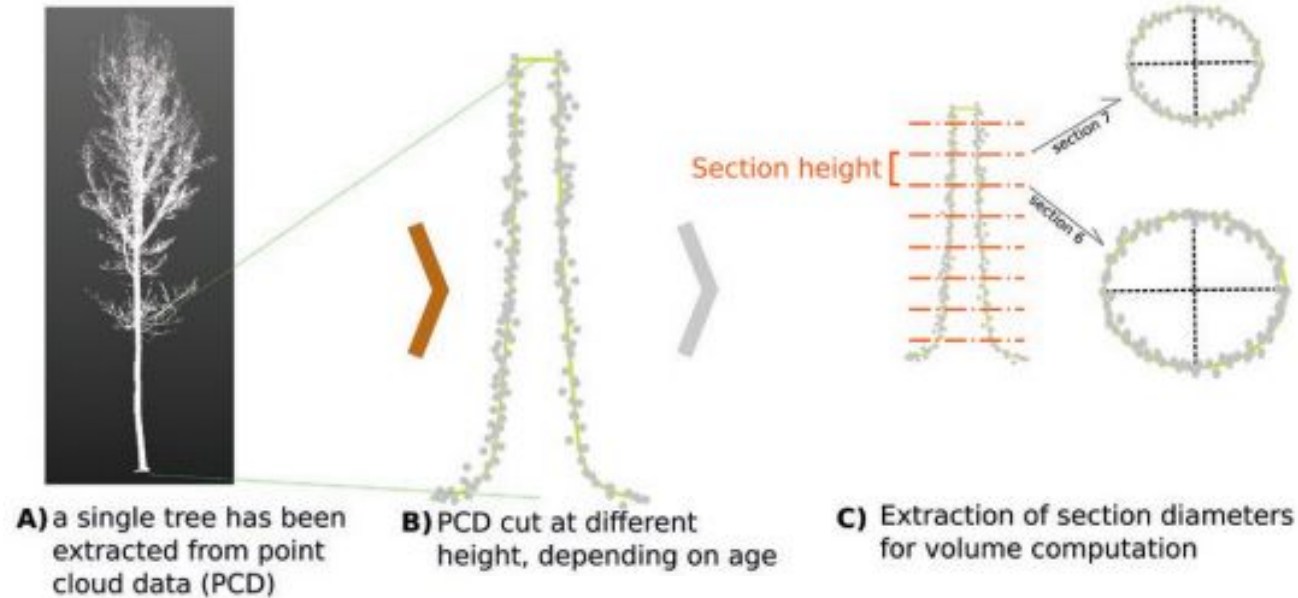


Annals of silvicultural research **2021**;
<http://dx.doi.org/10.12899/asr-2256>

Forests **2019**, 10(3), 239;
<https://doi.org/10.3390/f10030239>

Forest science 2020;
doi: 10.1093/forsci/fxaa021

APPLICAZIONI



Conclusioni

in Italia TLS è una tecnologia ancora poco utilizzata sia in ambito forestale che per la gestione di piantagioni



alta precisione della misura, ripetibilità, metodi non distruttivi



costi della strumentazione e alto livello tecnologico richiesto



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GRAZIE!

Acquisizione e processamento dati tramite TLS statico e mobile