

SAGA

Tools-Import-LAS
Shapes-Point Cloud-Point Cloud Reclassifier/Subset extractor-
Tools-Import-Grids-Import Grid from XYZ
Tools-Shapes-Shape-Grid Tools – Add Grid Values to Points (rozne warianty)
Tools-Table-Field Calculator- f3-fi
Tools-Import/Export-Shapes-Export Point Cloud to Text File

read1.m

```
clear;  
plik=fopen('delta.txt'); #otwórz plik  
T=fscanf(plik,'%f'); #wczytaj floaty do macierzy  
fclose(plik)
```

analiza1.m

```
T1=T([T>-99999]);  
statistics(T1)  
n=rows(T1)  
min1=min(T1)  
max1=max(T1)  
  
me=mean(T1)  
sd=std(T1)  
  
md=median(T1)  
abs1=abs(T1-md);  
nmad=1.4826*median(abs1)  
b=sum(abs1)/n  
sd_laplace=2^0.5*b  
sd_2times=1.96*sd  
  
p1=0.975;  
p2=0.95;  
f1_inv=norminv(p1,me,sd)  
f2_inv=norminv(p1,md,nmad)  
f3_inv=md-b*sign(p1-0.5)*log(1-2*abs(p1-0.5))  
percentil_975=prctile(T1,p1*100)  
percentil_95=prctile(abs(T1),p2*100)  
  
-----  
histfit(T([T>=-1 & T<=1]),100)
```

| | | | | |
|-------------------|--|--|--|--|
| | | | | |
| n | | | | |
| min | | | | |
| max | | | | |
| mean | | | | |
| sd | | | | |
| median | | | | |
| NMAD | | | | |
| b | | | | |
| $2^{0.5} b$ | | | | |
| 1.96σ | | | | |
| $F_1^{-1}(0.975)$ | | | | |
| $F_2^{-1}(0.975)$ | | | | |
| $F_3^{-1}(0.975)$ | | | | |
| P (0.95) | | | | |
| Percentyl (0.975) | | | | |
| histogram | | | | |
| QQplot | | | | |