



# Mastersizer 3000 – device description Runoff from erosion plots - PSD comparison

# Outline

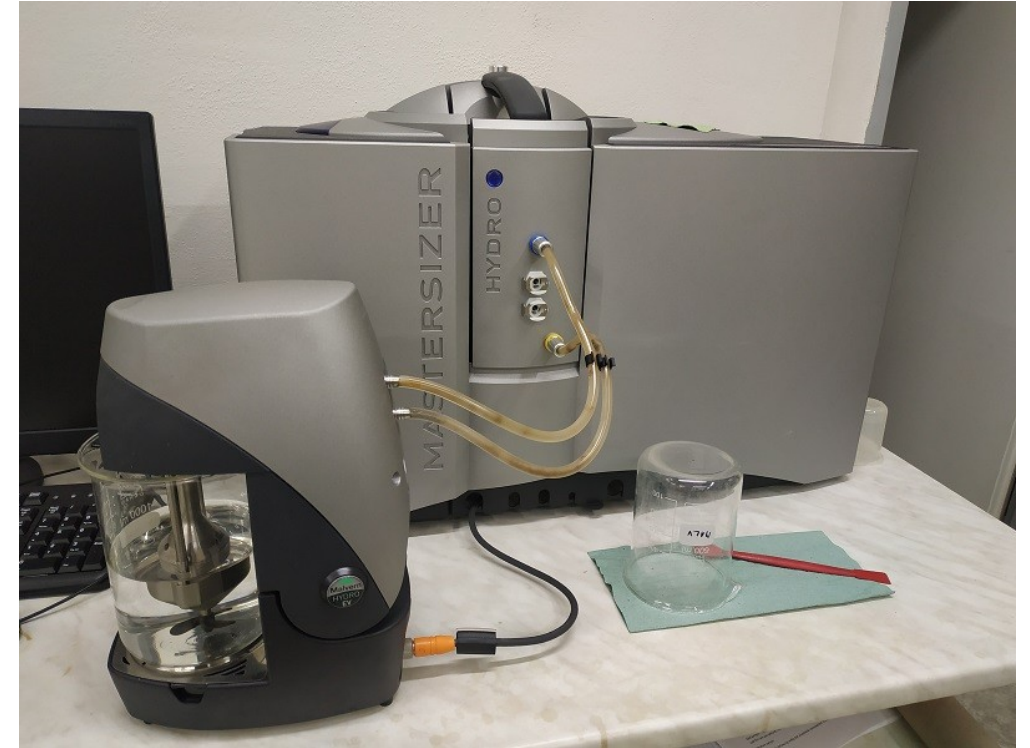
- Mastersizer 3000 – device description
- Example of results
- Densimeter vs Mastersizer
- Erosion plots in Jirkov
- Results of PSD in runoff from erosion plots

# Introduction

- Particle size distribution
- Methods: Densimeter, Pario, Laser difraktometer

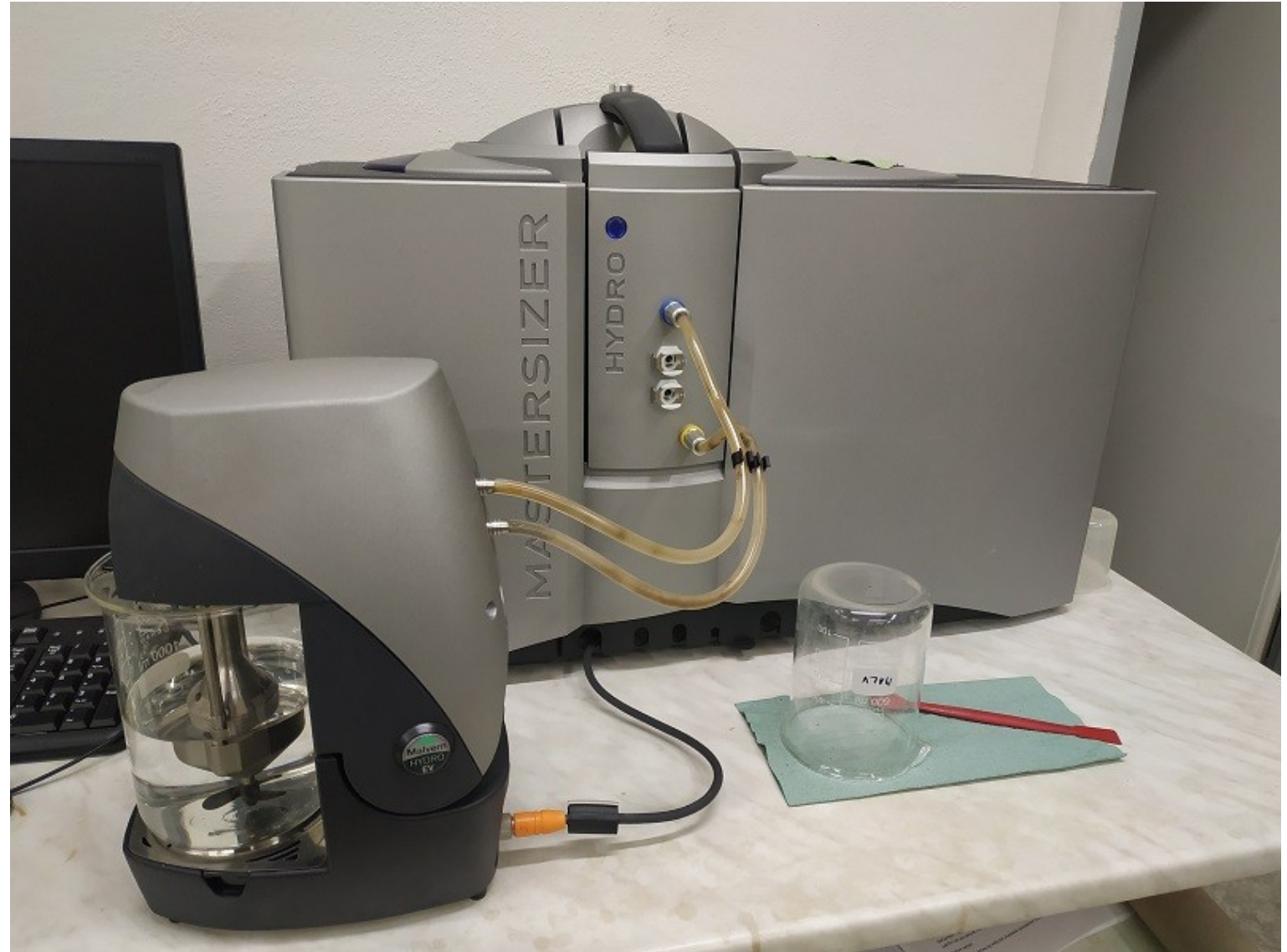


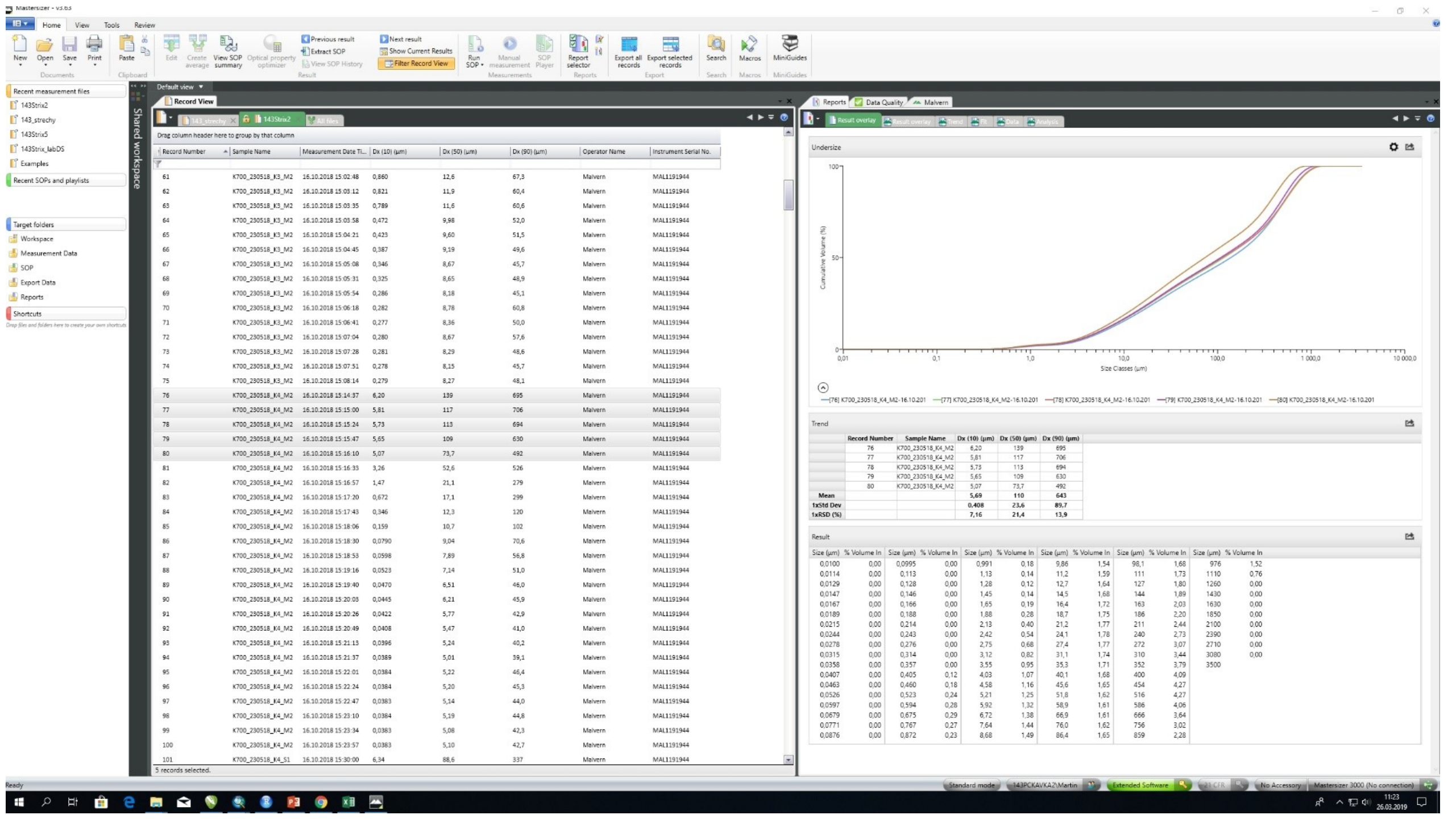
<https://geomor.com.pl/wp-content/uploads/2017/09/PARIO-Manual.pdf>



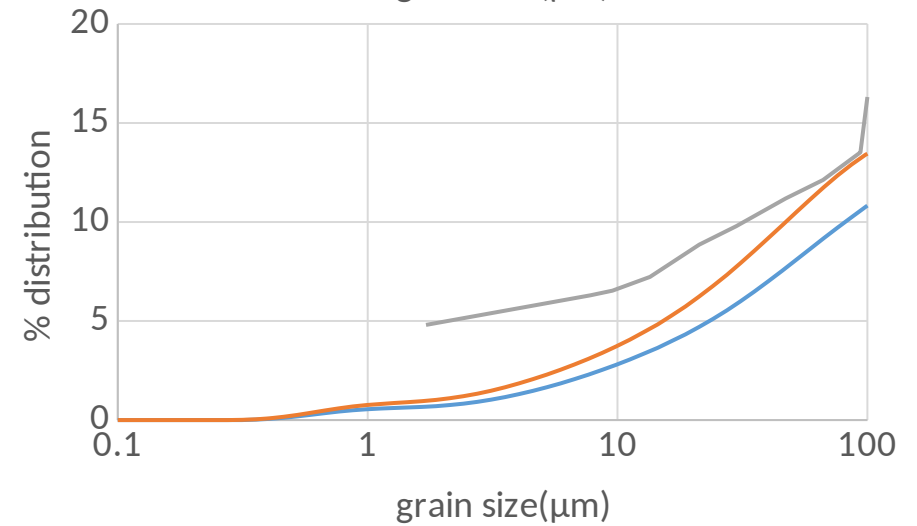
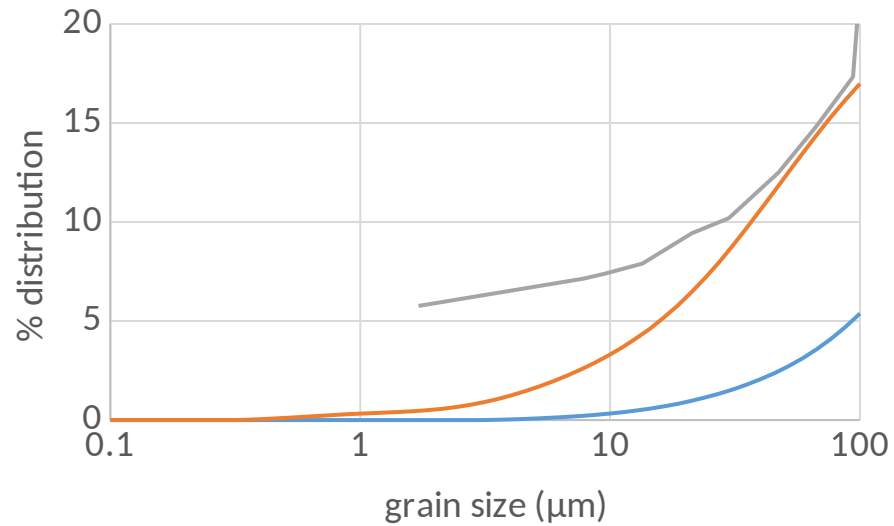
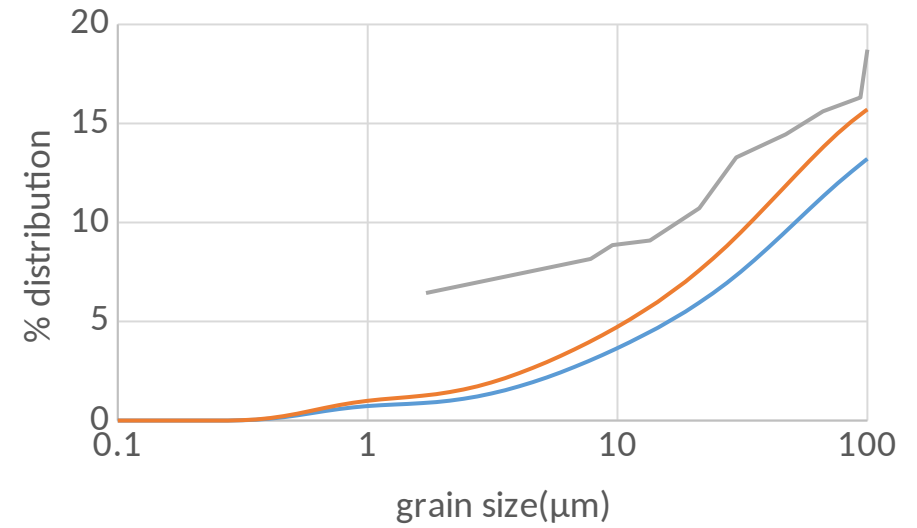
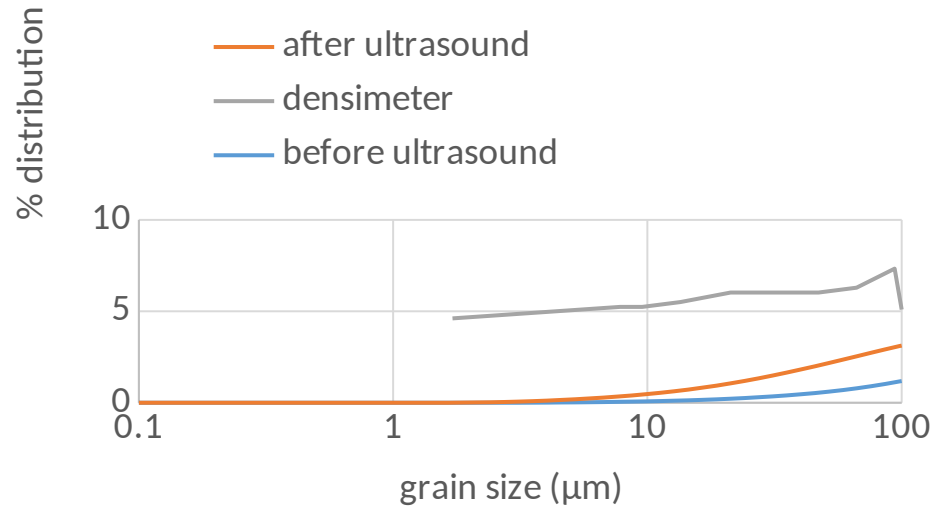
# Mastersizer 3000

- Laser diffraktometer
- Grain size 0,01 – 3500  $\mu\text{m}$
- Measurement time < 1 min

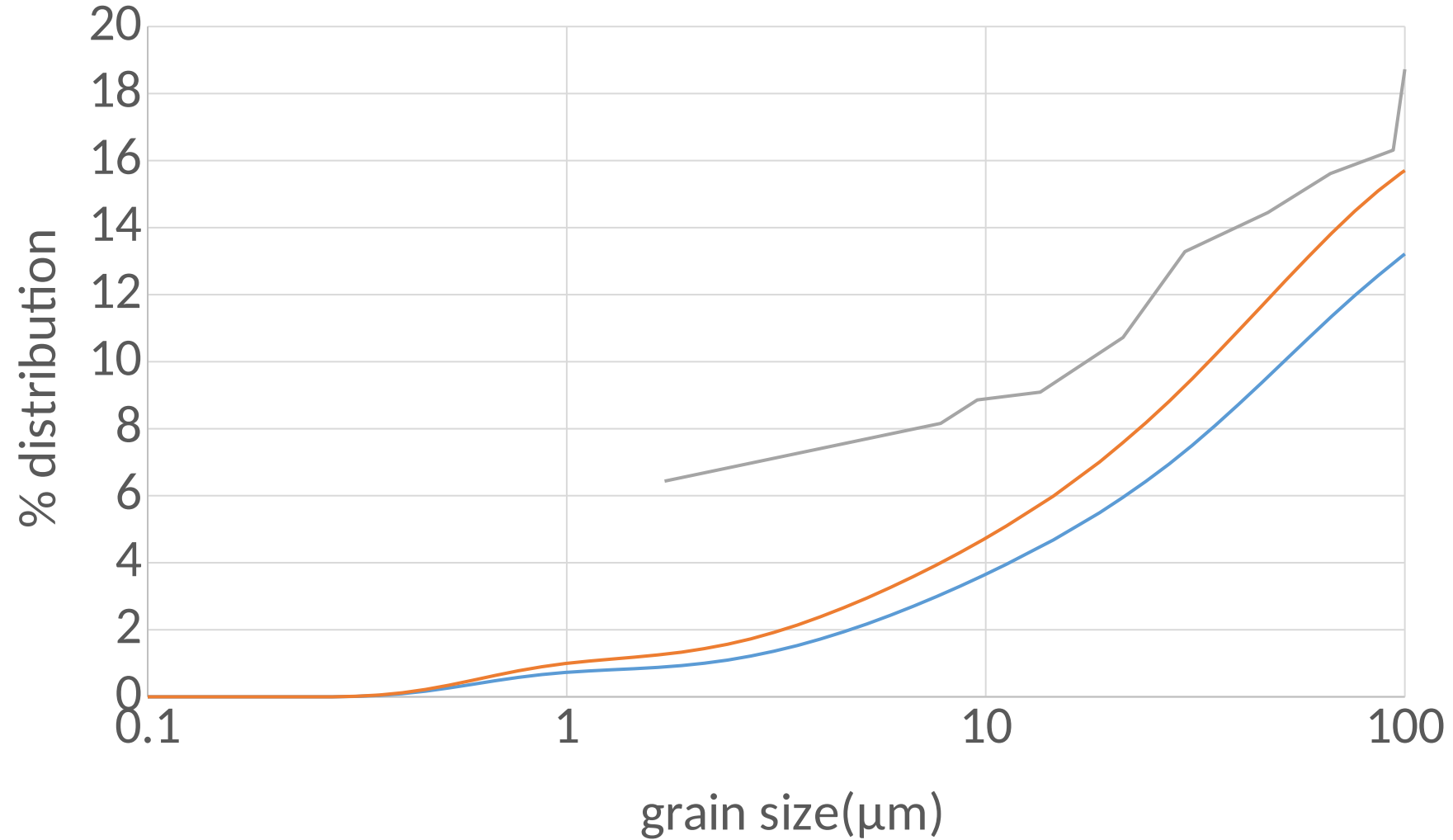




# Mastersizer vs densimeter



# Mastersizer vs densimeter



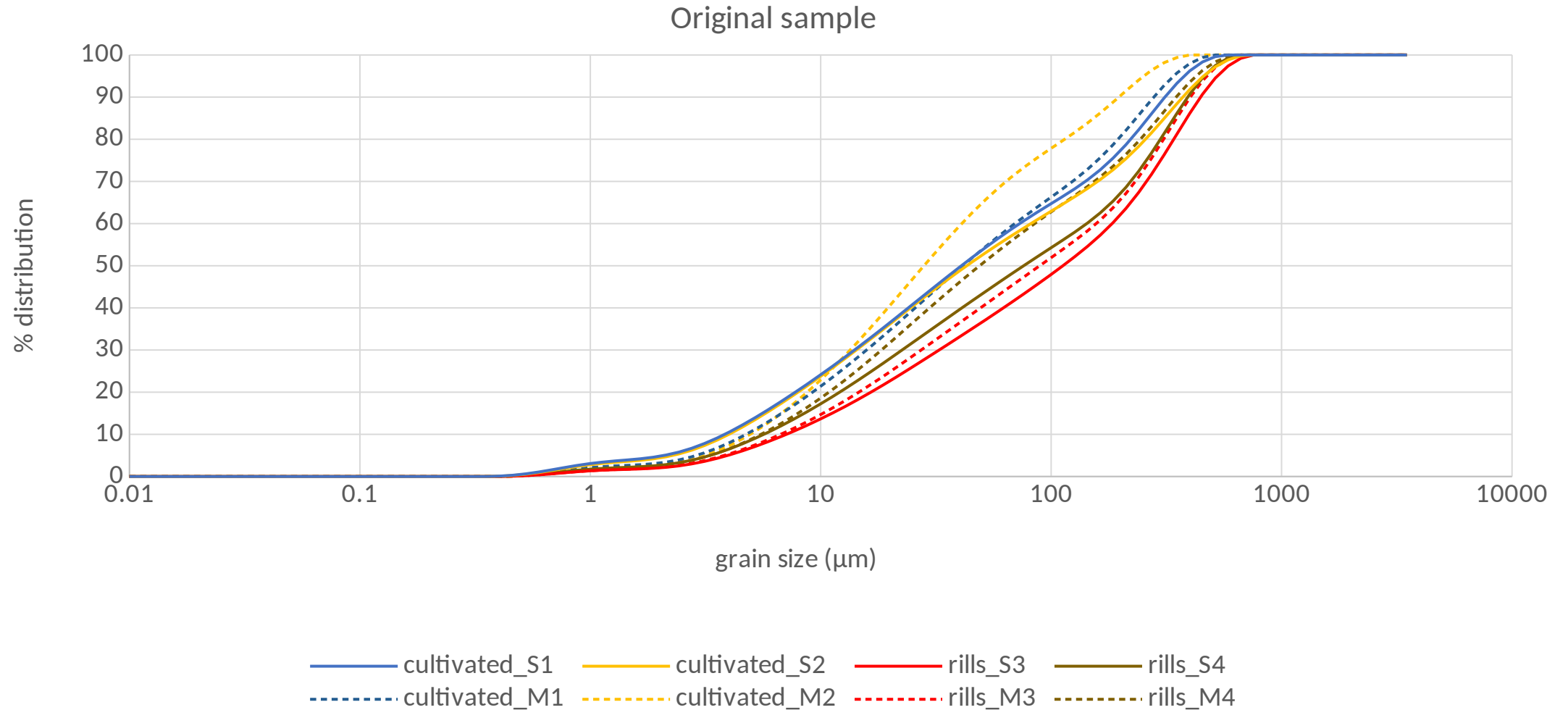
# Erosion plots- Jirkov

- Containers 6\*2 m
- Slope
- 3 simulators of same type
- Nozzles WSQ 40 (4 in square layout)
- Intensity of 60 mm/h

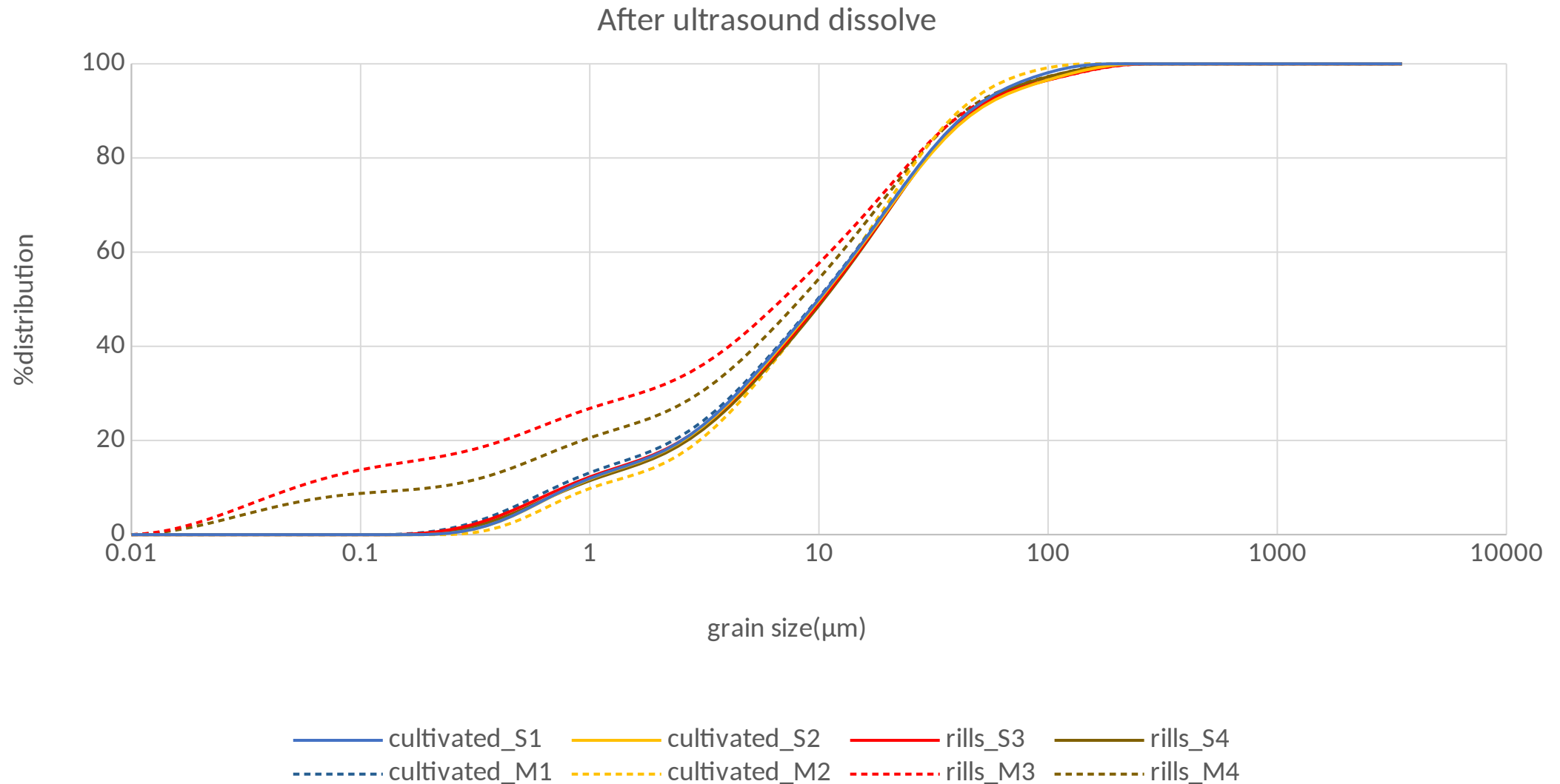




# Samples PSD comparison



# Samples PSD comparison



Thank you for your  
attention