



Royal Netherlands Institute for Sea Research

Summary of the discussion WinAxil operations and data processing problems 09.09.2010



XRF core scanning workshop

September 8 - 10 2010

NIOZ, Texel - The Netherlands



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Swiss Federal Institute of Technology Zurich

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Practicalities to improve measurement quality

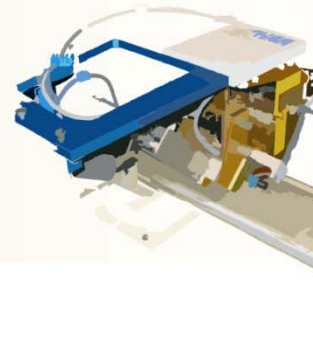
- **DT should not go over 50 % DT.**
This causes non-linear input-output relation and complicates peak fitting
- **For Silicon Drift Detector shorter shape times allow higher count rates.**



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Practicalities to improve data processing

- Using K or $K\alpha$ & $K\beta$ for your processing model?

K for low peaks

$K\alpha$ & $K\beta$ for high peaks

- Always account for sum and escape peaks

- Goodness-of-fit parameter

Chi-squared values are hard to interpret.

A good alternative is the Signal vs. Standard dev. by
 $\text{Area} > 3 * D_Area$ (signal $> 3\sigma$)

Remark D_Area option only for $K\alpha$ & $L\alpha$ lines

- If signal Area $\leq 3\sigma$, replace value by detection lim.