Influence of filtration on TOC content

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Samples:

30 soil water-, throughfall- and stemflow-samples from different plots in Hessen (Germany)

Filtration:

- Paper filters Sartorius „Schwarzband“ (388), 12-15 µm, 84 g/m^2, washed with deionized water and with the sample
- Membrane filters Sartorius (Cellulose-Acetat), 0,45 µm, washed with the sample

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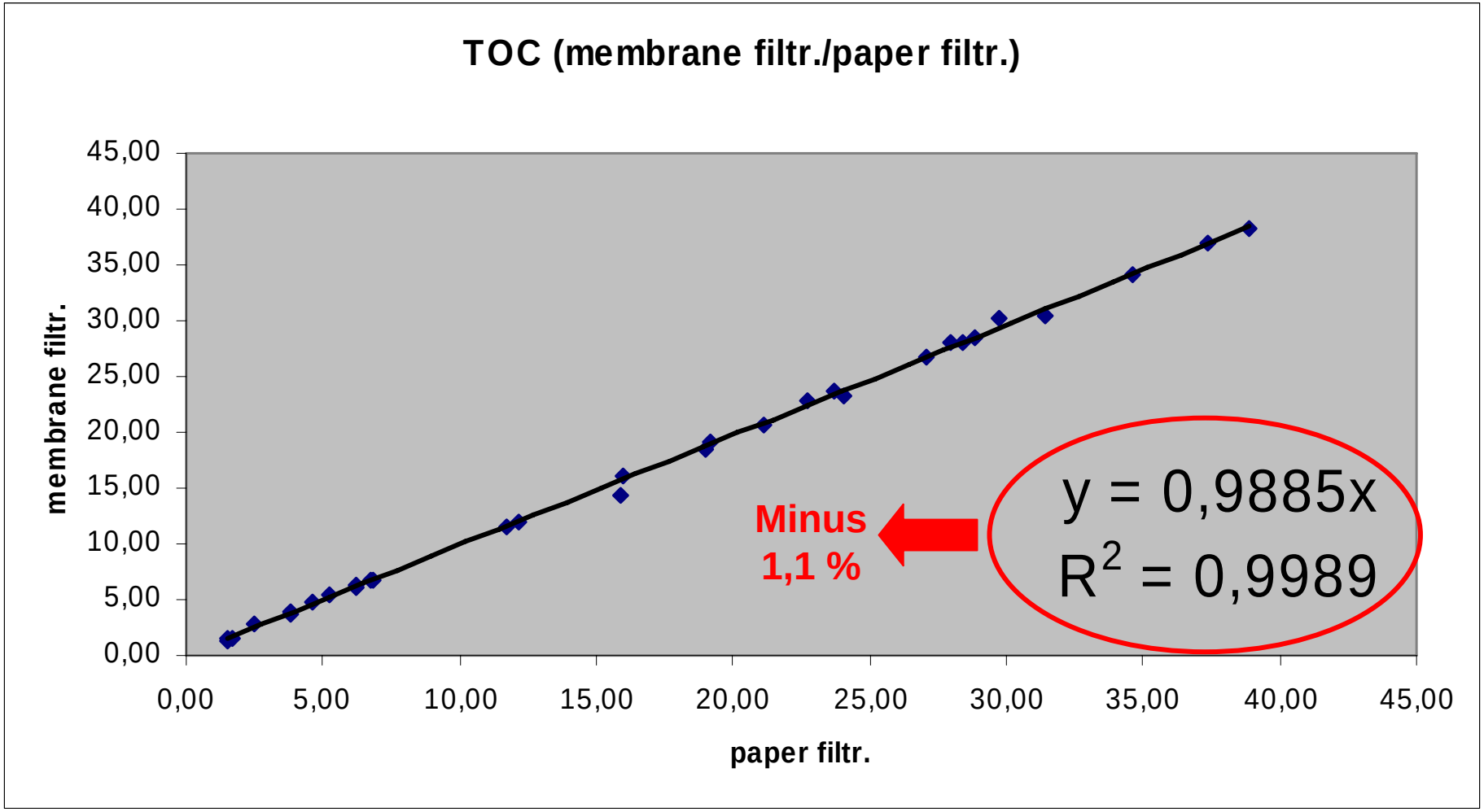

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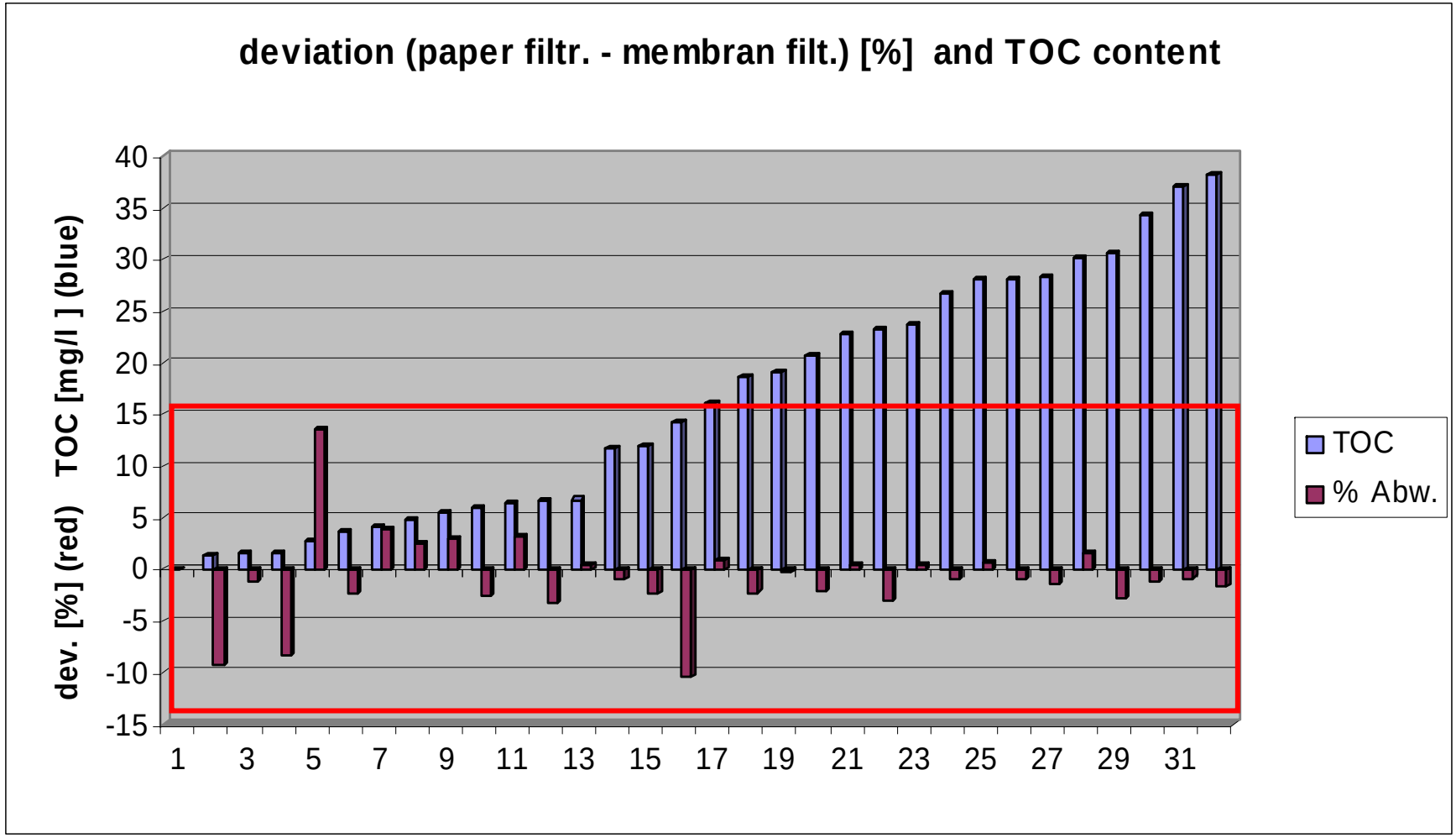

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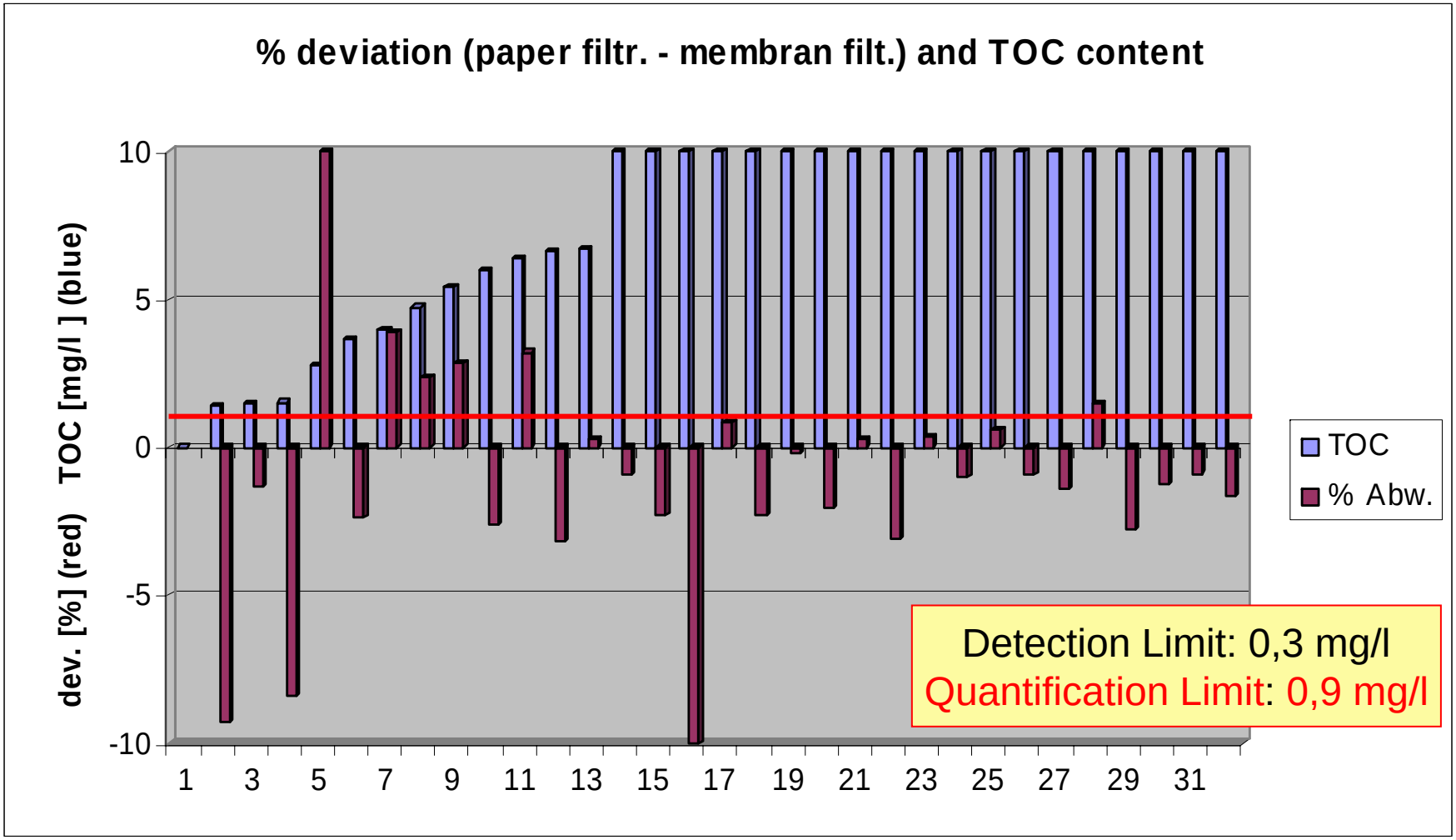

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Conclusions:

- The concentration of TOC is about 1 % lower after filtration with membrane filters (0,45 µm) than with paper filters (12-15 µm)

- The price and the time need is much lower for paper filters than for membrane filters

- The conservation effect for the samples by filtration with membrane filters may be better than with paper filters

=> **Normally for all water samples washed paper filters are used; only problematic samples (e.g. with mass noun) are filtered additionally with membrane filters**