

An intercalibration between the two methods used to collect soluble Fe samples on the U.S. Atlantic GEOTRACES cruises are shown below (Fitzsimmons, manuscript in preparation).

The 2010 cruise (Lisbon to Cape Verde, this study) used the 10kDa cross-flow filtration system, while the 2011 cruise (Woods Hole to Cape Verde) used the 0.02  $\mu\text{m}$  Anodisc filtration. **Soluble Fe produced by cross-flow filtration (10kDa membrane) is only ~65-70% of the soluble Fe produced by Anopore filtration!** The difference in soluble Fe between these two filtration methods is a function of 1) a larger pore size for Anopore filters than for a 10kDa cross flow filtration membrane, and 2) a natural variation of the size distribution of Fe complexes with depth and geographic location.

