

Figure 0.1: Estimated back diffused data series with different diffusion length estimates: diffusion length estimate from spectral fit (σ_{fit}) , maximum (σ_{Max}^{Theo}) and minimum (σ_{Min}^{Theo}) theoretically estimated diffusion lengths and final estimated diffusion length.

	Crete		Site A		Site B		Site D		Site E		Site G	
	$\sigma_{ m opt}$	$\sigma_{ m firn}$										
FFT												
DCT	6.08	6.02	5.97	5.85	5.71	5.83	4.55	4.41	6.37	6.24	8.81	8.72
NDCT	5.98	5.93	6.27	6.16	6.25	6.36	4.57	4.43	6.55	6.43	8.84	8.75

	Crete		Site A		Site B		Site D		Site E		Site G	
	$\sigma_{ m opt}$	$\sigma_{ m firn}$										
$\sigma_{ m constant} \ \sigma(z)$												

	Crete		Site A		Site B		Site D		Site E		Site G	
	$\sigma_{ m opt}$	$\sigma_{ m firn}$										
No constraints												
Constraints												