



Figure 1. Solid line is NINO3 index of ENSO phenomenon; circles are bulk stability (Σ) from central Weddell gyre region (yearly averages from within 20° W - 8° E and 59° - 63° S spatial domain); x's are estimated winter average ocean heat flux ($\langle F_T \rangle$; inverted to aid visual comparison) from the same region as Σ . Ordinate for all three time series is given in z-scores (standard deviations about mean values). Error bars on Σ and $\langle F_T \rangle$ points reflect scatter within spatial domain. r_Σ gives the degree of linear correlation between NINO3 and Σ , and $r_{\langle F_T \rangle}$ between NINO3 and $\langle F_T \rangle$. Correlation confidence levels (presented following @ symbol) are determined from bootstrap PDF (inset; described thoroughly in Appendix). Fractional correlations (r' ; see text for details) are given as function of abscissa by boxes at lower portion of figure showing percent contribution of each pair of points to overall correlation (solid boxes are contributions for bulk stability; dashed boxes are for $\langle F_T \rangle$).