Figures:

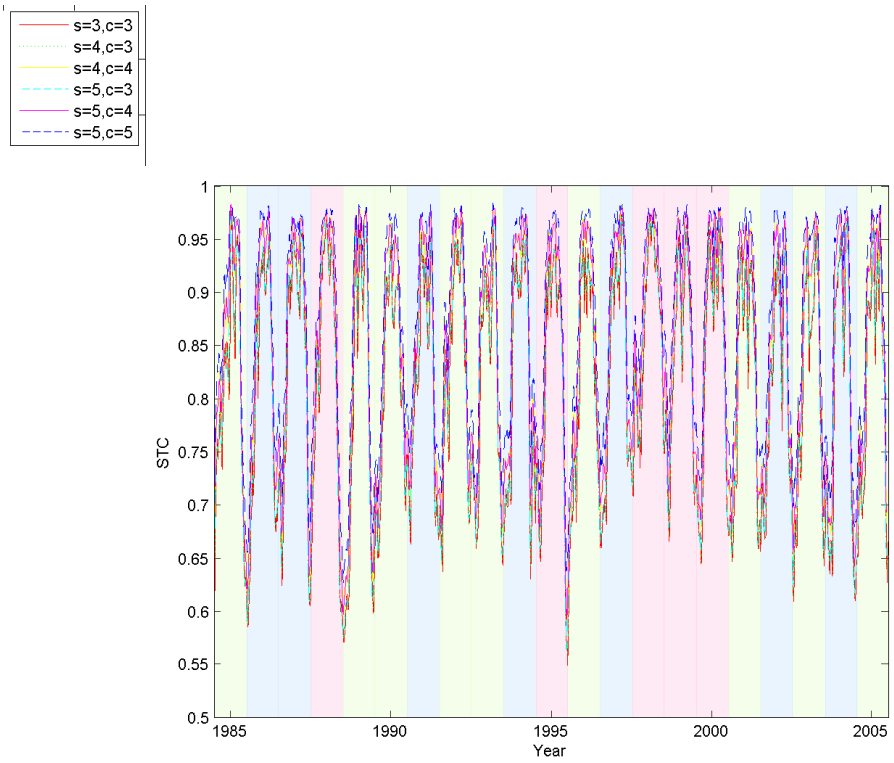

Figure 1: STC computations using different time slice sizes (s) and moving cube sizes (c) and with a moving window average of 5 weeks (i.e., 2 weeks before and 2 weeks after the current week being analyzed). Results using moving window averages of 0, 3, 7, 9 and 11 are similar.

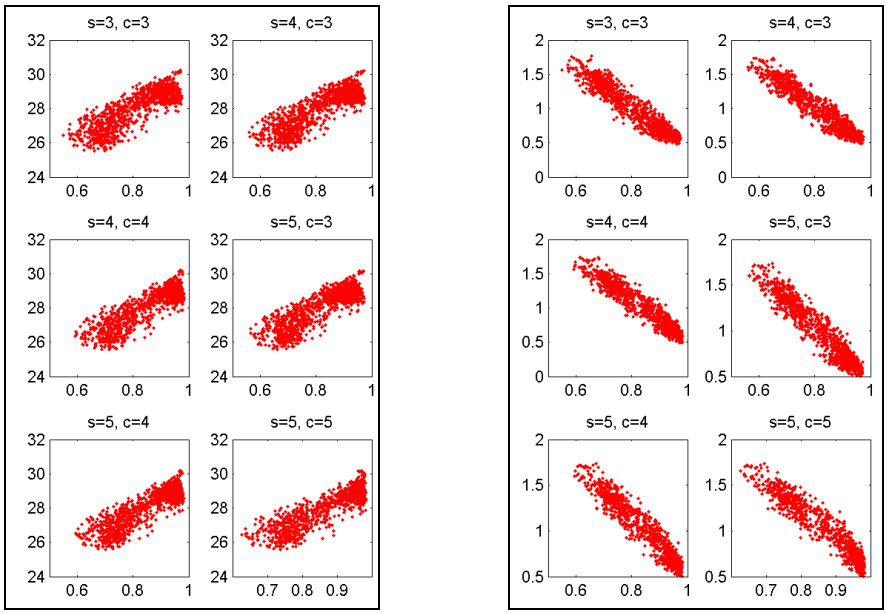

Figure 2: Left: Scatter plot of STC (x-axis) vs mean of SST time-slice (y-axis). Right: Scatter plot of STC (x-axis) vs standard deviation of the SST time-slice window (y-axis). A moving window of 5 weeks was used for threshold computation.

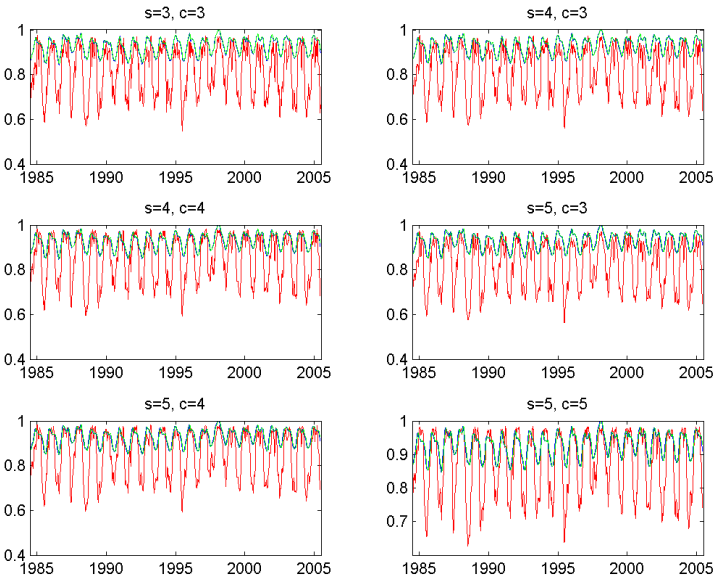

Figure 3: The STC plots (red) together with the mean of the slice window used in STC calculations (green) and the threshold obtained by taking the mean of 5 weeks centered at the current week being analyzed (blue). The mean of the slice window and the threshold are divided by their maximum normalize the values. Different slice window sizes (s) and moving cube sizes (c) were used.

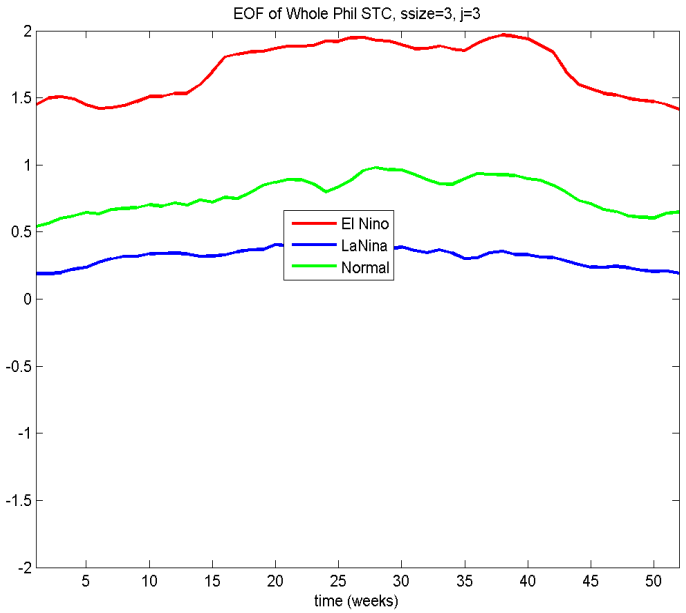

Figure 4: The STC data (Figure 1) were separated into El Nino, La Nina or normal years and EOF analysis was applied for each group.

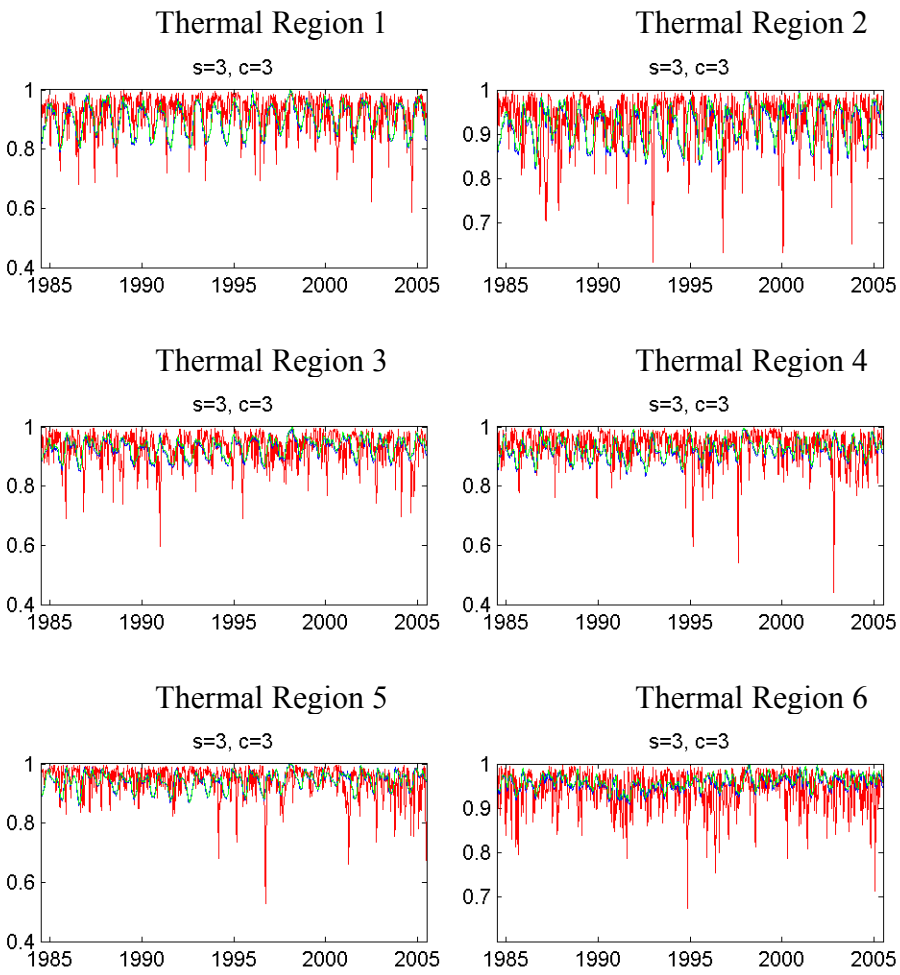

Figure 5: The STC of the thermal regions (red); upper left to lower right: thermal region 1 to thermal region 6. Also plotted are the mean of the slice window used in STC calculations (green) and the threshold obtained by getting the mean of 5 weeks centered at the current week being analyzed (blue). The mean of the slice window and the threshold are divided by their maximum to normalize the values. Different slice window sizes (s) and moving cube sizes (c) were used.

Tables

Table 1. The single-STC calculation for the thermal regions using different moving average windows, time slice windows and cube sizes.

	Moving Average j=0			Moving Average j=3			Moving Average j=5		
TR	**Cube size=3**	**Cube size=4**	**Cube size=5**	**Cube size=3**	**Cube size=4**	**Cube size=5**	**Cube size=3**	**Cube size=4**	**Cube size=5**
1	0.9835	0.9969	0.9977	0.9754	0.9945	0.9957	0.9599	0.9909	0.9961
2	0.9949	0.9842	0.9685	0.9937	0.9862	0.9702	0.9906	0.9902	0.9767
3	0.9887	0.9688	0.9474	0.9920	0.9745	0.9522	0.9932	0.9869	0.9687
4	0.9892	0.9938	0.9884	0.9827	0.9867	0.9765	0.9762	0.9882	0.9818
5	0.9947	0.9820	0.9653	0.9943	0.9845	0.9661	0.9935	0.9925	0.9784
6	0.9937	0.9805	0.9629	0.9939	0.9805	0.9592	0.9911	0.9858	0.9678