

A Test to Compare Interval Time Series

Elizabeth Ann Maharaj

Department of Econometrics & Business Statistics

Monash University, Melbourne, Australia

email: ann.maharaj@monash.edu

Paula Brito

Faculdade de Economia, Universidade do Porto & LIAAD INESC TEC,
Portugal

email: mpbrito@fep.up.pt

Paulo Teles

Faculdade de Economia, Universidade do Porto & LIAAD INESC TEC,
Portugal

email: pteles@fep.up.pt

1 Supplementary Materials for Simulation Studies

MATLAB Scripts

<i>wvrc_sim_size1.m</i>	<i>wvrc_sim_power1.m</i>
<i>wvc_sim_cen_size1.m</i>	<i>4wvc_sim_cen_power1.m</i>
<i>wvrc_sim_size2.m</i>	<i>wvrc_sim_power2.m</i>
<i>wvc_sim_cen_size2.m</i>	<i>wvc_sim_cen_power2.m</i>
	<i>wvrc_sim_power3.m</i>
	<i>wvc_sim_cen_power3.m</i>

Data for Simulation Studies

<i>rad1d.mat</i>	<i>cen1d.mat</i>	<i>mod1_256.xlsx</i>	<i>mod1_1024.xlsx</i>
<i>rad2d.mat</i>	<i>cen2d.mat</i>	<i>mod2_256.xlsx</i>	<i>mod2_1024.xlsx</i>
<i>rad1g.mat</i>	<i>cen1g.mat</i>	<i>mod3_256.xlsx</i>	<i>mod3_1024.xlsx</i>
<i>rad2g.mat</i>	<i>cen2g.mat</i>	<i>mod4_256.xlsx</i>	<i>mod4_1024.xlsx</i>
<i>rad1i.mat</i>	<i>cen1i.mat</i>	<i>ar0_256.xlsx</i>	<i>ar0_1024.xlsx</i>
<i>rad2i.mat</i>	<i>cen2i.mat</i>	<i>ar03_256.xlsx</i>	<i>ar03_1024.xlsx</i>
		<i>ar05_256.xlsx</i>	<i>ar05_1024.xlsx</i>
		<i>ar08_256.xlsx</i>	<i>ar08_1024.xlsx</i>

Figure 1: ITS from processes ST1, ST2, ST3 for size estimation.

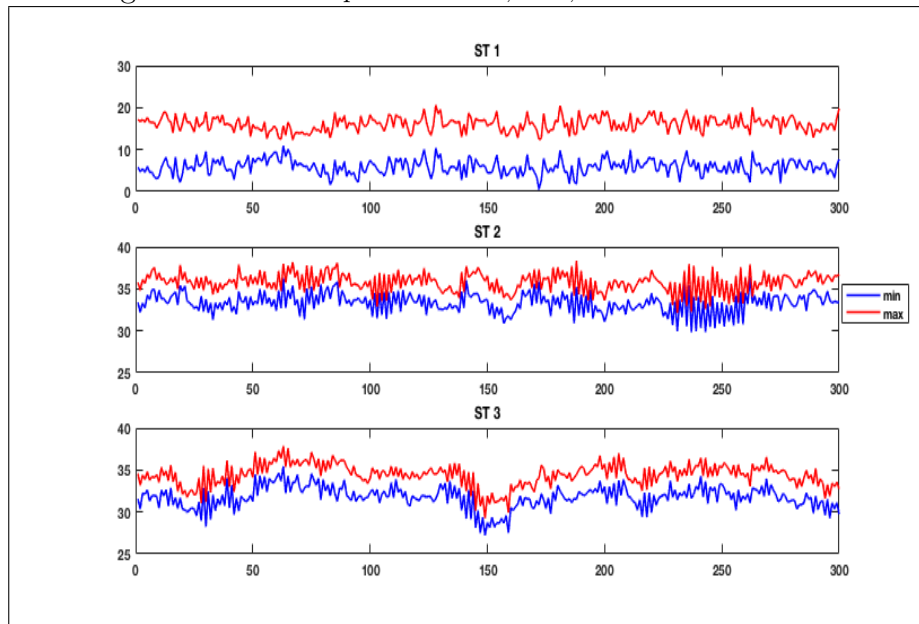


Figure 2: ITS from AR(1) processes

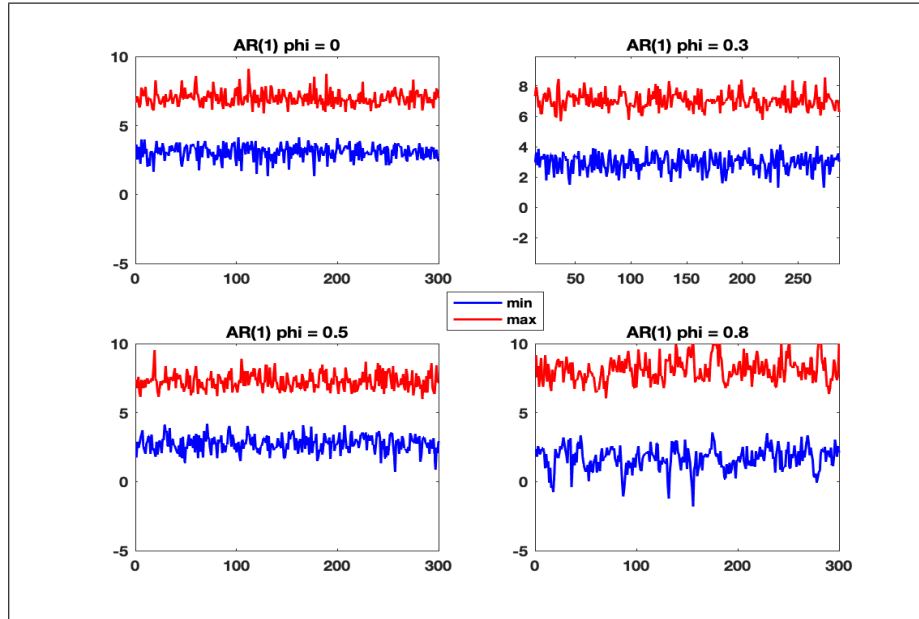
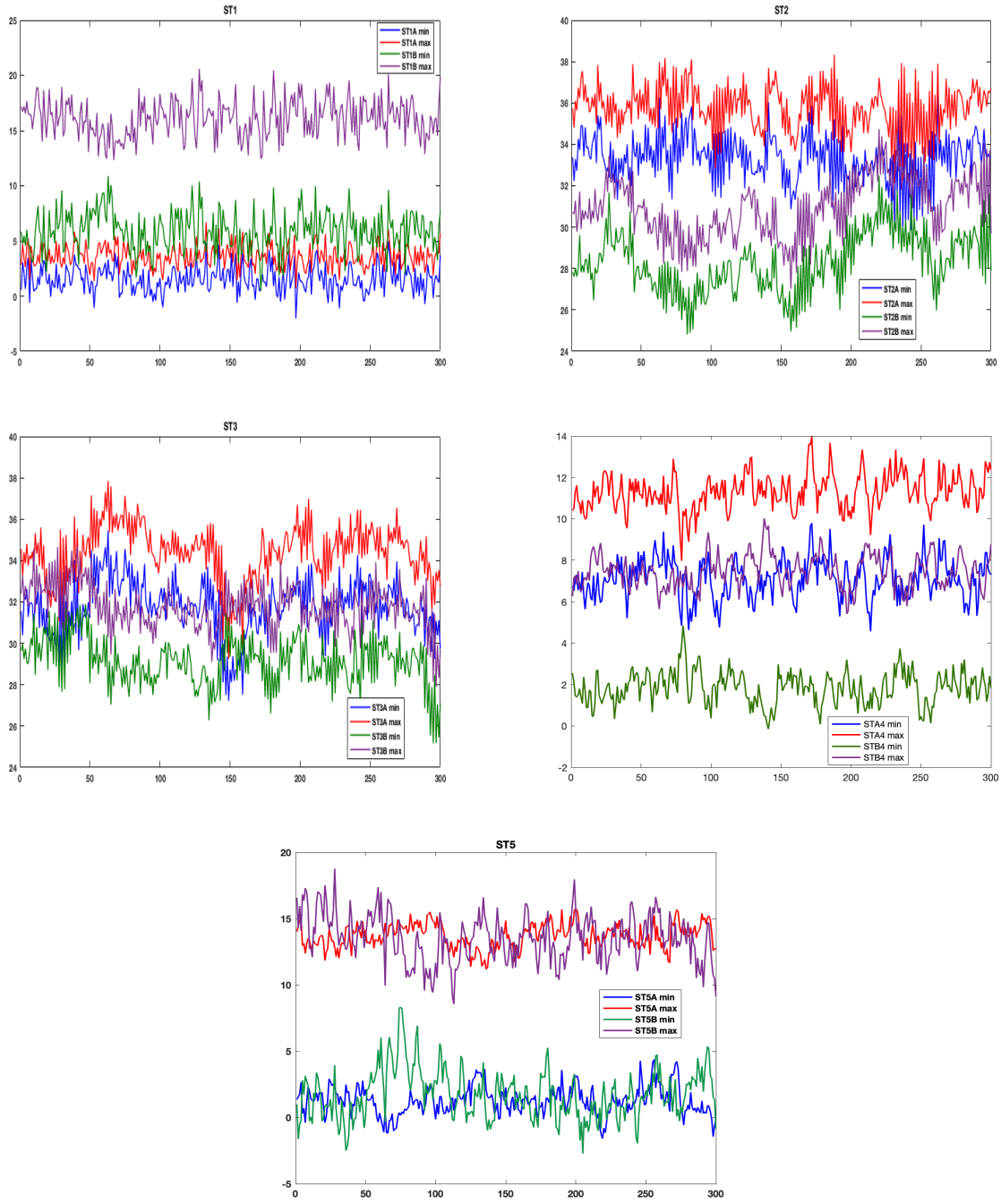


Figure 3: ITS for power estimation: (ST1A ST1B), (ST2A ST2B), (ST3A ST3B), (ST4A ST4B), (ST5A ST5B).



2 Supplementary Materials for Application

MATLAB Scripts

sea_ITS_wvarcov.m

sea_daily_means_wvar.m

Data for Application

maxmin.mat

maxmin365.xlsx

4dailymeans.xlsx

Sea Level ITS Plots and Test Results

Figure 4: Daily Sea Levels 2010-2012

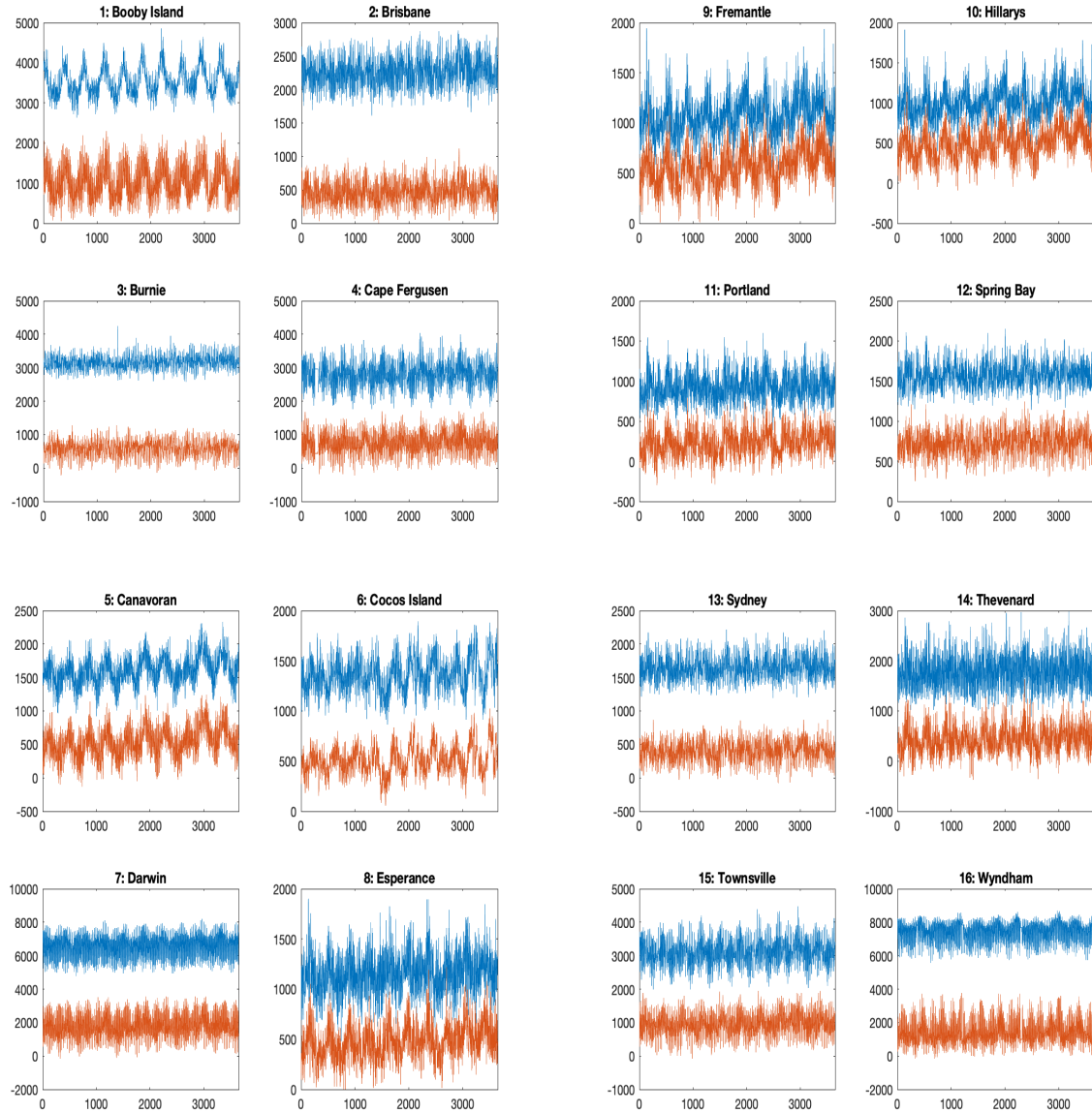


Table 1: Randomisation Tests: ITS (Radius and Centre).

Booby Island Brisbane		Booby Island Burnie		Booby Island Cape Fergusen		Booby Island Canavoron	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.9360	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.9630	2	0.0000
3	0.0000	3	0.0000	3	0.0170	3	0.0000
4	0.0000	4	0.0000	4	0.4030	4	0.0000
5	0.0000	5	0.0470	5	0.4660	5	0.0000
6	0.0000	6	0.0000	6	0.1740	6	0.0000
7	0.0000	7	0.0000	7	0.0000	7	0.0000
8	0.0000	8	0.0000	8	0.4010	8	0.0080

Booby Island Cocos Island		Booby Island Darwin		Booby Island Esperance		Booby Island Freemantle	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0170	1	0.000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.0410	5	0.0000	5	0.0000
6	0.0000	6	0.2320	6	0.0000	6	0.0000
7	0.0000	7	0.0000	7	0.0000	7	0.0000
8	0.0000	8	0.5970	8	0.0000	8	0.0000

Booby Island Hillarys		Booby Island Portland		Booby Island Spring Bay		Booby Island Sydney	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.0000	5	0.0000	5	0.0000
6	0.0000	6	0.0000	6	0.0000	6	0.0000
7	0.0000	7	0.0000	7	0.0000	7	0.0000
8	0.0000	8	0.0000	8	0.0000	8	0.0000

Table 2: Randomisation Tests: ITS (Radius and Centre).

Booby Island Thevenard		Booby Island Townsville		Booby Island Wyndham		Brisbane Burnie	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0450	2	0.0000	2	0.0000
3	0.0850	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0210	4	0.0000	4	0.0000
5	0.0000	5	0.8890	5	0.4930	5	0.0000
6	0.0880	6	0.0670	6	0.2450	6	0.6500
7	0.0000	7	0.0000	7	0.0790	7	0.0260
8	0.0000	8	0.2800	8	0.3490	8	0.1960

Brisbane Cape Ferguson		Brisbane Canavoron		Brisbane Cocos Island		Brisbane Darwin	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0160	3	0.0000	3	0.0000
4	0.0000	4	0.7270	4	0.0000	4	0.0000
5	0.0000	5	0.0030	5	0.1190	5	0.0000
6	0.1510	6	0.3260	6	0.7350	6	0.3310
7	0.0000	7	0.0010	7	0.0700	7	0.0000
8	0.0000	8	0.0000	8	0.3420	8	0.0000

Brisbane Esperance		Brisbane Freemantle		Brisbane Hillarys		Brisbane Portland	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0770	3	0.0000	3	0.0000	3	0.0100
4	0.0090	4	0.0000	4	0.0000	4	0.0970
5	0.0000	5	0.0000	5	0.0000	5	0.0000
6	0.0220	6	0.3180	6	0.3480	6	0.0160
7	0.4580	7	0.0390	7	0.0140	7	0.1660
8	0.2580	8	0.0570	8	0.0230	8	0.6850

Table 3: Randomisation Tests: ITS (Radius and Centre).

Brisbane Spring Bay		Brisbane Sydney		Brisbane Thevenard		Brisbane Ê Townsville	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.2240	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0060	4	0.0770	4	0.0000	4	0.0000
5	0.9230	5	0.5840	5	0.5640	5	0.0000
6	0.0780	6	0.0000	6	0.0000	6	0.3600
7	0.3510	7	0.4280	7	0.0000	7	0.0000
8	0.0000	8	0.0570	8	0.0060	8	0.0000

Brisbane Wyndham		Burnie Cape Ferguson		Burnie Canavoron		Burnie Cocos Island	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0070	2	0.0000
3	0.0000	3	0.0000	3	0.1410	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.0650	5	0.0000	5	0.0000
6	0.0000	6	0.0720	6	0.6440	6	0.7870
7	0.0000	7	0.0000	7	0.0000	7	0.0000
8	0.0000	8	0.0000	8	0.0000	8	0.0980

Burnie Darwin		Burnie Esperance		Burnie Freemantle		Burnie Hillarys	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0340	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.3770	2	0.1070	2	0.1740
3	0.0000	3	0.1240	3	0.2120	3	0.2460
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.6900	5	0.0000	5	0.0000	5	0.0000
6	0.1070	6	0.0300	6	0.5030	6	0.5510
7	0.0000	7	0.1370	7	0.0000	7	0.0000
8	0.0000	8	0.0130	8	0.0040	8	0.0030

Table 4: Randomisation Tests: ITS (Radius and Centre).

Burnie Portland		Burnie Spring Bay		Burnie Sydney		Burnie Thevenard	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.2140	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0080
5	0.0000	5	0.0000	5	0.0000	5	0.0000
6	0.0040	6	0.0730	6	0.0360	6	0.0000
7	0.5160	7	0.0260	7	0.0630	7	0.0000
8	0.3230	8	0.0190	8	0.9840	8	0.0000

Burnie Ë Townsville		Burnie Wyndham		Cape Ferguson Canavoron		Cape Ferguson Cocos Island	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.7270	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0080	5	0.3850	5	0.0000	5	0.0000
6	0.1420	6	0.0000	6	0.0210	6	0.1360
7	0.0000	7	0.0000	7	0.2010	7	0.0760
8	0.0000	8	0.0000	8	0.4740	8	0.0020

Cape Ferguson Darwin		Cape Ferguson Esperance		Cape Ferguson Freemantle		Cape Ferguson Hillarys	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0410	5	0.0000	5	0.0000	5	0.0000
6	0.7880	6	0.0030	6	0.0280	6	0.0450
7	0.9590	7	0.0000	7	0.0200	7	0.0620
8	0.0000	8	0.0120	8	0.0390	8	0.0360

Table 5: Randomisation Tests: ITS (Radius and Centre).

Cape Ferguson Portland		Cape Ferguson Spring Bay		Cape Ferguson Sydney		Cape Ferguson Thevenard	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.1020	1	0.0120	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.5010
4	0.0000	4	0.0000	4	0.0000	4	0.0010
5	0.0000	5	0.0000	5	0.0000	5	0.0000
6	0.0000	6	0.0100	6	0.0000	6	0.7820
7	0.0000	7	0.0000	7	0.0000	7	0.8780
8	0.0010	8	0.0000	8	0.0000	8	0.0390

Cape Ferguson Townsville		Cape Ferguson Wyndham		Canavoron Cocos Island		Canavoron Darwin	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.7700	5	0.3310	5	0.0000
6	0.4300	6	0.0030	6	0.4100	6	0.0980
7	0.6140	7	0.0000	7	0.3010	7	0.2830
8	0.1990	8	0.0000	8	0.0000	8	0.0260

Canavoron Esperance		Canavoron Freemantle		Canavoron Hillarys		Canavoron Portland	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0050
2	0.0000	2	0.2510	2	0.1650	2	0.0350
3	0.7660	3	0.0060	3	0.0070	3	0.7350
4	0.0100	4	0.0000	4	0.0000	4	0.0550
5	0.0050	5	0.0030	5	0.0150	5	0.0000
6	0.0610	6	0.7070	6	0.8110	6	0.0410
7	0.0000	7	0.0130	7	0.0840	7	0.0000
8	0.0000	8	0.0000	8	0.0000	8	0.0000

Table 6: Randomisation Tests: ITS (Radius and Centre).

Canavoron Spring Bay		Canavoron Sydney		Canavoron Thevenard		Canavoron Townsville	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0050	1	0.0000	1	0.0000	1	0.1170
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0060	4	0.2630	4	0.0000	4	0.0000
5	0.0010	5	0.0190	5	0.1430	5	0.0000
6	0.2090	6	0.0320	6	0.0000	6	0.0670
7	0.0000	7	0.0000	7	0.1680	7	0.1970
8	0.0000	8	0.0000	8	0.1080	8	0.6810

Canavoron Wyndham		Cocos Island Darwin		Cocos Island Esperance		Cocos Island Freemantle	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.0000	5	0.0000	5	0.0000
6	0.0000	6	0.1930	6	0.0060	6	0.2880
7	0.0010	7	0.1230	7	0.0000	7	0.6720
8	0.0090	8	0.0000	8	0.7720	8	0.0720

Cocos Island Hillarys		Cocos Island Portland		Cocos Island Spring Bay		Cocos Island Sydney	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0010	5	0.0000	5	0.0740	5	0.2070
6	0.3570	6	0.0040	6	0.0240	6	0.0030
7	0.9200	7	0.0010	7	0.0090	7	0.0050
8	0.0380	8	0.1900	8	0.0000	8	0.0320

Table 7: Randomisation Tests: ITS (Radius and Centre).

Cocos Island Thevenard		Cocos Island Townsville		Cocos Island Wyndham		Darwin Esperance	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.4300	5	0.0000	5	0.0000	5	0.0000
6	0.0000	6	0.3050	6	0.0000	6	0.0180
7	0.0320	7	0.0780	7	0.0000	7	0.0000
8	0.0950	8	0.0010	8	0.0000	8	0.0000

Darwin Freemantle		Darwin Hillarys		Darwin Portland		Darwin Spring Bay	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.0000	5	0.0000	5	0.0000
6	0.0810	6	0.1020	6	0.0130	6	0.0520
7	0.0330	7	0.0780	7	0.0000	7	0.0000
8	0.0020	8	0.0010	8	0.0000	8	0.0000

Darwin Sydney		Darwin Thevenard		Darwin Townsville		Darwin Wyndham	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.9780
5	0.0000	5	0.0000	5	0.0090	5	0.0990
6	0.0080	6	0.7410	6	0.8340	6	0.0000
7	0.0000	7	0.8610	7	0.9170	7	0.0000
8	0.0000	8	0.0000	8	0.0000	8	0.0230

Table 8: Randomisation Tests: ITS (Radius and Centre).

Esperance Freemantle		Esperance Hillarys		Esperance Portland		Esperance Spring Bay	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0570	1	0.0500	1	0.0000	1	0.0000
2	0.0000	2	0.0010	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.4780	3	0.0000
4	0.0000	4	0.0020	4	0.3120	4	0.6380
5	0.8870	5	0.6720	5	0.0000	5	0.0000
6	0.0220	6	0.0110	6	0.4850	6	0.3890
7	0.0030	7	0.0000	7	0.3550	7	0.9870
8	0.1050	8	0.0700	8	0.0100	8	0.0000

Esperance Sydney		Esperance Thevenard		Esperance Townsville		Esperance Wyndham	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.1550	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.0000	5	0.0000	5	0.0000
6	0.8890	6	0.0000	6	0.0100	6	0.0000
7	0.8000	7	0.0000	7	0.0000	7	0.0000
8	0.0120	8	0.0360	8	0.0100	8	0.0000

Freemantle Hillarys		Freemantle Portland		Freemantle Spring Bay		Freemantle Sydney	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.7440	1	0.7440	1	0.0430	1	0.0000
2	0.0610	2	0.0610	2	0.0000	2	0.0000
3	0.0110	3	0.0110	3	0.0000	3	0.0140
4	0.0070	4	0.0070	4	0.0000	4	0.0000
5	0.0410	5	0.0410	5	0.0000	5	0.0000
6	0.3330	6	0.3330	6	0.2140	6	0.1900
7	0.0000	7	0.0000	7	0.0000	7	0.0000
8	0.1720	8	0.1720	8	0.0000	8	0.0000

Table 9: Randomisation Tests: ITS (Radius and Centre).

Freemantle Thevenard		Freemantle Townsville		Freemantle Wyndham		Hillarys Portland	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0150	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0110
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.0000	5	0.0000	5	0.0040
6	0.0000	6	0.1010	6	0.0000	6	0.0100
7	0.0120	7	0.0190	7	0.0000	7	0.0010
8	0.4160	8	0.0570	8	0.0000	8	0.0050

Hillarys Spring Bay		Hillarys Sydney		Hillarys Thevenard		Hillarys Townsville	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0310	1	0.0000	1	0.0000	1	0.0220
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0050	3	0.0000	3	0.0000
4	0.0010	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.0000	5	0.0000	5	0.0000
6	0.1980	6	0.1540	6	0.0000	6	0.1150
7	0.0020	7	0.0000	7	0.0260	7	0.0590
8	0.0000	8	0.0000	8	0.5090	8	0.0410

Hillarys Wyndham		Portland Spring Bay		Portland Sydney		Portland Thevenard	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0020	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.6320	4	0.4840	4	0.0000
5	0.0000	5	0.0000	5	0.0000	5	0.0000
6	0.0000	6	0.0920	6	0.6350	6	0.0000
7	0.0000	7	0.4990	7	0.3490	7	0.0000
8	0.0000	8	0.0020	8	0.4920	8	0.0000

Table 10: Randomisation Tests: ITS (Radius and Centre).

Portland Townsville		Portland Wyndham		Spring Bay Sydney		Spring Bay Thevenard	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.1090	4	0.0000
5	0.0000	5	0.0000	5	0.5780	5	0.3970
6	0.0040	6	0.0000	6	0.6880	6	0.0000
7	0.0000	7	0.0000	7	0.7450	7	0.0000
8	0.0010	8	0.0000	8	0.0070	8	0.0000

Spring Bay Townsville		Spring Bay Wyndham		Sydney Thevenard		Sydney Townsville	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.5590	1	0.0000	1	0.0000	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0000	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.0000	5	0.7830	5	0.0000
6	0.0240	6	0.0000	6	0.0000	6	0.0000
7	0.0000	7	0.0000	7	0.0000	7	0.0000
8	0.0000	8	0.0000	8	0.0000	8	0.0000

Sydney Wyndham		Thevenard Townsville		Thevenard Wyndham		Townsville Wyndham	
Scale	p-value	Scale	p-value	Scale	p-value	Scale	p-value
1	0.0000	1	0.0000	1	0.8590	1	0.0000
2	0.0000	2	0.0000	2	0.0000	2	0.0000
3	0.0000	3	0.0330	3	0.0000	3	0.0000
4	0.0000	4	0.0000	4	0.0000	4	0.0000
5	0.0000	5	0.0000	5	0.0000	5	0.3900
6	0.0000	6	0.6170	6	0.0210	6	0.0000
7	0.0000	7	0.7710	7	0.0000	7	0.0000
8	0.0000	8	0.0600	8	0.0000	8	0.0000

Table 11: Number of locations for which the ITS of each location is significantly differently from at all scales

Location	Number	Location	Number
Booby Island	8	Fremantle	2
Brisbane	2	Hillarys	2
Burnie	0	Portland	3
Cape Ferguson	1	Spring Bay	2
Canavaran	0	Sydney	3
Cocos Island	2	Thevenard	1
Darwin	0	Townsville	1
Esperance	2	Wyndham	8