

Supplementary Information

High temperatures-related elderly mortality varied greatly from year to year: important information for heat-warning systems

Yuming Guo^{1,2*}, Adrian G Barnett¹, Shilu Tong¹

¹ School of Public Health and Social Work, Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, QLD 4059, Australia;

² School of Medicine, The University of Queensland, Brisbane, QLD 4006, Australia.

***Corresponding author:**

Yuming Guo

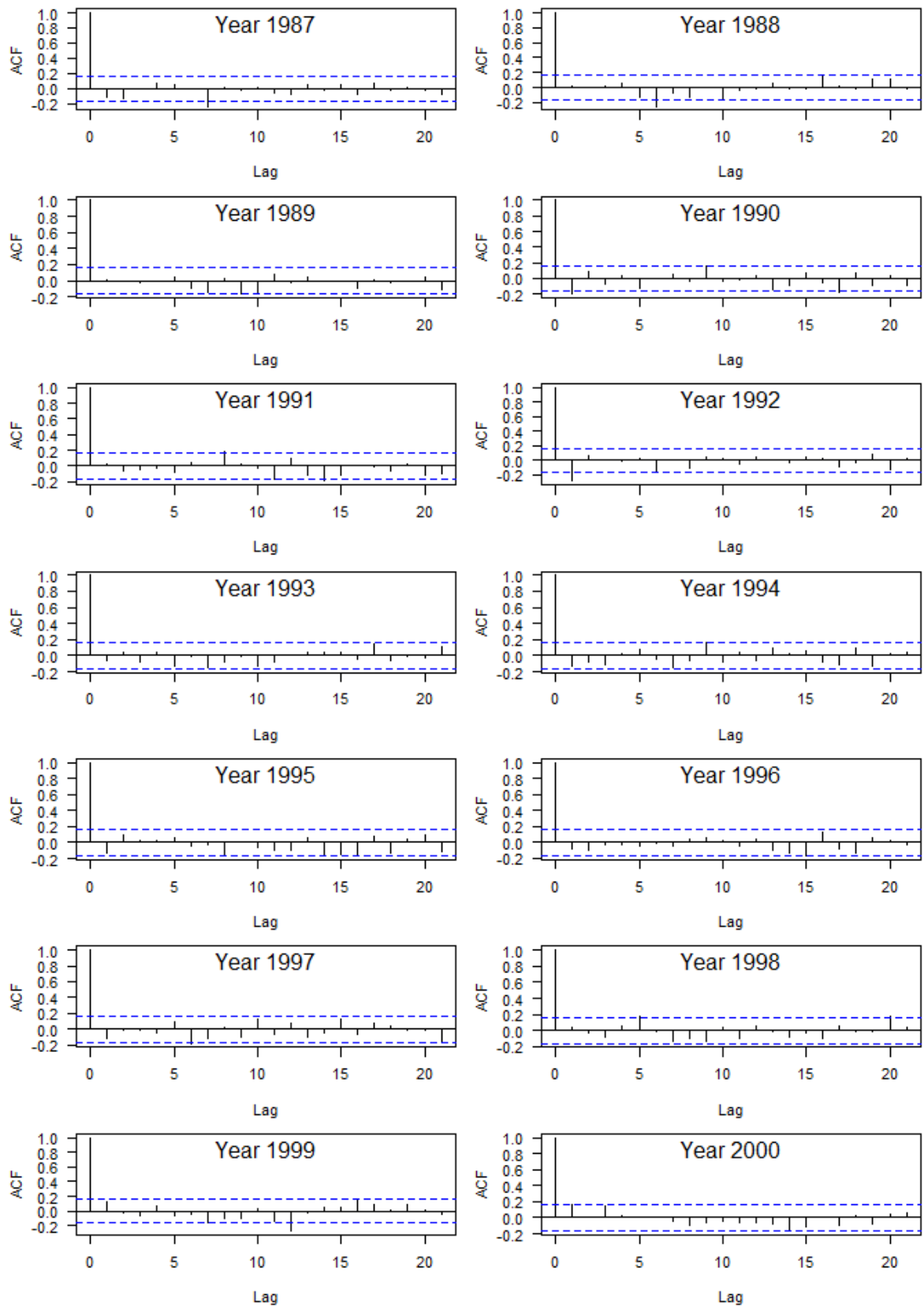
School of Medicine, The University of Queensland, Brisbane, QLD 4006, Australia;

Telephone: +61 7 3346 4991;

Email address: guoyuming@yahoo.cn;

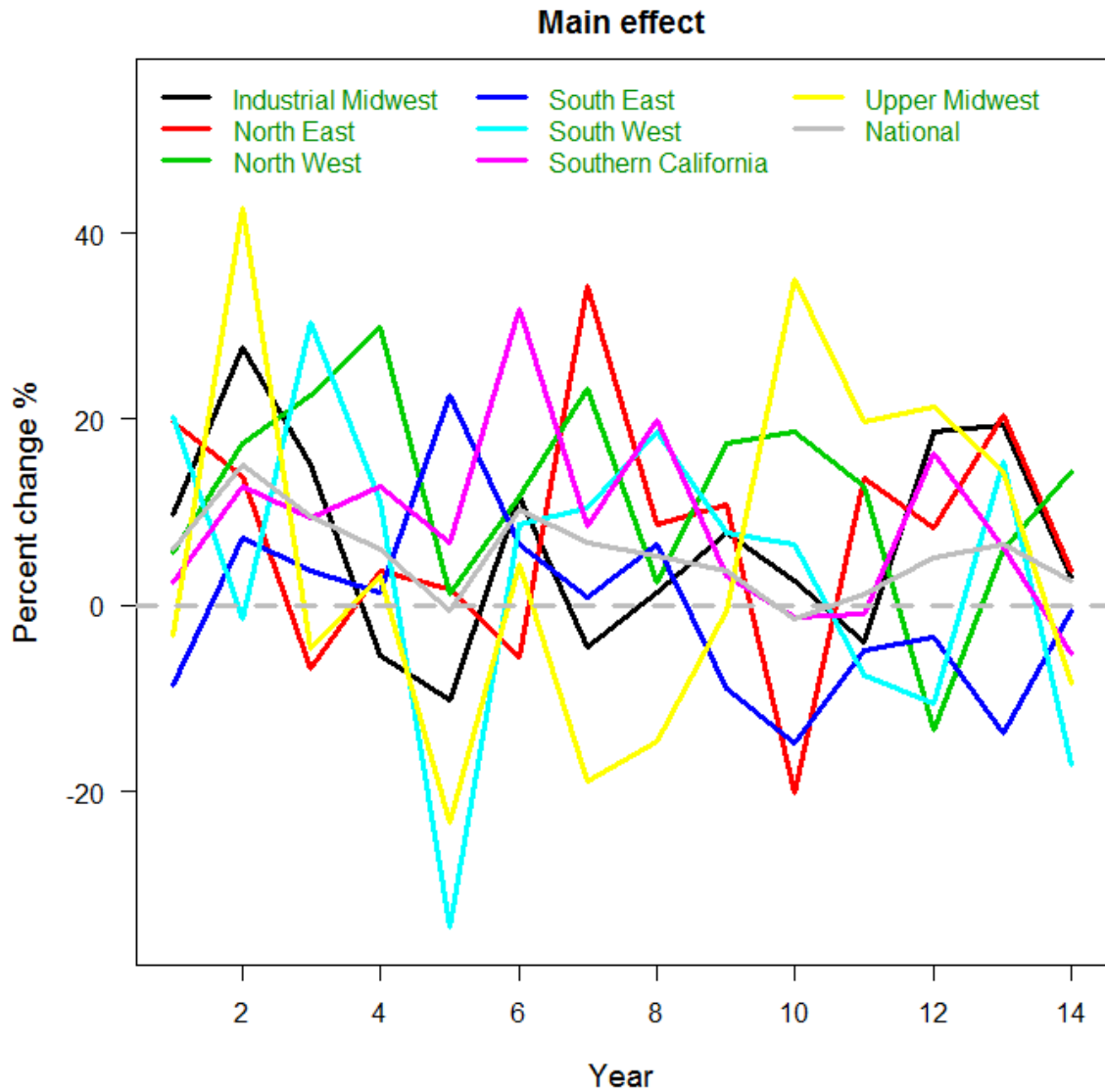
Supplementary Table S1: List of the 83 US cities by region.

Region	City	Abbreviation	State	Region	City	Abbreviation	State
Industrial Midwest	Akron	akr	OH	South East	Atlanta	atla	GA
	Buffalo	buff	NY		Baton Rouge	batr	LA
	Chicago	chic	IL		Birmingham	birn	AL
	Cincinnati	cinc	OH		Cayce	cayc	SC
	Cleveland	clev	OH		Charlotte	char	NC
	Columbus	clmo	OH		Dallas/Fort Worth	dlft	TX
	Dayton	dayt	OH		Greensboro	grnb	NC
	Detroit	det	MI		Houston	hous	TX
	Fort Wayne	ftwa	IN		Huntsville	hunt	AL
	Grand Rapids	gdrp	MI		Jackson	jcks	MS
	Indianapolis	indi	IN		Jacksonville	jckv	FL
	Lexington	lex	KY		Knoxville	knox	TN
	Louisville	loui	KY		Memphis	memp	TN
	Madison	madi	WI		Miami	miam	FL
	Milwaukee	milw	WI		Mobile	mobi	AL
	Pittsburgh	pitt	PA		Nashville	nash	TN
	St. Louis	stlo	MO		New Orleans	no	LA
Toledo	tole	OH	Orlando	orla	FL		
North East	Baltimore	balt	MD	Raleigh	ral	NC	
	Boston	bost	MA	Shreveport	shr	LA	
	Jersey City	jers	NJ	St. Petersburg	stpe	FL	
	Norfolk	nor	VA	Tampa	tamp	FL	
	Newark	nwk	NJ	Tulsa	tuls	OK	
	New York	ny	NY	South West	Albuquerque	albu	NM
	Philadelphia	phil	PA		Austin	aust	TX
	Providence	prov	RI		Corpus Christi	corp	TX
	Rochester	roch	NY		El Paso	elpa	TX
	Syracuse	syra	NY		Las Vegas	lasv	NV
Washington	dc	DC	Lubbock		lubb	TX	
North West	Denver	denv	CO		Oklahoma City	okla	OK
	Oakland	oakl	CA		Phoenix	phoe	AZ
	Portland	port	OR		San Antonio	sana	TX
	Sacramento	sacr	CA		Tucson	tucs	AZ
	Salt Lake City	salt	UT	Southern California	Fresno	fres	
	San Francisco	sanf	CA		Los Angeles	la	CA
	San Jose	sanj	CA		Riverside	rive	CA
	Seattle	seat	WA		San Bernardino	sanb	CA
	Spokane	spok	WA		San Diego	sand	CA
	Tacoma	taco	WA		Santa Ana/Anaheim	staa	CA
Upper Midwest	Des Moines	desm	IA				
	Kansas City	kan	MO				
	Lincoln	linc	NE				
	Minneapolis/St. Paul	minn	MN				
	Wichita	wich	KS				



Supplementary Figure S1: Autocorrelation functions for the residuals from the time series analyses for each year in New York city. The high temperatures were defined as two or more

than two consecutive days with temperature above the 90th percentile. Dashed horizontal lines show the test that the autocorrelation is non-zero.



Supplementary Figure S2: Mean associations between high temperatures and elderly mortality by region between 1987 and 2000 using a univariate meta-analysis. The high temperatures were defined as two or more than two consecutive days with temperature above the 95th percentile for each city during each warm season .