

## Supplementary Material:

## A nonlinear causality estimator based on Non-Parametric Multiplicative Regression

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## 1 SUPPLEMENTARY TABLES

**Supplementary Table 1.** Mean causality for Dataset 2. Results are from pairwise/univariate and conditional/multivariate estimates from linear GC, Kernel-GC and  $C_{NPMR}$ 

GC pairwise		$x_1$	To: $x_2$	$x_3$	GC conditional		$x_1$	To: $x_2$	$x_3$
From:	$x_1$	_	0.688	0.279	From:	$x_1$	_	0.665	0.003
	$x_2$	0.002	_	0.502		$x_2$	0.003	_	0.226
	$x_3$	0.003	0.025	_		$x_3$	0.003	0.003	_
K - GC univariate		$x_1$	To: $x_2$	$x_3$	K - GC multivariate		$x_1$	To: $x_2$	$x_3$
From:	$x_1$	_	0.491	0.237	From:	$x_1$	_	0.476	0
	$x_2$	0.001	_	0.392		$x_2$	0	_	0.195
	$x_3$	0.001	0.018	_		$x_3$	0	0.001	_
$C_{NPMR}$ pairwise		$x_1$	To: $x_2$	$x_3$	$C_{NPMR}$ conditional		$x_1$	To: $x_2$	$x_3$
From:	$x_1$	_	0.614	0.172	From:	$x_1$	_	0.510	0 (-0.125)
	$x_2$	0 (-0.084)	_	0.422		$x_2$	0 (-0.003)	_	0.064
	$x_3$	0 (-0.018)	0.003	_		$x_3$	0 (-0.055)	0 (-0.018)	_