

A Novel Grey Relational Analysis Model with the Dispersion of Panel Data and its Application to Chinese Storm-Tide Disaster Losses

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Table S1. Storm tide direct economic losses of China's five coastal provinces, 2011-2015 (million yuan).

Province	Years				
	2011	2012	2013	2014	2015
Jiangsu	0.61	6.15	0.17	0.47	0.58
Zhejiang	1.92	42.57	28.17	4.33	11.2
Fujian	5.32	2.64	45.06	4.29	30.79
Guangdong	12.63	17.47	74.2	60.41	28.76
Guangxi	1.15	5.33	4.9	28.3	0.47

Table S2. Mariculture losses of China's five coastal provinces, 2011-2015 (thousands of hectares)

Province	Years				
	2011	2012	2013	2014	2015
Jiangsu	7.8	42.28	2.26	12.75	0.02
Zhejiang	0	48.47	37.81	9.55	27.44
Fujian	1.62	5.78	54.85	14.19	27.54
Guangdong	17.4	5.88	37.38	45.37	24.43
Guangxi	4.44	103.81	0.62	8.83	1.59

Table S3. Coastal engineering losses of China's five coastal provinces, 2011-2015 (kilometers)

Province	Years				
	2011	2012	2013	2014	2015
Jiangsu	9.5	20.1	6.37	23.78	0
Zhejiang	13.75	259.39	29.55	6.74	41.28
Fujian	0.05	3.87	125.02	13.67	88.71
Guangdong	2.15	6.15	100.38	20.37	29.01
Guangxi	22.75	21.07	7.64	75.97	4.47

Table S4. The death toll of China's five coastal provinces, 2011-2015 (person)

Province	Years				
	2011	2012	2013	2014	2015
Jiangsu	0	0	0	0	0
Zhejiang	0	0	0	0	0
Fujian	0	0	0	0	0
Guangdong	0	9	0	0	5
Guangxi	0	0	0	0	0

Table S5. Ship losses of China's five coastal provinces, 2011-2015 (ship)

Province	Years				
	2011	2012	2013	2014	2015
Jiangsu	0	0	0	0	0
Zhejiang	148	915	2124	202	639
Fujian	21	167	6066	413	4265
Guangdong	303	506	5382	1213	2325
Guangxi	0	1	32	501	0

Table S6. Number of collapsed houses of China's five coastal provinces, 2011-2015 (room)

Province	Years				
	2011	2012	2013	2014	2015
Jiangsu	0	233	0	0	127
Zhejiang	0	0	175	60	116
Fujian	200	6	1101	53	3858
Guangdong	600	1391	4001	11717	78
Guangxi	0	718	620	0	72

Table S7. Storm surge frequency of China's five coastal provinces, 2011-2015 (number)

Province	Years				
	2011	2012	2013	2014	2015
Jiangsu	1	2	2	3	1
Zhejiang	1	3	3	1	3
Fujian	1	2	5	3	3
Guangdong	1	4	3	3	2
Guangxi	1	3	3	2	2

Data sources: China marine disasters communiqué