Supplement for "Has dyke development in the Vietnamese Mekong Delta shifted flood hazard downstream?"

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Table S1. List of gauged data used in this study, name of station, its location, type of data and purpose of usage

no.	**name of station**	**geographical location**			**Data**		
		lat.	*long.*	*located at*	*data*	*type of data*	*used in*
1	Kratie	12.260°N	105.984°E	Mekong river (CFP)	H&Q[1]	daily	trend & boundary
2	Kampong Cham	11.932°N	105.336°E	Mekong river (CFP)	H	daily	calibration
3	Prekdam	11.815°N	104.807°E	Tonlesap river (CFP)	H	daily	calibration
4	Phnom Penh port	11.583°N	104.924°E	Tonlesap river (CFP)	H	daily	calibration
5	Neakluong	11.260°N	105.280°E	Mekong river (CFP)	H	daily	calibration
6	Khokhel	11.255°N	105.030°E	Bassac river (CFP)	H	daily	calibration
7	Tan Chau	10.805°N	105.235°E	Mekong river (VMD)	H&Q	daily/hourly	trend & calibration
8	Chau Doc	10.709°N	105.125°E	Bassac river (VMD)	H&Q	daily/hourly	trend & calibration
9	Vam Nao	10.567°N	105.350°E	Vam Nao river (VMD)	H&Q	hourly	calibration
10	Long Xuyen	10.393°N	105.435°E	Bassac river (VMD)	H	hourly	calibration
11	Cao Lanh	10.417°N	105.644°E	Mekong river (VMD)	H	hourly	calibration
12	Can Tho	10.041°N	105.799°E	Bassac river (VMD)	H&Q	daily/hourly	trend & calibration
13	My Thuan	10.278°N	105.910°E	Mekong river (VMD)	H&Q	daily/hourly	trend & calibration
14	Hung Thanh	10.659°N	105.779°E	Phuoc Xuyen canal (VMD)	H	hourly	calibration
15	Moc Hoa	10.777°N	105.935°E	Vaico river (VMD)	H	hourly	calibration
16	Kien Binh	10.617°N	106.050°E	Kenh 12 canal (VMD)	H	hourly	calibration
17	Xuan To	10.606°N	104.944°E	Vinh Te canal (VMD)	H	hourly	calibration
18	Tri Ton	10.436°N	105.056°E	Tri Ton canal (VMD)	H	hourly	calibration
19	Tan Hiep	10.118°N	105.285°E	Cai San canal (VMD)	H	hourly	calibration
20	Vi Thanh	9.784°N	105.467°E	Xa No canal (VMD)	H	hourly	calibration
21	Vung Tau	10.333°N	107.067°E	South China Sea	H	hourly	model boundary
22	Vam Kenh	10.270°N	106.740°E	Tieu branch - Mekong estuary	H	hourly	model boundary
23	Binh Dai	10.197°N	106.711°E	Dai branch - Mekong estuary	H	hourly	model boundary
24	An Thuan	9.976°N	106.605°E	Ham Luong branch - Mekong estuary	H	hourly	model boundary
25	Ben Trai	9.881°N	106.529°E	Co Chien branch - Mekong estuary	H	hourly	model boundary
26	My Thanh	9.425°N	106.171°E	Bassac estuary	H	hourly	model boundary
27	Ganh Hao	9.031°N	105.419°E	Ganh Hao estuary	H	hourly	model boundary
28	Song Doc	9.041°N	104.833°E	Song Doc river (VMD)	H	hourly	model boundary
29	Xeo Ro	9.865°N	105.111°E	Cai Lon estuary (VMD)	H	hourly	model boundary
30	Rach Gia	10.012°N	105.084°E	Gulf of Thailand	H	hourly	model boundary

[1] *H - water stage data, Q - discharge data*

Table S2. Changes in inundation area as percentage of provincial area between the two model setups (with / without high-dyke system). The numbers are the mean of the two model setups as given in Table 3.

No.	Province	**no high-dyke systems** (Scenarios S1 & S3)			**with high-dyke systems** (Scenarios S2 & S4)			**changes**		
		shallow inundation (< 1.0 m)	*deep inundation (> 1.0m)*	*total inundated area*	*shallow inundation (< 1.0 m)*	*deep inundation (> 1.0m)*	*total inundated area*	*shallow inundation (< 1.0 m)*	*deep inundation (> 1.0m)*	*total inundated area*
1	An Giang	5.4	73.0	78.5	3.0	43.8	46.8	-2.4	-29.2	-31.7
2	Dong Thap	13.1	59.4	72.5	5.7	48.1	53.8	-7.4	-11.4	-18.7
3	Long An	37.9	36.3	74.2	39.3	38.1	77.4	1.4	1.8	3.2
4	Kien Giang	33.2	22.5	55.7	31.9	23.8	55.7	-1.3	1.3	0.0
5	Can Tho	37.3	34.8	72.1	30.7	41.4	72.1	-6.6	6.6	0.0
5	Vinh Long	51.7	35.7	87.4	39.6	48.0	87.7	-12.0	12.3	0.3
7	Hau Giang	42.1	21.6	63.7	43.5	24.5	68.0	1.5	2.9	4.4
8	Tien Giang	41.9	14.7	56.6	41.5	18.0	59.5	-0.3	3.3	2.9
9	Ben Tre	51.3	29.0	80.3	52.0	29.4	81.4	0.6	0.5	1.1