

# Tidal inlet seafloor changes induced by recently built hard structures

Carlotta Toso<sup>1,2\*</sup>, Fantina Madricardo<sup>1</sup>, Emanuela Molinaroli<sup>2</sup>, Stefano Fogarin<sup>1,2</sup>, Aleksandra Kruss<sup>1</sup>, Antonio Petrizzo<sup>1</sup>, Nicola Marco Pizzeghello<sup>3</sup>, Luigi Sinapi<sup>3</sup> Fabio Trincardi<sup>4</sup>,

**1** Istituto di Scienze Marine-Consiglio Nazionale delle Ricerche, Arsenale - Tesa 104, Castello 2737/F, 30122 Venezia, Italy

**2** Department of Environmental Sciences, Informatics and Statistics (DAIS), Università Ca' Foscari Venezia, Campus Scientifico, Via Torino 155, Mestre, VE, Italy

**3** Istituto Idrografico della Marina, Passo all'Osservatorio 4, Genova 16134, Italy

**4** Dipartimento Scienze del Sistema Terra e Tecnologie per l'Ambiente, Piazzale Aldo Moro 7, Roma, Italy

\* toso.carlotta@gmail.com

## Supporting Information

**S3 Table** Main parameters describing every dune field in each year, with D1, D2 and D3 indicating the 2011, 2013 and 2016 datasets respectively. The position of every dune field is shown in S1 Fig.

Dune field	$\lambda$ (m)	H (m)	Transversal Length (m)	Water depth (m)	Area ( $m^2$ )
D1_01	10	0.25	100	11	33996
D1_02	10	0.3	70	10	3269
D1_03	6	0.15	50	11.6	3458
D1_04	5	0.15	90	11.8	9927
D1_06	10	0.3	50	11	12025
D1_07	15	0.4	80	7	6446
D1_09	6	0.15	130	6	14922
D1_12	7	0.2	55	6.5	29448
D1_13	4	0.2	140	8	92904
D1_14	5	0.15	50	13.6	6337
D1_15	5	0.4	220	13.4	107879
D1_16	10	0.4	70	13	12828
D1_17	4	0.1	55	15	17423
D1_18	3	0.15	50	13.5	25986
D1_19	4	0.15	17	12	6872
D1_20	7	0.2	45	12	4267
D1_21	10	0.2	110	12	17681
D1_24	9	0.15	35	9	6366
D1_25	8	0.2	140	11.5	21160
D2_01	10	0.5	80	12.5	14164
D2_02	10	0.15	210	11.9	22223
D2_03	20	0.2	100	6.5	7801
D2_04	8	0.2	220	7	85299
D2_05	6	0.3	200	13.8	124313
D2_07	8	0.1	40	12	2196
D3_01	10	0.2	160	7	52040
D3_02	5	0.2	100	12	54514
D3_03	10	0.2	180	11	68919
D3_04	10	0.6	65	12	11297
D3_06	7	0.15	100	7.5	25692