

Table 1. Surveyed locations with Nothings and Eastings.

No	City	Prefecture	Co-ordinates	
1	Soma	Fukushima	N141°09.667'	E37°46.165'
2	Yamamoto	Miyagi	N140°54.930'	E37°57.613'
3	Watari	Miyagi	N140°55.283'	E38°02.262'
4	Iwanuma	Miyagi	N140°09.667'	E38°03.224'
5	Shichigahama	Miyagi	N141°03.872'	E38°17.289'
6	Higashimatsushima	Miyagi	N141°09.667'	E38°22.059'
7	Ishinomaki Port (East)	Miyagi	N141°18.312'	E38°24.895'
8	Ishinomaki Port (West)	Miyagi	N141°14.868'	E38°24.335'

Table 2. Dataset used for the representative scour depth predictive model.

Location	h (m)	V_m (m/s)	ν_2 (deg)	H_{d2} (m)	D_s (m)
Ishinomaki Port (East)	6.0	9.20	70.3	1.40	1.22
					1.66
					1.29
					1.16
					1.14
Soma	6.8	9.80	35.0	4.37	2.83
					3.87
					3.60
					3.50
Watari	7.6	10.36	77.7	4.60	4.06
					2.37
					2.75
Iwanuma	5.7	8.97	54.6	5.76	2.50
					1.09
					2.00
					1.90
Yamamoto	7.4	10.22	34.8	5.29	1.86
					1.40
					1.65

Table 3. Soil parameters derived from particle size distribution curves.

Location	Particle Size, D_{10} (mm)	Uniformity Coefficient, U $\left(\frac{D_{60}}{D_{10}}\right)$	Curvature Coefficient, Z $\left(\frac{D_{30}^2}{D_{60} D_{10}}\right)$	Permeability Coefficient, k (m/s) $\times 10^4$
Ishinomaki Port (East)	0.38	1.71	1.01	11.4
Soma	0.12	2.08	0.96	1.44
Watari	0.20	6.00	0.67	4.00
Iwanuma	0.28	2.68	0.76	7.84
Yamamoto	0.16	5.94	0.81	2.56