



Figure S1. Elevation changes relative to the levelling day in January 2021, indicated by the black vertical line, for three parcels in Zegveld (in parcel 16 with low ditch water level: ZEG_PWIS, in parcel 13 with high ditch water level: ZEG_PWIS13, in parcel 11 with high ditch water level: ZEG AWIS11), based on spirit levelling and extensometer measurements (surface anchor at ~0.05 m depth in green and anchor at ~0.80 m depth in red; daily averages for the levelling days are indicated with green and red dots respectively). In blue the phreatic groundwater level is shown. High-resolution automatic phreatic groundwater level measurements are only available for ZEG REF and ZEG AWIS. For ZEG PWIS, ZEG WIS-13 and ZEGp11 manual groundwater level measurements are plotted. Data before the reference date are indicated with dotted lines. Standard deviation for elevation changes based on levelling is in the order of 10 to 20 mm. bs= below surface.

Table S1. Yearly vertical soil movement ranges (maximum height – minimum height) in mm for Zegveld, based on levelling and extensometer measurements. RF=reference parcel, Dif.=Difference. Extensometer daily averages have been calculated for the days of the levelling measurements. The contribution of the 0.80 m anchor to the surface anchor (0.05 m depth) at the moment of maximum yearly subsidence (minimum elevation, relative to maximum elevation in preceding winter) is given in the last column. Note that parcels 11 and 13 have different ditch water levels compared to parcel 16, so differences should be taken with caution (both ditchwater level and WIS influence differences compared to the reference situation).

Vertical movement range (mm):		Levelling	Extensometer; Anchor depth 0.05 m		Extensometer; Anchor depth 0.80 m		Contribution -0.80 anchor to -0.05 anchor at yearly minimum elevation
			<i>Average on levelling day</i>	<i>Full data series</i>	<i>Average on levelling day</i>	<i>Full data series</i>	
2021	p16-RF	68	66	78	59	68	86%
	p16-AWIS	33	26	36	22	27	75%
	<i>Dif. to RF</i>	<i>-35 (-51%)</i>	<i>-40 (-61%)</i>	<i>-43 (-54%)</i>	<i>-37 (-63%)</i>	<i>-41 (-61%)</i>	
	p16-PWIS	46	33	39	24	28	71%
	<i>Dif. to RF</i>	<i>-23 (-33%)</i>	<i>-33 (-51%)</i>	<i>-39 (-50%)</i>	<i>-36 (-60%)</i>	<i>-40 (-59%)</i>	
	p13-PWIS	38	36	40	21	27	66%
	<i>Dif. to RF</i>	<i>-30 (-44%)</i>	<i>-30 (-45%)</i>	<i>-38 (-49%)</i>	<i>-38 (-64%)</i>	<i>-41 (-61%)</i>	
	p11-AWIS	32	21	27	16	23	86%
<i>Dif. to RF</i>	<i>-36 (-53%)</i>	<i>-45 (-69%)</i>	<i>-51 (-66%)</i>	<i>-43 (-73%)</i>	<i>-44 (-66%)</i>		
2022	p16-RF	71	69	98	57	84	86%
	p16-AWIS	47	33	53	19	31	59%
	<i>Dif. to RF</i>	<i>-24 (-34%)</i>	<i>-36 (-52%)</i>	<i>-45 (-46%)</i>	<i>-38 (-67%)</i>	<i>-53 (-63%)</i>	
	p16-PWIS	45	39	65	27	46	71%
	<i>Dif. to RF</i>	<i>-26 (-37%)</i>	<i>-30 (-43%)</i>	<i>-32 (-33%)</i>	<i>-31 (-53%)</i>	<i>-38 (-45%)</i>	
	p13-PWIS	52	38	50	22	31	62%
	<i>Dif. to RF</i>	<i>-19 (-27%)</i>	<i>-31 (-45%)</i>	<i>-47 (-48%)</i>	<i>-35 (-61%)</i>	<i>-53 (-63%)</i>	
	p11-AWIS	28	16	38	15	28	73%
<i>Dif. to RF</i>	<i>-43 (-61%)</i>	<i>-53 (-77%)</i>	<i>-60 (-61%)</i>	<i>-42 (-73%)</i>	<i>-57 (-67%)</i>		