

Interactive comment on “Understanding the Relative Importance of Vertical and Horizontal Flow in Ice-Wedge Polygons” by Nathan A. Wales et al.

Nathan A. Wales et al.

nathanwales@gmail.com

Received and published: 26 July 2019

Please see supplemental .pdf file for response to referee comments

Please also note the supplement to this comment:

<https://www.hydrol-earth-syst-sci-discuss.net/hess-2019-25/hess-2019-25-AC2-supplement.pdf>

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2019-25>, 2019.

C1

Low-centered polygon frostline depths (cm)																				
Date	N rim	N trough	NW rim	NW trough	E rim	E trough	SE rim	SE trough	S rim	S trough	SW rim	SW trough	W rim	W trough	NW rim	NW trough	AUX	C-1	C-2	C-3
7/11/2015	19.0	25.0	35.0	36.0	28.0	35.0	31.0	39.0	25.0	35.0	26.0	33.0	24.0	39.0	23.0	39.0	N/A	23.0	28.3	22.6
7/23/2015	24.0	29.0	41.0	36.0	35.0	35.0	46.5	32.0	35.0	35.0	35.0	27.5	42.0	26.0	40.0	34.0	9.2	7.4	23.6	
7/31/2015	26.5	29.0	42.0	36.0	35.5	39.5	37.0	47.0	33.0	35.0	35.5	36.0	31.0	42.0	28.5	41.5	35.0	11.3	8.5	24.6
8/7/2015	29.0	30.5	45.0	36.0	35.0	40.0	40.5	47.0	38.0	38.5	39.5	37.0	35.5	45.0	31.5	45.0	35.0	18.4	20.5	25.6
8/14/2015	29.5	31.5	45.0	37.5	36.5	44.0	44.5	47.0	44.5	47.0	44.5	39.0	42.0	41.0	36.5	46.0	38.0	20.2	25.1	26.6
9/12/2015	33.0	31.0	43.0	39.5	40.0	44.0	44.5	46.0	45.0	41.0	42.5	41.0	45.0	46.0	33.5	46.0	36.5	0.0	0.0	27.6
6/20/2016	9.0	10.0	20.0	16.0	10.0	13.5	13.5	17.5	9.0	12.0	9.0	13.0	9.5	12.5	10.0	14.5	10.5	0.0	0.0	28.6
6/23/2016	11.0	10.0	22.0	19.5	12.0	17.0	15.5	23.0	9.5	19.0	10.5	22.0	11.0	15.5	11.5	17.5	11.0	0.0	0.0	29.6
7/18/2016	27.5	32.0	38.0	39.5	33.0	35.0	37.0	45.0	29.0	33.0	34.5	34.5	26.5	34.0	25.0	32.0	31.3	0.0	0.0	30.6
9/2/2016	35.0	35.5	44.0	38.5	35.5	42.0	42.0	50.0	35.0	37.0	42.5	44.5	34.0	45.0	33.5	41.5	38.0	0.0	0.0	31.6

Fig. 1. Frost Table Depths LCP - to be added to Supplementary Information

C2

	High-centered polygon frostline depths (cm)																
Date	N_rim	N_trough	NE_rim	NE_trough	E_rim	E_trough	SE_rim	SE_trough	S_rim	S_trough	SW_rim	SW_trough	W_rim	W_trough	NW_rim	NW_trough	C-1
7/10/2015	21.5	21.0	22.0	25.0	25.0	25.0	27.0	20.0	24.0	21.0	24.0	25.0	23.0	21.0	25.0	25.0	17.7
7/23/2015	N/A	20.0	N/A	30.5	33.0	25.0	N/A	20.0	N/A	24.0	N/A	30.0	N/A	26.0	N/A	26.0	N/A
7/31/2015	25.5	25.0	30.0	33.0	35.5	28.5	38.5	23.5	34.0	25.0	41.0	33.5	27.0	29.5	27.5	33.0	24.7
8/7/2015	25.5	25.5	31.5	36.5	36.0	30.5	40.0	23.5	36.0	27.5	43.0	35.5	30.0	33.0	31.5	35.0	31.5
8/14/2015	25.5	26.0	35.0	36.5	36.5	32.0	41.0	25.5	36.0	31.0	43.5	35.5	31.0	33.0	32.0	36.0	31.8
9/12/2015	25.5	29.0	41.5	36.0	36.5	32.5	40.0	26.0	34.5	30.0	42.5	34.5	30.5	32.0	34.0	38.0	31.8
6/20/2016	6.5	12.0	10.5	11.0	13.0	13.0	10.5	12.0	10.5	8.5	14.0	19.0	11.5	7.0	8.0	14.0	11.7
6/23/2016	7.0	14.0	12.0	14.0	15.5	16.0	12.0	13.5	12.0	9.0	15.5	19.5	14.0	8.0	9.0	15.0	12.4
7/18/2016	18.0	26.5	29.5	28.0	39.0	26.0	29.0	21.5	32.0	22.0	36.0	35.0	33.0	26.5	24.5	28.0	23.0
9/2/2016	22.0	30.0	32.5	33.0	40.5	28.5	35.5	25.5	35.5	30.0	40.0	34.5	38.5	31.5	31.5	37.0	25.5

Fig. 2. Frost Table Depths HCP - to be added to Supplementary Information