Discrete Morse theory erratum

This page is devoted to errors and typos in the book Discrete Morse Theory, published by AMS press, 2019.

page	line	Comments
69	-10	The word "increasing" should be "decreasing."
71	-4	The object W induced by the generalized discrete Morse function f should have a different name than "generalized discrete vector field" defined in the middle of page 71. Call the W induced by f a **generalized gradient.** This is the object to which we refer in Corollary 4.30 (see the line in p. 116 below)
98	24	$\mathrm{null}(\partial_p) - \mathrm{rank}(\partial_p) = \mathrm{null}(\partial'_p) - \mathrm{rank}(\partial'_p)$ should be $\mathrm{null}(\partial_p) - \mathrm{rank}(\partial_{p+1}) = \mathrm{null}(\partial'_p) - \mathrm{rank}(\partial'_{p+1})$
102	11	the inequality is reversed. It should read $b_i \leq m_i$.
105	-10	"is" should be "in"
107	8	τ is critical, not γ
107	-2	f_t should be h_t
116	-5	"generalized discrete vector field" should be called "generalized gradient" to imply it is induced by a generalized discrete Morse function (see the line on p. 71 above)
119	-3	In definition 5.5, last line, the roles of k and i are switched.
121	-3	σ_p should be $\sigma^{(p)}$
150	Ex 6.4	Assume $n > 1$
153	Ex 6.10	x_4 should be x_0 in the diagram
153	Prob 6.12	Assume $n > 0$
166	Lemma 6.34	$\mathrm{link}_{\Delta^n}(v)$ should be $\mathrm{link}_M(v)$
176	Prob 7.10	G should be K
181		In both Prob 7.21 and Prob 7.22, G should be T
194	15	It should read $f(\widetilde{\sigma}_i) \leq f(\tau) \leq f(\sigma_i)$
199	16	$V \circ V$ should be $V \circ \partial$
201	-3	k_p^∞ should be k_p^Φ