

Errata

Computational Techniques of the Simplex Method

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ISTVÁN MAROS

Department of Computing, Imperial College, London

Email: i.maros@imperial.ac.uk

A strange problem with the `fancybox` L^AT_EX package has caused some shift in equation numbering (perhaps a conflict between `fancybox` and Kluwer `kapmono` style?). When I did the typesetting I overlooked this problem. The phenomenon: equation numbers of framed equations are shifted one number up in printing. The internal counter remains uncorrupted, therefore, all subsequent unframed equations carry correct numbers. I show the “culprit” structure which caused some problem in Chapter 1 for those who want to avoid this situation. Fortunately, later I have not used framed equations. Below is the problematic structure on page 12.

```
\fbox{%  
\begin{Beqnarray} \min && \ic\T\ix \label{eq.obj2} \\  
 \text{s.t.} && \iA\ix + \iI \iz = \ib \label{eq.constr2} \\  
 && \text{and every variable is one of types 0--3.} \label{eq.type2}  
\end{Beqnarray}  
}
```

Similar structures were used at three other places.

The “resulting” problems in the framed equations are:

Page	Framed equation number(s)	
	Printed	Should read
12	(1.15) (1.16) (1.17)	(1.14) (1.15) (1.16)
13	(1.21)	(1.20)
16	(1.24) (1.25) (1.26)	(1.23) (1.24) (1.25)
17	(1.27)	(1.26)

However, references to these equations are correct with the correct (“Should read”) numbers.

Other corrections:

Page	Line	Printed	Should read
6	Delete line 5 from bottom	constraint type	
40	In (2.50) and (2.51)	\mathbf{c}^T	$\mathbf{c}_{\mathcal{B}}^T$
42	3 from bottom	$w_j(t)$	$d_j(t)$
43	9 from bottom	α_j^p	d_j
91	10	are	are zero
93	10 from bottom	RANGE-1 Balance	RANGE-1 Res-2
99	3 from bottom	nonnegative	nonzero
105	In (7.27)	$\mathbf{a}_j^T \mathbf{y} \leq c_j$	$\mathbf{a}_j^T \mathbf{y} \geq c_j$
105	In (7.28)	$\mathbf{a}_j^T \mathbf{y} \geq c_j$	$\mathbf{a}_j^T \mathbf{y} \leq c_j$
105	2nd line after (7.28)	$a_j^i y_i \leq c_j$ or $a_j^i y_i \geq c_j$	$a_j^i y_i \geq c_j$ and $a_j^i y_i \leq c_j$
105	Last line of framed table	$a_j^i y_i \leq c_j$	$a_j^i y_i \geq c_j$
106	1st line after eq. (7.33)	nonnegative	nonzero
107	In title 7.1.11	sparsity	density
115	In eq. (7.56)	$\mathbf{M}^{-1} \delta_{2k}$	$\mathbf{M}^{-1} \delta_{2k+1}$
116	In eq. (7.58)	$\rho_{2k+1} h_{2k-1}$	$\rho_{2k+1} + h_{2k-1}$
142	10 from bottom	let i	let j
149	1	1(b)	1.2
149	2	1(c)	1.3
170	In last line of table	∞ -	∞ - 3
173	11 from bottom	$\{\mathcal{B}_3\}$	$\{k_3\}$
174	Step 12: In Algorithm 1	else	else if type(x_{k_i}) $\neq 2$
177	Before Step 0.	#1 (PSM-G)	#2 (PSM-G)
181	6	$\mathbf{R} \mathbf{x}_r$	$\mathbf{R} \mathbf{x}_{\mathcal{R}}$
183	Eqns (9.45) and (9.46)	$\pi^T - d_q \bar{\rho}^p$	$\pi^T + d_q \bar{\rho}^p$
196	Lines 2 and 3 after (9.69)	\mathbf{B}^{-1}	$\bar{\mathbf{B}}^{-1}$
208	2nd line of (9.88)	$\beta_i = 0$	$\beta_i = v_i$
219	7 from bottom	1 1 2 1	1 1 -2 1
220	3	-33 2 4	-33 -2 4
220	4	-27 1 2	-27 -1 2
228	14 from bottom	to z_j	to w_j
231	3 lines above (9.109)	$ \beta_i $	$ \beta_i - \lambda_i $
235	Eq. (9.117) changes to		$\alpha_q^i = 0, \forall i$ where type(β_i) $\in \{0, 1\}$
235	Eq. (9.118) changes to		$\alpha_q^i \leq 0, \forall i$ where type(β_i) = 2
237	15 from bottom	Stallingstalling	Stalling

Page	Line	Printed	Should read
243	2 from bottom	$-\varepsilon_f \leq \beta_i < \lambda_i$	$\lambda_i - \varepsilon_f \leq \beta_i < \lambda_i$
245	Middle of page, in eqn.	$a_j^i u_j$	$u_j \mathbf{a}_j$
247	12 from bottom	lower	upper
249	In equation $RC(i) =$	\bar{A}	\hat{A}
249	In equation $CC(i) =$	\bar{A}	\hat{A}
249	9 and 3 from bottom	max	argmax
271	First line after Step 4.	current θ_P .	current θ_D . $\theta_P = s_{k-1}/\alpha_q^p$.
272	Twice in (10.12)	$ \alpha_{j_i} $	$u_{j_i} \alpha_{j_i} $
275	Line of k=2 in table	$10 - -1 $	$10 - 1 $
277	1 from bottom, in \mathcal{T}^+	$j \in \mathcal{P}$	$j \in \mathcal{M}$
277	Last line, def. of \mathcal{T}^-	$j \in \mathcal{M}$	$j \in \mathcal{P}$
281	3	d_q	\bar{d}_μ
283	1	0, and $\text{type}(x_j) = 3$ then	0 then
286	1st line after Step 7.	$s_p^k \geq 0$	$s_p^k > 0$
286	11	for which	before which
286	12	nonnegative	positive