MATHEMATICAL TABLES—ERRATA

In this issue references have been made to errata in RMT **993** and **1011.**

210.—D. L. ARENBERG & D. LEVIN, *Table of Fresnel Integrals and Derived Functions.* Boston, 1948.

In *MTAC*, v. 3, p. 479, Editorial Note, lines 8–10, I stated, "The ARENBERG & LEVIN tables of $C(u)$ and $S(u)$, for $u \leq 8.5$, are identical with those given in JAHNKE & EMDE, *Tables of Functions*, 1945, p. 34." After "1945" I should have added, "p. 34, except in two cases." For $S(1.0)$ A. & L. had .4883 instead of .4383; for $S(7.3)$ they had .3189 instead of .5189.

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211.—P. K. BOSE, "On recursion formulae, tables and Bessel function populations associated with the distribution of classical D^2-statistic. Part I. On the construction of incomplete probability integral tables of the classical D^2-statistic," *Sankhyā*, v. 8, 1948, p. 235–248. [*MTAC*, v. 3, p. 415.]

The author lists in *Sankhyā*, v. 11, 1951, p. 96 a number of errors in the tables appearing in the above paper.

C. C. C.

212.—J. P. KULIK, L. POLETTI & R. J. PORTER, *Liste des nombres premiers du onzième million.* [*MTAC*, v. 6, p. 81.]

Page 23, Col. 5, Line 4 up.

For 5 1 *Read* 511

The number 10902511 is prime, so also is 10902517 which follows it.

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EDITORIAL NOTE: This erratum occurs in one of our two copies but not in the other.

D. H. L.

213.—RHETICUS-PITISCUS. A few months before he died COMRIE sent to me a number of sheets headed "Children of Rheticus." [Rheticus was born in 1514 and died in 1576; see *MTAC*, v. 3, p. 552–562.] From these sheets I abstracted certain tabular errata, checked every entry with the appropriate volume, and edited the whole in the form given below. The first three errata are in the 15D table of sines and cosines in *Thesaurus Mathematicus* (1613) of Rheticus, edited and published by BARTHOLOMÄUS PITISCUS (1561–1613); see *MTAC*, v. 3, p. 390–398. The remaining errata are in the 10D table of tangents and cotangents in *Opus Palatinum de Triangulis* (1596) of Rheticus. For each angle in question the complete Rheticus value is given. Then in a new column are values derived from ANDOYER's tables.[1] In the case of the first three values the corresponding Andoyer 15D values are transcribed. Corresponding to the 10D Rheticus tables, values got by rounding off Andoyer's 15D tables to 10D values were found but only those Andoyer pentads corresponding to erroneous Rheticus pentads are indicated. Thus

it is seen that there are 164 erroneous entries, but 53 of these are simply unit errors in the tenth decimal place; see *MTAC*, v. 2, p. 285, lines 33–36.

As explained in my Pitiscus article, the values given by Rheticus for tangents and cotangents less than 7° were especially faulty; hence in 1607 Pitiscus published a new table for these. In this range we note below that there are 15 errors. On comparing the corresponding 1607 tabular values with those of Andoyer, I found that there was exact agreement in 12 cases, and that in the remaining three cases there was agreement to the extent that the tenth decimal place was one unit less in Pitiscus for 2° 57′ 50″ and 6° 45′ 20″, but one unit more for 5° 26′ 40″. In the first of these three cases Pitiscus made no change in Rheticus; here was the first of the 53 cases of unit errors after rounding off Andoyer.

So far as I am aware there exist only three original copies of the Pitiscus table of 1607; the Brown University film copy of Mr. W. D. MORGAN'S original was the one I used in checking 15 values. For checking the 161 values of the *Opus Palatinum* I used the excellent copy acquired in 1950 for the fine collection of old science books belonging to Mr. ALBERT E. LOWNES of Providence, R. I. The collation of this copy agrees in almost every particular with that given in *MTAC*, v. 3, p. 556.

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[1] H. ANDOYER, *Nouvelles Tables Trigonométriques Fondamentales*, v. 1, 2, Paris, 1915, 1916.

Angle			Function	Rheticus	Andoyer
°	′	″			
8	32	50	cos	0.98889 27054 25336	0.98889 37054 25337
14	18	30	sin	0.24713 99747 34879	0.24713 99477 34878
29	15	10	sin	0.48866 25407 22794	0.48866 35407 22794
0	13	10	cot	261.09341 59146	47747
0	44	10	cot	77.83149 34719	33743
0	46	50	cot	73.39930 47413	44952
1	20	00	cot	42.96407 72888	73358
2	57	50	tan	0.05177 58111	58112
3	02	10	cot	18.85377 03160	02992
5	26	40	cot	10.49202 10301	10272
6	00	30	cot	9.50107 13501	13494
6	24	30	cot	8.90351 05550	05496
6	30	40	cot	8.76178 03398	03376
6	38	10	cot	8.59529 72506	72473
6	45	20	cot	8.44194 44514	44490
6	47	00	cot	8.40705 11059	15030
6	54	50	cot	8.24679 29153	28169
6	59	30	cot	8.15415 08503	08485
7	00	00	cot	8.14434 64279	64280
7	02	10	tan	0.12342 42700	43701
7	03	20	cot	8.07957 25619	25482
7	04	10	cot	8.06353 73496	73512
7	06	50	cot	8.01264 33506	33469
7	07	30	cot	8.00001 85504	85473
7	14	50	cot	7.86368 75505	75487
7	21	20	cot	7.74661 64501	64496
7	39	30	cot	7.43688 70721	70701
7	45	40	cot	7.33721 20493	20510
7	52	10	cot	7.23495 06502	06488
8	04	50	tan	0.14197 48487	48488
8	05	10	cot	7.03859 70500	70508
8	31	50	tan	0.14999 62513	62574
8	37	40	cot	6.59057 97491	97501

Angle °	′	″	Function	Rheticus	Andoyer
8	49	30	cot	6.44101 64498	64507
8	55	20	cot	6.36970 23503	23494
8	55	30	cot	6.36768 74494	74505
9	15	30	cot	6.13460 62503	62499
9	33	40	cot	5.93685 80614	80602
9	40	20	cot	5.86736 72518	72496
9	51	40	tan	0.17382 86080	86081
10	01	50	cot	5.68364 92518	92500
10	04	30	cot	5.62819 08495	08509
10	05	10	cot	5.62186 09485	09476
10	11	20	cot	5.56395 70500	70503
10	24	30	cot	5.44411 18058	18053
10	30	50	cot	5.38422 74506	.38822 74493
10	48	30	tan	0.19091 09931	09431
10	49	30	tan	0.19121 24500	24501
11	22	10	cot	4.97313 38625	38415
11	30	50	cot	4.90906 56814	56310
11	36	40	cot	4.86682 83675	83659
11	39	00	tan	0.20618 01817	01187
11	59	30	cot	4.70799 70513	70510
12	13	50	cot	4.61327 08501	08495
12	23	50	cot	4.54931 25660	24661
12	32	30	cot	4.49523 56502	56498
12	39	40	tan	0.22464 66717	66317
12	47	40	tan	0.22709 24603	24604
12	55	30	cot	4.35749 13782	13770
13	49	40	cot	4.06276 67383	67781
13	53	10	cot	4.04501 70041	71040
13	56	10	cot	4.02991 90504	90496
14	01	00	cot	4.00581 64036	65036
14	08	20	cot	3.96976 11501	11498
14	09	30	tan	0.25226 52596	52597
14	31	30	cot	3.85976 46357	46758
14	32	40	cot	3.85437 64095	65094
14	33	30	tan	0.25970 10737	40738
14	47	50	tan	0.26415 96316	95317
15	12	10	tan	0.27174 60475	60476
15	13	30	cot	3.67417 43503	43497
15	26	50	cot	3.61882 47481	47482
15	30	50	cot	3.60249 21270	21965
15	45	50	tan	0.28229 08741	08742
16	00	50	tan	0.28700 77722	77422
16	15	40	cot	3.42836 96577	96575
16	23	50	tan	0.29426 33251	33252
17	09	00	cot	3.24048 50395	60395
17	23	00	cot	3.19425 97618	97619
17	24	50	tan	0.31364 72372	72373
18	28	10	cot	2.99399 02821	02323
18	28	30	cot	2.99302 43787	43782
18	32	00	cot	2.98291 66502	66505
18	37	10	cot	2.96810 74167	74170
18	46	40	cot	2.94121 94465	94965
18	47	30	cot	2.93888 17496	17500
19	05	00	tan	0.34595 53113	53114
19	09	40	cot	2.87789 68129	68130
19	17	40	cot	2.85643 95071	96070
19	25	30	cot	2.83570 40500	40504
19	27	00	cot	2.83176 39504	39499
19	36	30	cot	2.80703 42717	42716
19	46	10	tan	0.35941 98500	98501
19	52	00	cot	2.76749 90375	90376
20	04	40	cot	2.73591 59501	59498
20	22	30	tan	0.37140 00666	00667
20	40	10	cot	2.65069 74995	74998
20	40	50	cot	2.64914 18153	18154
20	41	50	cot	2.64681 12839	12834
20	45	10	tan	0.37892 15500	15501

Angle °	′	″	Function	Rheticus	Andoyer
21	00	30	tan	0.38403 09198	09199
21	06	20	cot	2.59081 25803	25798
21	13	40	cot	2.57445 12321	12322
21	21	20	cot	2.55753 72314	72317
21	40	20	tan	0.39738 68503	68504
21	58	40	cot	2.47785 33464	33564
22	03	10	tan	0.40509 81362	81363
22	48	10	cot	2.37858 31847	31849
23	01	00	cot	2.35394 83407	83411
23	07	10	tan	0.42693 72163	73164
23	14	40	tan	0.42951 90500	90501
23	32	40	cot	2.29497 26583	26311
23	50	10	cot	2.26343 88926	88324
24	19	20	cot	2.21246 61499	61502
24	43	40	cot	2.17138 23500	23502
24	45	40	cot	2.16806 17501	17498
24	49	30	cot	2.16172 06216	06214
25	18	10	tan	0.47275 71499	71500
25	28	40	cot	2.09863 79499	79501
25	48	50	cot	2.06732 02054	03055
26	24	40	tan	0.49664 60462	60463
26	38	10	tan	0.50155 12499	12500
27	31	00	cot	1.91961 85729	85730
27	59	50	cot	1.88094 64517	64518
28	33	40	cot	1.83709 54009	54770
28	44	30	cot	1.82338 81499	81500
29	35	50	cot	1.76051 70444	70743
30	05	30	tan	0.57949 54234	.57948 54234
30	36	10	tan	0.59149 37910	.59146 37910
30	41	50	cot	1.68437 79623	79624
31	31	50	tan	0.61353 46886	45886
31	35	30	cot	1.62600 66589	66590
32	09	30	cot	1.59053 70349	70350
32	10	00	tan	0.62892 14878	14178
32	37	00	tan	0.63995 66167	.63993 66167
32	47	10	cot	1.55252 27347	26347
33	41	50	tan	0.66684 70537	70538
34	30	20	cot	1.45470 68333	68335
35	00	10	cot	1.42800 16525	06527
35	32	30	tan	0.71439 08583	08584
36	16	50	cot	1.36230 37483	37844
36	23	00	cot	1.35719 33743	33745
37	20	30	cot	1.31070 91949	91950
37	36	30	cot	1.29813 58518	58519
37	39	20	cot	1.29592 51553	51555
37	57	00	cot	1.28224 66152	65152
37	59	30	tan	0.78105 14288	14289
37	59	40	tan	0.78112 94887	94888
38	14	10	tan	0.78794 34531	34532
38	35	30	tan	0.79805 14791	14091
38	58	40	tan	0.80914 20410	20505
40	03	30	tan	0.84083 60622	60623
40	07	10	cot	1.18672 06418	05418
40	42	10	cot	1.16249 32414	32514
40	55	30	cot	1.15341 42400	42502
41	14	10	cot	1.14083 92066	92067
41	16	30	tan	0.87774 86686	86687
42	11	00	cot	1.10349 12379	12380
43	00	20	cot	1.07216 02642	02643
43	16	50	cot	1.06189 60132	60133
44	35	30	cot	1.01435 60076	60776
44	47	50	tan	0.99294 66336	66536
44	52	40	tan	0.99575 27146	.99574 27147
44	53	00	cot	1.00408 07498	07499

L. J. COMRIE (1893–1950)