THE X- AND Y-FUNCTIONS FOR ISOTROPIC SCATTERING. I

S. CHANDRASEKHAR AND DONNA ELBERT
Yerkes Observatory, University of Chicago
AND
ANN FRANKLIN
Watson Scientific Computing Laboratory, Columbia University
Received November 7, 1951

ABSTRACT

In this paper X- and Y-functions which occur in the solution of transfer problems in atmospheres of finite optical thicknesses and scattering radiation isotropically with an albedo $\varpi_0 \leqslant 1$ for single scattering are tabulated.

The values of the albedo, ϖ_0, and optical thickness, τ, for which solutions are tabulated are: $\varpi_0 = 1$, 0.95, 0.9, 0.8, 0.5, and $\tau = 0.05$, 0.10, 0.15, 0.20, 0.25, 0.5, and 1.

1. *Introduction.*—In a series of papers published in this *Journal* during the years 1944–1949, it was shown how exact solutions for many of the standard problems in the theory of radiative transfer in plane-parallel atmospheres can be expressed in terms of certain H- or X- and Y-functions. The H-functions occur in the solution of problems in semi-infinite atmospheres, while the X- and Y-functions occur in the corresponding problems in atmospheres of finite optical thicknesses. This theory has since been systematically presented in S. Chandrasekhar's *Radiative Transfer* (Oxford: Clarendon Press, 1950).[1] This book also includes tables of H-functions suitable for several problems in the theory of stellar and planetary atmospheres. But so far no similar tables of the X- and Y-functions have been available.

Now the X- and Y-functions are defined as solutions of the pair of integral equations,

$$X(\mu) = 1 + \mu \int_0^1 \frac{\Psi(\mu')}{\mu + \mu'} [X(\mu) X(\mu') - Y(\mu) Y(\mu')] d\mu' \tag{1}$$

and

$$Y(\mu) = e^{-\tau/\mu} + \mu \int_0^1 \frac{\Psi(\mu')}{\mu - \mu'} [Y(\mu) X(\mu') - X(\mu) Y(\mu')] d\mu' , \tag{2}$$

where τ denotes the optical thickness of the atmosphere and the "characteristic function" $\Psi(\mu)$ is, generally, an even polynomial in μ, satisfying the condition

$$\int_0^1 \Psi(\mu)\, d\mu \leqslant \tfrac{1}{2} . \tag{3}$$

In this paper we present tables of the X- and Y-functions for the case

$$\Psi(\mu) = \varpi_0 = \text{Constant} \qquad (\varpi_0 \leqslant 1) . \tag{4}$$

These functions occur in problems involving isotropic scattering, with an albedo, ϖ_0, for single scattering.

2. *The manner of solving for the X- and Y-functions. The tables of the solutions.*—The solutions for the cases $\varpi_0 = 1$, 0.95, 0.9, 0.8, and 0.5 and $\tau = 0.05$, 0.10, 0.15, 0.20, 0.25, 0.5, and 1 have been found by a direct process of iteration applied to the governing integral equations. The iterations were started with the solutions in the corrected second

[1] We shall hereafter refer to this book as "*R.T.*"

approximation as described in *R.T.*, chapter viii, § 60 (see particularly eqs. [117], [118], and [124]). The corrected second approximations were computed at the Yerkes Observatory for values of μ in the interval (0, 1) at steps of 0.01. The iterations were carried out at the Watson Scientific Computing Laboratory with IBM pluggable sequence relay calculators. In view of the factor $(\mu - \mu')^{-1}$ in the equation for Y, the values of the functions for the "even" values of the argument ($\mu = 0.02, 0.04, \ldots, 1.00$) were used for evaluating by numerical integration on the calculators the iterates for the "odd" values of the argument ($\mu = 0.01, 0.03, \ldots, 0.99$). Also it was found more convenient to iterate not for the functions X and Y themselves but for the functions

$$F(\mu) = \Psi(\mu)\, X(\mu) \qquad \text{and} \qquad G(\mu) = \Psi(\mu)\, Y(\mu)\,. \tag{5}$$

These functions satisfy the equations

$$F(\mu) = \Psi(\mu) + \mu \int_0^1 \frac{d\mu'}{\mu + \mu'} [F(\mu) F(\mu') - G(\mu) G(\mu')] \tag{6}$$

and

$$G(\mu) = \Psi(\mu)\, e^{-\tau/\mu} + \mu \int_0^1 \frac{d\mu'}{\mu - \mu'} [G(\mu) F(\mu') - F(\mu) G(\mu')]\,. \tag{7}$$

For $\tau < 0.25$ it was found that no more than three iterations were needed for satisfactory convergence; however, for $\tau = 0.5$ and 1 (particularly for $\varpi_0 = 0.95$ and 1) as many as six or seven iterations were necessary. And, even so, the iterated functions showed a certain raggedness between 0.9 and 1; in part this can be traced to the relative "flatness" of the functions in this interval, which makes the integrand in equations (6) and (7) sensitive to rounding errors. The solutions have therefore been "smoothed" by plotting the deviations from the corrected second approximations. Table 1 presents these smoothed solutions.

The smoothed values of the differences,

$$\delta = \text{Tabulated solution} - \text{corrected second approximation}\,, \tag{8}$$

are also listed. These differences may be used to interpolate for the "exact" solution for other values of τ and ϖ_0.

An idea of the over-all accuracy reached in the final tabulated solutions may be obtained by seeing how well the relation (*R.T.*, p. 187, eq. [27])

$$\alpha_0 = \frac{2}{\varpi_0} [1 - (1 - \varpi_0 + \tfrac{1}{4}\varpi_0^2 \beta_0^2)^{1/2}] \tag{9}$$

between the moments

$$\alpha_0 = \int_0^1 X(\mu)\, d\mu \qquad \text{and} \qquad \beta_0 = \int_0^1 Y(\mu)\, d\mu \tag{10}$$

is satisfied. This comparison is made in Tables 1*a* and 1*b* in the paper following this one (p. 269). It would appear from this comparison that for $\tau \leqslant 0.25$ the tabulated solutions are probably trustworthy to one part in 10,000, while for $\tau = 0.5$ and 1 the solutions for the larger values of the albedo are probably to be trusted to only one part in a thousand.

In presenting these first tables of the *X*- and *Y*-functions, S. Chandrasekhar would particularly wish to place on record his indebtedness to Dr. Wallace Eckert and the staff of the Watson Scientific Computing Laboratory for their generous co-operation in carrying out to completion this project. Without their participation the iterations of the *X*- and *Y*-functions to obtain the true solutions would have been impossible.

TABLE 1

THE ITERATED X AND Y FUNCTIONS AND THEIR DEVIATIONS

FROM THE CORRECTED SECOND APPROXIMATIONS

μ	$\tau = 0.05$; $\varpi_0 = 1.00$				$\tau = 0.05$; $\varpi_0 = 0.95$				$\tau = 0.05$; $\varpi_0 = 0.90$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.00000	0	0	0	1.00000	0	0	0	1.00000	0	0	0
0.01	1.02487	+2	0.02202	-6	1.02357	+ 6	0.02118	- 4	1.02230	+11	0.02030	- 7
0.02	1.04099	+3	0.11254	-7	1.03885	+12	0.11082	- 8	1.03667	+15	0.10912	-10
0.03	1.05173	+4	0.23090	-5	1.04900	+13	0.22849	-12	1.04622	+15	0.22621	- 9
0.04	1.05911	+5	0.33694	-4	1.05595	+12	0.33406	-12	1.05277	+14	0.33134	- 7
0.05	1.06442	+5	0.42455	-3	1.06094	+10	0.42135	- 9	1.05748	+13	0.41827	- 6
0.06	1.06841	+6	0.49605	-1	1.06468	+ 8	0.49259	- 7	1.06100	+11	0.48924	- 5
0.07	1.07150	+6	0.55474	-1	1.06759	+ 7	0.55109	- 5	1.06374	+10	0.54754	- 3
0.08	1.07396	+6	0.60347	-1	1.06990	+ 6	0.59966	- 4	1.06590	+ 8	0.59595	- 2
0.09	1.07597	+6	0.64443	-1	1.07179	+ 5	0.64051	- 2	1.06768	+ 7	0.63666	- 1
0.10	1.07763	+6	0.67927	-1	1.07336	+ 5	0.67526	0	1.06914	+ 5	0.67128	0
0.11	1.07903	+5	0.70924	0	1.07468	+ 4	0.70513	+ 1	1.07038	+ 4	0.70106	+ 1
0.12	1.08023	+5	0.73524	0	1.07581	+ 4	0.73105	+ 1	1.07145	+ 4	0.72690	+ 1
0.13	1.08127	+5	0.75801	0	1.07679	+ 4	0.75375	+ 1	1.07237	+ 4	0.74953	+ 1
0.14	1.08218	+5	0.77811	0	1.07765	+ 4	0.77379	+ 1	1.07318	+ 4	0.76950	+ 1
0.15	1.08298	+5	0.79597	0	1.07840	+ 4	0.79160	+ 1	1.07389	+ 4	0.78726	+ 1
0.16	1.08368	+5	0.81195	0	1.07907	+ 4	0.80753	+ 1	1.07452	+ 4	0.80314	+ 1
0.17	1.08432	+5	0.82632	0	1.07967	+ 4	0.82185	+ 1	1.07508	+ 4	0.81742	+ 1
0.18	1.08488	+5	0.83932	0	1.08020	+ 4	0.83481	+ 1	1.07558	+ 4	0.83034	+ 1
0.19	1.08540	+5	0.85112	0	1.08069	+ 4	0.84658	+ 1	1.07604	+ 4	0.84207	+ 1
0.20	1.08586	+5	0.86189	0	1.08113	+ 4	0.85732	+ 1	1.07645	+ 4	0.85278	+ 1
0.21	1.08629	+5	0.87177	+1	1.08153	+ 4	0.86715	+ 1	1.07683	+ 4	0.86259	+ 1
0.22	1.08668	+5	0.88084	+1	1.08190	+ 4	0.87620	+ 1	1.07718	+ 4	0.87160	+ 1
0.23	1.08703	+5	0.88920	+1	1.08223	+ 4	0.88454	+ 1	1.07750	+ 4	0.87992	+ 1
0.24	1.08736	+5	0.89694	+1	1.08254	+ 4	0.89226	+ 1	1.07779	+ 4	0.88762	+ 1
0.25	1.08767	+5	0.90413	+1	1.08283	+ 4	0.89942	+ 1	1.07806	+ 4	0.89476	+ 1
0.26	1.08795	+5	0.91081	+1	1.08310	+ 4	0.90608	+ 1	1.07831	+ 4	0.90140	+ 1
0.27	1.08822	+5	0.91704	+1	1.08335	+ 4	0.91229	+ 1	1.07854	+ 4	0.90760	+ 1
0.28	1.08846	+5	0.92287	+1	1.08358	+ 4	0.91810	+ 1	1.07876	+ 4	0.91339	+ 1
0.29	1.08869	+5	0.92833	+1	1.08379	+ 4	0.92355	+ 1	1.07897	+ 4	0.91882	+ 1
0.30	1.08890	+5	0.93345	+1	1.08400	+ 4	0.92866	+ 1	1.07916	+ 4	0.92391	+ 1
0.31	1.08910	+4	0.93828	+2	1.08419	+ 4	0.93346	+ 1	1.07934	+ 4	0.92870	+ 1
0.32	1.08929	+4	0.94282	+2	1.08437	+ 4	0.93799	+ 1	1.07950	+ 4	0.93322	+ 1
0.33	1.08946	+4	0.94711	+2	1.08454	+ 4	0.94227	+ 1	1.07966	+ 4	0.93748	+ 1
0.34	1.08963	+4	0.95117	+2	1.08469	+ 4	0.94631	+ 1	1.07981	+ 4	0.94151	+ 1
0.35	1.08979	+4	0.95500	+2	1.08485	+ 4	0.95014	+ 1	1.07996	+ 4	0.94533	+ 1
0.36	1.08994	+4	0.95864	+2	1.08499	+ 4	0.95377	+ 1	1.08009	+ 4	0.94895	+ 1
0.37	1.09009	+4	0.96210	+2	1.08512	+ 4	0.95721	+ 1	1.08022	+ 4	0.95239	+ 1
0.38	1.09022	+4	0.96539	+2	1.08525	+ 4	0.96049	+ 1	1.08034	+ 4	0.95565	+ 1
0.39	1.09035	+4	0.96852	+2	1.08537	+ 4	0.96361	+ 1	1.08045	+ 4	0.95876	+ 1
0.40	1.09048	+4	0.97150	+2	1.08549	+ 4	0.96658	+ 1	1.08056	+ 4	0.96173	+ 1
0.41	1.09059	+4	0.97434	+2	1.08560	+ 4	0.96942	+ 1	1.08067	+ 4	0.96456	+ 1
0.42	1.09071	+4	0.97706	+2	1.08571	+ 4	0.97213	+ 1	1.08077	+ 4	0.96726	+ 1
0.43	1.09081	+4	0.97966	+2	1.08581	+ 4	0.97472	+ 1	1.08086	+ 4	0.96984	+ 1
0.44	1.09092	+4	0.98214	+2	1.08590	+ 4	0.97720	+ 1	1.08095	+ 4	0.97232	+ 1
0.45	1.09101	+4	0.98453	+2	1.08600	+ 4	0.97958	+ 1	1.08104	+ 4	0.97468	+ 1
0.46	1.09111	+4	0.98681	+2	1.08608	+ 4	0.98185	+ 1	1.08112	+ 4	0.97696	+ 1
0.47	1.09120	+4	0.98900	+2	1.08617	+ 4	0.98404	+ 1	1.08120	+ 4	0.97914	+ 1
0.48	1.09128	+4	0.99111	+2	1.08625	+ 4	0.98614	+ 1	1.08128	+ 4	0.98123	+ 1
0.49	1.09137	+4	0.99313	+2	1.08633	+ 4	0.98816	+ 1	1.08135	+ 4	0.98324	+ 1
0.50	1.09145	+4	0.99508	+2	1.08640	+ 4	0.99010	+ 1	1.08142	+ 4	0.98518	+ 1

TABLE 1-Continued

μ	$\tau = 0.05$; $\varpi_0 = 1.00$				$\tau = 0.05$; $\varpi_0 = 0.95$				$\tau = 0.05$; $\varpi_0 = 0.90$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.09152	+4	0.99695	+2	1.08647	+ 3	0.99197	+ 1	1.08149	+ 4	0.98704	+ 1
0.52	1.09160	+4	0.99876	+2	1.08654	+ 3	0.99377	+ 1	1.08156	+ 4	0.98884	+ 1
0.53	1.09167	+4	1.00050	+2	1.08660	+ 3	0.99550	+ 1	1.08162	+ 4	0.99057	+ 1
0.54	1.09174	+4	1.00218	+2	1.08667	+ 3	0.99718	+ 1	1.08168	+ 4	0.99224	+ 1
0.55	1.09180	+4	1.00380	+2	1.08673	+ 3	0.99880	+ 1	1.08174	+ 4	0.99385	+ 1
0.56	1.09187	+4	1.00536	+2	1.08679	+ 3	1.00036	+ 1	1.08180	+ 4	0.99540	+ 1
0.57	1.09193	+4	1.00688	+2	1.08685	+ 3	1.00186	+ 1	1.08185	+ 4	0.99691	+ 1
0.58	1.09199	+4	1.00834	+2	1.08690	+ 3	1.00332	+ 1	1.08190	+ 4	0.99836	+ 1
0.59	1.09205	+4	1.00975	+2	1.08696	+ 3	1.00474	+ 1	1.08195	+ 4	0.99977	+ 1
0.60	1.09210	+4	1.01112	+2	1.08701	+ 3	1.00610	+ 1	1.08200	+ 4	1.00113	+ 1
0.61	1.09216	+4	1.01245	+2	1.08706	+ 3	1.00742	+ 1	1.08205	+ 4	1.00245	+ 1
0.62	1.09221	+4	1.01374	+2	1.08711	+ 3	1.00871	+ 1	1.08210	+ 4	1.00373	+ 1
0.63	1.09226	+4	1.01498	+2	1.08716	+ 3	1.00995	+ 1	1.08214	+ 4	1.00497	+ 1
0.64	1.09231	+4	1.01619	+2	1.08720	+ 3	1.01116	+ 1	1.08219	+ 4	1.00617	+ 1
0.65	1.09236	+4	1.01737	+2	1.08725	+ 3	1.01233	+ 1	1.08223	+ 4	1.00734	+ 1
0.66	1.09240	+4	1.01851	+2	1.08729	+ 3	1.01346	+ 1	1.08227	+ 4	1.00847	+ 1
0.67	1.09245	+4	1.01961	+2	1.08734	+ 3	1.01457	+ 1	1.08231	+ 4	1.00957	+ 1
0.68	1.09249	+4	1.02069	+2	1.08738	+ 3	1.01564	+ 1	1.08235	+ 4	1.01064	+ 1
0.69	1.09253	+4	1.02173	+2	1.08742	+ 3	1.01668	+ 1	1.08239	+ 4	1.01168	+ 1
0.70	1.09257	+4	1.02275	+2	1.08746	+ 3	1.01769	+ 1	1.08242	+ 4	1.01269	+ 1
0.71	1.09261	+4	1.02374	+2	1.08749	+ 3	1.01868	+ 1	1.08246	+ 4	1.01367	+ 1
0.72	1.09265	+4	1.02470	+2	1.08753	+ 3	1.01964	+ 1	1.08249	+ 4	1.01463	+ 1
0.73	1.09269	+4	1.02564	+2	1.08757	+ 3	1.02057	+ 1	1.08253	+ 4	1.01556	+ 1
0.74	1.09273	+4	1.02655	+2	1.08760	+ 3	1.02148	+ 1	1.08256	+ 4	1.01647	+ 1
0.75	1.09276	+4	1.02744	+2	1.08763	+ 3	1.02237	+ 1	1.08259	+ 4	1.01735	+ 1
0.76	1.09280	+4	1.02830	+2	1.08767	+ 3	1.02323	+ 1	1.08262	+ 4	1.01822	+ 1
0.77	1.09283	+4	1.02915	+2	1.08770	+ 3	1.02407	+ 1	1.08265	+ 4	1.01906	+ 1
0.78	1.09287	+4	1.02997	+2	1.08773	+ 3	1.02490	+ 1	1.08268	+ 4	1.01987	+ 1
0.79	1.09290	+4	1.03077	+2	1.08776	+ 3	1.02569	+ 1	1.08271	+ 4	1.02067	+ 1
0.80	1.09293	+4	1.03155	+2	1.08779	+ 3	1.02648	+ 1	1.08274	+ 4	1.02145	+ 1
0.81	1.09296	+4	1.03232	+2	1.08782	+ 3	1.02724	+ 1	1.08277	+ 4	1.02221	+ 1
0.82	1.09299	+4	1.03307	+2	1.08785	+ 3	1.02798	+ 1	1.08279	+ 4	1.02295	+ 1
0.83	1.09302	+4	1.03380	+2	1.08788	+ 3	1.02871	+ 1	1.08282	+ 4	1.02368	+ 1
0.84	1.09305	+4	1.03451	+2	1.08790	+ 3	1.02942	+ 1	1.08284	+ 4	1.02439	+ 1
0.85	1.09308	+4	1.03520	+2	1.08793	+ 3	1.03012	+ 1	1.08287	+ 4	1.02508	+ 1
0.86	1.09311	+4	1.03588	+2	1.08796	+ 3	1.03079	+ 1	1.08289	+ 4	1.02576	+ 1
0.87	1.09313	+4	1.03655	+2	1.08798	+ 3	1.03146	+ 1	1.08292	+ 4	1.02642	+ 1
0.88	1.09316	+4	1.03720	+2	1.08801	+ 3	1.03211	+ 1	1.08294	+ 4	1.02707	+ 1
0.89	1.09319	+4	1.03784	+2	1.08803	+ 3	1.03274	+ 1	1.08296	+ 4	1.02770	+ 1
0.90	1.09321	+4	1.03846	+2	1.08805	+ 3	1.03336	+ 1	1.08299	+ 4	1.02832	+ 1
0.91	1.09324	+4	1.03907	+2	1.08808	+ 3	1.03397	+ 1	1.08301	+ 4	1.02892	+ 1
0.92	1.09326	+4	1.03966	+2	1.08810	+ 3	1.03456	+ 1	1.08303	+ 4	1.02952	+ 1
0.93	1.09328	+4	1.04025	+2	1.08812	+ 3	1.03515	+ 1	1.08305	+ 4	1.03010	+ 1
0.94	1.09331	+4	1.04082	+2	1.08814	+ 3	1.03572	+ 1	1.08307	+ 4	1.03067	+ 1
0.95	1.09333	+4	1.04138	+2	1.08816	+ 3	1.03628	+ 1	1.08309	+ 4	1.03122	+ 1
0.96	1.09335	+4	1.04193	+2	1.08819	+ 3	1.03682	+ 1	1.08311	+ 4	1.03177	+ 1
0.97	1.09337	+4	1.04246	+2	1.08821	+ 3	1.03736	+ 1	1.08313	+ 4	1.03230	+ 1
0.98	1.09340	+4	1.04299	+2	1.08823	+ 3	1.03789	+ 1	1.08315	+ 4	1.03283	+ 1
0.99	1.09342	+4	1.04351	+2	1.08825	+ 3	1.03840	+ 1	1.08317	+ 4	1.03334	+ 1
1.00	1.09344	+4	1.04401	+2	1.08826	+ 3	1.03890	+ 1	1.08318	+ 4	1.03384	+ 1

TABLE 1-Continued

μ	$\tau = 0.05$; $\varpi_0 = 0.80$				$\tau = 0.05$; $\varpi_0 = 0.50$				$\tau = 0.10$; $\varpi_0 = 1.00$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.00000	0	0	0	1.00000	0	0	0	1.00000	0	0	0
0.01	1.01963	+7	0.01869	0	1.01195	+1	0.01393	+1	1.02583	+ 7	0.01208	-27
0.02	1.03224	+7	0.10591	0	1.01959	+1	0.09646	+1	1.04468	+15	0.03215	-39
0.03	1.04062	+6	0.22175	0	1.02466	+1	0.20873	+1	1.06013	+20	0.07469	-44
0.04	1.04638	+5	0.32596	0	1.02814	+1	0.31035	+1	1.07268	+23	0.13355	-45
0.05	1.05051	+4	0.41222	0	1.03064	+1	0.39469	+1	1.08286	+26	0.19764	-43
0.06	1.05361	+3	0.48268	+1	1.03252	+1	0.46367	+1	1.09117	+27	0.26045	-40
0.07	1.05602	+3	0.54056	+1	1.03397	+1	0.52040	+1	1.09804	+27	0.31915	-37
0.08	1.05794	+3	0.58864	+1	1.03513	+1	0.56755	+1	1.10380	+27	0.37279	-34
0.09	1.05951	+3	0.62907	+1	1.03608	+1	0.60722	+1	1.10868	+26	0.42132	-32
0.10	1.06081	+3	0.66347	+1	1.03687	+1	0.64099	+1	1.11286	+25	0.46509	-30
0.11	1.06191	+3	0.69305	+1	1.03753	+1	0.67003	+1	1.11648	+24	0.50456	-27
0.12	1.06285	+3	0.71873	+1	1.03809	+1	0.69524	+1	1.11964	+23	0.54018	-26
0.13	1.06366	+3	0.74122	+1	1.03858	+1	0.71734	+1	1.12243	+23	0.57243	-24
0.14	1.06437	+3	0.76107	+1	1.03901	+1	0.73684	+1	1.12490	+22	0.60171	-23
0.15	1.06499	+3	0.77872	+1	1.03938	+1	0.75418	+1	1.12710	+21	0.62836	-22
0.16	1.06554	+3	0.79450	+1	1.03972	+1	0.76969	+1	1.12908	+20	0.65273	-20
0.17	1.06604	+3	0.80870	+1	1.04002	+1	0.78364	+1	1.13087	+19	0.67506	-19
0.18	1.06648	+3	0.82154	+1	1.04028	+1	0.79626	+1	1.13249	+18	0.69558	-18
0.19	1.06688	+3	0.83321	+1	1.04052	+1	0.80772	+1	1.13396	+17	0.71450	-17
0.20	1.06725	+3	0.84385	+1	1.04074	+1	0.81819	+1	1.13532	+17	0.73199	-17
0.21	1.06758	+3	0.85360	+1	1.04094	+1	0.82777	+1	1.13656	+16	0.74821	-16
0.22	1.06788	+3	0.86257	+1	1.04113	+1	0.83658	+1	1.13771	+16	0.76327	-16
0.23	1.06816	+3	0.87083	+1	1.04130	+1	0.84471	+1	1.13876	+15	0.77731	-15
0.24	1.06842	+3	0.87848	+1	1.04145	+1	0.85223	+1	1.13975	+15	0.79042	-15
0.25	1.06865	+3	0.88558	+1	1.04159	+1	0.85921	+1	1.14066	+14	0.80268	-15
0.26	1.06887	+3	0.89219	+1	1.04173	+1	0.86570	+1	1.14150	+13	0.81418	-14
0.27	1.06908	+3	0.89835	+1	1.04185	+1	0.87176	+1	1.14230	+13	0.82498	-14
0.28	1.06927	+3	0.90411	+1	1.04197	+1	0.87743	+1	1.14304	+12	0.83514	-14
0.29	1.06945	+3	0.90950	+1	1.04207	+1	0.88273	+1	1.14374	+12	0.84472	-14
0.30	1.06962	+3	0.91457	+1	1.04217	+1	0.88771	+1	1.14440	+12	0.85376	-14
0.31	1.06978	+3	0.91934	+1	1.04227	+1	0.89240	+1	1.14501	+11	0.86232	-13
0.32	1.06992	+3	0.92383	+1	1.04236	+1	0.89682	+1	1.14560	+11	0.87042	-13
0.33	1.07006	+3	0.92807	+1	1.04244	+1	0.90098	+1	1.14615	+11	0.87810	-13
0.34	1.07019	+3	0.93207	+1	1.04252	+1	0.90493	+1	1.14668	+11	0.88540	-12
0.35	1.07032	+3	0.93587	+1	1.04260	+1	0.90866	+1	1.14717	+11	0.89234	-12
0.36	1.07044	+3	0.93947	+1	1.04267	+1	0.91220	+1	1.14763	+ 9	0.89895	-11
0.37	1.07055	+3	0.94288	+1	1.04274	+1	0.91556	+1	1.14807	+ 9	0.90524	-11
0.38	1.07065	+3	0.94613	+1	1.04280	+1	0.91875	+1	1.14850	+ 9	0.91125	-11
0.39	1.07076	+3	0.94923	+1	1.04286	+1	0.92179	+1	1.14891	+ 9	0.91698	-11
0.40	1.07085	+3	0.95217	+1	1.04292	+1	0.92469	+1	1.14930	+ 9	0.92246	-11
0.41	1.07094	+3	0.95499	+1	1.04297	+1	0.92746	+1	1.14967	+ 9	0.92773	- 9
0.42	1.07103	+3	0.95767	+1	1.04303	+1	0.93010	+1	1.15002	+ 9	0.93275	- 9
0.43	1.07111	+3	0.96024	+1	1.04308	+1	0.93263	+1	1.15036	+ 9	0.93757	- 9
0.44	1.07119	+3	0.96270	+1	1.04312	+1	0.93505	+1	1.15069	+ 9	0.94220	- 9
0.45	1.07127	+3	0.96505	+1	1.04317	+1	0.93736	+1	1.15100	+ 9	0.94664	- 9
0.46	1.07134	+3	0.96731	+1	1.04321	+1	0.93959	+1	1.15129	+ 8	0.95090	- 9
0.47	1.07141	+3	0.96948	+1	1.04326	+1	0.94172	+1	1.15157	+ 8	0.95501	- 9
0.48	1.07148	+3	0.97156	+1	1.04330	+1	0.94376	+1	1.15185	+ 8	0.95896	- 9
0.49	1.07154	+3	0.97356	+1	1.04334	+1	0.94573	+1	1.15212	+ 8	0.96277	- 9
0.50	1.07161	+3	0.97549	+1	1.04337	+1	0.94763	+1	1.15237	+ 8	0.96643	- 9

TABLE 1-Continued

μ	$\tau = 0.05$; $\varpi_0 = 0.80$				$\tau = 0.05$; $\varpi_0 = 0.50$				$\tau = 0.10$; $\varpi_0 = 1.00$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.07167	+3	0.97734	+1	1.04341	+1	0.94945	+1	1.15262	+ 8	0.96998	- 8
0.52	1.07172	+3	0.97913	+1	1.04344	+1	0.95121	+1	1.15285	+ 8	0.97340	- 8
0.53	1.07178	+3	0.98085	+1	1.04348	+1	0.95290	+1	1.15308	+ 8	0.97670	- 8
0.54	1.07183	+3	0.98251	+1	1.04351	+1	0.95453	+1	1.15330	+ 8	0.97988	- 8
0.55	1.07188	+3	0.98411	+1	1.04354	+1	0.95611	+1	1.15352	+ 8	0.98296	- 8
0.56	1.07193	+3	0.98566	+1	1.04357	+1	0.95763	+1	1.15371	+ 7	0.98594	- 8
0.57	1.07198	+3	0.98715	+1	1.04360	+1	0.95910	+1	1.15391	+ 7	0.98883	- 8
0.58	1.07203	+3	0.98860	+1	1.04363	+1	0.96053	+1	1.15411	+ 7	0.99162	- 8
0.59	1.07207	+3	0.99000	+1	1.04366	+1	0.96190	+1	1.15429	+ 7	0.99433	- 8
0.60	1.07212	+3	0.99136	+1	1.04368	+1	0.96323	+1	1.15447	+ 7	0.99695	- 8
0.61	1.07216	+3	0.99267	+1	1.04371	+1	0.96453	+1	1.15464	+ 6	0.99950	- 8
0.62	1.07220	+3	0.99394	+1	1.04373	+1	0.96578	+1	1.15481	+ 6	1.00197	- 8
0.63	1.07224	+3	0.99517	+1	1.04376	+1	0.96699	+1	1.15497	+ 6	1.00437	- 8
0.64	1.07228	+3	0.99637	+1	1.04378	+1	0.96817	+1	1.15513	+ 6	1.00669	- 8
0.65	1.07231	+3	0.99753	+1	1.04380	+1	0.96931	+1	1.15529	+ 6	1.00895	- 8
0.66	1.07235	+3	0.99865	+1	1.04382	+1	0.97042	+1	1.15544	+ 6	1.01115	- 8
0.67	1.07239	+3	0.99975	+1	1.04384	+1	0.97149	+1	1.15559	+ 6	1.01329	- 8
0.68	1.07242	+3	1.00081	+1	1.04386	+1	0.97254	+1	1.15573	+ 6	1.01537	- 8
0.69	1.07245	+3	1.00185	+1	1.04388	+1	0.97355	+1	1.15587	+ 6	1.01739	- 8
0.70	1.07249	+3	1.00285	+1	1.04390	+1	0.97454	+1	1.15600	+ 6	1.01936	- 8
0.71	1.07252	+3	1.00383	+1	1.04392	+1	0.97550	+1	1.15614	+ 6	1.02128	- 8
0.72	1.07255	+3	1.00478	+1	1.04394	+1	0.97644	+1	1.15626	+ 6	1.02314	- 8
0.73	1.07258	+3	1.00571	+1	1.04396	+1	0.97735	+1	1.15639	+ 6	1.02496	- 8
0.74	1.07260	+3	1.00661	+1	1.04398	+1	0.97824	+1	1.15651	+ 6	1.02674	- 8
0.75	1.07263	+3	1.00749	+1	1.04399	+1	0.97910	+1	1.15663	+ 6	1.02847	- 8
0.76	1.07266	+3	1.00834	+1	1.04401	+1	0.97995	+1	1.15673	+ 5	1.03015	- 8
0.77	1.07269	+3	1.00918	+1	1.04402	+1	0.98077	+1	1.15685	+ 5	1.03180	- 8
0.78	1.07271	+3	1.00999	+1	1.04404	+1	0.98157	+1	1.15696	+ 5	1.03340	- 8
0.79	1.07274	+3	1.01078	+1	1.04406	+1	0.98235	+1	1.15706	+ 5	1.03497	- 8
0.80	1.07276	+3	1.01156	+1	1.04407	+1	0.98311	+1	1.15717	+ 5	1.03650	- 8
0.81	1.07279	+3	1.01232	+1	1.04409	+1	0.98386	+1	1.15727	+ 5	1.03800	- 8
0.82	1.07281	+3	1.01305	+1	1.04410	+1	0.98458	+1	1.15737	+ 5	1.03946	- 8
0.83	1.07283	+3	1.01378	+1	1.04411	+1	0.98529	+1	1.15747	+ 5	1.04089	- 8
0.84	1.07286	+3	1.01448	+1	1.04413	+1	0.98598	+1	1.15756	+ 5	1.04228	- 8
0.85	1.07288	+3	1.01517	+1	1.04414	+1	0.98666	+1	1.15766	+ 5	1.04365	- 8
0.86	1.07290	+3	1.01584	+1	1.04415	+1	0.98732	+1	1.15775	+ 5	1.04498	- 8
0.87	1.07292	+3	1.01650	+1	1.04417	+1	0.98797	+1	1.15784	+ 5	1.04629	- 8
0.88	1.07294	+3	1.01714	+1	1.04418	+1	0.98860	+1	1.15792	+ 5	1.04757	- 8
0.89	1.07296	+3	1.01777	+1	1.04419	+1	0.98922	+1	1.15801	+ 5	1.04882	- 8
0.90	1.07298	+3	1.01839	+1	1.04420	+1	0.98983	+1	1.15809	+ 5	1.05004	- 8
0.91	1.07300	+3	1.01899	+1	1.04421	+1	0.99042	+1	1.15817	+ 5	1.05124	- 8
0.92	1.07302	+3	1.01958	+1	1.04422	+1	0.99100	+1	1.15825	+ 5	1.05242	- 8
0.93	1.07304	+3	1.02016	+1	1.04424	+1	0.99157	+1	1.15833	+ 5	1.05357	- 8
0.94	1.07305	+3	1.02072	+1	1.04425	+1	0.99213	+1	1.15841	+ 5	1.05469	- 8
0.95	1.07307	+3	1.02128	+1	1.04426	+1	0.99267	+1	1.15848	+ 5	1.05580	- 8
0.96	1.07309	+3	1.02182	+1	1.04427	+1	0.99321	+1	1.15856	+ 5	1.05688	- 8
0.97	1.07311	+3	1.02235	+1	1.04428	+1	0.99373	+1	1.15863	+ 5	1.05794	- 8
0.98	1.07312	+3	1.02287	+1	1.04429	+1	0.99424	+1	1.15870	+ 5	1.05898	- 8
0.99	1.07314	+3	1.02338	+1	1.04430	+1	0.99474	+1	1.15877	+ 5	1.06000	- 8
1.00	1.07315	+3	1.02388	+1	1.04431	+1	0.99524	+1	1.15884	+ 5	1.06101	- 8

TABLE 1-Continued

μ	$\tau = 0.10$; $\varpi_0 = 0.95$				$\tau = 0.10$; $\varpi_0 = 0.90$				$\tau = 0.10$; $\varpi_0 = 0.80$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.00000	0	0	0	1.00000	0	0	0	1.00000	0	0	0
0.01	1.02438	+ 6	0.01129	-30	1.02296	+ 6	0.01059	-25	1.02017	+ 6	0.00924	-16
0.02	1.04213	+13	0.03054	-41	1.03968	+11	0.02905	-35	1.03474	+ 9	0.02617	-24
0.03	1.05667	+17	0.07229	-43	1.05326	+14	0.06999	-38	1.04664	+12	0.06554	-28
0.04	1.06848	+21	0.13043	-42	1.06433	+16	0.12740	-38	1.05629	+14	0.12151	-30
0.05	1.07805	+23	0.19390	-39	1.07329	+17	0.19021	-37	1.06410	+15	0.18312	-28
0.06	1.08586	+24	0.25616	-37	1.08063	+19	0.25193	-36	1.07049	+16	0.24380	-27
0.07	1.09232	+24	0.31439	-34	1.08669	+20	0.30971	-33	1.07577	+17	0.30069	-25
0.08	1.09773	+24	0.36763	-32	1.09177	+20	0.36256	-30	1.08019	+17	0.35276	-24
0.09	1.10232	+23	0.41582	-30	1.09607	+20	0.41042	-28	1.08392	+16	0.39996	-23
0.10	1.10624	+22	0.45929	-28	1.09975	+19	0.45360	-27	1.08714	+16	0.44258	-21
0.11	1.10964	+21	0.49849	-27	1.10295	+19	0.49255	-24	1.08991	+15	0.48103	-19
0.12	1.11261	+20	0.53389	-25	1.10578	+18	0.52773	-23	1.09233	+14	0.51577	-18
0.13	1.11522	+18	0.56598	-24	1.10818	+17	0.55957	-22	1.09446	+13	0.54723	-17
0.14	1.11754	+18	0.59503	-23	1.11036	+17	0.58850	-20	1.09635	+12	0.57580	-16
0.15	1.11961	+17	0.62153	-22	1.11230	+16	0.61485	-18	1.09803	+11	0.60182	-16
0.16	1.12147	+16	0.64575	-20	1.11404	+15	0.63892	-17	1.09954	+10	0.62561	-15
0.17	1.12316	+16	0.66794	-19	1.11561	+14	0.66097	-17	1.10092	+10	0.64741	-15
0.18	1.12468	+15	0.68835	-18	1.11703	+13	0.68126	-16	1.10217	+10	0.66747	-14
0.19	1.12606	+14	0.70716	-17	1.11833	+12	0.69996	-15	1.10330	+10	0.68595	-14
0.20	1.12734	+14	0.72455	-17	1.11952	+12	0.71725	-15	1.10434	+10	0.70305	-14
0.21	1.12850	+13	0.74066	-17	1.12061	+11	0.73330	-13	1.10528	+ 8	0.71891	-12
0.22	1.12958	+13	0.75565	-16	1.12162	+11	0.74819	-13	1.10616	+ 8	0.73365	-12
0.23	1.13057	+13	0.76961	-16	1.12255	+10	0.76207	-13	1.10697	+ 8	0.74737	-12
0.24	1.13149	+12	0.78265	-15	1.12342	+10	0.77503	-13	1.10772	+ 8	0.76019	-12
0.25	1.13235	+12	0.79484	-15	1.12422	+10	0.78715	-13	1.10843	+ 8	0.77218	-12
0.26	1.13314	+11	0.80628	-14	1.12497	+10	0.79853	-12	1.10907	+ 7	0.78345	-10
0.27	1.13389	+11	0.81702	-14	1.12568	+10	0.80921	-12	1.10968	+ 7	0.79401	-10
0.28	1.13458	+10	0.82714	-13	1.12633	+10	0.81926	-12	1.11025	+ 7	0.80395	-10
0.29	1.13524	+10	0.83666	-13	1.12695	+10	0.82873	-12	1.11079	+ 7	0.81333	-10
0.30	1.13585	+ 9	0.84566	-13	1.12753	+10	0.83768	-12	1.11129	+ 7	0.82218	-10
0.31	1.13643	+ 9	0.85416	-13	1.12806	+ 8	0.84616	-10	1.11176	+ 6	0.83057	- 8
0.32	1.13698	+ 9	0.86223	-12	1.12857	+ 8	0.85417	-10	1.11221	+ 6	0.83850	- 8
0.33	1.13750	+ 9	0.86987	-12	1.12906	+ 8	0.86177	-10	1.11263	+ 6	0.84601	- 8
0.34	1.13798	+ 8	0.87712	-12	1.12952	+ 8	0.86899	-10	1.11303	+ 6	0.85315	- 8
0.35	1.13845	+ 8	0.88402	-12	1.12996	+ 8	0.87585	-10	1.11341	+ 6	0.85994	- 8
0.36	1.13889	+ 8	0.89060	-11	1.13036	+ 7	0.88238	-10	1.11376	+ 5	0.86641	- 8
0.37	1.13930	+ 7	0.89686	-11	1.13075	+ 7	0.88861	-10	1.11410	+ 5	0.87257	- 8
0.38	1.13970	+ 7	0.90283	-11	1.13113	+ 7	0.89455	-10	1.11443	+ 5	0.87845	- 8
0.39	1.14008	+ 7	0.90854	-11	1.13149	+ 7	0.90022	-10	1.11474	+ 5	0.88406	- 8
0.40	1.14045	+ 7	0.91399	-11	1.13183	+ 7	0.90565	-10	1.11504	+ 5	0.88943	- 8
0.41	1.14080	+ 7	0.91922	-10	1.13214	+ 6	0.91086	- 8	1.11531	+ 4	0.89458	- 7
0.42	1.14113	+ 7	0.92422	-10	1.13245	+ 6	0.91583	- 8	1.11558	+ 4	0.89950	- 7
0.43	1.14144	+ 7	0.92901	-10	1.13275	+ 6	0.92060	- 8	1.11584	+ 4	0.90422	- 7
0.44	1.14175	+ 7	0.93361	-10	1.13304	+ 6	0.92518	- 8	1.11609	+ 4	0.90875	- 7
0.45	1.14204	+ 7	0.93803	-10	1.13331	+ 6	0.92957	- 8	1.11632	+ 4	0.91310	- 7
0.46	1.14232	+ 7	0.94229	- 9	1.13356	+ 5	0.93380	- 8	1.11655	+ 4	0.91728	- 7
0.47	1.14259	+ 7	0.94637	- 9	1.13381	+ 5	0.93786	- 8	1.11677	+ 4	0.92130	- 7
0.48	1.14285	+ 7	0.95030	- 9	1.13405	+ 5	0.94177	- 8	1.11698	+ 4	0.92517	- 7
0.49	1.14309	+ 7	0.95409	- 9	1.13429	+ 5	0.94554	- 8	1.11718	+ 4	0.92890	- 7
0.50	1.14333	+ 7	0.95774	- 9	1.13451	+ 5	0.94917	- 8	1.11738	+ 4	0.93249	- 7

TABLE 1-Continued

μ	$\tau = 0.10$; $\varpi_0 = 0.95$				$\tau = 0.10$; $\varpi_0 = 0.90$				$\tau = 0.10$; $\varpi_0 = 0.80$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.14355	+ 6	0.96127	- 8	1.13473	+ 5	0.95267	- 8	1.11756	+ 3	0.93596	- 7
0.52	1.14378	+ 6	0.96467	- 8	1.13493	+ 5	0.95605	- 8	1.11774	+ 3	0.93931	- 7
0.53	1.14399	+ 6	0.96795	- 8	1.13513	+ 5	0.95932	- 8	1.11791	+ 3	0.94254	- 7
0.54	1.14420	+ 6	0.97112	- 8	1.13533	+ 5	0.96247	- 8	1.11808	+ 3	0.94566	- 7
0.55	1.14440	+ 6	0.97419	- 8	1.13552	+ 5	0.96552	- 8	1.11824	+ 3	0.94868	- 7
0.56	1.14459	+ 6	0.97716	- 8	1.13569	+ 4	0.96847	- 8	1.11840	+ 3	0.95160	- 7
0.57	1.14477	+ 6	0.98003	- 8	1.13586	+ 4	0.97133	- 8	1.11855	+ 3	0.95443	- 7
0.58	1.14495	+ 6	0.98281	- 8	1.13603	+ 4	0.97409	- 8	1.11870	+ 3	0.95716	- 7
0.59	1.14513	+ 6	0.98550	- 8	1.13619	+ 4	0.97677	- 8	1.11884	+ 3	0.95982	- 7
0.60	1.14530	+ 6	0.98811	- 8	1.13635	+ 4	0.97937	- 8	1.11898	+ 3	0.96239	- 7
0.61	1.14545	+ 5	0.99065	- 8	1.13650	+ 4	0.98189	- 8	1.11910	+ 2	0.96488	- 7
0.62	1.14561	+ 5	0.99310	- 8	1.13665	+ 4	0.98434	- 8	1.11923	+ 2	0.96730	- 7
0.63	1.14576	+ 5	0.99549	- 8	1.13680	+ 4	0.98671	- 8	1.11935	+ 2	0.96965	- 7
0.64	1.14591	+ 5	0.99781	- 8	1.13694	+ 4	0.98901	- 8	1.11948	+ 2	0.97193	- 7
0.65	1.14606	+ 5	1.00006	- 8	1.13707	+ 4	0.99125	- 8	1.11959	+ 2	0.97415	- 7
0.66	1.14620	+ 5	1.00224	- 8	1.13720	+ 4	0.99343	- 8	1.11971	+ 2	0.97630	- 7
0.67	1.14634	+ 5	1.00437	- 8	1.13733	+ 4	0.99555	- 8	1.11982	+ 2	0.97840	- 7
0.68	1.14647	+ 5	1.00644	- 8	1.13746	+ 4	0.99760	- 8	1.11993	+ 2	0.98044	- 7
0.69	1.14660	+ 5	1.00845	- 8	1.13758	+ 4	0.99961	- 8	1.12003	+ 2	0.98242	- 7
0.70	1.14672	+ 5	1.01041	- 8	1.13770	+ 4	1.00156	- 8	1.12014	+ 2	0.98435	- 7
0.71	1.14685	+ 5	1.01232	- 8	1.13781	+ 4	1.00345	- 8	1.12024	+ 2	0.98623	- 7
0.72	1.14696	+ 5	1.01418	- 8	1.13792	+ 4	1.00530	- 8	1.12033	+ 2	0.98806	- 7
0.73	1.14708	+ 5	1.01599	- 8	1.13803	+ 4	1.00711	- 8	1.12043	+ 2	0.98984	- 7
0.74	1.14719	+ 5	1.01776	- 8	1.13814	+ 4	1.00886	- 8	1.12052	+ 2	0.99158	- 7
0.75	1.14730	+ 5	1.01948	- 8	1.13824	+ 4	1.01058	- 8	1.12061	+ 2	0.99328	- 7
0.76	1.14741	+ 5	1.02116	- 8	1.13833	+ 3	1.01225	- 8	1.12070	+ 2	0.99493	- 7
0.77	1.14751	+ 5	1.02280	- 8	1.13843	+ 3	1.01388	- 8	1.12078	+ 2	0.99654	- 7
0.78	1.14762	+ 5	1.02440	- 8	1.13852	+ 3	1.01547	- 8	1.12086	+ 2	0.99812	- 7
0.79	1.14772	+ 5	1.02596	- 8	1.13862	+ 3	1.01702	- 8	1.12094	+ 2	0.99966	- 7
0.80	1.14781	+ 5	1.02748	- 8	1.13871	+ 3	1.01854	- 8	1.12102	+ 2	1.00116	- 7
0.81	1.14791	+ 5	1.02897	- 8	1.13880	+ 3	1.02002	- 8	1.12110	+ 2	1.00262	- 7
0.82	1.14800	+ 5	1.03042	- 8	1.13888	+ 3	1.02146	- 8	1.12118	+ 2	1.00406	- 7
0.83	1.14809	+ 5	1.03185	- 8	1.13897	+ 3	1.02288	- 8	1.12125	+ 2	1.00546	- 7
0.84	1.14818	+ 5	1.03324	- 8	1.13905	+ 3	1.02426	- 8	1.12132	+ 2	1.00683	- 7
0.85	1.14827	+ 5	1.03460	- 8	1.13913	+ 3	1.02562	- 8	1.12139	+ 2	1.00817	- 7
0.86	1.14835	+ 5	1.03593	- 8	1.13921	+ 3	1.02694	- 8	1.12146	+ 2	1.00947	- 7
0.87	1.14843	+ 5	1.03722	- 8	1.13929	+ 3	1.02823	- 8	1.12153	+ 2	1.01075	- 7
0.88	1.14851	+ 5	1.03850	- 8	1.13936	+ 3	1.02950	- 8	1.12159	+ 2	1.01201	- 7
0.89	1.14859	+ 5	1.03975	- 8	1.13944	+ 3	1.03074	- 8	1.12166	+ 2	1.01324	- 7
0.90	1.14867	+ 5	1.04096	- 8	1.13951	+ 3	1.03195	- 8	1.12172	+ 2	1.01444	- 7
0.91	1.14875	+ 5	1.04216	- 8	1.13958	+ 3	1.03314	- 8	1.12178	+ 2	1.01561	- 7
0.92	1.14882	+ 5	1.04333	- 8	1.13965	+ 3	1.03430	- 8	1.12184	+ 2	1.01676	- 7
0.93	1.14889	+ 5	1.04447	- 8	1.13972	+ 3	1.03544	- 8	1.12190	+ 2	1.01789	- 7
0.94	1.14896	+ 5	1.04560	- 8	1.13978	+ 3	1.03656	- 8	1.12196	+ 2	1.01900	- 7
0.95	1.14903	+ 5	1.04669	- 8	1.13985	+ 3	1.03765	- 8	1.12202	+ 2	1.02008	- 7
0.96	1.14910	+ 5	1.04777	- 8	1.13991	+ 3	1.03873	- 8	1.12207	+ 2	1.02114	- 7
0.97	1.14917	+ 5	1.04883	- 8	1.13998	+ 3	1.03978	- 8	1.12213	+ 2	1.02219	- 7
0.98	1.14923	+ 5	1.04987	- 8	1.14004	+ 3	1.04081	- 8	1.12218	+ 2	1.02321	- 7
0.99	1.14930	+ 5	1.05088	- 8	1.14010	+ 3	1.04182	- 8	1.12223	+ 2	1.02421	- 7
1.00	1.14936	+ 5	1.05188	- 8	1.14016	+ 3	1.04281	- 8	1.12228	+ 2	1.02519	- 7

TABLE 1-Continued

μ	$\tau = 0.10$; $\varpi_0 = 0.50$				$\tau = 0.15$; $\varpi_0 = 1.00$				$\tau = 0.15$; $\varpi_0 = 0.95$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.00000	0	0	0	1.00000	0	0	0	1.00000	0	0	0
0.01	1.01218	+3	0.00540	- 7	1.02648	+15	0.01034	- 54	1.02496	+14	0.00964	-51
0.02	1.02087	+5	0.01810	-10	1.04609	+28	0.02227	- 80	1.04339	+26	0.02082	-75
0.03	1.02793	+7	0.05318	-12	1.06500	+41	0.04070	- 96	1.05924	+36	0.03848	-87
0.04	1.03363	+8	0.10524	-13	1.07776	+51	0.06998	-102	1.07308	+45	0.06696	-92
0.05	1.03823	+8	0.16343	-13	1.09057	+57	0.10851	-102	1.08510	+52	0.10453	-92
0.06	1.04199	+8	0.22120	-13	1.10169	+63	0.15182	- 99	1.09549	+56	0.14734	-89
0.07	1.04509	+8	0.27559	-12	1.11130	+64	0.19730	- 94	1.10451	+59	0.19217	-85
0.08	1.04768	+7	0.32556	-11	1.11968	+65	0.24259	- 89	1.11235	+59	0.23687	-82
0.09	1.04987	+6	0.37092	-11	1.12701	+65	0.28643	- 85	1.11920	+58	0.28021	-77
0.10	1.05175	+5	0.41194	-10	1.13346	+64	0.32817	- 82	1.12524	+57	0.32148	-75
0.11	1.05338	+4	0.44900	- 9	1.13918	+63	0.36754	- 77	1.13058	+56	0.36041	-72
0.12	1.05480	+4	0.48251	- 8	1.14427	+62	0.40442	- 74	1.13535	+55	0.39693	-68
0.13	1.05605	+3	0.51287	- 8	1.14882	+60	0.43886	- 72	1.13960	+53	0.43103	-66
0.14	1.05717	+3	0.54047	- 8	1.15292	+58	0.47100	- 68	1.14343	+51	0.46285	-64
0.15	1.05815	+2	0.56562	- 8	1.15663	+57	0.50096	- 64	1.14689	+49	0.49252	-61
0.16	1.05904	+2	0.58862	- 8	1.16001	+56	0.52888	- 62	1.15004	+48	0.52020	-58
0.17	1.05984	+1	0.60971	- 8	1.16307	+54	0.55495	- 59	1.15291	+47	0.54602	-56
0.18	1.06057	+1	0.62910	- 8	1.16588	+52	0.57929	- 57	1.15555	+46	0.57014	-55
0.19	1.06123	0	0.64700	- 8	1.16846	+50	0.60206	- 55	1.15795	+44	0.59271	-53
0.20	1.06184	0	0.66355	- 8	1.17088	+48	0.62338	- 53	1.16018	+43	0.61385	-51
0.21	1.06240	0	0.67891	- 7	1.17304	+47	0.64338	- 51	1.16224	+42	0.63369	-48
0.22	1.06292	0	0.69318	- 7	1.17508	+46	0.66216	- 49	1.16414	+41	0.65231	-47
0.23	1.06340	0	0.70648	- 7	1.17698	+45	0.67982	- 48	1.16591	+39	0.66982	-46
0.24	1.06384	0	0.71890	- 7	1.17875	+44	0.69646	- 46	1.16756	+38	0.68632	-44
0.25	1.06425	0	0.73052	- 7	1.18040	+43	0.71215	- 45	1.16910	+37	0.70189	-43
0.26	1.06463	0	0.74142	- 7	1.18195	+42	0.72697	- 44	1.17055	+37	0.71659	-42
0.27	1.06499	0	0.75166	- 7	1.18340	+41	0.74100	- 42	1.17191	+36	0.73051	-40
0.28	1.06533	0	0.76130	- 7	1.18476	+40	0.75428	- 41	1.17318	+35	0.74369	-38
0.29	1.06564	0	0.77039	- 7	1.18605	+39	0.76687	- 40	1.17437	+34	0.75617	-38
0.30	1.06594	0	0.77898	- 7	1.18726	+38	0.77883	- 39	1.17550	+33	0.76804	-37
0.31	1.06622	0	0.78711	- 5	1.18840	+37	0.79019	- 38	1.17657	+32	0.77931	-36
0.32	1.06648	0	0.79480	- 5	1.18949	+37	0.80101	- 37	1.17757	+31	0.79004	-36
0.33	1.06673	0	0.80210	- 5	1.19052	+36	0.81131	- 36	1.17853	+30	0.80026	-35
0.34	1.06696	0	0.80902	- 5	1.19150	+36	0.82114	- 35	1.17943	+29	0.81002	-34
0.35	1.06719	0	0.81561	- 5	1.19242	+35	0.83052	- 35	1.18030	+29	0.81933	-33
0.36	1.06740	0	0.82189	- 4	1.19330	+34	0.83948	- 34	1.18112	+28	0.82822	-33
0.37	1.06760	0	0.82787	- 4	1.19414	+33	0.84806	- 33	1.18190	+27	0.83674	-32
0.38	1.06779	0	0.83357	- 4	1.19495	+33	0.85628	- 32	1.18265	+27	0.84489	-31
0.39	1.06797	0	0.83902	- 4	1.19571	+32	0.86414	- 32	1.18337	+27	0.85270	-30
0.40	1.06814	0	0.84423	- 4	1.19644	+32	0.87170	- 30	1.18404	+26	0.86019	-30
0.41	1.06831	0	0.84922	- 4	1.19714	+31	0.87898	- 30	1.18470	+26	0.86737	-30
0.42	1.06847	0	0.85400	- 4	1.19780	+30	0.88588	- 30	1.18531	+25	0.87427	-30
0.43	1.06862	0	0.85858	- 4	1.19845	+30	0.89256	- 30	1.18592	+25	0.88091	-30
0.44	1.06877	0	0.86297	- 4	1.19906	+29	0.89899	- 30	1.18648	+24	0.88729	-30
0.45	1.06891	0	0.86720	- 4	1.19965	+28	0.90518	- 30	1.18704	+24	0.89343	-30
0.46	1.06903	-1	0.87125	- 4	1.20022	+28	0.91116	- 28	1.18757	+24	0.89938	-27
0.47	1.06916	-1	0.87516	- 4	1.20077	+28	0.91691	- 28	1.18807	+23	0.90509	-27
0.48	1.06928	-1	0.87891	- 4	1.20130	+27	0.92245	- 28	1.18856	+23	0.91059	-27
0.49	1.06940	-1	0.88253	- 4	1.20181	+27	0.92780	- 28	1.18903	+22	0.91591	-27
0.50	1.06951	-1	0.88602	- 4	1.20230	+27	0.93297	- 28	1.18949	+22	0.92104	-27

TABLE 1-Continued

μ	$\tau = 0.10$; $\varpi_0 = 0.50$				$\tau = 0.15$; $\varpi_0 = 1.00$				$\tau = 0.15$; $\varpi_0 = 0.95$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.06962	-1	0.88939	- 4	1.20276	+26	0.93798	- 26	1.18993	+22	0.92602	-25
0.52	1.06973	-1	0.89264	- 4	1.20322	+26	0.94281	- 26	1.19035	+22	0.93081	-25
0.53	1.06983	-1	0.89578	- 4	1.20367	+26	0.94748	- 26	1.19076	+22	0.93545	-25
0.54	1.06993	-1	0.89881	- 4	1.20409	+25	0.95200	- 26	1.19116	+22	0.93994	-25
0.55	1.07003	-1	0.90174	- 4	1.20450	+25	0.95638	- 26	1.19154	+22	0.94429	-25
0.56	1.07012	-1	0.90458	- 4	1.20490	+25	0.96062	- 26	1.19189	+20	0.94850	-25
0.57	1.07021	-1	0.90732	- 4	1.20529	+25	0.96474	- 25	1.19225	+20	0.95259	-25
0.58	1.07029	-1	0.90998	- 4	1.20566	+25	0.96873	- 25	1.19260	+20	0.95655	-25
0.59	1.07038	-1	0.91256	- 4	1.20603	+25	0.97260	- 25	1.19294	+20	0.96039	-25
0.60	1.07046	-1	0.91505	- 4	1.20637	+24	0.97635	- 25	1.19326	+20	0.96412	-25
0.61	1.07054	-1	0.91748	- 4	1.20671	+24	0.98000	- 25	1.19357	+19	0.96775	-24
0.62	1.07061	-1	0.91983	- 4	1.20705	+24	0.98354	- 25	1.19388	+19	0.97127	-24
0.63	1.07068	-1	0.92211	- 4	1.20737	+24	0.98699	- 25	1.19418	+19	0.97469	-24
0.64	1.07076	-1	0.92432	- 4	1.20768	+24	0.99033	- 25	1.19446	+19	0.97802	-24
0.65	1.07083	-1	0.92648	- 4	1.20798	+23	0.99359	- 25	1.19475	+19	0.98126	-24
0.66	1.07089	-1	0.92857	- 4	1.20827	+23	0.99676	- 25	1.19501	+18	0.98440	-24
0.67	1.07096	-1	0.93060	- 4	1.20856	+23	0.99985	- 24	1.19527	+18	0.98747	-24
0.68	1.07102	-1	0.93258	- 4	1.20884	+23	1.00285	- 24	1.19553	+18	0.99045	-24
0.69	1.07108	-1	0.93451	- 4	1.20911	+23	1.00578	- 24	1.19578	+18	0.99336	-24
0.70	1.07114	-1	0.93638	- 4	1.20936	+21	1.00862	- 24	1.19603	+18	0.99619	-24
0.71	1.07120	-1	0.93821	- 4	1.20962	+21	1.01140	- 24	1.19626	+17	0.99895	-24
0.72	1.07126	-1	0.93998	- 4	1.20987	+21	1.01411	- 24	1.19649	+17	1.00164	-24
0.73	1.07131	-1	0.94172	- 4	1.21012	+21	1.01675	- 24	1.19671	+17	1.00427	-24
0.74	1.07137	-1	0.94341	- 4	1.21036	+21	1.01933	- 24	1.19693	+17	1.00683	-24
0.75	1.07142	-1	0.94505	- 4	1.21059	+21	1.02184	- 24	1.19715	+17	1.00933	-24
0.76	1.07147	-1	0.94666	- 4	1.21082	+21	1.02429	- 24	1.19735	+16	1.01177	-24
0.77	1.07152	-1	0.94823	- 4	1.21104	+21	1.02669	- 24	1.19755	+16	1.01415	-24
0.78	1.07157	-1	0.94976	- 4	1.21126	+21	1.02903	- 24	1.19775	+16	1.01648	-24
0.79	1.07162	-1	0.95125	- 4	1.21147	+21	1.03132	- 24	1.19795	+16	1.01875	-24
0.80	1.07166	-1	0.95271	- 4	1.21167	+20	1.03355	- 24	1.19814	+16	1.02097	-24
0.81	1.07171	-1	0.95413	- 4	1.21187	+20	1.03574	- 24	1.19832	+16	1.02314	-24
0.82	1.07175	-1	0.95553	- 4	1.21207	+20	1.03787	- 24	1.19850	+16	1.02527	-24
0.83	1.07180	-1	0.95689	- 4	1.21226	+20	1.03996	- 24	1.19868	+16	1.02734	-24
0.84	1.07184	-1	0.95822	- 4	1.21245	+20	1.04200	- 24	1.19885	+16	1.02938	-24
0.85	1.07188	-1	0.95952	- 4	1.21263	+20	1.04400	- 24	1.19902	+16	1.03136	-24
0.86	1.07192	-1	0.96079	- 4	1.21282	+20	1.04596	- 24	1.19919	+16	1.03331	-24
0.87	1.07196	-1	0.96203	- 4	1.21299	+20	1.04787	- 24	1.19935	+16	1.03521	-24
0.88	1.07200	-1	0.96325	- 4	1.21317	+20	1.04975	- 24	1.19951	+16	1.03708	-24
0.89	1.07204	-1	0.96444	- 4	1.21334	+20	1.05158	- 24	1.19966	+16	1.03891	-24
0.90	1.07207	-1	0.96561	- 4	1.21350	+20	1.05338	- 24	1.19982	+16	1.04070	-24
0.91	1.07211	-1	0.96675	- 4	1.21367	+20	1.05515	- 24	1.19997	+16	1.04245	-24
0.92	1.07214	-1	0.96787	- 4	1.21383	+20	1.05687	- 24	1.20011	+16	1.04417	-24
0.93	1.07218	-1	0.96897	- 4	1.21398	+20	1.05856	- 24	1.20025	+16	1.04585	-24
0.94	1.07221	-1	0.97004	- 4	1.21414	+20	1.06022	- 24	1.20039	+16	1.04750	-24
0.95	1.07225	-1	0.97110	- 4	1.21429	+20	1.06185	- 24	1.20053	+16	1.04912	-24
0.96	1.07228	-1	0.97213	- 4	1.21444	+20	1.06344	- 24	1.20066	+16	1.05071	-24
0.97	1.07231	-1	0.97314	- 4	1.21458	+20	1.06501	- 24	1.20080	+16	1.05226	-24
0.98	1.07234	-1	0.97413	- 4	1.21472	+20	1.06654	- 24	1.20093	+16	1.05379	-24
0.99	1.07237	-1	0.97510	- 4	1.21486	+20	1.06805	- 24	1.20105	+16	1.05529	-24
1.00	1.07240	-1	0.97606	- 4	1.21500	+20	1.06953	- 24	1.20118	+16	1.05676	-24

TABLE 1-Continued

μ	$\tau = 0.15$; $\varpi_0 = 0.90$				$\tau = 0.15$; $\varpi_0 = 0.80$				$\tau = 0.15$; $\varpi_0 = 0.50$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.00000	0	0	0	1.00000	0	0	0	1.00000	0	0	0
0.01	1.02345	+12	0.00900	-44	1.02051	+ 7	0.00775	-33	1.01231	+ 5	0.00444	-10
0.02	1.04072	+22	0.01943	-67	1.03554	+14	0.01681	-52	1.02116	+ 7	0.00983	-17
0.03	1.05558	+32	0.03032	-78	1.04841	+20	0.03223	-60	1.02869	+10	0.02128	-22
0.04	1.06851	+39	0.04403	-83	1.05961	+25	0.05843	-65	1.03520	+12	0.04347	-25
0.05	1.07973	+45	0.10085	-83	1.06931	+28	0.09381	-66	1.04082	+13	0.07500	-26
0.06	1.08943	+47	0.14298	-79	1.07771	+31	0.13459	-66	1.04566	+13	0.11220	-27
0.07	1.09785	+49	0.18718	-76	1.08499	+33	0.17758	-64	1.04985	+13	0.15192	-27
0.08	1.10518	+50	0.23131	-74	1.09133	+34	0.22063	-62	1.05350	+13	0.19202	-27
0.09	1.11158	+50	0.27413	-71	1.09686	+34	0.26248	-59	1.05669	+13	0.23122	-26
0.10	1.11722	+49	0.31496	-67	1.10175	+35	0.30243	-57	1.05948	+12	0.26878	-25
0.11	1.12220	+47	0.35348	-65	1.10606	+34	0.34016	-55	1.06196	+12	0.30438	-24
0.12	1.12664	+46	0.38961	-63	1.10990	+34	0.37558	-53	1.06416	+11	0.33786	-23
0.13	1.13062	+45	0.42340	-59	1.11333	+33	0.40873	-50	1.06613	+10	0.36922	-23
0.14	1.13420	+44	0.45492	-57	1.11643	+33	0.43966	-48	1.06790	+ 9	0.39856	-22
0.15	1.13744	+43	0.48430	-56	1.11923	+32	0.46851	-47	1.06951	+ 9	0.42596	-21
0.16	1.14038	+42	0.51171	-54	1.12176	+31	0.49544	-45	1.07096	+ 8	0.45155	-21
0.17	1.14304	+39	0.53731	-52	1.12407	+29	0.52058	-44	1.07229	+ 8	0.47547	-20
0.18	1.14551	+39	0.56122	-50	1.12618	+28	0.54408	-43	1.07350	+ 7	0.49784	-19
0.19	1.14775	+37	0.58360	-48	1.12813	+27	0.56607	-41	1.07462	+ 7	0.51879	-19
0.20	1.14984	+37	0.60455	-46	1.12991	+25	0.58668	-39	1.07565	+ 7	0.53843	-18
0.21	1.15176	+36	0.62420	-45	1.13156	+24	0.60601	-38	1.07660	+ 6	0.55685	-18
0.22	1.15354	+35	0.64267	-43	1.13309	+23	0.62415	-38	1.07748	+ 6	0.57417	-18
0.23	1.15519	+34	0.66005	-41	1.13452	+22	0.64124	-37	1.07829	+ 5	0.59048	-18
0.24	1.15673	+33	0.67641	-40	1.13584	+21	0.65734	-36	1.07906	+ 5	0.60584	-18
0.25	1.15818	+33	0.69185	-39	1.13708	+20	0.67253	-35	1.07977	+ 4	0.62034	-18
0.26	1.15952	+32	0.70644	-37	1.13824	+19	0.68688	-34	1.08044	+ 4	0.63406	-17
0.27	1.16078	+30	0.72022	-37	1.13933	+18	0.70045	-33	1.08106	+ 4	0.64703	-17
0.28	1.16196	+29	0.73329	-36	1.14036	+18	0.71330	-33	1.08164	+ 3	0.65932	-17
0.29	1.16309	+29	0.74568	-35	1.14132	+17	0.72550	-32	1.08220	+ 3	0.67098	-17
0.30	1.16414	+28	0.75745	-34	1.14224	+17	0.73708	-32	1.08272	+ 3	0.68206	-17
0.31	1.16513	+27	0.76863	-34	1.14309	+16	0.74810	-31	1.08321	+ 2	0.69259	-17
0.32	1.16608	+27	0.77928	-33	1.14390	+15	0.75858	-30	1.08368	+ 2	0.70261	-17
0.33	1.16697	+26	0.78941	-33	1.14468	+15	0.76857	-29	1.08412	+ 2	0.71217	-17
0.34	1.16782	+26	0.79909	-32	1.14540	+14	0.77810	-28	1.08453	+ 1	0.72128	-17
0.35	1.16862	+25	0.80833	-31	1.14610	+14	0.78719	-28	1.08493	+ 1	0.72999	-17
0.36	1.16938	+24	0.81716	-30	1.14676	+13	0.79589	-27	1.08530	0	0.73832	-16
0.37	1.17012	+24	0.82560	-30	1.14739	+13	0.80420	-27	1.08567	0	0.74628	-16
0.38	1.17081	+23	0.83369	-29	1.14798	+12	0.81216	-27	1.08601	0	0.75390	-16
0.39	1.17148	+23	0.84144	-29	1.14856	+12	0.81979	-26	1.08634	0	0.76121	-16
0.40	1.17211	+22	0.84887	-28	1.14910	+11	0.82711	-26	1.08666	0	0.76822	-16
0.41	1.17272	+22	0.85601	-27	1.14963	+11	0.83413	-26	1.08695	- 1	0.77496	-15
0.42	1.17331	+22	0.86286	-27	1.15013	+11	0.84088	-26	1.08724	- 1	0.78142	-15
0.43	1.17386	+21	0.86944	-27	1.15062	+11	0.84737	-25	1.08752	- 1	0.78764	-15
0.44	1.17440	+21	0.87577	-27	1.15108	+11	0.85361	-25	1.08778	- 1	0.79362	-15
0.45	1.17490	+20	0.88187	-27	1.15153	+11	0.85962	-25	1.08804	- 1	0.79938	-15
0.46	1.17540	+20	0.88776	-26	1.15195	+10	0.86541	-24	1.08827	- 2	0.80493	-15
0.47	1.17587	+19	0.89342	-26	1.15236	+10	0.87099	-24	1.08851	- 2	0.81028	-15
0.48	1.17633	+19	0.89888	-26	1.15275	+10	0.87638	-24	1.08873	- 2	0.81544	-15
0.49	1.17676	+18	0.90416	-26	1.15313	+10	0.88158	-23	1.08895	- 2	0.82042	-15
0.50	1.17719	+18	0.90925	-26	1.15350	+10	0.88660	-23	1.08916	- 2	0.82523	-15

TABLE 1-Continued

μ	$\tau = 0.15$; $\varpi_0 = 0.90$				$\tau = 0.15$; $\varpi_0 = 0.80$				$\tau = 0.15$; $\varpi_0 = 0.50$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.17759	+17	0.91418	-25	1.15384	+ 8	0.89145	-23	1.08937	- 2	0.82990	-13
0.52	1.17798	+17	0.91894	-25	1.15418	+ 8	0.89614	-23	1.08956	- 2	0.83440	-13
0.53	1.17837	+17	0.92354	-25	1.15451	+ 8	0.90068	-22	1.08975	- 2	0.83875	-13
0.54	1.17874	+17	0.92800	-25	1.15483	+ 8	0.90508	-22	1.08993	- 2	0.84296	-13
0.55	1.17909	+17	0.93231	-25	1.15514	+ 8	0.90933	-22	1.09011	- 2	0.84704	-13
0.56	1.17942	+15	0.93651	-24	1.15543	+ 7	0.91345	-22	1.09027	- 3	0.85100	-13
0.57	1.17975	+15	0.94056	-24	1.15571	+ 7	0.91744	-22	1.09043	- 3	0.85483	-13
0.58	1.18008	+15	0.94449	-24	1.15599	+ 7	0.92132	-22	1.09059	- 3	0.85855	-13
0.59	1.18039	+15	0.94831	-24	1.15626	+ 7	0.92508	-22	1.09075	- 3	0.86215	-13
0.60	1.18070	+15	0.95201	-24	1.15653	+ 7	0.92873	-22	1.09090	- 3	0.86566	-13
0.61	1.18099	+15	0.95560	-24	1.15677	+ 6	0.93228	-21	1.09105	- 3	0.86906	-13
0.62	1.18128	+15	0.95910	-24	1.15702	+ 6	0.93572	-21	1.09119	- 3	0.87236	-13
0.63	1.18156	+15	0.96249	-24	1.15726	+ 6	0.93907	-21	1.09132	- 3	0.87557	-13
0.64	1.18183	+15	0.96580	-24	1.15749	+ 6	0.94232	-21	1.09146	- 3	0.87870	-13
0.65	1.18209	+15	0.96901	-24	1.15772	+ 6	0.94549	-21	1.09159	- 3	0.88173	-13
0.66	1.18233	+14	0.97213	-24	1.15793	+ 5	0.94857	-21	1.09171	- 3	0.88469	-13
0.67	1.18258	+14	0.97517	-24	1.15814	+ 5	0.95157	-21	1.09183	- 3	0.88757	-13
0.68	1.18282	+14	0.97813	-24	1.15835	+ 5	0.95448	-21	1.09195	- 3	0.89037	-13
0.69	1.18306	+14	0.98102	-24	1.15855	+ 5	0.95733	-21	1.09207	- 3	0.89310	-13
0.70	1.18328	+14	0.98383	-24	1.15875	+ 5	0.96010	-21	1.09218	- 3	0.89576	-13
0.71	1.18350	+13	0.98657	-24	1.15893	+ 4	0.96280	-21	1.09228	- 4	0.89835	-13
0.72	1.18371	+13	0.98924	-24	1.15911	+ 4	0.96543	-21	1.09239	- 4	0.90088	-13
0.73	1.18392	+13	0.99185	-24	1.15929	+ 4	0.96800	-21	1.09249	- 4	0.90334	-13
0.74	1.18413	+13	0.99439	-24	1.15947	+ 4	0.97051	-21	1.09259	- 4	0.90575	-13
0.75	1.18433	+13	0.99687	-24	1.15964	+ 4	0.97295	-21	1.09269	- 4	0.90810	-13
0.76	1.18451	+12	0.99929	-24	1.15981	+ 4	0.97534	-21	1.09279	- 4	0.91039	-13
0.77	1.18471	+12	1.00166	-24	1.15998	+ 4	0.97767	-21	1.09288	- 4	0.91263	-13
0.78	1.18489	+12	1.00397	-24	1.16014	+ 4	0.97995	-21	1.09297	- 4	0.91481	-13
0.79	1.18507	+12	1.00622	-24	1.16029	+ 4	0.98217	-21	1.09306	- 4	0.91695	-13
0.80	1.18525	+12	1.00843	-24	1.16045	+ 4	0.98435	-21	1.09315	- 4	0.91904	-13
0.81	1.18542	+12	1.01059	-24	1.16059	+ 3	0.98647	-21	1.09323	- 4	0.92108	-13
0.82	1.18559	+12	1.01269	-24	1.16073	+ 3	0.98855	-21	1.09332	- 4	0.92307	-13
0.83	1.18576	+12	1.01476	-24	1.16087	+ 3	0.99058	-21	1.09340	- 4	0.92503	-13
0.84	1.18592	+12	1.01677	-24	1.16101	+ 3	0.99257	-21	1.09348	- 4	0.92694	-13
0.85	1.18608	+12	1.01875	-24	1.16115	+ 3	0.99452	-21	1.09356	- 4	0.92880	-13
0.86	1.18623	+12	1.02068	-24	1.16128	+ 3	0.99642	-21	1.09363	- 4	0.93063	-13
0.87	1.18638	+12	1.02257	-24	1.16141	+ 3	0.99828	-21	1.09371	- 4	0.93242	-13
0.88	1.18653	+12	1.02442	-24	1.16154	+ 3	1.00011	-21	1.09378	- 4	0.93418	-13
0.89	1.18668	+12	1.02623	-24	1.16166	+ 3	1.00190	-21	1.09385	- 4	0.93589	-13
0.90	1.18682	+12	1.02801	-24	1.16179	+ 3	1.00365	-21	1.09392	- 4	0.93757	-13
0.91	1.18696	+12	1.02975	-24	1.16191	+ 3	1.00536	-21	1.09399	- 4	0.93922	-13
0.92	1.18709	+12	1.03146	-24	1.16202	+ 3	1.00704	-21	1.09406	- 4	0.94084	-13
0.93	1.18722	+12	1.03313	-24	1.16214	+ 3	1.00869	-21	1.09412	- 4	0.94242	-13
0.94	1.18735	+12	1.03477	-24	1.16225	+ 3	1.01031	-21	1.09419	- 4	0.94397	-13
0.95	1.18748	+12	1.03637	-24	1.16236	+ 3	1.01189	-21	1.09425	- 4	0.94549	-13
0.96	1.18761	+12	1.03795	-24	1.16247	+ 3	1.01344	-21	1.09431	- 4	0.94699	-13
0.97	1.18773	+12	1.03949	-24	1.16257	+ 3	1.01497	-21	1.09437	- 4	0.94845	-13
0.98	1.18785	+12	1.04101	-24	1.16268	+ 3	1.01646	-21	1.09443	- 4	0.94989	-13
0.99	1.18797	+12	1.04250	-24	1.16278	+ 3	1.01793	-21	1.09449	- 4	0.95130	-13
1.00	1.18808	+12	1.04396	-24	1.16288	+ 3	1.01937	-21	1.09455	- 4	0.95268	-13

TABLE 1-Continued

μ	$\tau = 0.20$; $\varpi_0 = 1.00$				$\tau = 0.20$; $\varpi_0 = 0.95$				$\tau = 0.20$; $\varpi_0 = 0.90$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.00000	0	0	0	1.00000	0	0	0	1.00000	0	0	0
0.01	1.02698	+ 21	0.00927	- 75	1.02542	+ 22	0.00849	- 80	1.02384	+18	0.00800	- 59
0.02	1.04711	+ 41	0.01936	-123	1.04430	+ 40	0.01800	-111	1.04151	+34	0.01671	- 97
0.03	1.06469	+ 60	0.03146	-150	1.06074	+ 56	0.02935	-135	1.05686	+48	0.02731	-121
0.04	1.08045	+ 76	0.04842	-166	1.07549	+ 71	0.04554	-148	1.07063	+62	0.04273	-133
0.05	1.09466	+ 90	0.07172	-173	1.08875	+ 83	0.06802	-157	1.08299	+73	0.06445	-140
0.06	1.10743	+101	0.10062	-174	1.10066	+ 92	0.09614	-158	1.09407	+80	0.09182	-142
0.07	1.11888	+110	0.13344	-173	1.11133	+ 98	0.12823	-157	1.10400	+85	0.12317	-143
0.08	1.12913	+114	0.16854	-169	1.12088	+101	0.16263	-155	1.11289	+88	0.15691	-140
0.09	1.13834	+117	0.20458	-165	1.12945	+103	0.19803	-151	1.12089	+91	0.19169	-136
0.10	1.14661	+118	0.24062	-159	1.13716	+103	0.23347	-146	1.12806	+92	0.22655	-132
0.11	1.15409	+119	0.27599	-154	1.14412	+103	0.26829	-142	1.13453	+92	0.26085	-127
0.12	1.16085	+118	0.31030	-149	1.15040	+101	0.30211	-136	1.14038	+90	0.29415	-124
0.13	1.16698	+116	0.34330	-145	1.15612	+100	0.33465	-132	1.14569	+88	0.32623	-121
0.14	1.17258	+114	0.37489	-139	1.16134	+ 99	0.36581	-127	1.15053	+86	0.35696	-117
0.15	1.17771	+113	0.40497	-135	1.16610	+ 97	0.39549	-124	1.15495	+84	0.38627	-113
0.16	1.18239	+110	0.43358	-131	1.17048	+ 96	0.42374	-120	1.15902	+83	0.41416	-109
0.17	1.18671	+107	0.46074	-126	1.17451	+ 95	0.45055	-117	1.16275	+80	0.44064	-106
0.18	1.19070	+105	0.48650	-122	1.17822	+ 93	0.47600	-113	1.16618	+77	0.46578	-102
0.19	1.19439	+103	0.51093	-118	1.18164	+ 90	0.50013	-110	1.16938	+76	0.48961	-100
0.20	1.19781	+100	0.53409	-114	1.18482	+ 88	0.52301	-107	1.17234	+74	0.51223	- 97
0.21	1.20100	+ 98	0.55606	-110	1.18777	+ 84	0.54473	-103	1.17509	+72	0.53369	- 94
0.22	1.20397	+ 96	0.57690	-106	1.19054	+ 83	0.56533	-100	1.17766	+70	0.55404	- 92
0.23	1.20674	+ 93	0.59668	-104	1.19312	+ 81	0.58488	- 98	1.18005	+68	0.57339	- 89
0.24	1.20934	+ 91	0.61547	-101	1.19553	+ 79	0.60346	- 96	1.18230	+67	0.59176	- 87
0.25	1.21178	+ 89	0.63334	- 98	1.19780	+ 77	0.62114	- 93	1.18441	+65	0.60923	- 85
0.26	1.21408	+ 87	0.65034	- 95	1.19993	+ 76	0.63795	- 91	1.18639	+64	0.62587	- 82
0.27	1.21624	+ 85	0.66652	- 93	1.20193	+ 73	0.65397	- 88	1.18825	+62	0.64170	- 81
0.28	1.21829	+ 84	0.68196	- 90	1.20382	+ 72	0.66924	- 86	1.19002	+61	0.65680	- 78
0.29	1.22021	+ 82	0.69668	- 87	1.20560	+ 69	0.68378	- 85	1.19167	+59	0.67120	- 77
0.30	1.22203	+ 80	0.71072	- 85	1.20729	+ 68	0.69769	- 83	1.19324	+57	0.68494	- 76
0.31	1.22376	+ 78	0.72413	- 84	1.20889	+ 66	0.71097	- 81	1.19474	+57	0.69808	- 74
0.32	1.22540	+ 77	0.73696	- 82	1.21041	+ 65	0.72367	- 79	1.19615	+56	0.71064	- 73
0.33	1.22697	+ 76	0.74924	- 80	1.21186	+ 64	0.73583	- 77	1.19749	+54	0.72266	- 72
0.34	1.22845	+ 75	0.76101	- 78	1.21324	+ 63	0.74747	- 76	1.19877	+53	0.73419	- 70
0.35	1.22987	+ 74	0.77227	- 77	1.21454	+ 61	0.75863	- 74	1.19998	+52	0.74524	- 68
0.36	1.23122	+ 73	0.78309	- 75	1.21578	+ 59	0.76933	- 73	1.20113	+50	0.75583	- 67
0.37	1.23250	+ 71	0.79346	- 74	1.21697	+ 58	0.77960	- 72	1.20224	+49	0.76599	- 67
0.38	1.23374	+ 70	0.80342	- 73	1.21812	+ 58	0.78948	- 70	1.20330	+48	0.77576	- 65
0.39	1.23491	+ 69	0.81300	- 72	1.21921	+ 57	0.79898	- 68	1.20431	+47	0.78515	- 65
0.40	1.23604	+ 68	0.82222	- 70	1.22025	+ 56	0.80811	- 67	1.20528	+46	0.79418	- 64
0.41	1.23713	+ 67	0.83110	- 68	1.22125	+ 55	0.81690	- 66	1.20620	+45	0.80288	- 63
0.42	1.23816	+ 66	0.83965	- 67	1.22221	+ 54	0.82537	- 64	1.20709	+44	0.81126	- 62
0.43	1.23916	+ 65	0.84788	- 66	1.22313	+ 53	0.83353	- 63	1.20794	+43	0.81934	- 61
0.44	1.24012	+ 64	0.85582	- 66	1.22402	+ 53	0.84140	- 62	1.20877	+43	0.82713	- 60
0.45	1.24105	+ 64	0.86348	- 65	1.22487	+ 52	0.84900	- 61	1.20956	+42	0.83465	- 59
0.46	1.24193	+ 63	0.87088	- 64	1.22568	+ 51	0.85633	- 60	1.21031	+41	0.84191	- 58
0.47	1.24278	+ 62	0.87803	- 63	1.22646	+ 50	0.86342	- 59	1.21104	+40	0.84892	- 57
0.48	1.24360	+ 61	0.88494	- 62	1.22722	+ 49	0.87027	- 58	1.21174	+39	0.85571	- 56
0.49	1.24440	+ 60	0.89162	- 62	1.22795	+ 48	0.87689	- 57	1.21243	+39	0.86227	- 55
0.50	1.24516	+ 59	0.89810	- 60	1.22865	+ 47	0.88330	- 57	1.21308	+38	0.86862	- 54

TABLE 1-Continued

μ	$\tau = 0.20$; $\varpi_0 = 1.00$				$\tau = 0.20$; $\varpi_0 = 0.95$				$\tau = 0.20$; $\varpi_0 = 0.90$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.24590	+ 58	0.90435	- 60	1.22934	+ 47	0.88950	- 56	1.21371	+37	0.87475	- 54
0.52	1.24661	+ 57	0.91041	- 59	1.23000	+ 47	0.89552	- 55	1.21432	+37	0.88071	- 53
0.53	1.24730	+ 56	0.91628	- 59	1.23063	+ 46	0.90134	- 55	1.21491	+36	0.88647	- 53
0.54	1.24797	+ 56	0.92198	- 58	1.23124	+ 45	0.90699	- 54	1.21549	+36	0.89207	- 52
0.55	1.24862	+ 55	0.92750	- 58	1.23183	+ 44	0.91247	- 53	1.21603	+35	0.89749	- 51
0.56	1.24925	+ 55	0.93286	- 57	1.23242	+ 44	0.91778	- 53	1.21657	+35	0.90275	- 51
0.57	1.24985	+ 54	0.93806	- 57	1.23297	+ 43	0.92295	- 52	1.21709	+34	0.90787	- 50
0.58	1.25045	+ 54	0.94312	- 56	1.23351	+ 43	0.92796	- 51	1.21759	+34	0.91283	- 50
0.59	1.25102	+ 53	0.94802	- 56	1.23403	+ 42	0.93283	- 51	1.21808	+33	0.91764	- 50
0.60	1.25157	+ 52	0.95280	- 55	1.23454	+ 41	0.93757	- 50	1.21854	+32	0.92233	- 50
0.61	1.25210	+ 51	0.95744	- 55	1.23503	+ 41	0.94216	- 50	1.21901	+32	0.92688	- 50
0.62	1.25262	+ 50	0.96194	- 55	1.23551	+ 40	0.94664	- 50	1.21944	+31	0.93131	- 50
0.63	1.25314	+ 50	0.96634	- 54	1.23598	+ 40	0.95099	- 50	1.21987	+30	0.93562	- 50
0.64	1.25362	+ 49	0.97061	- 54	1.23642	+ 39	0.95524	- 49	1.22029	+30	0.93982	- 49
0.65	1.25410	+ 48	0.97478	- 53	1.23686	+ 38	0.95936	- 49	1.22071	+30	0.94391	- 49
0.66	1.25457	+ 48	0.97883	- 53	1.23729	+ 38	0.96339	- 48	1.22110	+29	0.94789	- 49
0.67	1.25502	+ 47	0.98277	- 53	1.23770	+ 37	0.96731	- 48	1.22148	+28	0.95177	- 49
0.68	1.25547	+ 47	0.98663	- 52	1.23811	+ 37	0.97112	- 48	1.22186	+28	0.95555	- 49
0.69	1.25590	+ 46	0.99038	- 52	1.23850	+ 36	0.97485	- 48	1.22222	+27	0.95924	- 49
0.70	1.25632	+ 46	0.99403	- 52	1.23888	+ 36	0.97848	- 48	1.22258	+27	0.96284	- 48
0.71	1.25674	+ 46	0.99761	- 51	1.23926	+ 36	0.98202	- 48	1.22293	+27	0.96635	- 48
0.72	1.25713	+ 45	1.00109	- 51	1.23962	+ 35	0.98548	- 48	1.22327	+27	0.96977	- 48
0.73	1.25753	+ 45	1.00450	- 50	1.23998	+ 35	0.98885	- 48	1.22360	+27	0.97311	- 48
0.74	1.25791	+ 45	1.00782	- 50	1.24032	+ 34	0.99214	- 48	1.22392	+26	0.97638	- 48
0.75	1.25828	+ 44	1.01106	- 50	1.24066	+ 34	0.99537	- 47	1.22423	+26	0.97957	- 48
0.76	1.25864	+ 44	1.01424	- 49	1.24099	+ 34	0.99852	- 47	1.22454	+26	0.98268	- 48
0.77	1.25900	+ 44	1.01733	- 49	1.24131	+ 34	1.00159	- 47	1.22484	+26	0.98572	- 48
0.78	1.25934	+ 43	1.02035	- 49	1.24163	+ 34	1.00459	- 47	1.22513	+25	0.98871	- 47
0.79	1.25968	+ 43	1.02332	- 48	1.24193	+ 33	1.00753	- 47	1.22541	+25	0.99162	- 47
0.80	1.26002	+ 43	1.02621	- 48	1.24223	+ 33	1.01040	- 47	1.22570	+25	0.99446	- 47
0.81	1.26035	+ 43	1.02904	- 48	1.24253	+ 33	1.01321	- 47	1.22597	+25	0.99725	- 47
0.82	1.26066	+ 43	1.03181	- 48	1.24282	+ 33	1.01596	- 47	1.22623	+24	0.99997	- 47
0.83	1.26098	+ 43	1.03451	- 48	1.24310	+ 33	1.01865	- 47	1.22649	+24	1.00263	- 47
0.84	1.26128	+ 43	1.03717	- 47	1.24337	+ 32	1.02129	- 47	1.22675	+24	1.00524	- 47
0.85	1.26158	+ 43	1.03977	- 47	1.24364	+ 32	1.02387	- 47	1.22700	+24	1.00780	- 47
0.86	1.26188	+ 43	1.04231	- 47	1.24390	+ 32	1.02640	- 46	1.22724	+24	1.01030	- 47
0.87	1.26216	+ 43	1.04480	- 47	1.24415	+ 31	1.02888	- 46	1.22747	+23	1.01276	- 46
0.88	1.26245	+ 43	1.04724	- 47	1.24440	+ 31	1.03130	- 46	1.22771	+23	1.01516	- 46
0.89	1.26271	+ 42	1.04963	- 47	1.24465	+ 31	1.03368	- 46	1.22794	+23	1.01751	- 46
0.90	1.26298	+ 42	1.05198	- 46	1.24489	+ 30	1.03600	- 46	1.22817	+23	1.01982	- 46
0.91	1.26325	+ 42	1.05427	- 46	1.24512	+ 30	1.03829	- 46	1.22838	+22	1.02208	- 46
0.92	1.26351	+ 42	1.05652	- 46	1.24536	+ 30	1.04052	- 46	1.22859	+22	1.02431	- 45
0.93	1.26375	+ 41	1.05873	- 46	1.24557	+ 29	1.04272	- 46	1.22881	+22	1.02648	- 45
0.94	1.26400	+ 41	1.06090	- 46	1.24580	+ 29	1.04487	- 46	1.22901	+22	1.02862	- 45
0.95	1.26425	+ 41	1.06302	- 46	1.24602	+ 29	1.04699	- 45	1.22922	+22	1.03071	- 45
0.96	1.26449	+ 41	1.06511	- 45	1.24623	+ 29	1.04907	- 45	1.22942	+22	1.03276	- 45
0.97	1.26472	+ 41	1.06716	- 45	1.24643	+ 28	1.05110	- 45	1.22961	+22	1.03479	- 44
0.98	1.26495	+ 41	1.06916	- 45	1.24664	+ 28	1.05310	- 45	1.22980	+22	1.03677	- 44
0.99	1.26518	+ 41	1.07113	- 45	1.24684	+ 28	1.05506	- 45	1.22998	+21	1.03871	- 44
1.00	1.26539	+ 40	1.07307	- 45	1.24703	+ 27	1.05698	- 45	1.23017	+21	1.04061	- 44

TABLE 1-Continued

μ	$\tau = 0.20$; $\varpi_0 = 0.80$				$\tau = 0.20$; $\varpi_0 = 0.50$				$\tau = 0.25$; $\varpi_0 = 1.00$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.00000	0	0	0	1.00000	0	0	0	1.00000	0	0	0
0.01	1.02082	+15	0.00682	- 46	1.01241	+ 8	0.00379	-17	1.02744	+ 31	0.00850	- 93
0.02	1.03615	+27	0.01425	- 76	1.02137	+13	0.00792	-29	1.04805	+ 62	0.01764	-159
0.03	1.04944	+39	0.02348	- 94	1.02905	+17	0.01361	-36	1.06613	+ 92	0.02768	-204
0.04	1.06130	+49	0.03746	-104	1.03584	+19	0.02382	-41	1.08251	+118	0.03982	-233
0.05	1.07194	+57	0.05773	-109	1.04191	+21	0.04028	-44	1.09740	+136	0.05556	-250
0.06	1.08148	+63	0.08366	-112	1.04732	+22	0.06248	-45	1.11120	+149	0.07545	-260
0.07	1.09000	+66	0.11366	-112	1.05215	+23	0.08891	-46	1.12380	+161	0.09914	-262
0.08	1.09762	+67	0.14611	-111	1.05647	+23	0.11798	-46	1.13536	+172	0.12576	-261
0.09	1.10446	+68	0.17970	-108	1.06034	+23	0.14842	-45	1.14593	+178	0.15439	-259
0.10	1.11061	+68	0.21344	-106	1.06380	+22	0.17925	-44	1.15562	+184	0.18420	-255
0.11	1.11615	+67	0.24671	-103	1.06692	+21	0.20982	-43	1.16449	+187	0.21454	-249
0.12	1.12118	+67	0.27908	-100	1.06976	+21	0.23969	-42	1.17263	+189	0.24489	-243
0.13	1.12573	+66	0.31030	- 97	1.07232	+20	0.26860	-41	1.18013	+190	0.27488	-236
0.14	1.12988	+64	0.34022	- 94	1.07465	+19	0.29639	-40	1.18703	+189	0.30424	-230
0.15	1.13369	+64	0.36878	- 92	1.07680	+19	0.32297	-39	1.19340	+188	0.33280	-224
0.16	1.13716	+62	0.39599	- 88	1.07875	+18	0.34833	-38	1.19930	+186	0.36045	-218
0.17	1.14037	+61	0.42183	- 86	1.08055	+17	0.37248	-37	1.20478	+184	0.38712	-213
0.18	1.14331	+58	0.44635	- 85	1.08222	+17	0.39542	-37	1.20986	+181	0.41281	-206
0.19	1.14603	+56	0.46964	- 83	1.08375	+16	0.41723	-36	1.21460	+178	0.43748	-200
0.20	1.14857	+55	0.49173	- 81	1.08517	+15	0.43794	-36	1.21903	+175	0.46113	-195
0.21	1.15093	+53	0.51270	- 79	1.08650	+15	0.45762	-35	1.22317	+172	0.48382	-190
0.22	1.15313	+52	0.53261	- 77	1.08773	+14	0.47632	-34	1.22706	+169	0.50556	-184
0.23	1.15517	+50	0.55152	- 75	1.08888	+13	0.49408	-34	1.23070	+166	0.52637	-180
0.24	1.15709	+48	0.56949	- 74	1.08996	+12	0.51099	-33	1.23415	+164	0.54632	-174
0.25	1.15890	+47	0.58658	- 73	1.09098	+12	0.52708	-32	1.23738	+161	0.56542	-170
0.26	1.16059	+46	0.60285	- 71	1.09192	+11	0.54240	-32	1.24043	+158	0.58372	-166
0.27	1.16218	+44	0.61835	- 70	1.09281	+10	0.55701	-31	1.24332	+156	0.60126	-162
0.28	1.16369	+43	0.63313	- 68	1.09366	+10	0.57093	-31	1.24606	+154	0.61808	-158
0.29	1.16511	+42	0.64723	- 67	1.09447	+10	0.58423	-30	1.24865	+151	0.63420	-155
0.30	1.16646	+41	0.66070	- 65	1.09522	+ 9	0.59692	-30	1.25110	+148	0.64968	-152
0.31	1.16772	+39	0.67355	- 65	1.09594	+ 9	0.60906	-30	1.25345	+146	0.66454	-148
0.32	1.16892	+37	0.68587	- 63	1.09661	+ 8	0.62068	-29	1.25568	+144	0.67882	-145
0.33	1.17007	+36	0.69765	- 62	1.09726	+ 8	0.63180	-29	1.25780	+142	0.69254	-142
0.34	1.17116	+35	0.70893	- 61	1.09788	+ 8	0.64245	-29	1.25982	+140	0.70573	-139
0.35	1.17220	+34	0.71975	- 60	1.09846	+ 8	0.65268	-28	1.26176	+138	0.71843	-136
0.36	1.17320	+34	0.73013	- 59	1.09901	+ 7	0.66248	-28	1.26360	+136	0.73064	-134
0.37	1.17415	+33	0.74009	- 58	1.09955	+ 7	0.67189	-28	1.26537	+134	0.74242	-131
0.38	1.17505	+32	0.74967	- 57	1.10006	+ 7	0.68095	-27	1.26706	+132	0.75377	-128
0.39	1.17592	+31	0.75887	- 56	1.10055	+ 7	0.68965	-27	1.26868	+130	0.76470	-126
0.40	1.17674	+30	0.76773	- 55	1.10101	+ 6	0.69803	-27	1.27024	+128	0.77525	-124
0.41	1.17753	+29	0.77626	- 54	1.10145	+ 6	0.70610	-26	1.27173	+126	0.78544	-122
0.42	1.17829	+28	0.78448	- 53	1.10188	+ 6	0.71387	-26	1.27317	+125	0.79528	-120
0.43	1.17902	+27	0.79239	- 53	1.10229	+ 5	0.72136	-26	1.27455	+123	0.80478	-118
0.44	1.17973	+27	0.80003	- 52	1.10268	+ 5	0.72858	-26	1.27588	+121	0.81397	-116
0.45	1.18040	+26	0.80740	- 51	1.10306	+ 5	0.73556	-26	1.27716	+120	0.82286	-114
0.46	1.18105	+26	0.81451	- 51	1.10342	+ 4	0.74229	-26	1.27839	+118	0.83146	-112
0.47	1.18167	+25	0.82140	- 50	1.10377	+ 4	0.74880	-26	1.27959	+117	0.83978	-111
0.48	1.18227	+24	0.82805	- 49	1.10410	+ 3	0.75509	-26	1.28074	+116	0.84784	-110
0.49	1.18286	+24	0.83448	- 48	1.10443	+ 3	0.76118	-26	1.28185	+114	0.85566	-108
0.50	1.18341	+23	0.84070	- 48	1.10475	+ 3	0.76708	-26	1.28292	+113	0.86323	-107

TABLE 1-Continued

μ	$\tau = 0.20$; $\varpi_0 = 0.80$				$\tau = 0.20$; $\varpi_0 = 0.50$				$\tau = 0.25$; $\varpi_0 = 1.00$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.18396	+23	0.84672	- 48	1.10503	+ 1	0.77280	-24	1.28396	+112	0.87058	-105
0.52	1.18448	+22	0.85256	- 47	1.10533	+ 1	0.77833	-24	1.28496	+110	0.87770	-104
0.53	1.18499	+22	0.85821	- 47	1.10561	+ 1	0.78369	-24	1.28592	+108	0.88462	-103
0.54	1.18548	+22	0.86370	- 46	1.10589	+ 1	0.78888	-24	1.28688	+108	0.89133	-102
0.55	1.18595	+21	0.86902	- 46	1.10616	+ 1	0.79392	-24	1.28778	+106	0.89787	-100
0.56	1.18640	+20	0.87418	- 46	1.10641	+ 1	0.79882	-24	1.28867	+105	0.90420	-100
0.57	1.18685	+20	0.87919	- 46	1.10666	+ 1	0.80357	-24	1.28953	+104	0.91036	- 99
0.58	1.18728	+20	0.88406	- 45	1.10691	+ 1	0.80818	-24	1.29036	+103	0.91635	- 98
0.59	1.18769	+19	0.88879	- 45	1.10714	+ 1	0.81266	-24	1.29117	+102	0.92218	- 97
0.60	1.18810	+19	0.89338	- 45	1.10737	+ 1	0.81702	-24	1.29195	+101	0.92786	- 96
0.61	1.18848	+18	0.89785	- 45	1.10758	0	0.82127	-23	1.29272	+100	0.93338	- 95
0.62	1.18887	+18	0.90221	- 44	1.10779	0	0.82540	-23	1.29347	+100	0.93876	- 94
0.63	1.18924	+18	0.90644	- 44	1.10800	0	0.82941	-23	1.29419	+ 99	0.94400	- 94
0.64	1.18960	+18	0.91056	- 44	1.10821	0	0.83332	-23	1.29489	+ 98	0.94910	- 93
0.65	1.18994	+17	0.91457	- 44	1.10840	0	0.83712	-23	1.29557	+ 97	0.95408	- 92
0.66	1.19029	+17	0.91847	- 44	1.10858	- 1	0.84083	-23	1.29624	+ 96	0.95893	- 92
0.67	1.19061	+16	0.92228	- 44	1.10877	- 1	0.84444	-23	1.29690	+ 96	0.96367	- 91
0.68	1.19093	+16	0.92599	- 44	1.10895	- 1	0.84796	-23	1.29753	+ 95	0.96829	- 90
0.69	1.19125	+16	0.92961	- 44	1.10913	- 1	0.85140	-23	1.29814	+ 94	0.97279	- 90
0.70	1.19155	+15	0.93313	- 44	1.10930	- 1	0.85475	-23	1.29874	+ 93	0.97719	- 89
0.71	1.19185	+15	0.93658	- 44	1.10946	- 2	0.85801	-23	1.29932	+ 92	0.98148	- 89
0.72	1.19214	+15	0.93994	- 44	1.10962	- 2	0.86120	-23	1.29990	+ 92	0.98568	- 88
0.73	1.19242	+15	0.94322	- 44	1.10978	- 2	0.86432	-23	1.30047	+ 92	0.98977	- 88
0.74	1.19270	+15	0.94643	- 43	1.10993	- 2	0.86736	-23	1.30101	+ 91	0.99378	- 87
0.75	1.19296	+14	0.94956	- 43	1.11009	- 2	0.87033	-23	1.30154	+ 90	0.99769	- 87
0.76	1.19323	+14	0.95262	- 43	1.11022	- 3	0.87323	-23	1.30207	+ 90	1.00152	- 86
0.77	1.19348	+14	0.95560	- 43	1.11037	- 3	0.87607	-23	1.30258	+ 89	1.00526	- 86
0.78	1.19373	+13	0.95852	- 43	1.11051	- 3	0.87884	-23	1.30308	+ 89	1.00892	- 86
0.79	1.19397	+13	0.96138	- 43	1.11065	- 3	0.88155	-23	1.30356	+ 88	1.01250	- 85
0.80	1.19421	+13	0.96417	- 43	1.11078	- 3	0.88421	-23	1.30404	+ 88	1.01601	- 85
0.81	1.19445	+13	0.96691	- 43	1.11091	- 3	0.88681	-22	1.30451	+ 87	1.01944	- 84
0.82	1.19468	+13	0.96958	- 43	1.11104	- 3	0.88935	-22	1.30497	+ 87	1.02280	- 84
0.83	1.19489	+12	0.97220	- 43	1.11117	- 3	0.89184	-22	1.30541	+ 86	1.02608	- 84
0.84	1.19511	+12	0.97476	- 43	1.11129	- 3	0.89427	-22	1.30585	+ 86	1.02930	- 84
0.85	1.19532	+12	0.97726	- 43	1.11141	- 3	0.89665	-22	1.30629	+ 86	1.03246	- 83
0.86	1.19553	+12	0.97972	- 43	1.11152	- 3	0.89898	-22	1.30670	+ 85	1.03555	- 83
0.87	1.19574	+12	0.98214	- 42	1.11164	- 3	0.90127	-22	1.30712	+ 85	1.03859	- 82
0.88	1.19594	+12	0.98449	- 42	1.11175	- 3	0.90351	-22	1.30751	+ 84	1.04155	- 82
0.89	1.19613	+11	0.98680	- 42	1.11186	- 3	0.90570	-22	1.30791	+ 84	1.04446	- 82
0.90	1.19632	+11	0.98907	- 42	1.11197	- 3	0.90785	-22	1.30831	+ 84	1.04732	- 82
0.91	1.19651	+11	0.99129	- 42	1.11208	- 3	0.90996	-22	1.30869	+ 84	1.05011	- 82
0.92	1.19669	+11	0.99346	- 42	1.11218	- 3	0.91203	-22	1.30906	+ 83	1.05287	- 81
0.93	1.19688	+11	0.99560	- 42	1.11228	- 3	0.91406	-22	1.30943	+ 83	1.05556	- 81
0.94	1.19705	+11	0.99769	- 42	1.11238	- 3	0.91605	-22	1.30979	+ 83	1.05820	- 81
0.95	1.19723	+11	0.99975	- 42	1.11248	- 3	0.91800	-22	1.31014	+ 82	1.06081	- 80
0.96	1.19739	+10	1.00176	- 42	1.11257	- 3	0.91992	-22	1.31049	+ 82	1.06335	- 80
0.97	1.19756	+10	1.00374	- 42	1.11267	- 3	0.92180	-22	1.31083	+ 82	1.06585	- 80
0.98	1.19772	+10	1.00568	- 42	1.11276	- 3	0.92364	-22	1.31117	+ 82	1.06830	- 80
0.99	1.19788	+10	1.00759	- 42	1.11285	- 3	0.92546	-22	1.31150	+ 82	1.07071	- 80
1.00	1.19804	+10	1.00946	- 42	1.11294	- 3	0.92723	-22	1.31183	+ 82	1.07308	- 80

TABLE 1-Continued

μ	$\tau = 0.25$; $\varpi_0 = 0.95$				$\tau = 0.25$; $\varpi_0 = 0.90$				$\tau = 0.25$; $\varpi_0 = 0.80$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.00000	0	0	0	1.00000	0	0	0	1.00000	0	0	0
0.01	1.02574	+ 22	0.00800	- 70	1.02411	+ 19	0.00740	- 60	1.02099	+ 13	0.00621	- 50
0.02	1.04498	+ 46	0.01634	-142	1.04210	+ 40	0.01507	-127	1.03654	+ 28	0.01274	- 98
0.03	1.06183	+ 69	0.02564	-184	1.05780	+ 60	0.02366	-166	1.05006	+ 43	0.02005	-128
0.04	1.07708	+ 90	0.03701	-211	1.07201	+ 80	0.03433	-187	1.06226	+ 58	0.02930	-148
0.05	1.09112	+116	0.05196	-226	1.08506	+103	0.04851	-202	1.07344	+ 75	0.04205	-161
0.06	1.10392	+130	0.07105	-236	1.09698	+118	0.06684	-210	1.08363	+ 86	0.05895	-167
0.07	1.11564	+141	0.09396	-238	1.10784	+126	0.08897	-214	1.09295	+ 95	0.07965	-171
0.08	1.12639	+151	0.11983	-237	1.11779	+132	0.11409	-215	1.10144	+100	0.10340	-172
0.09	1.13621	+157	0.14773	-235	1.12688	+136	0.14129	-214	1.10920	+103	0.12927	-172
0.10	1.14520	+162	0.17686	-232	1.13522	+140	0.16975	-211	1.11629	+105	0.15647	-171
0.11	1.15342	+163	0.20655	-228	1.14285	+142	0.19882	-207	1.12278	+105	0.18434	-169
0.12	1.16096	+164	0.23629	-222	1.14984	+142	0.22796	-203	1.12873	+105	0.21237	-166
0.13	1.16790	+164	0.26570	-218	1.15627	+142	0.25680	-200	1.13420	+104	0.24017	-163
0.14	1.17430	+162	0.29453	-212	1.16220	+142	0.28511	-195	1.13924	+103	0.26749	-160
0.15	1.18020	+161	0.32259	-207	1.16767	+140	0.31269	-190	1.14389	+101	0.29415	-156
0.16	1.18567	+159	0.34978	-202	1.17273	+138	0.33942	-186	1.14819	+ 99	0.32001	-153
0.17	1.19074	+157	0.37602	-197	1.17742	+136	0.36524	-181	1.15218	+ 97	0.34501	-150
0.18	1.19544	+154	0.40130	-191	1.18178	+133	0.39010	-177	1.15589	+ 95	0.36912	-146
0.19	1.19983	+152	0.42558	-187	1.18584	+130	0.41400	-173	1.15934	+ 92	0.39230	-143
0.20	1.20393	+149	0.44888	-182	1.18963	+128	0.43694	-169	1.16256	+ 90	0.41457	-140
0.21	1.20777	+147	0.47122	-178	1.19318	+125	0.45896	-164	1.16558	+ 88	0.43594	-137
0.22	1.21135	+144	0.49265	-173	1.19651	+123	0.48006	-160	1.16840	+ 85	0.45644	-134
0.23	1.21472	+141	0.51318	-168	1.19962	+120	0.50027	-157	1.17105	+ 83	0.47609	-131
0.24	1.21790	+139	0.53284	-164	1.20256	+118	0.51965	-153	1.17355	+ 81	0.49492	-129
0.25	1.22089	+137	0.55166	-161	1.20532	+116	0.53822	-150	1.17590	+ 79	0.51299	-126
0.26	1.22371	+134	0.56973	-156	1.20793	+113	0.55602	-146	1.17811	+ 77	0.53029	-124
0.27	1.22638	+132	0.58703	-153	1.21040	+111	0.57307	-144	1.18021	+ 75	0.54689	-122
0.28	1.22889	+129	0.60362	-150	1.21274	+108	0.58944	-141	1.18219	+ 73	0.56282	-120
0.29	1.23128	+127	0.61954	-146	1.21494	+106	0.60514	-138	1.18406	+ 71	0.57811	-118
0.30	1.23355	+125	0.63482	-143	1.21704	+104	0.62020	-136	1.18584	+ 69	0.59278	-116
0.31	1.23570	+122	0.64949	-140	1.21903	+102	0.63468	-133	1.18753	+ 67	0.60688	-114
0.32	1.23775	+120	0.66359	-137	1.22093	+100	0.64859	-130	1.18915	+ 66	0.62042	-113
0.33	1.23971	+118	0.67714	-134	1.22274	+ 98	0.66195	-128	1.19068	+ 64	0.63344	-111
0.34	1.24157	+116	0.69017	-132	1.22446	+ 96	0.67481	-126	1.19214	+ 62	0.64598	-109
0.35	1.24334	+114	0.70270	-130	1.22610	+ 94	0.68718	-124	1.19354	+ 61	0.65803	-108
0.36	1.24504	+112	0.71478	-127	1.22768	+ 92	0.69909	-122	1.19487	+ 59	0.66965	-106
0.37	1.24667	+111	0.72641	-125	1.22918	+ 91	0.71057	-120	1.19615	+ 58	0.68084	-105
0.38	1.24822	+109	0.73762	-123	1.23061	+ 89	0.72164	-118	1.19736	+ 56	0.69162	-104
0.39	1.24971	+107	0.74843	-121	1.23200	+ 88	0.73231	-116	1.19854	+ 55	0.70203	-102
0.40	1.25114	+106	0.75885	-120	1.23331	+ 86	0.74261	-114	1.19966	+ 54	0.71207	-101
0.41	1.25251	+104	0.76892	-118	1.23458	+ 84	0.75254	-113	1.20073	+ 52	0.72176	-100
0.42	1.25382	+102	0.77865	-116	1.23580	+ 83	0.76215	-111	1.20177	+ 51	0.73114	- 98
0.43	1.25508	+100	0.78805	-114	1.23696	+ 81	0.77142	-110	1.20276	+ 50	0.74019	- 97
0.44	1.25631	+ 99	0.79714	-112	1.23809	+ 80	0.78040	-108	1.20372	+ 49	0.74894	- 96
0.45	1.25748	+ 98	0.80592	-111	1.23918	+ 78	0.78907	-107	1.20464	+ 48	0.75740	- 95
0.46	1.25861	+ 96	0.81442	-110	1.24022	+ 77	0.79748	-105	1.20553	+ 47	0.76560	- 94
0.47	1.25970	+ 95	0.82266	-108	1.24123	+ 76	0.80560	-104	1.20637	+ 45	0.77354	- 93
0.48	1.26074	+ 94	0.83065	-107	1.24220	+ 74	0.81348	-103	1.20720	+ 44	0.78122	- 92
0.49	1.26176	+ 92	0.83836	-106	1.24313	+ 73	0.82111	-102	1.20799	+ 43	0.78868	- 91
0.50	1.26274	+ 91	0.84585	-105	1.24404	+ 72	0.82852	-100	1.20876	+ 42	0.79590	- 90

TABLE 1-Continued

μ	$\tau = 0.25$; $\varpi_0 = 0.95$				$\tau = 0.25$; $\varpi_0 = 0.90$				$\tau = 0.25$; $\varpi_0 = 0.80$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.26369	+ 90	0.85312	-104	1.24492	+ 71	0.83569	-100	1.20950	+ 41	0.80291	- 89
0.52	1.26460	+ 89	0.86016	-104	1.24576	+ 70	0.84266	- 99	1.21023	+ 41	0.80972	- 88
0.53	1.26548	+ 88	0.86701	-103	1.24658	+ 69	0.84942	- 98	1.21093	+ 40	0.81632	- 87
0.54	1.26634	+ 86	0.87365	-102	1.24738	+ 68	0.85599	- 97	1.21160	+ 39	0.82273	- 87
0.55	1.26717	+ 85	0.88011	-101	1.24814	+ 67	0.86237	- 96	1.21225	+ 38	0.82896	- 86
0.56	1.26797	+ 84	0.88639	-100	1.24889	+ 66	0.86857	- 95	1.21288	+ 37	0.83502	- 85
0.57	1.26875	+ 83	0.89249	-100	1.24961	+ 65	0.87460	- 94	1.21349	+ 36	0.84091	- 84
0.58	1.26951	+ 82	0.89842	- 99	1.25031	+ 64	0.88046	- 94	1.21408	+ 35	0.84663	- 84
0.59	1.27024	+ 82	0.90420	- 98	1.25098	+ 63	0.88616	- 93	1.21465	+ 34	0.85220	- 83
0.60	1.27095	+ 80	0.90982	- 97	1.25164	+ 62	0.89171	- 93	1.21522	+ 34	0.85763	- 82
0.61	1.27166	+ 80	0.91529	- 97	1.25228	+ 62	0.89712	- 92	1.21576	+ 33	0.86291	- 82
0.62	1.27233	+ 79	0.92062	- 96	1.25291	+ 61	0.90238	- 92	1.21628	+ 32	0.86805	- 81
0.63	1.27298	+ 78	0.92580	- 96	1.25351	+ 60	0.90751	- 91	1.21679	+ 31	0.87307	- 80
0.64	1.27361	+ 77	0.93087	- 95	1.25410	+ 59	0.91250	- 91	1.21730	+ 31	0.87795	- 80
0.65	1.27423	+ 76	0.93580	- 94	1.25468	+ 58	0.91738	- 90	1.21778	+ 30	0.88272	- 79
0.66	1.27484	+ 76	0.94061	- 94	1.25523	+ 58	0.92213	- 90	1.21824	+ 29	0.88735	- 79
0.67	1.27542	+ 75	0.94530	- 93	1.25577	+ 57	0.92676	- 90	1.21871	+ 29	0.89189	- 78
0.68	1.27599	+ 74	0.94988	- 93	1.25630	+ 56	0.93127	- 90	1.21915	+ 28	0.89630	- 78
0.69	1.27654	+ 74	0.95435	- 92	1.25681	+ 56	0.93569	- 89	1.21958	+ 27	0.90062	- 77
0.70	1.27709	+ 73	0.95871	- 92	1.25731	+ 56	0.94000	- 89	1.22001	+ 27	0.90483	- 77
0.71	1.27762	+ 72	0.96296	- 92	1.25780	+ 55	0.94420	- 89	1.22042	+ 26	0.90895	- 76
0.72	1.27812	+ 72	0.96713	- 91	1.25828	+ 54	0.94831	- 89	1.22083	+ 26	0.91297	- 76
0.73	1.27863	+ 71	0.97119	- 91	1.25875	+ 54	0.95234	- 88	1.22122	+ 25	0.91690	- 75
0.74	1.27912	+ 70	0.97517	- 90	1.25920	+ 54	0.95626	- 88	1.22161	+ 25	0.92073	- 75
0.75	1.27960	+ 70	0.97905	- 90	1.25964	+ 53	0.96009	- 88	1.22198	+ 24	0.92448	- 75
0.76	1.28007	+ 69	0.98284	- 90	1.26008	+ 52	0.96384	- 88	1.22235	+ 24	0.92815	- 74
0.77	1.28052	+ 68	0.98656	- 89	1.26050	+ 52	0.96751	- 88	1.22270	+ 23	0.93174	- 74
0.78	1.28097	+ 68	0.99019	- 89	1.26090	+ 52	0.97109	- 88	1.22306	+ 23	0.93526	- 73
0.79	1.28140	+ 68	0.99374	- 89	1.26132	+ 52	0.97461	- 88	1.22339	+ 22	0.93869	- 73
0.80	1.28183	+ 67	0.99723	- 88	1.26171	+ 51	0.97805	- 87	1.22373	+ 22	0.94205	- 73
0.81	1.28224	+ 66	1.00065	- 88	1.26210	+ 50	0.98141	- 87	1.22405	+ 21	0.94534	- 72
0.82	1.28265	+ 66	1.00396	- 88	1.26247	+ 50	0.98471	- 87	1.22437	+ 21	0.94856	- 72
0.83	1.28304	+ 65	1.00723	- 88	1.26284	+ 50	0.98793	- 87	1.22468	+ 20	0.95172	- 72
0.84	1.28344	+ 65	1.01043	- 87	1.26320	+ 50	0.99109	- 87	1.22499	+ 20	0.95482	- 71
0.85	1.28381	+ 64	1.01357	- 87	1.26355	+ 49	0.99419	- 87	1.22528	+ 19	0.95784	- 71
0.86	1.28419	+ 64	1.01664	- 87	1.26390	+ 49	0.99723	- 86	1.22558	+ 19	0.96091	- 71
0.87	1.28456	+ 64	1.01964	- 87	1.26424	+ 48	1.00021	- 86	1.22586	+ 18	0.96373	- 70
0.88	1.28491	+ 63	1.02260	- 86	1.26457	+ 48	1.00312	- 86	1.22614	+ 18	0.96658	- 70
0.89	1.28526	+ 62	1.02550	- 86	1.26490	+ 48	1.00598	- 86	1.22641	+ 17	0.96937	- 70
0.90	1.28560	+ 62	1.02833	- 86	1.26521	+ 48	1.00878	- 86	1.22668	+ 17	0.97211	- 70
0.91	1.28594	+ 62	1.03111	- 86	1.26552	+ 48	1.01153	- 86	1.22694	+ 16	0.97480	- 70
0.92	1.28627	+ 61	1.03384	- 86	1.26583	+ 47	1.01423	- 86	1.22720	+ 16	0.97745	- 69
0.93	1.28658	+ 60	1.03652	- 86	1.26612	+ 46	1.01688	- 86	1.22746	+ 16	0.98004	- 69
0.94	1.28690	+ 60	1.03916	- 85	1.26642	+ 46	1.01947	- 86	1.22770	+ 15	0.98258	- 69
0.95	1.28722	+ 60	1.04174	- 85	1.26671	+ 46	1.02203	- 86	1.22794	+ 15	0.98508	- 68
0.96	1.28752	+ 60	1.04427	- 85	1.26699	+ 46	1.02453	- 86	1.22817	+ 14	0.98753	- 68
0.97	1.28782	+ 59	1.04676	- 85	1.26726	+ 46	1.02699	- 86	1.22841	+ 14	0.98994	- 68
0.98	1.28810	+ 58	1.04920	- 85	1.26754	+ 46	1.02940	- 86	1.22864	+ 14	0.99229	- 68
0.99	1.28840	+ 58	1.05159	- 85	1.26781	+ 45	1.03177	- 86	1.22886	+ 13	0.99461	- 68
1.00	1.28868	+ 58	1.05396	- 85	1.26807	+ 45	1.03410	- 86	1.22909	+ 13	0.99690	- 67

TABLE 1-Continued

μ	$\tau = 0.25$; $\varpi_0 = 0.50$				$\tau = 0.50$; $\varpi_0 = 1.00$				$\tau = 0.50$; $\varpi_0 = 0.95$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.00000	0	0	0	1.0000	0	0	0	1.0000	0	0	0
0.01	1.01247	+ 9	0.00328	-26	1.0288	+ 4	0.0063	-17	1.0268	+ 3	0.0057	-16
0.02	1.02152	+17	0.00687	-39	1.0508	+ 9	0.0130	-32	1.0472	+ 7	0.0118	-29
0.03	1.02928	+23	0.01097	-48	1.0702	+14	0.0201	-45	1.0652	+11	0.0182	-40
0.04	1.03620	+27	0.01678	-56	1.0882	+20	0.0275	-56	1.0818	+17	0.0250	-50
0.05	1.04247	+30	0.02594	-61	1.1051	+26	0.0352	-66	1.0974	+23	0.0321	-58
0.06	1.04817	+32	0.03916	-66	1.1210	+32	0.0436	-73	1.1120	+28	0.0397	-64
0.07	1.05337	+34	0.05625	-68	1.1362	+38	0.0527	-78	1.1259	+34	0.0480	-70
0.08	1.05811	+35	0.07647	-69	1.1506	+44	0.0627	-82	1.1391	+39	0.0572	-74
0.09	1.06243	+36	0.09895	-70	1.1643	+48	0.0737	-86	1.1516	+42	0.0674	-78
0.10	1.06636	+36	0.12292	-70	1.1775	+54	0.0859	-89	1.1637	+47	0.0787	-81
0.11	1.06997	+36	0.14773	-70	1.1900	+57	0.0992	-91	1.1751	+50	0.0912	-83
0.12	1.07327	+36	0.17288	-69	1.2020	+61	0.1136	-92	1.1860	+52	0.1048	-84
0.13	1.07629	+35	0.19797	-68	1.2134	+63	0.1290	-93	1.1963	+54	0.1194	-86
0.14	1.07908	+34	0.22275	-67	1.2244	+66	0.1452	-94	1.2063	+56	0.1348	-86
0.15	1.08165	+33	0.24700	-66	1.2348	+68	0.1621	-94	1.2158	+58	0.1510	-87
0.16	1.08402	+32	0.27062	-65	1.2448	+70	0.1796	-94	1.2248	+60	0.1677	-87
0.17	1.08623	+31	0.29351	-64	1.2543	+71	0.1976	-94	1.2334	+60	0.1849	-86
0.18	1.08826	+29	0.31562	-63	1.2634	+72	0.2159	-93	1.2416	+61	0.2025	-86
0.19	1.09017	+28	0.33694	-62	1.2721	+73	0.2343	-92	1.2495	+62	0.2203	-86
0.20	1.09195	+27	0.35744	-62	1.2804	+74	0.2530	-91	1.2570	+62	0.2382	-85
0.21	1.09361	+26	0.37715	-61	1.2884	+74	0.2716	-91	1.2642	+63	0.2562	-85
0.22	1.09517	+25	0.39608	-60	1.2959	+74	0.2902	-90	1.2710	+63	0.2742	-84
0.23	1.09663	+24	0.41425	-59	1.3032	+74	0.3087	-88	1.2776	+63	0.2922	-83
0.24	1.09800	+23	0.43169	-58	1.3102	+75	0.3271	-87	1.2838	+63	0.3099	-82
0.25	1.09929	+22	0.44841	-58	1.3169	+75	0.3453	-86	1.2898	+62	0.3276	-81
0.26	1.10051	+21	0.46447	-57	1.3233	+75	0.3633	-85	1.2956	+62	0.3450	-80
0.27	1.10166	+20	0.47988	-56	1.3294	+74	0.3810	-84	1.3011	+62	0.3622	-80
0.28	1.10275	+19	0.49467	-55	1.3354	+74	0.3985	-83	1.3064	+62	0.3792	-78
0.29	1.10378	+18	0.50887	-55	1.3411	+74	0.4156	-82	1.3115	+61	0.3959	-78
0.30	1.10476	+17	0.52252	-54	1.3466	+74	0.4325	-80	1.3164	+61	0.4123	-77
0.31	1.10569	+16	0.53564	-53	1.3518	+73	0.4490	-79	1.3211	+60	0.4284	-76
0.32	1.10657	+15	0.54824	-53	1.3569	+73	0.4653	-78	1.3256	+60	0.4442	-75
0.33	1.10742	+15	0.56038	-52	1.3617	+72	0.4812	-77	1.3300	+59	0.4598	-74
0.34	1.10823	+14	0.57204	-52	1.3665	+72	0.4968	-76	1.3342	+59	0.4749	-74
0.35	1.10899	+13	0.58329	-51	1.3710	+71	0.5120	-75	1.3382	+58	0.4898	-72
0.36	1.10972	+12	0.59412	-51	1.3754	+71	0.5270	-74	1.3421	+58	0.5044	-71
0.37	1.11043	+12	0.60456	-50	1.3796	+70	0.5416	-72	1.3458	+57	0.5187	-70
0.38	1.11109	+11	0.61462	-50	1.3837	+70	0.5559	-71	1.3495	+57	0.5327	-70
0.39	1.11173	+10	0.62434	-49	1.3877	+69	0.5699	-70	1.3530	+56	0.5464	-69
0.40	1.11235	+10	0.63371	-49	1.3915	+69	0.5836	-69	1.3564	+56	0.5598	-68
0.41	1.11294	+ 9	0.64277	-48	1.3952	+68	0.5969	-68	1.3596	+55	0.5728	-67
0.42	1.11350	+ 8	0.65152	-48	1.3988	+68	0.6100	-67	1.3628	+55	0.5856	-67
0.43	1.11405	+ 8	0.65998	-47	1.4022	+67	0.6228	-66	1.3658	+54	0.5982	-66
0.44	1.11457	+ 7	0.66816	-47	1.4056	+67	0.6353	-65	1.3689	+54	0.6104	-65
0.45	1.11509	+ 7	0.67607	-47	1.4089	+66	0.6475	-65	1.3717	+53	0.6224	-64
0.46	1.11557	+ 6	0.68374	-46	1.4121	+66	0.6595	-63	1.3745	+53	0.6342	-63
0.47	1.11604	+ 6	0.69116	-46	1.4151	+65	0.6712	-62	1.3772	+52	0.6456	-62
0.48	1.11649	+ 5	0.69836	-45	1.4182	+65	0.6826	-62	1.3798	+51	0.6568	-61
0.49	1.11693	+ 5	0.70533	-45	1.4210	+64	0.6937	-61	1.3823	+51	0.6678	-61
0.50	1.11735	+ 4	0.71209	-45	1.4239	+64	0.7046	-60	1.3848	+50	0.6785	-60

TABLE 1-Continued

μ	$\tau = 0.25$; $\varpi_0 = 0.50$				$\tau = 0.50$; $\varpi_0 = 1.00$				$\tau = 0.50$; $\varpi_0 = 0.95$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.11776	+ 4	0.71865	-45	1.4266	+63	0.7153	-59	1.3872	+50	0.6890	-60
0.52	1.11816	+ 4	0.72502	-44	1.4293	+63	0.7258	-58	1.3896	+50	0.6993	-59
0.53	1.11853	+ 3	0.73120	-44	1.4319	+62	0.7360	-58	1.3918	+49	0.7093	-58
0.54	1.11890	+ 3	0.73721	-44	1.4344	+62	0.7460	-57	1.3940	+48	0.7192	-58
0.55	1.11926	+ 2	0.74305	-43	1.4369	+61	0.7557	-56	1.3961	+48	0.7288	-57
0.56	1.11961	+ 2	0.74872	-43	1.4393	+61	0.7653	-55	1.3982	+48	0.7382	-56
0.57	1.11994	+ 2	0.75424	-43	1.4416	+60	0.7746	-55	1.4003	+47	0.7475	-55
0.58	1.12026	+ 1	0.75961	-42	1.4439	+60	0.7838	-54	1.4022	+47	0.7565	-55
0.59	1.12058	+ 1	0.76483	-42	1.4461	+59	0.7928	-53	1.4041	+46	0.7654	-54
0.60	1.12088	0	0.76991	-42	1.4483	+59	0.8016	-52	1.4060	+46	0.7740	-54
0.61	1.12118	0	0.77486	-42	1.4504	+58	0.8102	-52	1.4078	+45	0.7825	-53
0.62	1.12148	0	0.77968	-42	1.4525	+58	0.8186	-51	1.4096	+45	0.7908	-53
0.63	1.12175	- 1	0.78439	-41	1.4545	+58	0.8269	-50	1.4113	+44	0.7989	-52
0.64	1.12203	- 1	0.78897	-41	1.4565	+58	0.8349	-50	1.4130	+44	0.8069	-51
0.65	1.12230	- 1	0.79343	-41	1.4584	+57	0.8428	-49	1.4147	+43	0.8147	-51
0.66	1.12256	- 1	0.79778	-41	1.4603	+56	0.8506	-48	1.4163	+43	0.8224	-50
0.67	1.12280	- 2	0.80203	-41	1.4622	+56	0.8582	-48	1.4178	+42	0.8299	-50
0.68	1.12305	- 2	0.80618	-41	1.4640	+56	0.8656	-47	1.4194	+42	0.8373	-49
0.69	1.12329	- 2	0.81023	-40	1.4657	+55	0.8730	-47	1.4209	+42	0.8446	-49
0.70	1.12352	- 3	0.81418	-40	1.4675	+55	0.8801	-46	1.4224	+42	0.8516	-48
0.71	1.12375	- 3	0.81804	-40	1.4692	+54	0.8872	-46	1.4238	+41	0.8586	-48
0.72	1.12397	- 3	0.82181	-40	1.4708	+54	0.8940	-45	1.4252	+40	0.8654	-47
0.73	1.12418	- 4	0.82550	-40	1.4725	+54	0.9008	-44	1.4266	+40	0.8721	-47
0.74	1.12439	- 4	0.82910	-40	1.4740	+53	0.9074	-44	1.4279	+40	0.8787	-46
0.75	1.12460	- 4	0.83262	-40	1.4756	+53	0.9139	-43	1.4292	+39	0.8851	-46
0.76	1.12480	- 4	0.83606	-40	1.4772	+53	0.9203	-43	1.4305	+39	0.8915	-45
0.77	1.12500	- 4	0.83943	-40	1.4786	+52	0.9265	-42	1.4318	+39	0.8977	-45
0.78	1.12518	- 5	0.84272	-40	1.4801	+52	0.9327	-42	1.4330	+39	0.9038	-45
0.79	1.12537	- 5	0.84595	-40	1.4816	+52	0.9387	-41	1.4342	+38	0.9098	-44
0.80	1.12556	- 5	0.84910	-40	1.4830	+52	0.9446	-41	1.4354	+38	0.9157	-44
0.81	1.12574	- 5	0.85220	-39	1.4844	+52	0.9505	-40	1.4365	+37	0.9215	-43
0.82	1.12590	- 6	0.85523	-39	1.4858	+51	0.9562	-40	1.4376	+37	0.9271	-43
0.83	1.12608	- 6	0.85819	-39	1.4871	+51	0.9618	-40	1.4388	+37	0.9327	-43
0.84	1.12625	- 6	0.86109	-39	1.4884	+51	0.9673	-39	1.4398	+36	0.9382	-42
0.85	1.12641	- 6	0.86394	-39	1.4897	+51	0.9727	-39	1.4409	+36	0.9436	-42
0.86	1.12657	- 6	0.86673	-39	1.4910	+50	0.9780	-38	1.4420	+36	0.9489	-42
0.87	1.12673	- 6	0.86946	-39	1.4922	+50	0.9832	-38	1.4430	+36	0.9541	-41
0.88	1.12688	- 7	0.87214	-39	1.4935	+50	0.9884	-37	1.4440	+35	0.9592	-41
0.89	1.12703	- 7	0.87477	-39	1.4947	+50	0.9934	-37	1.4450	+35	0.9642	-41
0.90	1.12718	- 7	0.87734	-39	1.4959	+50	0.9984	-37	1.4459	+35	0.9692	-40
0.91	1.12732	- 7	0.87987	-39	1.4971	+50	1.0033	-36	1.4469	+34	0.9741	-40
0.92	1.12747	- 7	0.88235	-39	1.4982	+49	1.0080	-36	1.4478	+34	0.9788	-40
0.93	1.12761	- 7	0.88479	-39	1.4994	+49	1.0128	-35	1.4487	+34	0.9835	-40
0.94	1.12774	- 7	0.88718	-39	1.5005	+49	1.0174	-35	1.4496	+34	0.9882	-40
0.95	1.12787	- 8	0.88952	-39	1.5016	+49	1.0220	-35	1.4505	+33	0.9928	-39
0.96	1.12800	- 8	0.89182	-39	1.5027	+49	1.0264	-34	1.4514	+33	0.9972	-39
0.97	1.12813	- 8	0.89409	-39	1.5038	+49	1.0309	-34	1.4522	+33	1.0016	-39
0.98	1.12826	- 8	0.89630	-39	1.5048	+49	1.0352	-34	1.4531	+33	1.0060	-39
0.99	1.12838	- 8	0.89848	-39	1.5059	+48	1.0395	-33	1.4539	+32	1.0103	-38
1.00	1.12850	- 8	0.90065	-39	1.5069	+48	1.0437	-33	1.4547	+32	1.0145	-38

TABLE 1-Continued

μ	τ = 0.50 ; ϖ = 0.90				τ = 0.50 ; ϖ = 0.80				τ = 0.50 ; ϖ = 0.50			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.0000	0	0	0	1.00000	0	0	0	1.00000	0	0	0
0.01	1.0252	+ 5	0.0052	-14	1.02163	+ 24	0.00418	-104	1.01266	+ 15	0.00204	- 36
0.02	1.0443	+10	0.0106	-25	1.03790	+ 58	0.00860	-195	1.02186	+ 27	0.00416	- 70
0.03	1.0610	+14	0.0164	-36	1.05213	+ 90	0.01328	-272	1.02980	+ 38	0.00640	-100
0.04	1.0763	+18	0.0225	-44	1.06503	+117	0.01818	-341	1.03693	+ 48	0.00880	-123
0.05	1.0905	+22	0.0289	-51	1.07715	+159	0.02335	-401	1.04348	+ 59	0.01132	-147
0.06	1.1038	+25	0.0358	-58	1.08843	+192	0.02898	-448	1.04957	+ 69	0.01412	-169
0.07	1.1165	+30	0.0433	-63	1.09910	+224	0.03518	-492	1.05527	+ 79	0.01744	-186
0.08	1.1286	+34	0.0517	-67	1.10920	+252	0.04223	-526	1.06064	+ 88	0.02152	-197
0.09	1.1401	+37	0.0612	-70	1.11875	+273	0.05028	-554	1.06568	+ 93	0.02644	-214
0.10	1.1511	+41	0.0718	-73	1.12793	+300	0.05943	-577	1.07048	+100	0.03244	-224
0.11	1.1615	+43	0.0834	-75	1.13660	+318	0.06968	-598	1.07502	+105	0.03952	-233
0.12	1.1715	+45	0.0962	-76	1.14485	+332	0.08105	-610	1.07932	+109	0.04768	-238
0.13	1.1810	+47	0.1100	-78	1.15273	+346	0.09341	-620	1.08340	+112	0.05680	-246
0.14	1.1900	+49	0.1246	-78	1.16020	+354	0.10663	-629	1.08728	+114	0.06684	-250
0.15	1.1986	+50	0.1400	-79	1.16733	+361	0.12060	-638	1.09095	+114	0.07768	-254
0.16	1.2069	+51	0.1560	-79	1.17412	+366	0.13523	-641	1.09444	+114	0.08916	-260
0.17	1.2147	+51	0.1724	-79	1.18058	+368	0.15035	-645	1.09776	+113	0.10124	-262
0.18	1.2222	+52	0.1893	-79	1.18675	+369	0.16585	-648	1.10092	+112	0.11376	-265
0.19	1.2294	+52	0.2064	-79	1.19263	+369	0.18168	-647	1.10392	+110	0.12666	-266
0.20	1.2362	+53	0.2236	-78	1.19824	+368	0.19768	-647	1.10679	+108	0.13980	-268
0.21	1.2427	+53	0.2409	-78	1.20361	+367	0.21380	-646	1.10952	+105	0.15316	-268
0.22	1.2489	+53	0.2583	-78	1.20874	+365	0.22998	-643	1.11212	+102	0.16661	-270
0.23	1.2549	+53	0.2756	-77	1.21365	+363	0.24613	-640	1.11462	+100	0.18014	-270
0.24	1.2606	+53	0.2927	-76	1.21834	+360	0.26220	-639	1.11700	+ 97	0.19367	-270
0.25	1.2661	+52	0.3098	-76	1.22283	+356	0.27818	-635	1.11927	+ 94	0.20717	-270
0.26	1.2713	+52	0.3266	-75	1.22713	+352	0.29400	-632	1.12145	+ 91	0.22060	-270
0.27	1.2763	+51	0.3433	-74	1.23125	+347	0.30965	-629	1.12354	+ 88	0.23391	-270
0.28	1.2811	+51	0.3597	-74	1.23521	+343	0.32510	-625	1.12555	+ 86	0.24710	-270
0.29	1.2857	+50	0.3759	-73	1.23900	+338	0.34033	-621	1.12747	+ 83	0.26013	-270
0.30	1.2902	+50	0.3918	-72	1.24265	+333	0.35533	-616	1.12931	+ 80	0.27300	-270
0.31	1.2945	+50	0.4074	-72	1.24616	+328	0.37008	-611	1.13108	+ 77	0.28568	-270
0.32	1.2986	+49	0.4228	-71	1.24953	+323	0.38455	-609	1.13278	+ 74	0.29818	-268
0.33	1.3025	+48	0.4378	-70	1.25275	+316	0.39878	-604	1.13441	+ 70	0.31046	-268
0.34	1.3064	+48	0.4526	-69	1.25590	+313	0.41273	-600	1.13599	+ 68	0.32253	-268
0.35	1.3100	+47	0.4670	-69	1.25888	+305	0.42643	-595	1.13751	+ 65	0.33439	-268
0.36	1.3136	+47	0.4812	-68	1.26180	+302	0.43985	-590	1.13897	+ 62	0.34605	-266
0.37	1.3169	+46	0.4951	-67	1.26458	+295	0.45298	-587	1.14038	+ 59	0.35747	-266
0.38	1.3203	+46	0.5087	-66	1.26730	+291	0.46585	-583	1.14173	+ 56	0.36867	-266
0.39	1.3234	+45	0.5220	-66	1.26990	+285	0.47845	-579	1.14304	+ 53	0.37967	-264
0.40	1.3265	+45	0.5350	-65	1.27242	+280	0.49078	-576	1.14431	+ 50	0.39044	-264
0.41	1.3295	+44	0.5477	-65	1.27483	+275	0.50288	-570	1.14553	+ 47	0.40100	-262
0.42	1.3324	+44	0.5602	-64	1.27720	+269	0.51473	-564	1.14672	+ 45	0.41134	-262
0.43	1.3351	+43	0.5724	-63	1.27948	+264	0.52628	-562	1.14786	+ 42	0.42148	-260
0.44	1.3378	+42	0.5843	-63	1.28168	+259	0.53760	-558	1.14896	+ 39	0.43140	-260
0.45	1.3404	+42	0.5959	-62	1.28381	+253	0.54865	-557	1.15004	+ 37	0.44111	-260
0.46	1.3430	+42	0.6074	-61	1.28588	+249	0.55953	-549	1.15107	+ 34	0.45064	-258
0.47	1.3454	+41	0.6185	-61	1.28788	+243	0.57013	-546	1.15208	+ 32	0.45995	-258
0.48	1.3478	+40	0.6294	-60	1.28983	+239	0.58052	-542	1.15305	+ 29	0.46907	-258
0.49	1.3501	+40	0.6401	-60	1.29170	+233	0.59067	-539	1.15400	+ 27	0.47802	-256
0.50	1.3523	+40	0.6506	-59	1.29355	+230	0.60060	-536	1.15493	+ 25	0.48677	-256

TABLE 1-Continued

μ	$\tau = 0.50$; $\varpi_0 = 0.90$				$\tau = 0.50$; $\varpi_0 = 0.80$				$\tau = 0.50$; $\varpi_0 = 0.50$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.3545	+39	0.6608	-58	1.29532	+224	0.61033	-533	1.15581	+ 22	0.49535	-254
0.52	1.3566	+38	0.6708	-58	1.29705	+220	0.61985	-530	1.15668	+ 20	0.50374	-254
0.53	1.3586	+38	0.6806	-57	1.29873	+216	0.62918	-526	1.15752	+ 18	0.51198	-252
0.54	1.3606	+37	0.6901	-57	1.30036	+211	0.63830	-523	1.15834	+ 16	0.52002	-252
0.55	1.3626	+37	0.6996	-56	1.30195	+207	0.64723	-520	1.15913	+ 13	0.52791	-252
0.56	1.3645	+37	0.7087	-56	1.30349	+203	0.65598	-517	1.15990	+ 11	0.53565	-250
0.57	1.3663	+36	0.7177	-55	1.30500	+199	0.66453	-515	1.16065	+ 9	0.54322	-250
0.58	1.3681	+36	0.7265	-55	1.30645	+194	0.67295	-510	1.16139	+ 7	0.55065	-248
0.59	1.3698	+35	0.7351	-54	1.30788	+190	0.68115	-508	1.16210	+ 5	0.55792	-248
0.60	1.3715	+35	0.7436	-54	1.30925	+185	0.68920	-506	1.16280	+ 4	0.56504	-248
0.61	1.3732	+34	0.7518	-54	1.31060	+181	0.69712	-500	1.16348	+ 2	0.57204	-246
0.62	1.3748	+34	0.7599	-53	1.31193	+178	0.70483	-499	1.16414	0	0.57888	-246
0.63	1.3764	+33	0.7679	-53	1.31321	+174	0.71241	-496	1.16478	- 2	0.58559	-246
0.64	1.3779	+33	0.7757	-52	1.31446	+170	0.71982	-494	1.16540	- 4	0.59219	-244
0.65	1.3794	+33	0.7833	-52	1.31568	+166	0.72710	-492	1.16601	- 6	0.59864	-244
0.66	1.3809	+32	0.7908	-52	1.31688	+163	0.73425	-488	1.16662	- 7	0.60497	-244
0.67	1.3823	+32	0.7981	-51	1.31805	+160	0.74124	-486	1.16720	- 9	0.61120	-242
0.68	1.3837	+32	0.8053	-51	1.31919	+156	0.74810	-484	1.16776	- 11	0.61728	-242
0.69	1.3851	+31	0.8123	-50	1.32029	+152	0.75483	-482	1.16833	- 12	0.62326	-242
0.70	1.3864	+31	0.8192	-50	1.32138	+149	0.76143	-480	1.16886	- 14	0.62912	-242
0.71	1.3877	+30	0.8260	-50	1.32245	+146	0.76790	-478	1.16940	- 15	0.63489	-240
0.72	1.3890	+30	0.8327	-49	1.32348	+142	0.77424	-477	1.16992	- 17	0.64054	-240
0.73	1.3902	+30	0.8392	-49	1.32449	+139	0.78047	-476	1.17043	- 18	0.64608	-240
0.74	1.3914	+29	0.8456	-49	1.32549	+136	0.78659	-474	1.17092	- 20	0.65153	-240
0.75	1.3926	+29	0.8519	-48	1.32645	+132	0.79260	-472	1.17141	- 21	0.65689	-238
0.76	1.3938	+29	0.8581	-48	1.32740	+129	0.79850	-470	1.17188	- 23	0.66214	-238
0.77	1.3949	+28	0.8641	-48	1.32833	+126	0.80429	-469	1.17235	- 24	0.66729	-238
0.78	1.3960	+28	0.8701	-47	1.32925	+124	0.80997	-468	1.17279	- 26	0.67236	-238
0.79	1.3971	+28	0.8760	-47	1.33013	+120	0.81555	-467	1.17324	- 27	0.67733	-238
0.80	1.3982	+27	0.8817	-47	1.33101	+118	0.82103	-466	1.17368	- 28	0.68222	-238
0.81	1.3992	+27	0.8873	-46	1.33187	+116	0.82641	-465	1.17410	- 30	0.68704	-236
0.82	1.4002	+27	0.8929	-46	1.33271	+113	0.83171	-464	1.17452	- 31	0.69176	-236
0.83	1.4012	+26	0.8983	-46	1.33352	+110	0.83691	-463	1.17494	- 32	0.69640	-236
0.84	1.4023	+26	0.9037	-46	1.33433	+108	0.84202	-462	1.17534	- 33	0.70096	-236
0.85	1.4032	+26	0.9090	-45	1.33512	+105	0.84704	-461	1.17573	- 35	0.70544	-236
0.86	1.4042	+26	0.9141	-45	1.33589	+102	0.85198	-460	1.17611	- 36	0.70987	-234
0.87	1.4051	+26	0.9192	-45	1.33665	+100	0.85683	-460	1.17649	- 37	0.71421	-234
0.88	1.4060	+26	0.9242	-45	1.33740	+ 98	0.86159	-460	1.17687	- 38	0.71847	-234
0.89	1.4069	+25	0.9291	-44	1.33813	+ 95	0.86629	-459	1.17723	- 39	0.72267	-234
0.90	1.4078	+25	0.9340	-44	1.33885	+ 93	0.87091	-458	1.17759	- 40	0.72679	-234
0.91	1.4087	+25	0.9387	-44	1.33954	+ 90	0.87546	-457	1.17794	- 41	0.73085	-234
0.92	1.4096	+25	0.9434	-44	1.34023	+ 88	0.87993	-456	1.17829	- 42	0.73485	-234
0.93	1.4104	+25	0.9480	-43	1.34092	+ 86	0.88432	-456	1.17862	- 44	0.73880	-232
0.94	1.4112	+24	0.9525	-43	1.34158	+ 84	0.88864	-456	1.17895	- 45	0.74267	-232
0.95	1.4120	+24	0.9570	-43	1.34223	+ 81	0.89290	-455	1.17928	- 46	0.74648	-232
0.96	1.4128	+24	0.9614	-43	1.34287	+ 79	0.89708	-455	1.17961	- 46	0.75023	-232
0.97	1.4136	+24	0.9657	-42	1.34350	+ 77	0.90121	-454	1.17992	- 47	0.75392	-232
0.98	1.4144	+24	0.9700	-42	1.34412	+ 75	0.90527	-454	1.18023	- 48	0.75755	-232
0.99	1.4151	+24	0.9741	-42	1.34473	+ 73	0.90927	-453	1.18053	- 49	0.76113	-232
1.00	1.4159	+24	0.9782	-42	1.34533	+ 71	0.91320	-453	1.18083	- 50	0.76465	-232

TABLE 1-Continued

μ	$\tau = 1.00$; $\varpi_0 = 1.00$				$\tau = 1.00$; $\varpi_0 = 0.95$				$\tau = 1.00$; $\varpi_0 = 0.90$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0	1.0000	0	0	0	1.0000	0	0	0	1.0000	0	0	0
0.01	1.0302	+ 6	0.0052	- 26	1.0279	+ 6	0.0046	- 24	1.0258	+ 4	0.0042	- 20
0.02	1.0587	+ 13	0.0093	- 53	1.0493	+ 12	0.0080	- 50	1.0456	+ 10	0.0071	- 41
0.03	1.0749	+ 22	0.0138	- 81	1.0687	+ 21	0.0122	- 72	1.0633	+ 18	0.0105	- 64
0.04	1.0946	+ 33	0.0189	-104	1.0865	+ 30	0.0167	- 93	1.0796	+ 26	0.0144	- 82
0.05	1.1134	+ 46	0.0241	-126	1.1033	+ 40	0.0214	-113	1.0950	+ 35	0.0183	-100
0.06	1.1312	+ 58	0.0296	-144	1.1192	+ 50	0.0262	-132	1.1094	+ 44	0.0225	-116
0.07	1.1484	+ 70	0.0352	-164	1.1346	+ 61	0.0312	-149	1.1233	+ 53	0.0268	-132
0.08	1.1648	+ 82	0.0412	-180	1.1493	+ 72	0.0362	-167	1.1366	+ 62	0.0312	-147
0.09	1.1808	+ 95	0.0472	-196	1.1634	+ 82	0.0418	-180	1.1493	+ 70	0.0358	-160
0.10	1.1962	+106	0.0534	-211	1.1770	+ 91	0.0474	-193	1.1616	+ 78	0.0406	-173
0.11	1.2113	+118	0.0599	-224	1.1904	+102	0.0532	-206	1.1736	+ 87	0.0456	-184
0.12	1.2259	+130	0.0667	-235	1.2034	+113	0.0592	-217	1.1851	+ 94	0.0508	-196
0.13	1.2403	+143	0.0737	-246	1.2159	+122	0.0655	-228	1.1963	+102	0.0563	-205
0.14	1.2542	+153	0.0811	-255	1.2280	+130	0.0721	-238	1.2072	+109	0.0621	-214
0.15	1.2679	+165	0.0887	-264	1.2398	+138	0.0790	-246	1.2177	+115	0.0681	-223
0.16	1.2811	+174	0.0967	-271	1.2514	+146	0.0862	-254	1.2281	+122	0.0744	-230
0.17	1.2940	+183	0.1051	-278	1.2626	+153	0.0938	-262	1.2380	+127	0.0811	-238
0.18	1.3066	+191	0.1138	-284	1.2735	+160	0.1017	-268	1.2478	+133	0.0881	-244
0.19	1.3189	+199	0.1229	-288	1.2842	+166	0.1100	-274	1.2572	+137	0.0955	-250
0.20	1.3310	+206	0.1322	-293	1.2946	+172	0.1186	-279	1.2665	+142	0.1032	-255
0.21	1.3427	+213	0.1420	-296	1.3046	+177	0.1275	-284	1.2754	+145	0.1112	-260
0.22	1.3542	+219	0.1520	-299	1.3146	+182	0.1368	-288	1.2842	+149	0.1196	-264
0.23	1.3655	+226	0.1623	-302	1.3241	+186	0.1464	-291	1.2927	+152	0.1282	-268
0.24	1.3764	+231	0.1730	-303	1.3335	+190	0.1562	-294	1.3010	+155	0.1371	-272
0.25	1.3872	+236	0.1839	-305	1.3426	+194	0.1664	-297	1.3090	+157	0.1463	-275
0.26	1.3976	+241	0.1950	-306	1.3516	+197	0.1767	-300	1.3169	+159	0.1558	-277
0.27	1.4079	+245	0.2063	-306	1.3603	+200	0.1874	-301	1.3246	+161	0.1655	-280
0.28	1.4179	+249	0.2178	-306	1.3687	+202	0.1982	-303	1.3320	+162	0.1754	-282
0.29	1.4277	+252	0.2295	-306	1.3770	+204	0.2091	-304	1.3393	+163	0.1855	-284
0.30	1.4373	+255	0.2413	-306	1.3850	+207	0.2203	-306	1.3464	+165	0.1957	-286
0.31	1.4466	+258	0.2533	-305	1.3929	+208	0.2316	-306	1.3533	+165	0.2061	-287
0.32	1.4557	+260	0.2653	-304	1.4006	+210	0.2430	-307	1.3601	+166	0.2167	-288
0.33	1.4646	+262	0.2775	-303	1.4080	+211	0.2545	-307	1.3667	+166	0.2273	-289
0.34	1.4734	+264	0.2898	-301	1.4154	+212	0.2661	-308	1.3731	+167	0.2381	-290
0.35	1.4819	+266	0.3020	-300	1.4224	+213	0.2778	-308	1.3794	+167	0.2489	-291
0.36	1.4903	+267	0.3143	-298	1.4294	+214	0.2895	-308	1.3855	+167	0.2598	-291
0.37	1.4984	+268	0.3267	-295	1.4362	+214	0.3012	-308	1.3914	+166	0.2707	-292
0.38	1.5064	+269	0.3390	-293	1.4428	+214	0.3130	-307	1.3973	+166	0.2816	-292
0.39	1.5142	+270	0.3513	-291	1.4493	+214	0.3248	-307	1.4030	+166	0.2926	-292
0.40	1.5219	+271	0.3636	-289	1.4556	+215	0.3366	-306	1.4085	+165	0.3036	-292
0.41	1.5294	+271	0.3759	-286	1.4618	+215	0.3483	-306	1.4139	+165	0.3146	-292
0.42	1.5367	+272	0.3881	-283	1.4678	+215	0.3601	-304	1.4192	+164	0.3256	-292
0.43	1.5440	+272	0.4003	-281	1.4737	+214	0.3718	-304	1.4244	+163	0.3365	-292
0.44	1.5510	+272	0.4124	-278	1.4795	+214	0.3835	-302	1.4294	+162	0.3474	-291
0.45	1.5579	+272	0.4245	-275	1.4851	+213	0.3951	-302	1.4344	+162	0.3583	-291
0.46	1.5647	+272	0.4365	-272	1.4906	+213	0.4067	-300	1.4392	+161	0.3692	-290
0.47	1.5713	+272	0.4484	-268	1.4959	+212	0.4182	-299	1.4439	+160	0.3800	-290
0.48	1.5778	+272	0.4602	-265	1.5012	+212	0.4296	-298	1.4485	+158	0.3907	-289
0.49	1.5842	+271	0.4719	-262	1.5063	+211	0.4410	-296	1.4530	+157	0.4013	-289
0.50	1.5905	+271	0.4836	-258	1.5114	+210	0.4522	-295	1.4574	+156	0.4120	-288

TABLE 1-Continued

μ	$\tau = 1.00$; $\varpi_\circ = 1.00$				$\tau = 1.00$; $\varpi_\circ = 0.95$				$\tau = 1.00$; $\varpi_\circ = 0.90$			
	X	δ	Y	δ	X	δ	Y	δ	X	δ	Y	δ
0.51	1.5966	+270	0.4952	-255	1.5163	+209	0.4634	-294	1.4617	+155	0.4225	-288
0.52	1.6026	+270	0.5066	-251	1.5211	+208	0.4746	-292	1.4659	+154	0.4330	-286
0.53	1.6086	+269	0.5180	-247	1.5258	+207	0.4857	-290	1.4701	+152	0.4433	-286
0.54	1.6144	+268	0.5293	-244	1.5305	+207	0.4966	-289	1.4741	+151	0.4536	-285
0.55	1.6200	+267	0.5404	-240	1.5350	+206	0.5074	-287	1.4781	+150	0.4638	-284
0.56	1.6257	+267	0.5515	-236	1.5394	+204	0.5182	-286	1.4819	+149	0.4740	-283
0.57	1.6311	+266	0.5624	-232	1.5437	+203	0.5288	-284	1.4857	+147	0.4840	-282
0.58	1.6366	+265	0.5733	-227	1.5479	+202	0.5394	-282	1.4894	+146	0.4940	-281
0.59	1.6418	+264	0.5840	-223	1.5521	+201	0.5499	-280	1.4931	+144	0.5038	-280
0.60	1.6470	+263	0.5946	-219	1.5562	+200	0.5602	-280	1.4966	+143	0.5136	-279
0.61	1.6522	+262	0.6051	-215	1.5602	+199	0.5705	-277	1.5001	+142	0.5233	-278
0.62	1.6572	+261	0.6155	-211	1.5641	+198	0.5806	-275	1.5036	+140	0.5329	-276
0.63	1.6622	+260	0.6258	-206	1.5679	+197	0.5907	-273	1.5069	+139	0.5423	-275
0.64	1.6670	+259	0.6360	-202	1.5717	+196	0.6006	-272	1.5102	+138	0.5517	-274
0.65	1.6718	+257	0.6460	-197	1.5754	+194	0.6104	-270	L.5134	+136	0.5611	-272
0.66	1.6765	+256	0.656	-19	1.5790	+193	0.6202	-268	1.5166	+135	0.5702	-272
0.67	1.6811	+255	0.666	-19	1.5826	+192	0.6298	-266	1.5197	+133	0.5794	-270
0.68	1.6857	+254	0.676	-18	1.5860	+190	0.6394	-264	1.5228	+132	0.5884	-268
0.69	1.6902	+252	0.685	-18	1.5894	+189	0.6488	-262	1.5257	+130	0.5973	-267
0.70	1.6946	+251	0.695	-18	1.5928	+188	0.6581	-260	1.5287	+129	0.6061	-266
0.71	1.6989	+250	0.704	-17	1.5961	+187	0.6673	-258	1.5315	+128	0.6149	-264
0.72	1.7032	+248	0.713	-17	1.5993	+186	0.6765	-256	1.5344	+126	0.6235	-263
0.73	1.7074	+247	0.722	-16	1.6025	+184	0.6855	-254	1.5371	+125	0.6321	-261
0.74	1.7115	+246	0.731	-16	1.6056	+183	0.6944	-252	1.5399	+124	0.6405	-260
0.75	1.7156	+244	0.740	-15	1.6087	+182	0.7032	-250	1.5425	+122	0.6489	-258
0.76	1.7196	+243	0.749	-15	1.6117	+181	0.7119	-249	1.5452	+121	0.6572	-257
0.77	1.7236	+241	0.758	-14	1.6146	+179	0.7205	-247	1.5477	+119	0.6653	-255
0.78	1.7275	+240	0.766	-14	1.6176	+178	0.7290	-245	1.5503	+118	0.6734	-254
0.79	1.7313	+238	0.775	-13	1.6204	+177	0.7375	-243	1.5528	+116	0.6814	-252
0.80	1.7352	+237	0.783	-13	1.6232	+176	0.7458	-241	1.5552	+115	0.6894	-250
0.81	1.7389	+235	0.792	-12	1.6260	+175	0.7540	-239	1.5576	+114	0.6972	-249
0.82	1.7426	+233	0.800	-12	1.6287	+173	0.7622	-237	1.5600	+112	0.7049	-247
0.83	1.7462	+232	0.808	-12	1.6313	+172	0.7702	-235	1.5623	+111	0.7126	-246
0.84	1.7498	+231	0.816	-11	1.6340	+171	0.7782	-233	1.5646	+110	0.7201	-244
0.85	1.7534	+229	0.824	-11	1.6366	+170	0.7860	-232	1.5668	+108	0.7276	-242
0.86	1.7568	+227	0.831	-10	1.6391	+169	0.7938	-230	1.5691	+107	0.7350	-241
0.87	1.7603	+226	0.839	-10	1.6416	+168	0.8015	-228	1.5712	+106	0.7423	-240
0.88	1.7637	+224	0.847	- 9	1.6441	+167	0.8091	-226	1.5734	+105	0.7496	-238
0.89	1.7670	+223	0.854	- 9	1.6465	+165	0.8166	-224	1.5755	+103	0.7567	-236
0.90	1.7703	+221	0.862	- 8	1.6489	+164	0.8240	-222	1.5776	+102	0.7638	-234
0.91	1.7736	+219	0.869	- 8	1.6512	+163	0.8314	-220	1.5796	+101	0.7708	-232
0.92	1.7769	+218	0.876	- 8	1.6536	+163	0.8386	-218	1.5816	+100	0.7778	-230
0.93	1.7801	+216	0.883	- 7	1.6559	+162	0.8458	-216	1.5836	+ 98	0.7846	-229
0.94	1.7832	+215	0.890	- 7	1.6581	+160	0.8530	-214	1.5855	+ 97	0.7914	-227
0.95	1.7863	+213	0.897	- 6	1.6603	+160	0.8600	-212	1.5875	+ 96	0.7980	-226
0.96	1.7894	+211	0.904	- 6	1.6626	+159	0.8669	-210	1.5894	+ 95	0.8047	-224
0.97	1.7924	+210	0.911	- 5	1.6647	+158	0.8738	-209	1.5912	+ 94	0.8113	-222
0.98	1.7954	+208	0.918	- 5	1.6668	+157	0.8806	-207	1.5930	+ 92	0.8178	-220
0.99	1.7984	+207	0.924	- 4	1.6689	+156	0.8873	-205	1.5948	+ 91	0.8241	-219
1.00	1.8013	+205	0.931	- 4	1.6710	+156	0.8939	-203	1.5966	+ 90	0.8305	-217

TABLE 1-Continued

μ	τ = 1.00 ; ϖ₀ = 0.80				μ	τ = 1.00 ; ϖ₀ = 0.80				μ	τ = 1.00 ; ϖ₀ = 0.50				μ	τ = 1.00 ; ϖ₀ = 0.50			
	X	δ	Y	δ		X	δ	Y	δ		X	δ	Y	δ		X	δ	Y	δ
0	1.0000	0	0	0	0.50	1.3668	+86	0.3469	-258	0	1.0000	0	0	0	0.50	1.1795	+12	0.2272	-107
0.01	1.0222	+ 5	0.0080	- 17	0.51	1.3700	+85	0.3563	-254	0.01	1.0127	+ 2	0.0010	- 6	0.51	1.1810	+11	0.2344	-108
0.02	1.0390	+ 10	0.0050	- 33	0.52	1.3733	+83	0.3656	-254	0.02	1.0221	+ 4	0.0020	- 11	0.52	1.1824	+10	0.2417	-108
0.03	1.0538	+ 15	0.0079	- 47	0.53	1.3765	+82	0.3750	-253	0.03	1.0301	+ 6	0.0030	- 17	0.53	1.1838	+10	0.2489	-108
0.04	1.0673	+ 20	0.0106	- 63	0.54	1.3796	+81	0.3842	-253	0.04	1.0374	+ 8	0.0042	- 22	0.54	1.1852	+ 9	0.2560	-108
0.05	1.0800	+ 27	0.0136	- 76	0.55	1.3826	+79	0.3934	-253	0.05	1.0440	+10	0.0058	- 27	0.55	1.1865	+ 8	0.2632	-109
0.06	1.0919	+ 33	0.0166	- 89	0.56	1.3856	+77	0.4024	-253	0.06	1.0508	+12	0.0065	- 31	0.56	1.1878	+ 7	0.2703	-109
0.07	1.1033	+ 40	0.0198	-102	0.57	1.3885	+76	0.4115	-253	0.07	1.0561	+14	0.0078	- 35	0.57	1.1891	+ 6	0.2775	-109
0.08	1.1141	+ 46	0.0231	-113	0.58	1.3914	+74	0.4204	-253	0.08	1.0616	+16	0.0091	- 40	0.58	1.1904	+ 6	0.2843	-109
0.09	1.1244	+ 51	0.0265	-124	0.59	1.3942	+73	0.4293	-253	0.09	1.0669	+18	0.0104	- 44	0.59	1.1916	+ 5	0.2912	-110
0.10	1.1344	+ 58	0.0301	-134	0.60	1.3969	+72	0.4380	-253	0.10	1.0719	+20	0.0119	- 47	0.60	1.1928	+ 4	0.2982	-110
0.11	1.1441	+ 65	0.0338	-144	0.61	1.3996	+70	0.4468	-252	0.11	1.0767	+21	0.0134	- 51	0.61	1.1940	+ 3	0.3050	-110
0.12	1.1534	+ 69	0.0377	-152	0.62	1.4022	+69	0.4554	-252	0.12	1.0812	+23	0.0151	- 55	0.62	1.1951	+ 3	0.3118	-110
0.13	1.1623	+ 73	0.0418	-161	0.63	1.4048	+67	0.4640	-252	0.13	1.0856	+24	0.0169	- 58	0.63	1.1962	+ 2	0.3186	-111
0.14	1.1711	+ 78	0.0462	-169	0.64	1.4074	+66	0.4725	-251	0.14	1.0899	+25	0.0188	- 62	0.64	1.1974	+ 1	0.3252	-111
0.15	1.1795	+ 82	0.0509	-176	0.65	1.4098	+64	0.4808	-251	0.15	1.0939	+26	0.0210	- 65	0.65	1.1984	0	0.3319	-111
0.16	1.1877	+ 86	0.0558	-183	0.66	1.4122	+63	0.4891	-251	0.16	1.0978	+27	0.0235	- 67	0.66	1.1995	- 1	0.3384	-111
0.17	1.1956	+ 89	0.0611	-189	0.67	1.4146	+61	0.4974	-250	0.17	1.1016	+28	0.0262	- 70	0.67	1.2005	- 1	0.3450	-112
0.18	1.2033	+ 92	0.0666	-194	0.68	1.4170	+60	0.5055	-250	0.18	1.1058	+28	0.0292	- 72	0.68	1.2015	- 2	0.3514	-112
0.19	1.2108	+ 95	0.0725	-200	0.69	1.4192	+58	0.5136	-249	0.19	1.1088	+29	0.0324	- 75	0.69	1.2026	- 3	0.3578	-112
0.20	1.2181	+ 97	0.0788	-205	0.70	1.4215	+57	0.5215	-249	0.20	1.1122	+29	0.0359	- 77	0.70	1.2035	- 4	0.3642	-112
0.21	1.2251	+ 99	0.0858	-209	0.71	1.4237	+55	0.5294	-248	0.21	1.1155	+29	0.0398	- 79	0.71	1.2045	- 4	0.3704	-112
0.22	1.2320	+101	0.0921	-214	0.72	1.4259	+54	0.5372	-248	0.22	1.1187	+29	0.0439	- 81	0.72	1.2054	- 5	0.3767	-112
0.23	1.2387	+102	0.0993	-217	0.73	1.4280	+52	0.5450	-247	0.23	1.1218	+29	0.0485	- 83	0.73	1.2064	- 6	0.3828	-112
0.24	1.2452	+103	0.1068	-220	0.74	1.4301	+51	0.5526	-247	0.24	1.1248	+29	0.0530	- 85	0.74	1.2072	- 6	0.3889	-112
0.25	1.2515	+104	0.1145	-224	0.75	1.4322	+50	0.5602	-246	0.25	1.1277	+29	0.0580	- 86	0.75	1.2081	- 7	0.3950	-112
0.26	1.2577	+105	0.1225	-227	0.76	1.4342	+48	0.5677	-246	0.26	1.1306	+29	0.0632	- 88	0.76	1.2090	- 8	0.4010	-113
0.27	1.2637	+106	0.1306	-230	0.77	1.4361	+47	0.5751	-245	0.27	1.1335	+28	0.0686	- 89	0.77	1.2099	- 8	0.4069	-113
0.28	1.2695	+106	0.1391	-232	0.78	1.4381	+46	0.5824	-244	0.28	1.1360	+28	0.0743	- 91	0.78	1.2107	- 9	0.4127	-113
0.29	1.2752	+106	0.1477	-234	0.79	1.4400	+44	0.5897	-244	0.29	1.1386	+27	0.0802	- 92	0.79	1.2115	-10	0.4185	-113
0.30	1.2808	+106	0.1565	-237	0.80	1.4419	+43	0.5968	-243	0.30	1.1411	+27	0.0862	- 93	0.80	1.2124	-10	0.4243	-113
0.31	1.2862	+106	0.1654	-239	0.81	1.4437	+41	0.6039	-243	0.31	1.1435	+26	0.0924	- 94	0.81	1.2132	-11	0.4300	-113
0.32	1.2914	+106	0.1746	-240	0.82	1.4455	+40	0.6110	-242	0.32	1.1459	+26	0.0988	- 96	0.82	1.2139	-12	0.4356	-113
0.33	1.2965	+105	0.1838	-242	0.83	1.4473	+39	0.6179	-241	0.33	1.1482	+25	0.1054	- 96	0.83	1.2147	-12	0.4412	-113
0.34	1.3015	+105	0.1931	-243	0.84	1.4491	+38	0.6248	-240	0.34	1.1505	+25	0.1121	- 97	0.84	1.2155	-13	0.4467	-113
0.35	1.3064	+104	0.2026	-245	0.85	1.4508	+36	0.6315	-240	0.35	1.1526	+24	0.1189	- 98	0.85	1.2162	-14	0.4521	-113
0.36	1.3111	+103	0.2121	-246	0.86	1.4525	+35	0.6383	-239	0.36	1.1548	+23	0.1258	- 99	0.86	1.2170	-14	0.4575	-113
0.37	1.3157	+102	0.2216	-247	0.87	1.4542	+34	0.6449	-238	0.37	1.1569	+22	0.1328	-100	0.87	1.2177	-15	0.4628	-113
0.38	1.3203	+102	0.2312	-248	0.88	1.4558	+33	0.6515	-237	0.38	1.1589	+22	0.1398	-101	0.88	1.2184	-15	0.4681	-113
0.39	1.3246	+100	0.2409	-249	0.89	1.4574	+32	0.6580	-237	0.39	1.1608	+21	0.1470	-101	0.89	1.2191	-16	0.4734	-114
0.40	1.3290	+100	0.2506	-250	0.90	1.4590	+30	0.6644	-236	0.40	1.1628	+20	0.1542	-102	0.90	1.2198	-17	0.4785	-114
0.41	1.3331	+ 98	0.2603	-250	0.91	1.4606	+29	0.6708	-235	0.41	1.1646	+20	0.1614	-103	0.91	1.2204	-17	0.4837	-114
0.42	1.3372	+ 97	0.2700	-251	0.92	1.4621	+28	0.6771	-234	0.42	1.1664	+19	0.1686	-103	0.92	1.2211	-18	0.4887	-114
0.43	1.3412	+ 96	0.2797	-251	0.93	1.4636	+27	0.6833	-233	0.43	1.1682	+18	0.1759	-104	0.93	1.2218	-18	0.4937	-114
0.44	1.3452	+ 95	0.2894	-252	0.94	1.4652	+26	0.6894	-233	0.44	1.1700	+17	0.1832	-105	0.94	1.2224	-19	0.4987	-114
0.45	1.3489	+ 93	0.2991	-252	0.95	1.4666	+25	0.6955	-232	0.45	1.1716	+16	0.1906	-105	0.95	1.2230	-20	0.5036	-114
0.46	1.3527	+ 92	0.3087	-252	0.96	1.4681	+24	0.7016	-231	0.46	1.1733	+15	0.1979	-105	0.96	1.2237	-20	0.5085	-114
0.47	1.3563	+ 90	0.3183	-253	0.97	1.4695	+23	0.7075	-230	0.47	1.1749	+15	0.2052	-106	0.97	1.2243	-21	0.5133	-114
0.48	1.3598	+ 89	0.3279	-253	0.98	1.4709	+22	0.7134	-229	0.48	1.1765	+14	0.2126	-106	0.98	1.2249	-21	0.5180	-114
0.49	1.3633	+ 88	0.3374	-253	0.99	1.4723	+20	0.7192	-228	0.49	1.1780	+13	0.2199	-107	0.99	1.2255	-22	0.5227	-114
0.50	1.3668	+ 86	0.3469	-253	1.00	1.4737	+20	0.7250	-227	0.50	1.1795	+12	0.2272	-107	1.00	1.2260	-22	0.5274	-114