

Month	N	Omega			Cos(theata-z)		Cos(theata)		Rb	
		9am	12PM	Delta	9AM	12PM	9Am	12PM	9AM	12PM
January	1	-45	0	-23.01163673	0.344787838	0.573410055	0.650839097	0.920425477	1.887650967	1.605178473
January	2	-45	0	-22.93054361	0.345809609	0.574569026	0.651229675	0.920977838	1.883202944	1.602901995
January	3	-45	0	-22.84265567	0.346916212	0.575823807	0.651651506	0.921574398	1.878411797	1.600445113
January	4	-45	0	-22.74799897	0.348107128	0.577173711	0.65210411	0.922214477	1.873285713	1.597810954
January	5	-45	0	-22.64660154	0.349381798	0.578617996	0.652586971	0.922897345	1.867833339	1.595002836
January	6	-45	0	-22.53849343	0.350739623	0.580155872	0.653099537	0.923622223	1.862063749	1.592024261
January	7	-45	0	-22.42370668	0.352179964	0.581786492	0.653641223	0.924388283	1.855986402	1.588878902
January	8	-45	0	-22.30227531	0.353702142	0.583508962	0.65421141	0.925194649	1.849611106	1.58557059
January	9	-45	0	-22.17423529	0.355305441	0.585322334	0.654809445	0.926040398	1.842947982	1.582103303
January	10	-45	0	-22.03962456	0.356989104	0.587225613	0.655434644	0.926924563	1.836007421	1.578481154
January	11	-45	0	-21.89848302	0.358752335	0.58921775	0.65608629	0.927846129	1.828800052	1.574708381
January	12	-45	0	-21.75085248	0.360594302	0.59129765	0.656763635	0.928804039	1.821336695	1.570789331
January	13	-45	0	-21.5967767	0.362514132	0.593464167	0.657465901	0.929797194	1.813628332	1.56672845
January	14	-45	0	-21.43630132	0.364510916	0.595716108	0.658192282	0.930824451	1.805686066	1.56253027
January	15	-45	0	-21.26947391	0.366583705	0.598052233	0.65894194	0.931884629	1.797521085	1.558199397
January	16	-45	0	-21.09634389	0.368731517	0.600471253	0.659714013	0.932976505	1.789144628	1.5537405
January	17	-45	0	-20.91696257	0.37095333	0.602971834	0.66050761	0.93409882	1.780567951	1.549158297
January	18	-45	0	-20.73138311	0.373248085	0.605552598	0.661321814	0.935250279	1.771802296	1.544457545
January	19	-45	0	-20.53966049	0.37561469	0.608212119	0.662155684	0.936429549	1.762858859	1.539643028
January	20	-45	0	-20.34185152	0.378052016	0.61094893	0.663008255	0.937635266	1.753748761	1.534719548
January	21	-45	0	-20.13801482	0.380558899	0.61376152	0.663878538	0.938866033	1.744483021	1.529691911
January	22	-45	0	-19.9282108	0.383134141	0.616648336	0.664765524	0.94012042	1.735072532	1.524564918
January	23	-45	0	-19.71250161	0.385776509	0.619607783	0.665668181	0.94139697	1.725528035	1.519343358
January	24	-45	0	-19.49095119	0.388484738	0.622638227	0.66658546	0.942694198	1.715860097	1.514031996
January	25	-45	0	-19.26362517	0.391257529	0.625737995	0.667516291	0.944010592	1.706079094	1.508635563
January	26	-45	0	-19.03059093	0.394093553	0.628905373	0.668459588	0.945344616	1.696195189	1.503158752
January	27	-45	0	-18.79191752	0.396991447	0.632138615	0.66941425	0.946694711	1.686218317	1.497606205
January	28	-45	0	-18.54767565	0.39994982	0.635435934	0.670379159	0.948059299	1.676158172	1.491982509
January	29	-45	0	-18.29793771	0.402967248	0.638795511	0.671353185	0.949436779	1.666024194	1.48629219
January	30	-45	0	-18.04277769	0.40604228	0.642215493	0.672335184	0.950825536	1.655825554	1.480539704
January	31	-45	0	-17.78227121	0.409173437	0.645693995	0.673324003	0.952223937	1.64557115	1.47472943
February	32	-45	0	-17.51649546	0.41235921	0.649229101	0.674318479	0.953630338	1.635269596	1.46886567
February	33	-45	0	-17.24552919	0.415598065	0.652818864	0.675317439	0.955043081	1.624929217	1.462952641
February	34	-45	0	-16.9694527	0.418888443	0.65646131	0.676319704	0.956460498	1.614558042	1.45699447
February	35	-45	0	-16.68834779	0.422228758	0.660154438	0.677324091	0.957880915	1.604163806	1.450995191
February	36	-45	0	-16.40229777	0.4256174	0.663896223	0.67832941	0.959302651	1.593753942	1.444958742
February	37	-45	0	-16.11138739	0.42905274	0.667684612	0.679334469	0.96072402	1.583335582	1.438888963
February	38	-45	0	-15.81570286	0.432533122	0.671517534	0.680338076	0.962143334	1.572915558	1.432789593
February	39	-45	0	-15.5153318	0.436056872	0.675392895	0.681339038	0.963558908	1.562500404	1.426664265
February	40	-45	0	-15.21036321	0.439622295	0.679308582	0.682336163	0.964969056	1.552096358	1.42051651
February	41	-45	0	-14.90088746	0.44322768	0.683262464	0.683328263	0.966372096	1.541709361	1.414349752
February	42	-45	0	-14.58699625	0.446871294	0.687252395	0.684314152	0.967766355	1.531345067	1.408167307
February	43	-45	0	-14.2687826	0.450551393	0.691276215	0.685292653	0.969150164	1.521008844	1.401972386
February	44	-45	0	-13.94634081	0.454266213	0.695331749	0.686262594	0.970521868	1.510705781	1.395768091
February	45	-45	0	-13.61976641	0.458013979	0.699416814	0.687222812	0.971879821	1.500440693	1.389557417
February	46	-45	0	-13.28915619	0.461792903	0.703529216	0.688172155	0.973222395	1.490218126	1.383343253
February	47	-45	0	-12.95460809	0.465601186	0.707666756	0.689109481	0.974547974	1.480042367	1.37712838
February	48	-45	0	-12.61622127	0.469437017	0.711827228	0.690033662	0.975854963	1.469917447	1.370915477
February	49	-45	0	-12.27409599	0.47329858	0.716008421	0.690943584	0.977141788	1.459847154	1.364707116
February	50	-45	0	-11.92833363	0.477184048	0.720208126	0.69183815	0.978406894	1.449835034	1.35850577
February	51	-45	0	-11.57903665	0.48109159	0.724424131	0.692716277	0.979648754	1.439884405	1.352313808
February	52	-45	0	-11.22630855	0.485019371	0.728654227	0.693576905	0.980865865	1.429998361	1.346133501
February	53	-45	0	-10.87025385	0.488965551	0.732896209	0.694418989	0.982056753	1.420179781	1.339967025
February	54	-45	0	-10.51097806	0.492928291	0.737147878	0.69524151	0.983219973	1.41043134	1.333816459

February	55	-45	0	-10.14858765	0.49690575	0.741407043	0.696043468	0.984354112	1.400755512	1.32768379
February	56	-45	0	-9.783189981	0.500896088	0.745671522	0.696823889	0.985457794	1.391154584	1.321570913
February	57	-45	0	-9.414893347	0.504897469	0.749939144	0.697581822	0.986529674	1.381630658	1.315479638
February	58	-45	0	-9.043806876	0.50890806	0.754207754	0.698316345	0.987568446	1.372185665	1.309411685
February	59	-45	0	-8.670040531	0.512926036	0.758475209	0.699026562	0.988572845	1.362821369	1.303368696
March	60	-45	0	-8.293705065	0.516949575	0.762739386	0.699711606	0.989541643	1.353539378	1.297352229
March	61	-45	0	-7.914911995	0.520976868	0.76699818	0.70037064	0.990473658	1.344341147	1.291363766
March	62	-45	0	-7.533773567	0.525006114	0.771249507	0.701002858	0.991367749	1.33522799	1.285404711
March	63	-45	0	-7.150402718	0.529035523	0.775491306	0.701607486	0.992222823	1.326201088	1.279476398
March	64	-45	0	-6.764913051	0.53306332	0.77972154	0.702183784	0.99303783	1.317261492	1.273580092
March	65	-45	0	-6.377418794	0.537087743	0.783938201	0.702731044	0.993811774	1.308410132	1.267716986
March	66	-45	0	-5.98803477	0.541107046	0.788139307	0.703248596	0.994543703	1.299647826	1.261888215
March	67	-45	0	-5.596876363	0.545119503	0.792322906	0.703735804	0.995232719	1.290975283	1.256094846
March	68	-45	0	-5.20405948	0.549123403	0.796487079	0.704192069	0.995877975	1.282393112	1.250337891
March	69	-45	0	-4.809700522	0.553117057	0.800629941	0.70461683	0.996478678	1.273901828	1.244618302
March	70	-45	0	-4.413916346	0.557098799	0.80474964	0.705009565	0.997034089	1.265501858	1.23893698
March	71	-45	0	-4.016824231	0.561066985	0.808844363	0.70536979	0.997543524	1.257193543	1.233294771
March	72	-45	0	-3.618541845	0.565019994	0.812912334	0.705697062	0.998006356	1.248977151	1.227692476
March	73	-45	0	-3.219187206	0.568956232	0.816951817	0.705990977	0.998422015	1.240852876	1.222130845
March	74	-45	0	-2.818878653	0.572874133	0.820961117	0.706251173	0.998789987	1.232820846	1.216610587
March	75	-45	0	-2.417734805	0.576772157	0.824938584	0.706477329	0.99910982	1.224881126	1.211132368
March	76	-45	0	-2.01587453	0.580648795	0.828882609	0.706669166	0.999381119	1.217033726	1.205696812
March	77	-45	0	-1.613416909	0.584502567	0.832791631	0.706826448	0.999603549	1.209278603	1.200304509
March	78	-45	0	-1.210481196	0.588332028	0.836664133	0.70694898	0.999776836	1.201615664	1.194956012
March	79	-45	0	-0.807186793	0.592135761	0.840498649	0.707036611	0.999900765	1.194044775	1.189651841
March	80	-45	0	-0.403653202	0.595912387	0.844293759	0.707089233	0.999975184	1.186565759	1.184392485
March	81	-45	0	-5.74595E-15	0.59966056	0.848048096	0.707106781	1	1.179178403	1.179178403
March	82	-45	0	0.403653202	0.603378969	0.851760342	0.707089233	0.999975184	1.171882464	1.174010029
March	83	-45	0	0.807186793	0.607066343	0.855429231	0.707036611	0.999900765	1.164677665	1.168887768
March	84	-45	0	1.210481196	0.610721446	0.859053551	0.70694898	0.999776836	1.157563706	1.163812005
March	85	-45	0	1.613416909	0.61434308	0.862632143	0.706826448	0.999603549	1.150540262	1.1587831
March	86	-45	0	2.01587453	0.617930088	0.866163902	0.706669166	0.999381119	1.143606988	1.153801396
March	87	-45	0	2.417734805	0.621481351	0.869647778	0.706477329	0.99910982	1.136763522	1.148867215
March	88	-45	0	2.818878653	0.624995792	0.873082777	0.706251173	0.998789987	1.130009484	1.143980861
March	89	-45	0	3.219187206	0.628472376	0.876467961	0.705990977	0.998422015	1.123344485	1.139142627
March	90	-45	0	3.618541845	0.631910106	0.879802447	0.705697062	0.998006356	1.116768121	1.134352786
April	91	-45	0	4.016824231	0.635308031	0.88308541	0.70536979	0.997543524	1.110279984	1.129611602
April	92	-45	0	4.413916346	0.63866524	0.886316081	0.705009565	0.997034089	1.103879656	1.124919326
April	93	-45	0	4.809700522	0.641980866	0.88949375	0.70461683	0.996478678	1.097566715	1.1202762
April	94	-45	0	5.20405948	0.645254085	0.892617761	0.704192069	0.995877975	1.091340738	1.115682454
April	95	-45	0	5.596876363	0.648484115	0.895687518	0.703735804	0.995232719	1.085201299	1.111138313
April	96	-45	0	5.98803477	0.65167022	0.89870248	0.703248596	0.994543703	1.079147972	1.106643994
April	97	-45	0	6.377418794	0.654811706	0.901662164	0.702731044	0.993811774	1.073180333	1.102199707
April	98	-45	0	6.764913051	0.657907922	0.904566143	0.702183784	0.99303783	1.067297961	1.097805659
April	99	-45	0	7.150402718	0.660958263	0.907414046	0.701607486	0.992222823	1.061500439	1.09346205
April	##	-45	0	7.533773567	0.663962165	0.910205558	0.701002858	0.991367749	1.055787356	1.089169079
April	##	-45	0	7.914911995	0.666919108	0.91294042	0.70037064	0.990473658	1.050158305	1.084926942
April	##	-45	0	8.293705065	0.669828616	0.915618427	0.699711606	0.989541643	1.04461289	1.080735833
April	##	-45	0	8.670040531	0.672690255	0.918239428	0.699026562	0.988572845	1.039150719	1.076595944
April	##	-45	0	9.043806876	0.675503634	0.920803327	0.698316345	0.987568446	1.033771412	1.072507469
April	##	-45	0	9.414893347	0.678268403	0.923310079	0.697581822	0.986529674	1.028474596	1.0684706
April	##	-45	0	9.783189981	0.680984256	0.92575969	0.696823889	0.985457794	1.02325991	1.064485529
April	##	-45	0	10.14858765	0.683650926	0.928152219	0.696043468	0.984354112	1.018127002	1.060552453
April	##	-45	0	10.51097806	0.686268187	0.930487774	0.69524151	0.983219973	1.013075534	1.056671565
April	##	-45	0	10.87025385	0.688835853	0.93276651	0.694418989	0.982056753	1.008105177	1.052843066
April	##	-45	0	11.22630855	0.691353777	0.934988633	0.693576905	0.980865865	1.003215616	1.049067155

April	##	-45	0	11.57903665	0.693821851	0.937154391	0.692716277	0.979648754	0.998406546	1.045344036
April	##	-45	0	11.92833363	0.696240004	0.939264082	0.69183815	0.978406894	0.993677677	1.041673916
April	##	-45	0	12.27409599	0.698608203	0.941318044	0.690943584	0.977141788	0.989028731	1.038057003
April	##	-45	0	12.61622127	0.700926449	0.94331666	0.690033662	0.975854963	0.984459443	1.034493511
April	##	-45	0	12.95460809	0.703194781	0.945260351	0.689109481	0.974547974	0.979969561	1.030983657
April	##	-45	0	13.28915619	0.705413268	0.947149581	0.688172155	0.973222395	0.975558847	1.027527662
April	##	-45	0	13.61976641	0.707582016	0.948984851	0.687222812	0.971879821	0.971227076	1.024125749
April	##	-45	0	13.94634081	0.70970116	0.950766696	0.686262594	0.970521868	0.966974035	1.020778149
April	##	-45	0	14.2687826	0.711770867	0.952495689	0.685292653	0.969150164	0.962799526	1.017485093
April	##	-45	0	14.58699625	0.713791333	0.954172434	0.684314152	0.967766355	0.958703363	1.014246818
May	##	-45	0	14.90088746	0.715762785	0.955797569	0.683328263	0.966372096	0.954685375	1.011063564
May	##	-45	0	15.21036321	0.717685473	0.95737176	0.682336163	0.964969056	0.950745401	1.007935576
May	##	-45	0	15.5153318	0.719559677	0.9588957	0.681339038	0.963558908	0.946883296	1.004863102
May	##	-45	0	15.81570286	0.721385699	0.960370112	0.680338076	0.962143334	0.943098924	1.001846395
May	##	-45	0	16.11138739	0.723163867	0.961795739	0.679334469	0.96072402	0.939392163	0.99888571
May	##	-45	0	16.40229777	0.724894528	0.963173351	0.67832941	0.959302651	0.935762905	0.995981305
May	##	-45	0	16.68834779	0.726578054	0.964503735	0.677324091	0.957880915	0.93221105	0.993133443
May	##	-45	0	16.9694527	0.728214832	0.965787699	0.676319704	0.956460498	0.928736513	0.99034239
May	##	-45	0	17.24552919	0.729805271	0.967026069	0.675317439	0.955043081	0.925339218	0.987608412
May	##	-45	0	17.51649546	0.731349794	0.968219685	0.674318479	0.953630338	0.9220191	0.984931781
May	##	-45	0	17.78227121	0.732848841	0.969369399	0.673324003	0.952223937	0.918776104	0.982312768
May	##	-45	0	18.04277769	0.734302865	0.970476078	0.672335184	0.950825536	0.915610188	0.979751647
May	##	-45	0	18.29793771	0.735712332	0.971540595	0.671353185	0.949436779	0.912521315	0.977248696
May	##	-45	0	18.54767565	0.737077719	0.972563833	0.670379159	0.948059299	0.909509461	0.974804189
May	##	-45	0	18.79191752	0.738399513	0.973546681	0.66941425	0.946694711	0.906574609	0.972418406
May	##	-45	0	19.03059093	0.73967821	0.97449003	0.668459588	0.945344616	0.903716751	0.970091624
May	##	-45	0	19.26362517	0.74091431	0.975394776	0.667516291	0.944010592	0.900935887	0.967824121
May	##	-45	0	19.49095119	0.742108323	0.976261812	0.66658546	0.942694198	0.898232023	0.965616176
May	##	-45	0	19.71250161	0.743260759	0.977092033	0.665668181	0.94139697	0.895605174	0.963468065
May	##	-45	0	19.9282108	0.744372133	0.977886328	0.664765524	0.94012042	0.893055361	0.961380063
May	##	-45	0	20.13801482	0.745442962	0.978645583	0.663878538	0.938866033	0.89058261	0.959352445
May	##	-45	0	20.34185152	0.746473761	0.979370675	0.663008255	0.937635266	0.888186953	0.957385483
May	##	-45	0	20.53966049	0.747465045	0.980062474	0.662155684	0.936429549	0.885868428	0.955479446
May	##	-45	0	20.73138311	0.748417326	0.980721839	0.661321814	0.935250279	0.883627077	0.9536346
May	##	-45	0	20.91696257	0.749331113	0.981349618	0.66050761	0.93409882	0.881462946	0.951851209
May	##	-45	0	21.09634389	0.750206909	0.981946644	0.659714013	0.932976505	0.879376084	0.950129531
May	##	-45	0	21.26947391	0.75104521	0.982513737	0.65894194	0.931884629	0.877366544	0.948469821
May	##	-45	0	21.43630132	0.751846507	0.983051699	0.658192282	0.930824451	0.875434381	0.946872328
May	##	-45	0	21.5967767	0.752611279	0.983561314	0.657465901	0.929797194	0.873579654	0.945337297
May	##	-45	0	21.75085248	0.753339998	0.984043345	0.656763635	0.928804039	0.871802422	0.943864967
May	##	-45	0	21.89848302	0.754033122	0.984498537	0.65608629	0.927846129	0.870102745	0.942455569
June	##	-45	0	22.03962456	0.7546911	0.984927609	0.655434644	0.926924563	0.868480685	0.941109331
June	##	-45	0	22.17423529	0.755314366	0.985331259	0.654809445	0.926040398	0.866936305	0.939826469
June	##	-45	0	22.30227531	0.75590334	0.985710159	0.65421141	0.925194649	0.865469665	0.938607196
June	##	-45	0	22.42370668	0.756458426	0.986064955	0.653641223	0.924388283	0.864080828	0.937451715
June	##	-45	0	22.53849343	0.756980015	0.986396264	0.653099537	0.923622223	0.862769854	0.93636022
June	##	-45	0	22.64660154	0.757468478	0.986704676	0.652586971	0.922897345	0.861536803	0.935332899
June	##	-45	0	22.74799897	0.75792417	0.986990752	0.65210411	0.922214477	0.860381732	0.934369927
June	##	-45	0	22.84265567	0.758347426	0.98725502	0.651651506	0.921574398	0.859304699	0.933471473
June	##	-45	0	22.93054361	0.758738562	0.987497978	0.651229675	0.920977838	0.858305755	0.932637695
June	##	-45	0	23.01163673	0.759097875	0.987720092	0.650839097	0.920425477	0.857384954	0.93186874
June	##	-45	0	23.085911	0.75942564	0.987921793	0.650480217	0.919917945	0.856542342	0.931164746
June	##	-45	0	23.15334442	0.759722113	0.988103478	0.650153444	0.919455819	0.855777966	0.930525839
June	##	-45	0	23.21391701	0.759987524	0.988265512	0.649859151	0.919039625	0.855091867	0.929952137
June	##	-45	0	23.26761081	0.760222084	0.988408221	0.64959767	0.918669836	0.854484083	0.929443742
June	##	-45	0	23.31440992	0.76042598	0.988531898	0.649369301	0.918346872	0.853954649	0.929000748

June	##	-45	0	23.35430046	0.760599377	0.988636796	0.649174302	0.918071102	0.853503594	0.928623237
June	##	-45	0	23.38727062	0.760742413	0.988723134	0.649012894	0.917842837	0.853130946	0.928311279
June	##	-45	0	23.41331063	0.760855206	0.988791094	0.648885262	0.917662338	0.852836725	0.928064931
June	##	-45	0	23.43241276	0.760937847	0.988840816	0.64879155	0.917529809	0.852620949	0.927884239
June	##	-45	0	23.44457137	0.760990405	0.988872408	0.648731864	0.9174454	0.852483631	0.927769237
June	##	-45	0	23.44978285	0.761012922	0.988885935	0.648706272	0.917409208	0.852424779	0.927719947
June	##	-45	0	23.44804565	0.761005417	0.988881427	0.648714803	0.917421273	0.852444396	0.927736377
June	##	-45	0	23.43936028	0.760967884	0.988858874	0.648757448	0.917481582	0.852542482	0.927818525
June	##	-45	0	23.42372933	0.760900291	0.988818227	0.648834158	0.917590066	0.85271903	0.927966376
June	##	-45	0	23.40115742	0.760802584	0.988759402	0.648944846	0.917746603	0.852974031	0.9281799
June	##	-45	0	23.37165125	0.760674682	0.988682273	0.649089387	0.917951014	0.853307468	0.92845906
June	##	-45	0	23.33521955	0.760516482	0.98858668	0.649267615	0.918203067	0.853719322	0.928803803
June	##	-45	0	23.29187312	0.760327854	0.988472422	0.64947933	0.918502477	0.85420957	0.929214064
June	##	-45	0	23.2416248	0.760108648	0.988339263	0.649724289	0.918848902	0.854778184	0.92968977
June	##	-45	0	23.18448949	0.759858687	0.988186931	0.650002216	0.919241949	0.85542513	0.930230831
July	##	-45	0	23.12048412	0.759577773	0.988015114	0.650312793	0.919681172	0.856150372	0.930837149
July	##	-45	0	23.04962764	0.759265685	0.987823468	0.650655668	0.92016607	0.856953872	0.931508614
July	##	-45	0	22.97194107	0.758922179	0.987611613	0.65103045	0.920696092	0.857835584	0.932245105
July	##	-45	0	22.88744741	0.75854699	0.987379133	0.651436713	0.921270634	0.858795462	0.93304649
July	##	-45	0	22.79617171	0.758139832	0.98712558	0.651873993	0.921889042	0.859833457	0.933912625
July	##	-45	0	22.69814101	0.757700399	0.986850473	0.652341792	0.92255061	0.860949516	0.934843358
July	##	-45	0	22.59338436	0.757228365	0.986553297	0.652839577	0.923254583	0.862143584	0.935838527
July	##	-45	0	22.48193281	0.756723384	0.986233508	0.653366778	0.924000159	0.863415604	0.936897957
July	##	-45	0	22.36381937	0.756185094	0.985890531	0.653922794	0.924786484	0.864765517	0.938021469
July	##	-45	0	22.23907905	0.755613114	0.985523762	0.654506989	0.92561266	0.866193263	0.939208871
July	##	-45	0	22.10774881	0.755007045	0.985132569	0.655118693	0.926477741	0.867698781	0.940459964
July	##	-45	0	21.96986757	0.754366477	0.984716293	0.655757207	0.927380736	0.869282009	0.941774541
July	##	-45	0	21.82547618	0.753690981	0.98427425	0.656421798	0.928320609	0.870942885	0.943152387
July	##	-45	0	21.67461744	0.752980116	0.98380573	0.657111702	0.929296282	0.872681348	0.94459328
July	##	-45	0	21.51733603	0.752233429	0.983310002	0.657826129	0.930306633	0.874497335	0.94609699
July	##	-45	0	21.35367858	0.751450454	0.98278631	0.658564254	0.9313505	0.876390787	0.947663282
July	##	-45	0	21.18369356	0.750630715	0.982233882	0.65932523	0.932426682	0.878361645	0.949291914
July	##	-45	0	21.00743137	0.749773728	0.981651923	0.660108178	0.933533938	0.880409853	0.95098264
July	##	-45	0	20.82494422	0.748879	0.981039624	0.660912194	0.934670989	0.882535356	0.952735207
July	##	-45	0	20.63628618	0.747946029	0.980396157	0.661736351	0.935836522	0.884738103	0.954549358
July	##	-45	0	20.44151317	0.74697431	0.979720682	0.662579693	0.937029189	0.887018047	0.956424832
July	##	-45	0	20.2406829	0.745963333	0.979012345	0.663441245	0.938247607	0.889375143	0.958361365
July	##	-45	0	20.03385488	0.744912583	0.978270281	0.664320007	0.939490364	0.891809351	0.960358689
July	##	-45	0	19.82109039	0.743821546	0.977493616	0.665214959	0.940756017	0.894320637	0.962416533
July	##	-45	0	19.60245249	0.742689706	0.976681469	0.666125059	0.942043093	0.896908971	0.964534624
July	##	-45	0	19.37800596	0.741516546	0.975832952	0.667049249	0.943350095	0.899574329	0.966712687
July	##	-45	0	19.14781731	0.740301553	0.974947172	0.66798645	0.944675497	0.902316694	0.968950445
July	##	-45	0	18.91195474	0.739044218	0.974023237	0.668935568	0.946017753	0.905136056	0.971247623
July	##	-45	0	18.67048816	0.737744035	0.97306025	0.669895494	0.947375293	0.90803241	0.97360394
July	##	-45	0	18.4234891	0.736400505	0.972057318	0.670865103	0.948746528	0.911005762	0.976019119
July	##	-45	0	18.17103077	0.735013139	0.971013551	0.671843259	0.950129849	0.914056123	0.978492883
August	##	-45	0	17.91318797	0.733581452	0.969928063	0.672828814	0.951523633	0.917183513	0.981024954
August	##	-45	0	17.65003711	0.732104974	0.968799976	0.673820607	0.952926241	0.920387965	0.983615055
August	##	-45	0	17.38165615	0.730583245	0.967628418	0.674817472	0.954336021	0.923669515	0.986262911
August	##	-45	0	17.10812464	0.729015818	0.966412531	0.675818232	0.955751513	0.927028215	0.98896825
August	##	-45	0	16.82952363	0.727402261	0.965151468	0.676821707	0.957170437	0.930464122	0.991730799
August	##	-45	0	16.54593566	0.725742159	0.963844396	0.677826708	0.958591724	0.933977308	0.99455029
August	##	-45	0	16.25744477	0.724035113	0.962490498	0.678832046	0.960013486	0.937567853	0.997426456
August	##	-45	0	15.96413645	0.722280743	0.961088976	0.679836529	0.961434039	0.941235849	1.000359034
August	##	-45	0	15.66609762	0.720478691	0.959639051	0.680838962	0.962851694	0.944981401	1.003347762
August	##	-45	0	15.36341658	0.718628617	0.958139967	0.681838155	0.964264766	0.948804624	1.006392384

August	##	-45	0	15.05618303	0.716730207	0.95659099	0.682832915	0.965671569	0.952705646	1.009492646
August	##	-45	0	14.744488	0.714783171	0.954991412	0.683822057	0.967070428	0.956684608	1.012648298
August	##	-45	0	14.42842387	0.712787242	0.953340553	0.6848044	0.968459669	0.960741662	1.015859093
August	##	-45	0	14.10808428	0.710742181	0.951637762	0.685778766	0.969837632	0.964876976	1.019124788
August	##	-45	0	13.78356417	0.708647779	0.949882416	0.686743991	0.971202666	0.969090727	1.022445146
August	##	-45	0	13.45495968	0.706503852	0.948073928	0.687698915	0.972553132	0.973383107	1.025819931
August	##	-45	0	13.1223682	0.704310249	0.946211744	0.688642391	0.973887409	0.977754323	1.029248913
August	##	-45	0	12.78588828	0.702066851	0.944295343	0.689573285	0.975203891	0.982204592	1.032731865
August	##	-45	0	12.44561963	0.699773569	0.942324245	0.690490475	0.976500994	0.986734146	1.036268566
August	##	-45	0	12.10166307	0.697430348	0.940298006	0.691392855	0.977777152	0.991343231	1.039858795
August	##	-45	0	11.75412053	0.69503717	0.938216225	0.692279335	0.979030825	0.996032104	1.043502338
August	##	-45	0	11.40309498	0.69259405	0.93607854	0.693148844	0.980260496	1.000801038	1.047198984
August	##	-45	0	11.04869045	0.69010104	0.933884634	0.694000329	0.981464678	1.005650316	1.050948525
August	##	-45	0	10.69101196	0.687558229	0.931634233	0.694832758	0.98264191	1.010580237	1.054750755
August	##	-45	0	10.33016549	0.684965745	0.92932711	0.695645121	0.983790765	1.015591109	1.058605473
August	##	-45	0	9.966257972	0.682323754	0.926963084	0.69643643	0.984909845	1.020683255	1.06251248
August	##	-45	0	9.599397234	0.679632462	0.924542025	0.697205725	0.985997791	1.025857009	1.066471578
August	##	-45	0	9.229691988	0.676892115	0.922063847	0.697952067	0.987053278	1.031112715	1.070482572
August	##	-45	0	8.857251784	0.674103	0.91952852	0.698674547	0.98807502	1.036450731	1.074545268
August	##	-45	0	8.482186986	0.671265444	0.916936061	0.699372284	0.989061769	1.041871423	1.078659474
August	##	-45	0	8.104608732	0.668379819	0.914286541	0.700044425	0.990012321	1.047375168	1.082824997
September	##	-45	0	7.724628908	0.665446537	0.911580084	0.70069015	0.990925513	1.052962351	1.087041644
September	##	-45	0	7.34236011	0.662466052	0.908816868	0.701308668	0.99180023	1.058633368	1.091309222
September	##	-45	0	6.957915612	0.659438863	0.905997125	0.701899221	0.992635398	1.064388619	1.095627537
September	##	-45	0	6.571409333	0.656365512	0.903121141	0.702461087	0.993429996	1.070228514	1.099996391
September	##	-45	0	6.182955804	0.653246582	0.90018926	0.702993575	0.994183047	1.076153468	1.104415584
September	##	-45	0	5.792670132	0.650082703	0.89720188	0.703496032	0.994893629	1.082163898	1.108884913
September	##	-45	0	5.400667967	0.646874545	0.894159457	0.70396784	0.995560867	1.088260228	1.113404169
September	##	-45	0	5.007065467	0.643622826	0.891062502	0.704408421	0.996183943	1.094442883	1.11797314
September	##	-45	0	4.611979266	0.640328303	0.887911583	0.704817232	0.996762089	1.100712289	1.122591605
September	##	-45	0	4.215526435	0.63699178	0.884707328	0.70519377	0.997294594	1.10706887	1.127259335
September	##	-45	0	3.817824453	0.633614102	0.881450418	0.705537572	0.997780803	1.11351305	1.131976096
September	##	-45	0	3.418991168	0.630196158	0.878141594	0.705848213	0.998220115	1.120045249	1.13674164
September	##	-45	0	3.019144761	0.62673888	0.874781652	0.706125311	0.998611992	1.126665879	1.141555712
September	##	-45	0	2.618403717	0.62324324	0.871371447	0.706368525	0.998955947	1.133375348	1.146418041
September	##	-45	0	2.216886783	0.619710256	0.867911889	0.706577553	0.999251559	1.140174052	1.151328346
September	##	-45	0	1.814712938	0.616140983	0.864403944	0.70675214	0.999498461	1.147062376	1.156286328
September	##	-45	0	1.412001354	0.61253652	0.860848634	0.706892068	0.99969635	1.154040691	1.161291673
September	##	-45	0	1.008871364	0.608898004	0.857247036	0.706997166	0.999844981	1.16110935	1.166344051
September	##	-45	0	0.605442423	0.605226614	0.853600283	0.707067304	0.99994417	1.16826869	1.17144311
September	##	-45	0	0.201834077	0.601523565	0.849909561	0.707102394	0.999993795	1.175519023	1.176588477
September	##	-45	0	-0.201834077	0.597790113	0.846176108	0.707102394	0.999993795	1.182860638	1.181779757
September	##	-45	0	-0.605442423	0.594027547	0.842401216	0.707067304	0.99994417	1.190293795	1.187016532
September	##	-45	0	-1.008871364	0.590237197	0.838586229	0.706997166	0.999844981	1.197818724	1.192298355
September	##	-45	0	-1.412001354	0.586420426	0.83473254	0.706892068	0.99969635	1.205435618	1.197624751
September	##	-45	0	-1.814712938	0.58257863	0.830841591	0.70675214	0.999498461	1.213144635	1.202995218
September	##	-45	0	-2.216886783	0.578713242	0.826914876	0.706577553	0.999251559	1.220945888	1.208409219
September	##	-45	0	-2.618403717	0.574825725	0.822953932	0.706368525	0.998955947	1.228839445	1.213866183
September	##	-45	0	-3.019144761	0.570917572	0.818960344	0.706125311	0.998611992	1.236825325	1.219365502
September	##	-45	0	-3.418991168	0.566990308	0.814935743	0.705848213	0.998220115	1.244903489	1.224906532
September	##	-45	0	-3.817824453	0.563045487	0.810881802	0.705537572	0.997780803	1.253073843	1.230488587
October	##	-45	0	-4.215526435	0.559084688	0.806800236	0.70519377	0.997294594	1.261336225	1.236110935
October	##	-45	0	-4.611979266	0.555109521	0.8026928	0.704817232	0.996762089	1.269690406	1.241772803
October	##	-45	0	-5.007065467	0.551121615	0.798561291	0.704408421	0.996183943	1.278136081	1.247473368
October	##	-45	0	-5.400667967	0.547122628	0.79440754	0.70396784	0.995560867	1.286672867	1.253211756
October	##	-45	0	-5.792670132	0.543114238	0.790233415	0.703496032	0.994893629	1.295300294	1.258987041

October	##	-45	0	-6.182955804	0.539098143	0.786040821	0.702993575	0.994183047	1.304017801	1.264798241
October	##	-45	0	-6.571409333	0.535076062	0.781831692	0.702461087	0.993429996	1.312824729	1.270644317
October	##	-45	0	-6.957915612	0.531049733	0.777607995	0.701899221	0.992635398	1.321720316	1.276524168
October	##	-45	0	-7.34236011	0.527020909	0.773371725	0.701308668	0.99180023	1.330703689	1.282436631
October	##	-45	0	-7.724628908	0.522991359	0.769124906	0.70069015	0.990925513	1.339773857	1.288380477
October	##	-45	0	-8.104608732	0.518962865	0.764869587	0.700044425	0.990012321	1.348929707	1.294354408
October	##	-45	0	-8.482186986	0.514937223	0.760607839	0.699372284	0.989061769	1.358169991	1.300357053
October	##	-45	0	-8.857251784	0.510916239	0.756341759	0.698674547	0.98807502	1.367493326	1.306386971
October	##	-45	0	-9.229691988	0.506901728	0.75207346	0.697952067	0.987053278	1.376898181	1.312442642
October	##	-45	0	-9.599397234	0.502895513	0.747805075	0.697205725	0.985997791	1.386382871	1.318522466
October	##	-45	0	-9.966257972	0.498899424	0.743538754	0.696436643	0.984909845	1.39594555	1.324624762
October	##	-45	0	-10.33016549	0.494915296	0.73927666	0.695645121	0.983790765	1.405584202	1.330747767
October	##	-45	0	-10.69101196	0.490944966	0.73502097	0.694832758	0.98264191	1.415296634	1.336889627
October	##	-45	0	-11.04869045	0.486990276	0.730773869	0.694000329	0.981464678	1.425080466	1.343048402
October	##	-45	0	-11.40309498	0.483053065	0.726537555	0.693148844	0.980260496	1.434933125	1.349222059
October	##	-45	0	-11.75412053	0.479135174	0.722314229	0.692279335	0.979030825	1.444851834	1.355408471
October	##	-45	0	-12.10166307	0.47523844	0.718106098	0.691392855	0.977777152	1.454833609	1.361605416
October	##	-45	0	-12.44561963	0.471364696	0.713915372	0.690490475	0.976500994	1.464875245	1.367810572
October	##	-45	0	-12.78588828	0.467515771	0.709744264	0.689573285	0.975203891	1.47497331	1.374021519
October	##	-45	0	-13.1223682	0.463693488	0.705594982	0.688642391	0.973887409	1.485124138	1.380235735
October	##	-45	0	-13.45495968	0.459899659	0.701469735	0.687698915	0.972553132	1.495323821	1.386450595
October	##	-45	0	-13.78356417	0.456136089	0.697370727	0.686743991	0.971202666	1.50555682	1.392663369
October	##	-45	0	-14.10808428	0.452404573	0.693300154	0.685778766	0.969837632	1.515852861	1.398871221
October	##	-45	0	-14.42842387	0.448706893	0.689260204	0.6848044	0.968459669	1.526173122	1.40507121
October	##	-45	0	-14.744488	0.445044817	0.685253058	0.683822057	0.967070428	1.536524034	1.411260287
October	##	-45	0	-15.05618303	0.4414201	0.681280882	0.682832915	0.965671569	1.546900368	1.417435296
October	##	-45	0	-15.36341658	0.437834481	0.677345831	0.681838155	0.964264766	1.557296614	1.423592974
October	##	-45	0	-15.66609762	0.434289681	0.673450041	0.680838962	0.962851694	1.567706976	1.42972995
October	##	-45	0	-15.96413645	0.430787404	0.669595637	0.679836529	0.961434039	1.578125362	1.435842747
October	##	-45	0	-16.25744477	0.427329336	0.665784721	0.678832046	0.960013486	1.58854539	1.441927783
September	##	-45	0	-16.54593566	0.423917139	0.662019376	0.677826708	0.958591724	1.598960375	1.44798137
November	##	-45	0	-16.82952363	0.420552458	0.658301665	0.676821707	0.957170437	1.609363335	1.45399972
November	##	-45	0	-17.10812464	0.417236912	0.654633626	0.675818232	0.95575131	1.619746988	1.459978944
November	##	-45	0	-17.38165615	0.413972099	0.651017273	0.674817472	0.954336021	1.630103751	1.465915055
November	##	-45	0	-17.65003711	0.410759592	0.647454593	0.673820607	0.952926241	1.64042574	1.47180397
November	##	-45	0	-17.91318797	0.407600937	0.643947548	0.672828814	0.951523633	1.650704777	1.477641519
November	##	-45	0	-18.17103077	0.404497656	0.640498068	0.671843259	0.950129849	1.660932394	1.483423442
November	##	-45	0	-18.4234891	0.401451242	0.637108055	0.670865103	0.948746528	1.671099833	1.489145398
November	##	-45	0	-18.67048816	0.398463162	0.633779377	0.669895494	0.947375293	1.681198058	1.494802966
November	##	-45	0	-18.91195474	0.395534853	0.630513872	0.668935568	0.946017753	1.691217762	1.500391657
November	##	-45	0	-19.14781731	0.392667721	0.627313341	0.66798645	0.944675497	1.701149377	1.505906913
November	##	-45	0	-19.37800596	0.389863146	0.624179552	0.667049249	0.943350095	1.710983088	1.511344119
November	##	-45	0	-19.60245249	0.387122471	0.621114234	0.666125059	0.942043093	1.720708843	1.516698605
November	##	-45	0	-19.82109039	0.384447012	0.618119082	0.665214959	0.940756017	1.73031637	1.52196566
November	##	-45	0	-20.03385488	0.381838052	0.615195749	0.664320007	0.939490364	1.739795195	1.527140534
November	##	-45	0	-20.2406829	0.379296837	0.612345849	0.663441245	0.938247607	1.749134662	1.532218449
November	##	-45	0	-20.44151317	0.376824585	0.609570957	0.662579693	0.937029189	1.758323951	1.537194608
November	##	-45	0	-20.63628618	0.374422476	0.606872605	0.661736351	0.935836522	1.767352103	1.542064208
November	##	-45	0	-20.82494422	0.372091657	0.604252281	0.660912194	0.934670989	1.776208045	1.546822441
November	##	-45	0	-21.00743137	0.369833238	0.601711434	0.660108178	0.933533938	1.784880614	1.551464515
November	##	-45	0	-21.18369356	0.367648297	0.599251463	0.65932523	0.932426682	1.793358588	1.555985658
November	##	-45	0	-21.35367858	0.36553787	0.596873727	0.658564254	0.9313505	1.801630714	1.56038113
November	##	-45	0	-21.51733603	0.363502963	0.594579536	0.657826129	0.930306633	1.80968574	1.564646236
November	##	-45	0	-21.67461744	0.36154454	0.592370154	0.657111702	0.929296282	1.817512448	1.568776338
November	##	-45	0	-21.82547618	0.359663531	0.5902468	0.656421798	0.928320609	1.825099689	1.572766865
November	##	-45	0	-21.96986757	0.357860825	0.588210641	0.655757207	0.927380736	1.832436415	1.576613327

December	##	-45	0	-22.10774881	0.356137276	0.586262799	0.655118693	0.926477741	1.839511722	1.580311324
December	##	-45	0	-22.23907905	0.354493698	0.584404346	0.654506989	0.92561266	1.846314879	1.583856564
December	##	-45	0	-22.36381937	0.352930867	0.582636304	0.653922794	0.924786484	1.852835372	1.58724487
December	##	-45	0	-22.48193281	0.35144952	0.580959643	0.653366778	0.924000159	1.85906294	1.590472194
December	##	-45	0	-22.59338436	0.350050355	0.579375287	0.652839577	0.923254583	1.864987614	1.59353463
December	##	-45	0	-22.69814101	0.348734031	0.577884104	0.652341792	0.92255061	1.870599755	1.596428425
December	##	-45	0	-22.79617171	0.347501165	0.576486913	0.651873993	0.921889042	1.875890092	1.59914999
December	##	-45	0	-22.88744741	0.346352338	0.575184482	0.651436713	0.921270634	1.880849761	1.601695914
December	##	-45	0	-22.97194107	0.345288089	0.573977523	0.65103045	0.920696092	1.885470339	1.604062973
December	##	-45	0	-23.04962764	0.344308916	0.5728667	0.650655668	0.92016607	1.889743882	1.606248139
December	##	-45	0	-23.12048412	0.343415279	0.57185262	0.650312793	0.919681172	1.893662957	1.608248594
December	##	-45	0	-23.18448949	0.342607596	0.57093584	0.650002216	0.919241949	1.897220678	1.610061737
December	##	-45	0	-23.2416248	0.341886245	0.570116861	0.649724289	0.918848902	1.900410731	1.611685192
December	##	-45	0	-23.29187312	0.341251564	0.569396131	0.64947933	0.918502477	1.903227409	1.61311682
December	##	-45	0	-23.33521955	0.340703848	0.568774046	0.649267615	0.918203067	1.905665634	1.614354721
December	##	-45	0	-23.37165125	0.340243355	0.568250946	0.649089387	0.917951014	1.907720979	1.615397247
December	##	-45	0	-23.40115742	0.339870299	0.567827117	0.648944846	0.917746603	1.909389694	1.616243
December	##	-45	0	-23.42372933	0.339584854	0.56750279	0.648834158	0.917590066	1.910668718	1.616890845
December	##	-45	0	-23.43936028	0.339387154	0.567278144	0.648757448	0.917481582	1.911555698	1.617339909
December	##	-45	0	-23.44804565	0.339277291	0.567153301	0.648714803	0.917421273	1.912048997	1.617589586
December	##	-45	0	-23.44978285	0.339255315	0.567128329	0.648706272	0.917409208	1.912147702	1.617639538
December	##	-45	0	-23.44457137	0.339321239	0.567203241	0.648731864	0.9174454	1.911851632	1.617489698
December	##	-45	0	-23.43241276	0.339475029	0.567377998	0.64879155	0.917529809	1.911161333	1.617140269
December	##	-45	0	-23.41331063	0.339716616	0.567652503	0.648885262	0.917662338	1.910078081	1.616591722
December	##	-45	0	-23.38727062	0.340045886	0.568026607	0.649012894	0.917842837	1.908603873	1.615844797
December	##	-45	0	-23.35430046	0.340462685	0.568500104	0.649174302	0.918071102	1.906741417	1.614900499
December	##	-45	0	-23.31440992	0.340966818	0.569072736	0.649369301	0.918346872	1.90449412	1.613760095
December	##	-45	0	-23.26761081	0.341558051	0.569744189	0.64959767	0.918669836	1.901866075	1.612425109
December	##	-45	0	-23.21391701	0.342236107	0.570514096	0.649859151	0.919039625	1.898862034	1.610897315
December	##	-45	0	-23.15334442	0.343000669	0.571382035	0.650153444	0.919455819	1.895487395	1.609178733
December	##	-45	0	-23.085911	0.343851379	0.572347531	0.650480217	0.919917945	1.891748171	1.607271623