

## SŁOŃCE

Data 2014	0 <sup>h</sup> UT			Data 2014	0 <sup>h</sup> UT				
	X <sub>2000</sub>	Y <sub>2000</sub>	Z <sub>2000</sub>		X <sub>2000</sub>	Y <sub>2000</sub>	Z <sub>2000</sub>		
I	1	0.17559	-0.88773	-0.38484	II	16	0.82876	-0.49322	-0.21382
	2	0.19278	-0.88471	-0.38353		17	0.83827	-0.47985	-0.20803
	3	0.20990	-0.88141	-0.38211		18	0.84753	-0.46633	-0.20217
	4	0.22696	-0.87784	-0.38056		19	0.85653	-0.45267	-0.19624
	5	0.24395	-0.87400	-0.37889		20	0.86527	-0.43887	-0.19026
	6	0.26086	-0.86988	-0.37711		21	0.87374	-0.42494	-0.18422
	7	0.27769	-0.86550	-0.37521		22	0.88195	-0.41087	-0.17812
	8	0.29443	-0.86084	-0.37319		23	0.88989	-0.39668	-0.17197
	9	0.31108	-0.85591	-0.37105		24	0.89756	-0.38236	-0.16576
	10	0.32763	-0.85072	-0.36880		25	0.90496	-0.36793	-0.15950
	11	0.34407	-0.84527	-0.36644		26	0.91207	-0.35338	-0.15320
	12	0.36041	-0.83955	-0.36396		27	0.91891	-0.33872	-0.14684
	13	0.37663	-0.83358	-0.36137		28	0.92547	-0.32396	-0.14044
	14	0.39274	-0.82734	-0.35867	III	1	0.93175	-0.30910	-0.13400
	15	0.40872	-0.82085	-0.35586		2	0.93774	-0.29414	-0.12752
	16	0.42458	-0.81411	-0.35293		3	0.94344	-0.27910	-0.12099
	17	0.44031	-0.80711	-0.34990		4	0.94886	-0.26397	-0.11443
	18	0.45590	-0.79987	-0.34676		5	0.95398	-0.24876	-0.10784
	19	0.47135	-0.79237	-0.34351		6	0.95882	-0.23347	-0.10122
	20	0.48665	-0.78464	-0.34016		7	0.96336	-0.21811	-0.09456
	21	0.50181	-0.77665	-0.33670		8	0.96761	-0.20269	-0.08788
	22	0.51681	-0.76843	-0.33313		9	0.97156	-0.18722	-0.08117
	23	0.53165	-0.75997	-0.32946		10	0.97523	-0.17168	-0.07443
	24	0.54633	-0.75127	-0.32569		11	0.97860	-0.15609	-0.06767
	25	0.56084	-0.74234	-0.32182		12	0.98167	-0.14046	-0.06090
	26	0.57518	-0.73318	-0.31784		13	0.98445	-0.12479	-0.05410
	27	0.58934	-0.72379	-0.31377		14	0.98693	-0.10908	-0.04729
	28	0.60332	-0.71417	-0.30960		15	0.98911	-0.09334	-0.04047
	29	0.61711	-0.70433	-0.30534		16	0.99100	-0.07757	-0.03363
	30	0.63071	-0.69427	-0.30098		17	0.99259	-0.06178	-0.02679
	31	0.64411	-0.68399	-0.29652		18	0.99389	-0.04597	-0.01993
II	1	0.65731	-0.67350	-0.29197		19	0.99489	-0.03015	-0.01307
	2	0.67031	-0.66280	-0.28734		20	0.99559	-0.01431	-0.00621
	3	0.68310	-0.65190	-0.28261		21	0.99600	0.00152	0.00066
	4	0.69568	-0.64079	-0.27779		22	0.99610	0.01736	0.00753
	5	0.70804	-0.62949	-0.27290		23	0.99591	0.03320	0.01439
	6	0.72018	-0.61799	-0.26791		24	0.99543	0.04903	0.02126
	7	0.73209	-0.60631	-0.26285		25	0.99464	0.06484	0.02811
	8	0.74378	-0.59443	-0.25770		26	0.99356	0.08064	0.03496
	9	0.75524	-0.58238	-0.25247		27	0.99218	0.09641	0.04180
	10	0.76647	-0.57014	-0.24717		28	0.99051	0.11216	0.04862
	11	0.77746	-0.55774	-0.24179		29	0.98853	0.12788	0.05544
	12	0.78821	-0.54516	-0.23634		30	0.98627	0.14355	0.06223
	13	0.79872	-0.53241	-0.23082		31	0.98370	0.15919	0.06901
	14	0.80898	-0.51951	-0.22522	IV	1	0.98085	0.17477	0.07576
II	15	0.81900	-0.50644	-0.21956	IV	2	0.97770	0.19031	0.08250

### SŁOŃCE

Data 2014	0 <sup>h</sup> UT			Data 2014	0 <sup>h</sup> UT				
	X <sub>2000</sub>	Y <sub>2000</sub>	Z <sub>2000</sub>		X <sub>2000</sub>	Y <sub>2000</sub>	Z <sub>2000</sub>		
IV	3	0.97426	0.20578	0.08921	V	19	0.53969	0.78501	0.34031
	4	0.97053	0.22120	0.09589		20	0.52535	0.79338	0.34394
	5	0.96651	0.23654	0.10254		21	0.51085	0.80152	0.34747
	6	0.96221	0.25182	0.10916		22	0.49621	0.80944	0.35091
	7	0.95762	0.26702	0.11575		23	0.48143	0.81713	0.35424
	8	0.95275	0.28214	0.12231		24	0.46651	0.82458	0.35747
	9	0.94760	0.29718	0.12883		25	0.45145	0.83180	0.36060
	10	0.94217	0.31212	0.13531		26	0.43626	0.83879	0.36363
	11	0.93647	0.32698	0.14175		27	0.42095	0.84553	0.36655
	12	0.93049	0.34174	0.14814		28	0.40551	0.85203	0.36937
	13	0.92423	0.35639	0.15450		29	0.38996	0.85829	0.37208
	14	0.91771	0.37094	0.16081		30	0.37430	0.86430	0.37468
	15	0.91092	0.38539	0.16707		31	0.35853	0.87007	0.37718
	16	0.90387	0.39972	0.17328	VI	1	0.34266	0.87558	0.37957
	17	0.89655	0.41393	0.17945		2	0.32669	0.88085	0.38186
	18	0.88897	0.42803	0.18556		3	0.31064	0.88586	0.38403
	19	0.88114	0.44200	0.19161		4	0.29449	0.89063	0.38610
	20	0.87304	0.45584	0.19761		5	0.27826	0.89514	0.38805
	21	0.86469	0.46955	0.20356		6	0.26196	0.89939	0.38990
	22	0.85609	0.48313	0.20944		7	0.24558	0.90339	0.39163
	23	0.84724	0.49656	0.21527		8	0.22913	0.90714	0.39326
	24	0.83814	0.50986	0.22103		9	0.21262	0.91063	0.39477
	25	0.82879	0.52300	0.22673		10	0.19605	0.91386	0.39617
	26	0.81920	0.53600	0.23236		11	0.17943	0.91683	0.39746
	27	0.80937	0.54884	0.23793		12	0.16276	0.91955	0.39864
	28	0.79931	0.56152	0.24343		13	0.14604	0.92201	0.39971
	29	0.78901	0.57403	0.24885		14	0.12928	0.92421	0.40066
	30	0.77848	0.58638	0.25420		15	0.11249	0.92614	0.40150
V	1	0.76773	0.59856	0.25948		16	0.09566	0.92782	0.40223
	2	0.75675	0.61057	0.26469		17	0.07880	0.92924	0.40284
	3	0.74555	0.62239	0.26981		18	0.06192	0.93040	0.40334
	4	0.73414	0.63404	0.27486		19	0.04503	0.93130	0.40373
	5	0.72251	0.64549	0.27983		20	0.02811	0.93193	0.40401
	6	0.71068	0.65677	0.28471		21	0.01119	0.93230	0.40417
	7	0.69865	0.66785	0.28952		22	-0.00574	0.93241	0.40421
	8	0.68641	0.67874	0.29424		23	-0.02266	0.93225	0.40415
	9	0.67398	0.68943	0.29887		24	-0.03958	0.93183	0.40396
	10	0.66135	0.69992	0.30342		25	-0.05650	0.93115	0.40367
	11	0.64854	0.71021	0.30789		26	-0.07339	0.93020	0.40325
	12	0.63554	0.72030	0.31226		27	-0.09027	0.92899	0.40273
	13	0.62236	0.73018	0.31654		28	-0.10712	0.92752	0.40209
	14	0.60900	0.73986	0.32074		29	-0.12394	0.92578	0.40134
	15	0.59547	0.74932	0.32484		30	-0.14072	0.92378	0.40047
	16	0.58177	0.75856	0.32885	VII	1	-0.15747	0.92152	0.39949
	17	0.56790	0.76760	0.33277		2	-0.17416	0.91900	0.39840
V	18	0.55387	0.77641	0.33659	VII	3	-0.19081	0.91622	0.39719

### SŁOŃCE

Data 2014	0 <sup>h</sup> UT			Data 2014	0 <sup>h</sup> UT				
	X <sub>2000</sub>	Y <sub>2000</sub>	Z <sub>2000</sub>		X <sub>2000</sub>	Y <sub>2000</sub>	Z <sub>2000</sub>		
VII	4	-0.20741	0.91318	0.39588	VIII	19	-0.83666	0.52257	0.22654
	5	-0.22394	0.90989	0.39445		20	-0.84595	0.50951	0.22088
	6	-0.24041	0.90634	0.39291		21	-0.85500	0.49630	0.21515
	7	-0.25681	0.90253	0.39126		22	-0.86380	0.48295	0.20936
	8	-0.27313	0.89847	0.38950		23	-0.87236	0.46946	0.20351
	9	-0.28938	0.89416	0.38763		24	-0.88066	0.45583	0.19761
	10	-0.30554	0.88960	0.38566		25	-0.88871	0.44207	0.19164
	11	-0.32162	0.88479	0.38357		26	-0.89651	0.42819	0.18562
	12	-0.33761	0.87973	0.38138		27	-0.90405	0.41418	0.17955
	13	-0.35350	0.87442	0.37908		28	-0.91132	0.40005	0.17343
	14	-0.36930	0.86888	0.37667		29	-0.91834	0.38580	0.16725
	15	-0.38499	0.86308	0.37416		30	-0.92509	0.37145	0.16103
	16	-0.40057	0.85705	0.37155		31	-0.93157	0.35699	0.15476
	17	-0.41605	0.85077	0.36882	IX	1	-0.93778	0.34243	0.14845
	18	-0.43140	0.84426	0.36600		2	-0.94372	0.32777	0.14210
	19	-0.44664	0.83750	0.36307		3	-0.94939	0.31302	0.13570
	20	-0.46176	0.83051	0.36004		4	-0.95479	0.29818	0.12927
	21	-0.47674	0.82329	0.35691		5	-0.95990	0.28326	0.12280
	22	-0.49159	0.81583	0.35367		6	-0.96475	0.26825	0.11630
	23	-0.50631	0.80814	0.35034		7	-0.96931	0.25317	0.10976
	24	-0.52088	0.80022	0.34690		8	-0.97360	0.23802	0.10319
	25	-0.53530	0.79207	0.34337		9	-0.97761	0.22280	0.09659
	26	-0.54957	0.78370	0.33974		10	-0.98133	0.20751	0.08996
	27	-0.56369	0.77510	0.33602		11	-0.98477	0.19217	0.08331
	28	-0.57765	0.76629	0.33220		12	-0.98793	0.17677	0.07663
	29	-0.59144	0.75725	0.32828		13	-0.99081	0.16131	0.06993
	30	-0.60506	0.74801	0.32427		14	-0.99339	0.14581	0.06321
	31	-0.61851	0.73855	0.32017		15	-0.99569	0.13027	0.05647
VIII	1	-0.63179	0.72888	0.31598		16	-0.99770	0.11469	0.04972
	2	-0.64488	0.71900	0.31170		17	-0.99942	0.09907	0.04295
	3	-0.65779	0.70893	0.30733		18	-1.00085	0.08342	0.03616
	4	-0.67052	0.69865	0.30288		19	-1.00199	0.06774	0.02937
	5	-0.68305	0.68817	0.29834		20	-1.00283	0.05205	0.02256
	6	-0.69539	0.67751	0.29371		21	-1.00338	0.03634	0.01575
	7	-0.70753	0.66665	0.28901		22	-1.00364	0.02061	0.00894
	8	-0.71946	0.65560	0.28422		23	-1.00360	0.00488	0.00212
	9	-0.73120	0.64437	0.27935		24	-1.00327	-0.01085	-0.00470
	10	-0.74273	0.63296	0.27440		25	-1.00264	-0.02658	-0.01152
	11	-0.75404	0.62137	0.26938		26	-1.00171	-0.04230	-0.01833
	12	-0.76515	0.60960	0.26427		27	-1.00049	-0.05801	-0.02514
	13	-0.77604	0.59766	0.25910		28	-0.99897	-0.07370	-0.03194
	14	-0.78671	0.58555	0.25385		29	-0.99716	-0.08936	-0.03874
	15	-0.79716	0.57328	0.24853		30	-0.99506	-0.10500	-0.04552
	16	-0.80738	0.56084	0.24313	X	1	-0.99266	-0.12061	-0.05228
	17	-0.81737	0.54824	0.23767		2	-0.98997	-0.13618	-0.05903
VIII	18	-0.82714	0.53548	0.23214	X	3	-0.98699	-0.15171	-0.06576

### SŁOŃCE

Data 2014	0 <sup>h</sup> UT			Data 2014	0 <sup>h</sup> UT				
	X <sub>2000</sub>	Y <sub>2000</sub>	Z <sub>2000</sub>		X <sub>2000</sub>	Y <sub>2000</sub>	Z <sub>2000</sub>		
X	4	-0.98371	-0.16719	-0.07247	XI	19	-0.54755	-0.75502	-0.32731
	5	-0.98015	-0.18262	-0.07916		20	-0.53286	-0.76359	-0.33103
	6	-0.97630	-0.19800	-0.08583		21	-0.51801	-0.77193	-0.33464
	7	-0.97216	-0.21331	-0.09247		22	-0.50299	-0.78004	-0.33815
	8	-0.96774	-0.22856	-0.09908		23	-0.48782	-0.78790	-0.34156
	9	-0.96303	-0.24375	-0.10567		24	-0.47250	-0.79551	-0.34486
	10	-0.95803	-0.25886	-0.11222		25	-0.45704	-0.80289	-0.34806
	11	-0.95275	-0.27390	-0.11874		26	-0.44143	-0.81001	-0.35115
	12	-0.94720	-0.28886	-0.12522		27	-0.42569	-0.81688	-0.35413
	13	-0.94135	-0.30373	-0.13167		28	-0.40982	-0.82350	-0.35700
	14	-0.93523	-0.31852	-0.13808		29	-0.39382	-0.82986	-0.35976
	15	-0.92883	-0.33321	-0.14445		30	-0.37770	-0.83597	-0.36240
	16	-0.92216	-0.34780	-0.15078	XII	1	-0.36147	-0.84182	-0.36494
	17	-0.91521	-0.36229	-0.15706		2	-0.34513	-0.84741	-0.36736
	18	-0.90798	-0.37667	-0.16329		3	-0.32869	-0.85274	-0.36967
	19	-0.90048	-0.39095	-0.16948		4	-0.31214	-0.85780	-0.37187
	20	-0.89271	-0.40510	-0.17562		5	-0.29550	-0.86261	-0.37395
	21	-0.88467	-0.41914	-0.18170		6	-0.27877	-0.86714	-0.37592
	22	-0.87636	-0.43304	-0.18773		7	-0.26195	-0.87141	-0.37777
	23	-0.86779	-0.44682	-0.19370		8	-0.24506	-0.87541	-0.37951
	24	-0.85896	-0.46047	-0.19962		9	-0.22808	-0.87915	-0.38112
	25	-0.84987	-0.47397	-0.20547		10	-0.21104	-0.88261	-0.38263
	26	-0.84052	-0.48733	-0.21126		11	-0.19393	-0.88580	-0.38401
	27	-0.83092	-0.50055	-0.21699		12	-0.17676	-0.88871	-0.38527
	28	-0.82106	-0.51361	-0.22265		13	-0.15953	-0.89135	-0.38642
	29	-0.81096	-0.52651	-0.22825		14	-0.14225	-0.89372	-0.38744
	30	-0.80061	-0.53926	-0.23377		15	-0.12492	-0.89581	-0.38835
	31	-0.79003	-0.55184	-0.23922		16	-0.10756	-0.89762	-0.38913
XI	1	-0.77920	-0.56425	-0.24461		17	-0.09016	-0.89915	-0.38979
	2	-0.76814	-0.57649	-0.24991		18	-0.07273	-0.90040	-0.39034
	3	-0.75685	-0.58855	-0.25514		19	-0.05528	-0.90137	-0.39076
	4	-0.74534	-0.60044	-0.26030		20	-0.03781	-0.90206	-0.39105
	5	-0.73359	-0.61214	-0.26537		21	-0.02033	-0.90247	-0.39123
	6	-0.72163	-0.62366	-0.27036		22	-0.00284	-0.90260	-0.39129
	7	-0.70945	-0.63499	-0.27528		23	0.01465	-0.90244	-0.39122
	8	-0.69706	-0.64613	-0.28011		24	0.03214	-0.90201	-0.39103
	9	-0.68445	-0.65707	-0.28485		25	0.04962	-0.90129	-0.39072
	10	-0.67164	-0.66781	-0.28951		26	0.06707	-0.90029	-0.39028
	11	-0.65862	-0.67836	-0.29408		27	0.08451	-0.89900	-0.38973
	12	-0.64540	-0.68869	-0.29856		28	0.10192	-0.89744	-0.38905
	13	-0.63198	-0.69882	-0.30295		29	0.11929	-0.89560	-0.38826
	14	-0.61837	-0.70874	-0.30725		30	0.13663	-0.89348	-0.38734
	15	-0.60457	-0.71844	-0.31145		31	0.15392	-0.89108	-0.38630
	16	-0.59058	-0.72792	-0.31556					
	17	-0.57641	-0.73718	-0.31958					
XI	18	-0.56207	-0.74621	-0.32349					