

## SŁOŃCE

Data 2011	0 <sup>h</sup> UT			Data 2011	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	0.17159	-0.88838	-0.38513	II	16	0.82653	-0.49625	-0.21514
	2	0.18879	-0.88543	-0.38385		17	0.83610	-0.48291	-0.20935
	3	0.20593	-0.88220	-0.38245		18	0.84541	-0.46942	-0.20351
	4	0.22301	-0.87870	-0.38094		19	0.85446	-0.45579	-0.19760
	5	0.24002	-0.87492	-0.37930		20	0.86326	-0.44202	-0.19163
	6	0.25695	-0.87087	-0.37754		21	0.87179	-0.42812	-0.18560
	7	0.27380	-0.86655	-0.37567		22	0.88006	-0.41408	-0.17952
	8	0.29057	-0.86195	-0.37367		23	0.88805	-0.39992	-0.17338
	9	0.30724	-0.85709	-0.37157		24	0.89578	-0.38564	-0.16719
	10	0.32381	-0.85196	-0.36934		25	0.90324	-0.37123	-0.16094
	11	0.34029	-0.84657	-0.36700		26	0.91042	-0.35671	-0.15465
	12	0.35666	-0.84091	-0.36455		27	0.91733	-0.34208	-0.14830
	13	0.37291	-0.83499	-0.36198		28	0.92395	-0.32735	-0.14191
	14	0.38905	-0.82881	-0.35931	III	1	0.93029	-0.31251	-0.13548
	15	0.40506	-0.82237	-0.35652		2	0.93635	-0.29758	-0.12901
	16	0.42095	-0.81568	-0.35362		3	0.94212	-0.28256	-0.12249
	17	0.43670	-0.80874	-0.35061		4	0.94761	-0.26745	-0.11594
	18	0.45233	-0.80155	-0.34749		5	0.95281	-0.25225	-0.10936
	19	0.46780	-0.79411	-0.34426		6	0.95771	-0.23698	-0.10274
	20	0.48314	-0.78642	-0.34093		7	0.96233	-0.22164	-0.09609
	21	0.49833	-0.77849	-0.33750		8	0.96665	-0.20623	-0.08941
	22	0.51336	-0.77032	-0.33396		9	0.97067	-0.19076	-0.08270
	23	0.52823	-0.76192	-0.33031		10	0.97441	-0.17523	-0.07597
	24	0.54294	-0.75327	-0.32656		11	0.97784	-0.15965	-0.06921
	25	0.55749	-0.74440	-0.32272		12	0.98098	-0.14403	-0.06244
	26	0.57186	-0.73529	-0.31877		13	0.98383	-0.12836	-0.05565
	27	0.58606	-0.72595	-0.31472		14	0.98637	-0.11265	-0.04884
	28	0.60008	-0.71639	-0.31057		15	0.98862	-0.09691	-0.04202
	29	0.61391	-0.70660	-0.30633		16	0.99058	-0.08115	-0.03518
	30	0.62756	-0.69660	-0.30199		17	0.99223	-0.06536	-0.02834
	31	0.64101	-0.68637	-0.29756		18	0.99359	-0.04955	-0.02149
II	1	0.65426	-0.67594	-0.29303		19	0.99465	-0.03373	-0.01463
	2	0.66731	-0.66529	-0.28842		20	0.99542	-0.01790	-0.00776
	3	0.68015	-0.65443	-0.28371		21	0.99589	-0.00206	-0.00090
	4	0.69278	-0.64338	-0.27892		22	0.99606	0.01378	0.00597
	5	0.70519	-0.63212	-0.27404		23	0.99594	0.02961	0.01283
	6	0.71739	-0.62067	-0.26907		24	0.99552	0.04544	0.01969
	7	0.72936	-0.60902	-0.26402		25	0.99480	0.06125	0.02655
	8	0.74111	-0.59719	-0.25889		26	0.99378	0.07705	0.03340
	9	0.75262	-0.58517	-0.25368		27	0.99247	0.09283	0.04024
	10	0.76391	-0.57297	-0.24840		28	0.99087	0.10858	0.04707
	11	0.77495	-0.56060	-0.24303		29	0.98897	0.12430	0.05388
	12	0.78576	-0.54806	-0.23759		30	0.98677	0.13998	0.06068
	13	0.79632	-0.53534	-0.23208		31	0.98428	0.15562	0.06747
	14	0.80664	-0.52247	-0.22650	IV	1	0.98149	0.17122	0.07423
II	15	0.81671	-0.50944	-0.22085	IV	2	0.97841	0.18677	0.08097

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IV	3	0.97504	0.20226	0.08768	V	19	0.54288	0.78310	0.33949
	4	0.97138	0.21769	0.09437		20	0.52857	0.79151	0.34314
	5	0.96743	0.23306	0.10103		21	0.51411	0.79971	0.34669
	6	0.96320	0.24835	0.10767		22	0.49951	0.80767	0.35014
	7	0.95868	0.26358	0.11426		23	0.48476	0.81541	0.35350
	8	0.95387	0.27872	0.12083		24	0.46987	0.82292	0.35675
	9	0.94878	0.29378	0.12736		25	0.45485	0.83019	0.35990
	10	0.94342	0.30875	0.13385		26	0.43970	0.83722	0.36296
	11	0.93777	0.32363	0.14030		27	0.42442	0.84402	0.36590
	12	0.93185	0.33842	0.14671		28	0.40901	0.85058	0.36875
	13	0.92566	0.35310	0.15307		29	0.39349	0.85690	0.37148
	14	0.91919	0.36768	0.15939		30	0.37786	0.86297	0.37412
	15	0.91246	0.38215	0.16566		31	0.36212	0.86879	0.37664
	16	0.90546	0.39650	0.17189	VI	1	0.34627	0.87437	0.37906
	17	0.89820	0.41074	0.17806		2	0.33033	0.87970	0.38137
	18	0.89067	0.42486	0.18418		3	0.31429	0.88478	0.38357
	19	0.88289	0.43886	0.19025		4	0.29816	0.88960	0.38566
	20	0.87485	0.45273	0.19626		5	0.28195	0.89417	0.38764
	21	0.86656	0.46647	0.20222		6	0.26566	0.89849	0.38951
	22	0.85802	0.48007	0.20812		7	0.24929	0.90255	0.39127
	23	0.84922	0.49353	0.21396		8	0.23285	0.90636	0.39292
	24	0.84018	0.50686	0.21973		9	0.21635	0.90990	0.39446
	25	0.83089	0.52003	0.22544		10	0.19979	0.91319	0.39588
	26	0.82136	0.53306	0.23109		11	0.18318	0.91622	0.39720
	27	0.81159	0.54593	0.23667		12	0.16652	0.91900	0.39840
	28	0.80158	0.55865	0.24219		13	0.14981	0.92151	0.39949
	29	0.79134	0.57120	0.24763		14	0.13306	0.92376	0.40047
	30	0.78087	0.58359	0.25300		15	0.11627	0.92576	0.40133
V	1	0.77017	0.59581	0.25830		16	0.09945	0.92749	0.40209
	2	0.75925	0.60786	0.26352		17	0.08260	0.92897	0.40273
	3	0.74810	0.61973	0.26866		18	0.06573	0.93018	0.40325
	4	0.73674	0.63142	0.27373		19	0.04884	0.93113	0.40367
	5	0.72516	0.64292	0.27872		20	0.03194	0.93182	0.40397
	6	0.71338	0.65424	0.28363		21	0.01502	0.93225	0.40415
	7	0.70139	0.66537	0.28845		22	-0.00190	0.93242	0.40423
	8	0.68919	0.67631	0.29319		23	-0.01882	0.93232	0.40418
	9	0.67680	0.68705	0.29785		24	-0.03574	0.93196	0.40403
	10	0.66421	0.69759	0.30242		25	-0.05265	0.93134	0.40376
	11	0.65144	0.70793	0.30690		26	-0.06955	0.93046	0.40338
	12	0.63848	0.71807	0.31129		27	-0.08642	0.92931	0.40288
	13	0.62533	0.72800	0.31560		28	-0.10328	0.92790	0.40227
	14	0.61201	0.73772	0.31981		29	-0.12010	0.92623	0.40154
	15	0.59852	0.74722	0.32393		30	-0.13690	0.92430	0.40070
	16	0.58485	0.75652	0.32796	VII	1	-0.15365	0.92210	0.39975
	17	0.57102	0.76559	0.33190		2	-0.17036	0.91965	0.39868
V	18	0.55703	0.77446	0.33574	VII	3	-0.18702	0.91693	0.39751

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VII	4	-0.20363	0.91395	0.39621	VIII	19	-0.83448	0.52558	0.22785
	5	-0.22018	0.91072	0.39481		20	-0.84382	0.51256	0.22221
	6	-0.23667	0.90722	0.39330		21	-0.85292	0.49939	0.21650
	7	-0.25309	0.90348	0.39167		22	-0.86178	0.48607	0.21073
	8	-0.26944	0.89947	0.38994		23	-0.87039	0.47262	0.20489
	9	-0.28570	0.89522	0.38809		24	-0.87876	0.45903	0.19900
	10	-0.30189	0.89071	0.38614		25	-0.88687	0.44531	0.19305
	11	-0.31799	0.88595	0.38408		26	-0.89473	0.43145	0.18704
	12	-0.33400	0.88095	0.38191		27	-0.90233	0.41748	0.18098
	13	-0.34991	0.87569	0.37963		28	-0.90967	0.40338	0.17487
	14	-0.36573	0.87020	0.37725		29	-0.91675	0.38916	0.16871
	15	-0.38144	0.86446	0.37476		30	-0.92356	0.37483	0.16250
	16	-0.39705	0.85847	0.37217		31	-0.93011	0.36040	0.15624
	17	-0.41254	0.85225	0.36947	IX	1	-0.93639	0.34586	0.14994
	18	-0.42792	0.84579	0.36667		2	-0.94239	0.33122	0.14359
	19	-0.44318	0.83909	0.36377		3	-0.94813	0.31648	0.13720
	20	-0.45832	0.83215	0.36076		4	-0.95359	0.30166	0.13078
	21	-0.47333	0.82498	0.35765		5	-0.95877	0.28675	0.12431
	22	-0.48821	0.81758	0.35444		6	-0.96368	0.27176	0.11782
	23	-0.50295	0.80994	0.35113		7	-0.96831	0.25669	0.11128
	24	-0.51755	0.80208	0.34772		8	-0.97265	0.24155	0.10472
	25	-0.53200	0.79399	0.34421		9	-0.97672	0.22635	0.09813
	26	-0.54631	0.78567	0.34061		10	-0.98051	0.21107	0.09151
	27	-0.56046	0.77713	0.33690		11	-0.98401	0.19574	0.08486
	28	-0.57445	0.76837	0.33311		12	-0.98723	0.18035	0.07819
	29	-0.58829	0.75940	0.32921		13	-0.99017	0.16491	0.07150
	30	-0.60195	0.75020	0.32523		14	-0.99282	0.14942	0.06478
	31	-0.61545	0.74079	0.32115		15	-0.99518	0.13389	0.05805
VIII	1	-0.62877	0.73118	0.31698		16	-0.99725	0.11832	0.05130
	2	-0.64191	0.72135	0.31272		17	-0.99904	0.10271	0.04453
	3	-0.65486	0.71132	0.30837		18	-1.00053	0.08707	0.03775
	4	-0.66763	0.70108	0.30393		19	-1.00173	0.07141	0.03096
	5	-0.68021	0.69065	0.29941		20	-1.00265	0.05572	0.02416
	6	-0.69260	0.68003	0.29480		21	-1.00327	0.04002	0.01735
	7	-0.70478	0.66921	0.29011		22	-1.00359	0.02430	0.01054
	8	-0.71677	0.65820	0.28534		23	-1.00363	0.00858	0.00372
	9	-0.72855	0.64701	0.28049		24	-1.00336	-0.00715	-0.00310
	10	-0.74012	0.63563	0.27556		25	-1.00281	-0.02288	-0.00992
	11	-0.75149	0.62408	0.27055		26	-1.00195	-0.03860	-0.01674
	12	-0.76264	0.61235	0.26547		27	-1.00081	-0.05432	-0.02355
	13	-0.77358	0.60045	0.26031		28	-0.99936	-0.07001	-0.03035
	14	-0.78429	0.58838	0.25508		29	-0.99762	-0.08569	-0.03715
	15	-0.79479	0.57614	0.24977		30	-0.99559	-0.10134	-0.04393
	16	-0.80505	0.56374	0.24440	X	1	-0.99326	-0.11696	-0.05070
	17	-0.81510	0.55117	0.23895		2	-0.99064	-0.13254	-0.05746
VIII	18	-0.82491	0.53846	0.23344	X	3	-0.98772	-0.14808	-0.06419

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X	4	-0.98451	-0.16358	-0.07091
	5	-0.98102	-0.17902	-0.07761
	6	-0.97723	-0.19442	-0.08428
	7	-0.97315	-0.20975	-0.09093
	8	-0.96879	-0.22502	-0.09755
	9	-0.96414	-0.24023	-0.10414
	10	-0.95921	-0.25536	-0.11070
	11	-0.95399	-0.27041	-0.11722
	12	-0.94849	-0.28539	-0.12372
	13	-0.94271	-0.30028	-0.13017
	14	-0.93665	-0.31508	-0.13659
	15	-0.93032	-0.32979	-0.14297
	16	-0.92370	-0.34440	-0.14930
	17	-0.91681	-0.35891	-0.15559
	18	-0.90965	-0.37331	-0.16184
	19	-0.90222	-0.38761	-0.16804
	20	-0.89451	-0.40179	-0.17418
	21	-0.88654	-0.41585	-0.18028
	22	-0.87830	-0.42978	-0.18632
	23	-0.86979	-0.44359	-0.19231
	24	-0.86103	-0.45727	-0.19824
	25	-0.85200	-0.47081	-0.20411
	26	-0.84271	-0.48421	-0.20991
	27	-0.83317	-0.49746	-0.21566
	28	-0.82338	-0.51056	-0.22134
	29	-0.81333	-0.52351	-0.22695
	30	-0.80304	-0.53629	-0.23249
	31	-0.79251	-0.54891	-0.23796
XI	1	-0.78174	-0.56137	-0.24336
	2	-0.77073	-0.57365	-0.24869
	3	-0.75949	-0.58576	-0.25394
	4	-0.74802	-0.59769	-0.25911
	5	-0.73632	-0.60944	-0.26420
	6	-0.72441	-0.62100	-0.26921
	7	-0.71227	-0.63238	-0.27414
	8	-0.69992	-0.64356	-0.27899
	9	-0.68736	-0.65454	-0.28375
	10	-0.67459	-0.66533	-0.28843
	11	-0.66162	-0.67592	-0.29302
	12	-0.64844	-0.68630	-0.29752
	13	-0.63507	-0.69647	-0.30193
	14	-0.62150	-0.70643	-0.30625
	15	-0.60775	-0.71618	-0.31048
	16	-0.59381	-0.72571	-0.31461
	17	-0.57969	-0.73502	-0.31865
XI	18	-0.56538	-0.74410	-0.32258

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XI	19	-0.55091	-0.75296	-0.32643
	20	-0.53626	-0.76159	-0.33017
	21	-0.52145	-0.76999	-0.33381
	22	-0.50648	-0.77815	-0.33734
	23	-0.49134	-0.78607	-0.34078
	24	-0.47606	-0.79374	-0.34410
	25	-0.46063	-0.80118	-0.34733
	26	-0.44505	-0.80836	-0.35044
	27	-0.42934	-0.81530	-0.35345
	28	-0.41350	-0.82198	-0.35634
	29	-0.39753	-0.82841	-0.35913
	30	-0.38144	-0.83458	-0.36180
XII	1	-0.36523	-0.84049	-0.36437
	2	-0.34891	-0.84614	-0.36682
	3	-0.33248	-0.85153	-0.36915
	4	-0.31595	-0.85666	-0.37137
	5	-0.29933	-0.86152	-0.37348
	6	-0.28261	-0.86612	-0.37548
	7	-0.26581	-0.87045	-0.37735
	8	-0.24893	-0.87451	-0.37911
	9	-0.23197	-0.87830	-0.38076
	10	-0.21494	-0.88182	-0.38228
	11	-0.19785	-0.88506	-0.38369
	12	-0.18069	-0.88804	-0.38498
	13	-0.16348	-0.89074	-0.38615
	14	-0.14621	-0.89317	-0.38721
	15	-0.12890	-0.89532	-0.38814
	16	-0.11155	-0.89719	-0.38895
	17	-0.09416	-0.89879	-0.38964
	18	-0.07675	-0.90010	-0.39022
	19	-0.05930	-0.90114	-0.39067
	20	-0.04184	-0.90190	-0.39099
	21	-0.02436	-0.90238	-0.39120
	22	-0.00687	-0.90258	-0.39128
	23	0.01062	-0.90249	-0.39125
	24	0.02811	-0.90212	-0.39109
	25	0.04559	-0.90147	-0.39080
	26	0.06305	-0.90054	-0.39040
	27	0.08050	-0.89933	-0.38987
	28	0.09791	-0.89783	-0.38923
	29	0.11530	-0.89606	-0.38846
	30	0.13265	-0.89400	-0.38756
	31	0.14996	-0.89167	-0.38655