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Geophysical Institute

Yearbook

of radiation and meteorological measurements

2011

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OBSERVATORIES:

SKALNATÉ PLESO: $\phi = 49^\circ 11' \text{ N}$, $\lambda = 20^\circ 14' \text{ E}$, H = 1778 m a.s.l.
STARÁ LESNÁ: $\phi = 49^\circ 09' \text{ N}$, $\lambda = 20^\circ 17' \text{ E}$, H = 810 m a.s.l.

GEOPHYSICAL INSTITUTE
OF THE SLOVAK ACADEMY OF SCIENCES

Department of Atmospheric Physics

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INTRODUCTION

The meteorological observatories (MO) of the Geophysical Institute of the Slovak Academy of Sciences are characterized as follows:

- MO Skalnaté Pleso represents a slope station in the south side of the High Tatras
- MO Stará Lesná represents a valley position of the Poprad-hollow.

The panorama of the horizon of these observatories is shown in Fig. 1 and Fig. 2.

The year-book contains tables of daily and monthly sums of radiation elements

- *global radiation*
- *diffuse radiation*
- *global UV-B radiation*
- *back atmospheric radiation*
- *long-wave radiation balance*
- *radiation balance*
- *sunshine duration*

and tables of daily and monthly averages of

- *air temperature*
- *relative air humidity*
- *atmospheric pressure*
- *soil temperature at 2 cm depth*
- *soil temperature at 20 cm depth.*

Notice: There are three values in the tables:

- without brackets if all 24 hour values were valid;
- with brackets if the number of the valid hour values was greater or equal 16;
- without value if the number of valid hour values was less than 16.

Measurements and recording of radiation fluxes, air temperature, relative air humidity, atmospheric pressure, and soil temperatures were realized by the central measurement data system ESM 200. The 10 minute scanning interval of the local time is used for each sensor. These data are stored in the central measurement station. The hourly averages, each calculated from 6 instant values, are loaded on magnetic medium.

The global and diffuse radiation is measured by pyranometer with galvanic thermels.

The global UV-B radiation is measured by the UV- biometer Solar Light, model 501A at the station Skalnaté Pleso. The relative spectral sensitivity of the instrument is close to the Erythema Action Spectrum (CIE, 1987). At the station Stará Lesná, the global UV-B radiation is measured by the UV-biometer, manufactured by the Yankee Environmental Systems, INC. The spectral response is similar to the Erythemal action spectrum (CIE, 1987). Stability of both UV- biometers is checked every year by their comparison with the Slovak national standard instrument for the broadband UV-biometers (UV- biometer Solar Light, model 501) under clear sky-condition by solar zenith angles lower than 50°.

For the measurement of long-wave radiation fluxes and radiation balance the Schulze balance meters are used. Subsequently, the radiation balance, downward atmospheric radiation and long-wave radiation balance are calculated.

The calibrations of pyranometers and radiation balance meters in short-wave spectral range are performed by the Sun-shade method with help of the Linke-Feussner actinometer as a standard instrument. This actinometer is calibrated against the Slovak national standard instrument - the Angström pyrheliometer held by the Slovak Hydrometeorological Institute.

The sunshine duration is measured by the Campbell-Stokes heliograph with green tape. The method utilized in the Slovak Hydrometeorological Institute is used by evaluation of the tapes.

The air temperature and relative air humidity are measured with sheltered electronic thermometer and hygrometer, respectively at 2 m level above the surface. For air temperature the Kroneis NTC sensor, YSI 44212 type is used. The relative air humidity is measured by the Vaisala sensor, MHP35D type.

The air pressure measurements are carried out with an electronic barometer in the building of the MO.

For the soil temperature measurements the thermal probes with platinum resistance thermometers Pt 100 are used.

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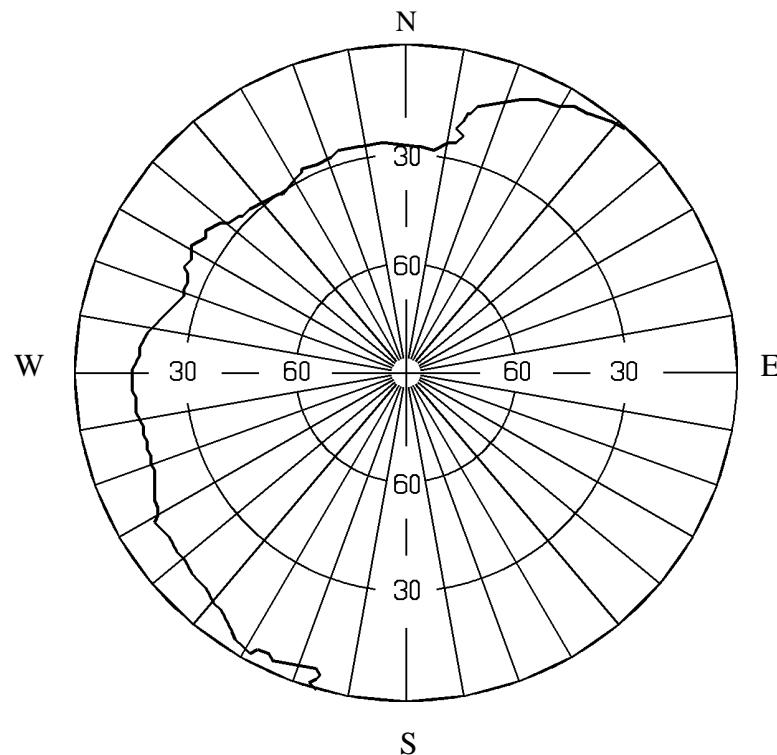


Fig. 1. Panorama of the horizon of Skalnaté Pleso

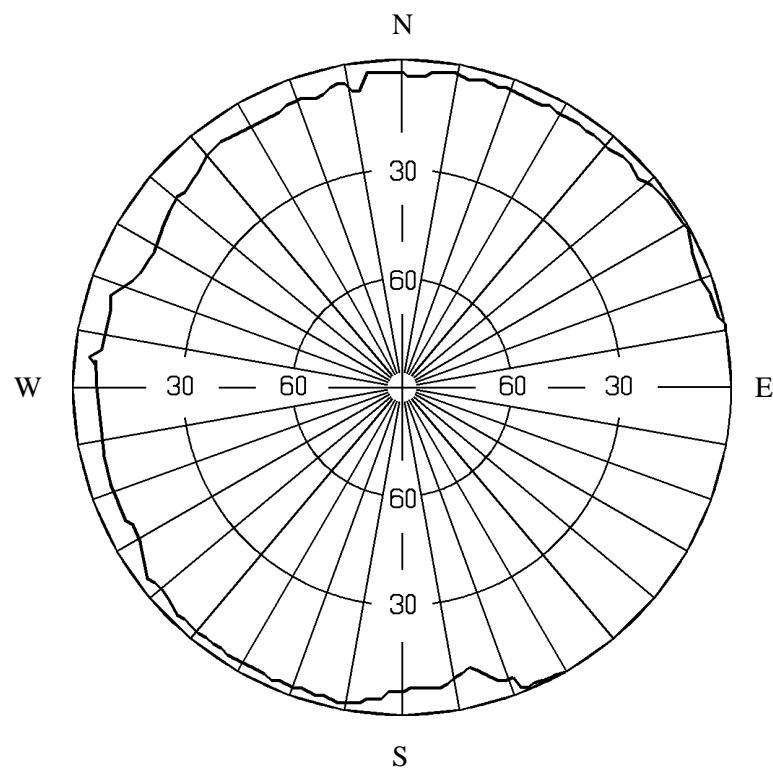


Fig. 2. Panorama of the horizon of Stará Lesná

Skalnaté Pleso

Daily and monthly sums of global radiation [J/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	461	843	1560	935	466	1353	620	1016	1293	1404	886	650
2	478	839	1544	1079	1045	656	681	1685	968	1529	903	545
3	509	847	897	938	516	2127	1047	1208	1666	1518	898	392
4	588	1002	1485	1921	654	1340	704	1540	1894	771	706	328
5	662	817	1451	1597	2388	2156	828	1529	1931	1038	210	268
6	584	261	857	1714	2727	1389	756	1864	625	922	853	499
7	383	846	1780	1714	2385	(1330)	2573	1805	1237	99	792	335
8	271	779	1527	1867	1304	458	2267	397	390	1025	(54)	28
9	557	1016	1580	(397)	2583	698	1712	985	918	828	696	213
10	409	1016	783	1926	2337	1220	1271	1355	832	773	834	155
11	389	537	1041	1415	2899	(1215)	2009	1885	1628	300	807	503
12	346	1185	1628	1113	2446	2956	956	888	1154	589	762	352
13	444	567	1291	(1773)	1351	1390	2289	896	1938	956	751	379
14	325	793	973	993	1976	1221	2465	1423	950	1128	471	290
15	206	1081	432	922	373	1024	532	1061	897	1071	717	130
16	556	754	319	1627	2352	1064	866	517	738	1270	727	472
17	661	412	102	1649	1517	1294	2988	749	1230	1232	687	142
18	580	655	662	1530	1533	882	1598	1213	1632	1216	701	461
19	352	422	814	2180	2240	610	1220	1614	1535	1098	646	336
20	287	748	1431	2556	2030	939	801	1953	643	197	683	295
21	687	1200	1882	1868	1494	1383	571	2362	1573	785	675	492
22	669	1258	1647	1876	2223	1799	608	1842	957	356	724	253
23	509	1272	1714	990	1669	816	1484	1322	205	228	661	671
24	273	1437	1982	981	847	1141	226	1520	572	126	633	251
25	417	693	1581	254	2066	1274	525	(1399)	1636	391	601	519
26	854	1290	493	2026	3063	1238	844	1903	1490	608	537	195
27	603	1189	1461	1795	2642	1626	434	2316	1137	754	449	620
28	898	1448	1088	1534	(275)	2079	900	705	1117	895	606	580
29	1073		1715	1953	607	925	564	2156	1546	641	561	558
30	966		2089	(1181)	3037	673	556	869	1405	506	564	379
31	937		1563		2295		1030	569		643		220
Sum	16932	25204	39372	(44303)	(55340)	(38275)	35925	(42548)	35734	24895	(19793)	11511

Skalnaté Pleso

Daily and monthly sums of diffuse radiation [J/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	158	110	258	735	414	1011	539	844	599	191	141	146
2	373	181	235	697	766	485	602	842	618	171	97	212
3	350	364	742	617	401	817	815	878	795	152	104	329
4	391	300	197	523	575	942	612	938	668	515	187	274
5	402	417	296	537	937	909	597	695	478	434	198	212
6	162	87	717	929	371	847	661	1082	499	491	113	152
7	273	121	407	777	822	(883)	659	773	537	70	130	238
8	234	280	295	624	784	386	724	364	316	572	17	26
9	184	141	197	(355)	494	587	801	719	579	609	174	203
10	279	166	646	1084	722	993	594	819	617	599	121	151
11	335	474	671	752	254	(967)	820	894	583	264	106	103
12	249	524	306	644	473	429	821	661	375	465	100	325
13	258	313	599	(724)	741	673	910	600	167	492	94	261
14	270	334	699	766	911	937	804	749	552	561	255	220
15	166	208	394	707	335	755	461	648	539	508	112	127
16	397	334	270	1011	1079	586	728	399	549	164	128	152
17	96	381	102	715	949	716	321	585	418	122	171	105
18	212	535	603	1002	898	657	851	621	336	121	102	253
19	276	391	726	589	697	511	810	526	600	410	210	245
20	260	652	817	226	898	678	554	544	534	68	131	253
21	187	399	417	646	882	945	509	904	620	556	120	255
22	148	302	566	680	743	976	537	620	461	333	166	219
23	368	718	849	659	780	654	841	630	194	212	115	131
24	247	287	866	538	490	821	214	496	486	120	98	223
25	347	619	814	230	838	682	466	(533)	270	338	124	395
26	409	346	428	847	275	763	722	640	440	500	204	181
27	338	387	1073	894	407	985	392	411	483	458	129	108
28	270	341	855	1005	(246)	1084	704	567	424	250	114	106
29	129		928	810	535	790	498	687	411	375	93	125
30	172		489	(534)	330	527	496	481	150	408	81	269
31	114		493		724		782	506		354		167
Sum	8053	9711	16957	(20855)	(19771)	(22997)	19844	(20656)	14297	10882	3937	6164

Skalnaté Pleso

Daily and monthly sums of global UVB radiation [mJ/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	27	52	124	128	79	249	129	192	209	165	76	27
2	19	52	123	168	150	111	133	270	152	170	75	26
3	17	48	99	152	64	349	189	221	268	182	70	22
4	23	53	132	248	137	238	141	267	295	122	58	21
5	24	52	137	213	301	375	150	260	307	131	27	18
6	25	38	72	235	338	230	185	329	112	116	63	21
7	24	70	132	274	325	(284)	450	330	212	12	58	17
8	21	52	144	300	167	74	414	94	66	101	(2)	(6)
9	28	61	134	(68)	401	129	306	178	147	97	50	15
10	25	71	86	277	363	251	245	219	159	90	51	13
11	21	37	121	183	436	(227)	376	340	217	45	52	28
12	21	63	164	145	413	520	196	155	142	64	49	20
13	26	56	144	(289)	238	251	440	156	282	77	47	23
14	20	67	97	185	314	241	493	237	133	97	35	21
15	13	78	60	178	68	212	113	190	126	104	47	10
16	23	66	31	292	381	166	177	104	101	110	52	18
17	33	42	19	307	228	225	536	126	191	111	45	8
18	31	52	88	210	219	199	302	230	221	106	50	19
19	22	40	108	335	366	114	249	321	195	100	44	16
20	17	81	160	393	300	151	134	362	94	30	43	18
21	31	99	186	278	213	277	84	430	200	73	39	21
22	31	81	178	306	361	369	115	345	133	36	41	17
23	24	70	165	143	260	188	227	248	34	25	39	30
24	24	77	235	148	131	201	47	303	88	15	32	22
25	30	64	217	46	388	228	100	(275)	193	38	33	23
26	37	101	77	295	515	221	147	332	164	63	31	17
27	29	98	178	303	499	326	75	387	132	69	29	33
28	44	104	135	235	(49)	393	138	157	137	75	30	35
29	48		214	312	124	226	98	383	182	52	28	29
30	50		266	(165)	529	125	114	126	172	52	28	15
31	54		226		390		179	111		60		13
Sum	862	1825	4250	(6812)	(8747)	(7146)	6680	(7679)	5063	2587	(1322)	(624)

Skalnaté Pleso

Daily and monthly sums of downward atmospheric radiation [J/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	2345	2127	1742	(2186)	2322	(2120)	2474	2219	(2018)	(2086)	(2052)	2091
2	2034	2152	1787	2086	(1864)	2576	2249	(1787)	2141	(1943)	(2025)	2299
3	1848	2066	2160	2085	(2362)	(1698)	(2016)	(2070)	(1833)	(1866)	(2018)	2355
4	1752	2109	1906	(1773)	2139	(2183)	2362	(1935)	(1929)	2321	(2294)	2439
5	1893	2358	1994	(1981)	(1624)	(1819)	(2304)	(2036)	(1987)	(2186)	2723	2431
6	2334	2628	1964	(1872)		(2159)	(2370)	(1905)	2519	(2133)	(2153)	2015
7	2547	2537	(1450)	(1928)	(1585)	(987)		(1943)	(2124)	2750	2249	2254
8	2639	2389	1588	(1798)	(1950)		(1862)	2879	2570	(2031)	1944	2442
9	2510	2054	1812	1855			(1981)	2171	(2256)	(2149)	2151	2480
10	2444	2091	2220	(1756)	(1702)		(2357)	(1830)	2297	(2082)	(2007)	2418
11	2489	2434	2111	(1805)		(1094)	(1860)	(1764)	(1967)	2649	(1960)	2033
12	2478	1828	1990	(2192)	(1631)		2349	(2330)	(2450)	2276	2101	2441
13	2397	2098	2221	(1393)	(1831)	(2064)	(1814)	(2331)	(1836)	(1926)	2092	2425
14	2595	1965	(2275)	2241	(1700)	(1997)	(1895)	(2079)	2308	(1825)	2275	2522
15	2586	1864	2549	(2197)	2638	(2331)	2972	(2331)	(2086)	(1810)	2028	2469
16	2312	2178	2635	(1803)	(1550)	(2328)	2378	2737	2152	(1698)	(1955)	2248
17	2404	2419	2745	(1829)	(1677)	(2203)		2476	(2079)	(1849)	2028	2415
18	2316	2346	2401	(1846)	(1766)	(2512)	(2088)	(2200)	(2052)	(1959)	2040	2060
19	2393	2358	2257	(1541)	(1709)	2433	(2318)	(2154)	(2217)	(2127)	2078	2074
20	2256	1919	(1756)		(1673)	(2133)	(2577)	(1820)	2537	2591	2010	2128
21	2007	1656	(1627)	(1636)	(1853)	(2012)	2549	(1689)	(1893)	2025	1968	1950
22	2052	1765	(1807)	(1668)	(1746)	(1798)	2394	(1929)	(2281)	2341	(1893)	2179
23	2123	1688	(1741)	(2107)	(1889)	(2543)	(1919)	(2400)	2772	2559	1996	1962
24	2081	1615	(1721)	(2156)	(2458)	(2168)	2847	(2317)	2291	2622	2008	2378
25	2091	2082	(1861)	2612	(1767)	(2045)	2603	(1075)	(1798)	2406	2092	2146
26	1902	2151	2414	(1568)		(1897)	2313		(1847)	2466	2126	2491
27	1907	2106	1773	(1726)	(1701)	(1827)	2676		(2160)	2257	2321	2377
28	1857	2010	2024	(1707)	2213	(1814)	2261	1469	(2075)	(2074)	2014	2318
29	(1711)		(1786)		2435	(2346)	2597	(1992)	(1981)	2207	2069	2263
30	1830		(1624)	(704)		(2557)	2559	(2449)	(2103)	2292	2181	2215
31	1903		(1884)		(1669)		(2162)	2473		2279		2259
Sum	(68037)	58998	(61825)	(52052)	(49456)	(53643)	(67105)	(60789)	(64559)	(67785)	(62851)	70580

Skalnaté Pleso

Daily and monthly sums of long-wave radiation balance [J/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	-201	-517	-794	-701	-431	-1252	-544	-986	-1282	-1331	-825	-618
2	-292	-534	-741	-782	-949	-616	-591	-1632	-963	-1672	-919	-542
3	-385	-543	-454	-739	-480	-1946	-928	-1164	-1685	-1566	-1009	-400
4	-457	-597	-782	-1477	-487	-1238	-634	-1455	-1865	-776	-679	-339
5	-530	-424	-820	-1009	-1914	-2010	-729	-1454	-1812	-1111	-238	-272
6	-334	-71	-354	-1321	-2482	-1237	-678	-1710	-571	-952	-1000	-435
7	-276	-301	-804	-1439	-2126	-(1205)	-2420	-1652	-1175	-137	-785	-231
8	-250	-349	-889	-1425	-999	-415	-2055	-349	-330	-770	-(50)	4
9	-314	-423	-840	-(177)	-2359	-651	-1614	-890	-800	-583	-685	-185
10	-282	-518	-450	-1023	-2111	-1099	-1169	-1235	-792	-675	-771	-141
11	-263	-303	-566	-1005	-2651	-(1093)	-1920	-1758	-1538	-307	-750	-389
12	-218	-500	-819	-633	-2243	-2621	-873	-839	-1086	-533	-729	-265
13	-248	-300	-811	-(963)	-1271	-1266	-2156	-840	-1841	-841	-723	-259
14	-170	-468	-660	-381	-1791	-1128	-2338	-1337	-895	-880	-464	-232
15	-112	-519	-283	-414	-333	-932	-363	-1023	-924	-816	-686	-160
16	-361	-393	-184	-926	-2055	-1000	-815	-464	-751	-967	-683	-277
17	-491	-198	-72	-949	-1401	-1195	-2879	-705	-1212	-977	-692	-90
18	-431	-337	-385	-1051	-1452	-798	-1460	-1158	-1628	-1054	-716	-305
19	-221	-215	-403	-1682	-2084	-556	-1099	-1547	-1641	-979	-649	-256
20	-161	-415	-830	-2263	-1896	-863	-758	-1890	-718	-109	-676	-196
21	-300	-659	-1125	-1786	-1398	-1256	-548	-2294	-1582	-560	-634	-390
22	-374	-624	-1106	-1786	-2042	-1709	-579	-1797	-919	-282	-689	-187
23	-231	-625	-1134	-991	-1542	-769	-1426	-1250	-173	-203	-672	-464
24	-135	-755	-1256	-894	-778	-1050	-209	-1444	-588	-110	-642	-213
25	-260	-298	-1105	-192	-1907	-1129	-519	-(1414)	-1675	-315	-619	-328
26	-472	-588	-256	-1871	-2771	-1104	-834	-1849	-1436	-452	-504	-154
27	-396	-662	-807	-1644	-2384	-1465	-416	-2267	-1086	-715	-473	-447
28	-521	-712	-660	-1433	-(243)	-1889	-863	-689	-1076	-971	-561	-491
29	-788		-1116	-1797	-567	-830	-551	-2143	-1415	-595	-603	-421
30	-649		-1493	-(1167)	-2759	-604	-552	-863	-1343	-439	-609	-237
31	-601		-1125		-2111		-1010	-573		-648		-141
Sum	-10723	-12849	-23122	-(33919)	-(50017)	-(34928)	-33529	-(40669)	-34803	-22326	-(19735)	-9062

Skalnaté Pleso

Daily and monthly sums of radiation balance [J/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	972	1695	3972	1168	153	502	-1279	-1589	165	599	-159	327
2	965	1692	3974	1436	401	195	-1464	-4026	9	511	-38	264
3	942	1657	2510	1127	155	797	-2277	-1121	366	580	209	123
4	1102	1973	3718	2382	578	502	-1771	-435	491	243	306	91
5	1218	1631	3537	2240	1758	831	-959	-671	533	365	1	88
6	1118	514	2000	2101	1087	617	844	-124	86	329	265	316
7	704	1749	3546	1513	992	-(59)	643	577	449	-9	357	518
8	420	1466	2905	1736	1247	114	540	312	161	1878	-(13)	34
9	1068	2017	3034	(789)	1014	-308	500	177	365	1515	302	320
10	690	1967	1508	3268	959	-231	392	458	207	1237	418	226
11	649	1051	2013	1784	1158	(296)	792	707	609	281	414	914
12	612	2322	3103	1846	1001	1253	433	299	477	-1439	368	541
13	809	1073	2336	(3032)	419	597	863	280	787	-149	370	639
14	645	1503	1566	2138	821	497	916	527	388	1309	189	471
15	390	2011	720	1843	106	435	-142	115	281	1148	357	141
16	899	1438	547	2905	1062	438	-330	-1901	254	1246	375	895
17	1108	849	145	2959	590	483	433	-3004	421	719	316	223
18	980	1360	1119	2275	557	321	643	-3815	614	-107	327	867
19	630	863	1566	2672	874	251	124	280	485	-675	302	598
20	584	1520	2465	2134	768	374	296	699	135	-699	333	535
21	1488	2470	3218	1038	525	564	205	2013	579	1043	353	887
22	1387	2672	2630	873	878	656	-16	713	401	306	366	435
23	1083	2755	2637	363	605	281	-2471	127	72	-54	317	1286
24	561	3795	3112	389	307	456	-2719	-1885	158	-57	301	422
25	832	2207	2337	272	724	494	-1854	-(1079)	591	-80	276	986
26	1770	3525	932	786	1239	546	-1596	-1184	592	887	265	314
27	1178	3100	2810	711	1099	683	-1796	226	467	426	155	1134
28	1844	3734	1922	575	(48)	972	-1332	-1652	377	70	322	1040
29	2010		2717	776	98	503	-2488	-878	661	-216	244	1034
30	1906		3072	(659)	1186	-650	-2450	-138	581	-326	254	715
31	1872		2247		891		-1942	-165		-737		385
Sum	32436	54610	73917	(47791)	(23298)	(12409)	-19260	-(16156)	11765	10144	(7853)	16770

Skalnaté Pleso

Daily and monthly sums of sunshine duration [h]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	4.8	8.0	9.1	1.4	0.0	0.9	0.3	0.8	6.3	8.2	7.6	4.6
2	1.0	6.2	9.3	4.1	1.4	1.6	0.1	6.1	4.3	10.0	7.9	3.4
3	1.7	3.7	0.4	3.3	1.4	10.8	1.3	3.5	8.1	9.6	8.2	0.0
4	5.9	4.7	9.4	9.3	0.1	2.3	0.0	4.8	9.7	1.6	6.1	0.0
5	4.9	3.7	8.5	5.1	8.2	8.5	0.4	7.2	11.3	6.1	0.1	0.3
6	6.1	0.0	0.0	6.3	12.4	4.8	0.0	6.3	0.4	4.2	8.0	4.5
7	0.0	7.7	8.0	4.0	8.6	2.6	12.5	10.5	5.5	0.7	7.0	0.3
8	0.0	4.7	7.9	5.6	3.1	0.7	8.3	0.0	0.2	4.1	7.9	0.0
9	5.3	7.8	9.6	0.0	10.9	0.2	9.0	2.7	2.5	1.0	6.7	0.0
10	1.9	7.7	0.5	6.5	10.7	0.0	5.3	4.4	1.1	1.7	7.6	0.0
11	0.1	0.0	2.9	5.1	13.0	0.6	8.6	6.6	8.6	0.4	7.8	6.0
12	1.2	4.5	9.5	3.8	11.5	12.6	0.1	0.8	6.0	0.6	7.6	0.0
13	1.9	2.9	4.8	6.8	3.5	5.8	10.3	2.0	10.9	5.0	7.7	1.4
14	0.0	3.7	1.6	0.0	8.4	3.6	9.0	5.3	4.8	5.2	2.0	0.4
15	0.0	8.2	0.0	0.8	0.0	1.1	0.0	4.6	2.5	4.4	7.5	0.0
16	0.6	4.4	1.1	3.7	5.3	4.0	0.4	0.8	1.4	9.0	7.5	4.1
17	7.2	0.0	0.0	6.6	5.6	4.3	13.0	1.7	5.0	8.9	6.5	0.0
18	5.7	1.2	0.0	5.1	5.9	2.8	7.1	5.5	9.3	9.0	7.5	2.5
19	0.5	0.0	0.0	11.5	9.7	0.1	3.1	7.5	6.1	5.8	5.9	0.1
20	0.0	0.1	5.4	11.3	7.2	1.6	1.1	9.1	0.3	0.0	7.3	0.2
21	6.4	5.9	10.4	9.0	4.4	4.2	0.0	12.2	6.8	2.1	7.3	2.1
22	6.6	8.2	8.2	8.7	8.3	9.5	0.0	10.8	4.3	0.0	6.1	0.0
23	2.2	2.8	8.3	3.0	6.4	2.1	4.8	6.0	0.0	0.0	7.3	5.5
24	0.2	6.5	10.6	3.2	3.8	2.3	0.0	6.7	0.2	0.0	7.3	0.0
25	2.0	0.0	7.2	0.0	7.3	2.9	0.0	6.2	10.1	0.4	6.9	1.3
26	4.6	7.2	0.0	7.3	13.6	6.5	0.3	10.8	9.2	0.4	5.0	0.0
27	2.3	6.1	3.5	4.2	11.7	7.5	0.0	11.2	5.7	0.8	3.4	6.5
28	7.0	9.0	2.3	2.0	0.0	5.6	0.7	0.8	4.9	6.0	6.8	6.3
29	7.9		7.3	8.2	0.0	0.1	0.3	8.3	8.2	3.6	6.5	5.7
30	7.9		11.0	5.5	13.5	0.6	0.0	3.6	9.5	1.0	7.0	0.5
31	7.9		7.5		11.1		1.1	0.0		2.8		0.0
Sum	103.8	124.9	164.3	151.4	207.0	110.2	97.1	166.8	163.2	112.6	198.0	55.7

Skalnaté Pleso

Daily and monthly averages of air temperature [°C]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	-4.0	-1.2	-5.5	2.9	2.5	12.6	6.2	10.2	8.5	11.7	5.7	1.2
2	-11.0	-1.6	-6.2	2.4	-0.2	17.4	2.3	10.7	9.5	11.1	7.0	4.8
3	-12.9	-3.2	-3.7	2.2	0.9	11.1	4.0	10.4	11.2	11.1	7.9	1.8
4	-12.9	-0.7	-2.1	5.1	-4.0	9.8	5.3	10.0	13.8	10.3	6.6	2.1
5	-7.3	0.5	0.0	-0.5	-3.9	11.7	5.3	11.7	16.3	9.9	6.3	0.0
6	-0.6	-1.3	-11.4	3.1	0.9	10.3	7.6	13.0	8.9	8.0	9.5	-6.2
7	2.6	3.9	-12.5	6.6	2.3	10.7	13.0	14.2	10.7	4.5	8.8	-6.0
8	3.8	0.9	-7.7	-0.8	1.1	11.8	14.5	11.5	4.2	-0.5	5.7	-6.9
9	3.6	-6.4	-3.3	-(4.4)	4.7	10.3	15.3	7.8	4.2	-1.5	4.8	0.0
10	-0.6	-3.5	-2.3	-4.7	7.9	7.9	17.1	5.6	8.8	1.5	1.7	-3.7
11	0.9	0.2	-2.6	-1.1	8.7	(7.9)	16.0	7.2	14.3	5.8	1.1	-5.6
12	-1.4	-10.1	1.0	1.6	8.5	9.5	10.0	10.4	14.6	2.0	3.6	1.0
13	-2.1	-7.7	6.9	-(4.3)	5.5	9.7	15.5	10.1	13.3	-2.2	3.1	0.0
14	0.9	-8.2	3.5	-3.9	5.8	9.2	18.4	10.9	11.6	-3.7	2.1	2.2
15	-0.6	-9.0	2.3	-3.5	4.9	10.7	14.7	13.3	6.7	-3.7	1.0	-1.0
16	-0.6	-4.1	2.3	-1.7	1.6	12.0	9.8	10.4	5.1	-3.1	0.2	-3.8
17	5.1	-3.0	2.0	-0.3	4.8	12.9	13.4	9.9	8.9	1.3	3.0	-5.4
18	1.2	-2.7	0.1	1.5	8.3	12.6	14.0	12.8	12.9	5.0	3.8	-9.0
19	-3.6	-5.0	-3.2	3.9	11.0	6.1	13.2	15.4	12.9	6.6	3.1	-8.5
20	-8.8	-12.0	-4.6	6.4	11.1	4.8	11.8	10.9	12.2	-0.7	2.0	-9.6
21	-10.9	-12.4	-3.8	7.4	10.3	8.6	8.1	12.8	11.4	-3.3	-1.2	-8.2
22	-7.5	-10.9	0.9	7.7	11.2	14.2	5.5	16.5	10.2	-2.1	-0.4	-9.1
23	-9.5	-13.1	1.0	7.6	11.1	12.9	7.4	16.3	5.3	1.5	1.6	-5.8
24	-14.1	-11.0	1.4	5.3	11.3	9.0	7.5	17.9	4.6	0.4	1.0	-2.4
25	-9.7	-9.4	2.6	2.2	7.0	3.2	8.5	17.4	8.7	0.0	2.7	-6.0
26	-9.5	-1.0	-2.2	5.8	8.6	4.5	8.9	17.9	9.8	5.2	-1.1	-1.0
27	-11.0	-0.8	-6.2	5.6	12.6	6.3	8.4	16.8	9.9	7.0	3.2	4.8
28	-9.6	-1.5	-2.6	6.5	(9.2)	7.6	9.2	11.5	8.6	6.0	-2.6	4.7
29	-5.3		-0.4	5.7	7.7	9.9	9.3	13.2	10.2	2.0	2.4	-0.4
30	-5.8		2.9	(5.0)	13.0	9.2	8.2	10.8	12.8	1.6	4.5	-7.0
31	-5.8		3.3		13.9		8.0	7.3		6.2		-8.5
Average	-4.7	-4.8	-1.6	(2.3)	(6.4)	(9.8)	10.2	12.1	10.0	3.2	3.2	-3.0

Skalnaté Pleso

Daily and monthly averages of relative air humidity [%]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	64	39	43	78	84	75	93	98	84	35	69	57
2	90	46	67	76	88	83	94	91	79	42	46	45
3	87	60	83	69	91	81	94	95	76	40	32	74
4	73	61	61	61	92	88	98	95	74	59	39	71
5	33	91	50	76	68	76	94	88	64	71	83	68
6	42	93	83	78	51	85	90	85	86	74	26	66
7	82	44	59	82	65	85	72	87	50	77	13	79
8	83	50	48	74	84	81	77	99	90	84	65	81
9	65	63	57	(88)	71	87	74	90	86	81	66	54
10	89	46	77	77	69	86	69	87	86	63	29	86
11	86	78	84	57	46		75	86	76	90	21	48
12	91	73	64	80	59	50	99	82	70	85	34	70
13	81	45	38	(73)	73	76	71	82	59	79	35	69
14	89	52	79	85	72	79	54	88	82	82	37	59
15	92	40	90	83	93	72	84	83	83	72	37	46
16	80	88	92	73	68	79	99	94	89	42	40	74
17	36	91	98	67	72	79	70	92	68	45	20	88
18	56	92	97	67	74	84	79	79	65	48	20	87
19	92	92	83	60	61	93	91	73	80	44	26	66
20	92	92	45	30	62	88	96	76	79	89	29	79
21	85	77	48	52	66	86	99	65	68	70	64	52
22	38	64	40	55	65	78	98	64	73	75	54	88
23	79	74	50	56	72	93	93	85	90	88	25	57
24	88	81	52	70	79	94	99	63	87	90	33	83
25	70	89	53	88	79	88	99	71	68	90	42	73
26	87	81	83	59	50	74	98	80	75	80	52	87
27	86	73	84	56	56	79	99	72	80	45	34	57
28	69	68	75	58	(91)	87	96	94	68	58	49	38
29	40		67	67	93	94	98	87	62	83	13	56
30	39		41	(73)	61	95	99	92	44	83	26	82
31	38		50		66		99	95		58		86
Average	72	69	66	(69)	(72)	(83)	89	84	75	68	39	69

Skalnaté Pleso

Daily and monthly averages of atmospheric pressure [hPa]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	810.3	820.5	827.2	822.8	811.7	825.1	817.2	820.1	821.8	831.3	824.3	824.4
2	809.9	820.1	828.3	823.3	811.9	829.6	813.8	824.2	822.3	829.2	824.1	818.8
3	813.1	821.0	827.0	820.5	810.1	832.2	809.7	826.0	824.5	828.4	821.0	815.4
4	814.6	820.7	826.5	817.9	814.7	828.7	814.5	823.9	825.6	827.1	818.8	808.5
5	814.1	817.6	818.2	821.6	821.0	824.3	816.4	823.8	824.5	825.8	820.9	802.1
6	813.2	820.0	813.1	824.9	826.4	821.6	815.3	822.2	826.0	821.5	825.4	807.8
7	817.6	821.7	823.6	819.7	822.2	820.0	821.0	818.9	820.4	811.5	827.4	806.6
8	818.5	817.5	826.1	809.0	824.1	817.4	823.2	817.7	814.4	809.6	827.7	809.5
9	819.2	818.2	819.5	(809.6)	830.9	815.9	828.2	820.5	816.7	815.4	825.7	814.1
10	820.1	819.4	816.8	813.0	830.3	817.1	828.0	822.7	823.6	817.7	823.0	812.2
11	817.1	810.7	817.1	816.5	826.3	(819.0)	825.1	823.2	825.1	818.7	828.2	816.7
12	815.0	808.1	819.2	811.2	822.5	821.0	825.0	822.3	822.8	816.3	832.9	814.9
13	812.0	813.3	816.0	(809.1)	821.5	822.5	823.7	819.8	823.0	820.6	832.2	814.0
14	814.6	811.0	819.3	809.9	821.4	823.3	824.4	820.4	823.0	825.9	826.3	814.3
15	816.8	808.6	821.8	816.0	816.7	825.3	824.2	822.6	823.7	826.7	821.8	812.9
16	825.4	807.6	820.7	821.1	820.0	824.7	821.6	824.2	824.0	828.8	822.7	800.1
17	826.2	808.4	812.2	824.3	824.5	823.3	818.2	826.0	823.9	825.7	823.5	792.4
18	822.9	810.6	812.0	824.5	826.5	818.4	817.0	827.3	819.9	821.0	822.1	805.2
19	819.0	811.1	817.2	821.6	826.7	815.3	818.1	826.1	819.5	819.9	822.4	813.3
20	815.7	810.2	823.7	823.0	827.0	819.1	811.1	826.8	825.2	820.4	822.4	808.5
21	818.7	810.3	828.6	823.3	827.4	823.2	808.1	828.7	826.1	824.1	819.9	807.8
22	818.9	808.7	830.5	821.9	826.9	825.9	810.2	828.5	823.6	825.4	820.3	814.9
23	812.6	813.2	829.7	821.1	828.9	824.0	815.6	829.5	822.5	825.5	825.1	817.4
24	811.2	817.9	826.6	820.8	828.5	821.9	814.9	828.4	823.7	823.7	829.4	815.1
25	807.9	820.2	818.6	821.9	827.4	822.6	815.1	827.7	828.0	821.5	827.8	822.6
26	804.9	820.8	811.3	822.2	825.3	824.5	819.3	827.5	831.0	824.2	823.3	830.0
27	812.1	816.9	814.3	821.9	821.7	824.4	822.7	825.4	832.9	826.2	820.2	831.9
28	819.8	820.9	812.8	820.6	(819.3)	820.1	823.1	826.0	832.8	828.0	822.8	827.1
29	819.3		816.7	819.2	822.1	818.9	820.0	823.1	831.2	827.9	825.8	816.7
30	816.6		819.8	(815.7)	827.6	817.0	815.1	821.2	832.6	825.2	825.5	806.6
31	819.4		822.7		825.8		815.6	820.4		824.7		810.2
Average	816.0	815.2	820.6	(818.9)	(823.1)	(822.2)	818.6	824.0	824.5	823.2	824.4	813.3

Skalnaté Pleso

Daily and monthly averages of soil temperature at 2cm depth [°C]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	0.7	0.0	-0.7	0.2	1.6	13.9	10.3	12.8	11.4	10.5	2.0	-2.8
2	0.7	-0.1	-0.8	0.2	3.5	11.1	7.5	14.0	10.4	9.4	1.2	-2.1
3	0.7	-0.3	-1.0	0.2	3.2	13.6	8.5	13.5	11.5	8.5	0.6	-1.7
4	0.7	-0.3	-0.9	0.2	2.8	15.1	8.8	13.6	13.1	7.5	0.7	-1.1
5	0.6	-0.1	-1.0	0.1	2.5	15.7	8.6	13.3	14.7	8.0	3.2	-0.7
6	0.4	0.1	-1.1	0.1	5.1	13.7	8.6	14.5	13.0	7.9	2.9	-1.8
7	0.4	0.2	-1.1	0.1	5.6		13.0	15.4	11.1	4.1	1.8	-1.9
8	0.4	0.1	-1.2	0.1	3.0		15.1	13.9	9.6	2.9	(0.8)	-1.5
9	0.4	0.1	-1.5	(0.1)	7.1		15.2	12.3	7.9	3.0	0.5	-1.1
10	0.4	0.1	-1.6	0.1	10.0		15.2	10.7	9.4	3.0	-0.2	-0.8
11	0.3	0.1	-1.5	0.2	11.1		16.6	11.5	11.4	0.3	-0.6	-0.7
12	0.3	0.0	-1.3	0.2	11.4	12.3	15.3	11.5	12.9	2.2	-0.7	-1.3
13	0.3	0.0	-1.0	(0.1)	9.3	12.1	15.9	11.0	12.9	2.1	-0.7	-0.7
14	0.3	-0.1	-0.5	0.2	9.1	11.6	17.4	12.3	11.6	2.3	-0.8	-0.6
15	0.3	-0.3	0.0	0.2	8.4	11.4	14.9	12.6	10.6	1.6	-1.1	-0.6
16	0.3	-0.6	0.1	0.2	7.1	11.6	14.1	12.3	7.6	1.9	-1.3	-1.2
17	0.4	-0.7	0.1	0.2	7.3	12.0	15.8	12.2	8.4	1.6	-2.0	-1.0
18	0.3	-0.6	0.1	0.2	9.0	12.0	15.4	12.1	10.7	1.0	-2.6	-0.6
19	0.3	-0.5	0.1	0.2	11.5	10.5	14.8	14.2	13.1	0.8	-2.7	-0.5
20	0.3	-0.5	0.1	0.2	11.5	8.3	13.5	14.3	11.9	1.2	-2.9	-0.4
21	0.3	-0.5	0.2	0.1	10.8	10.8	12.2	14.3	12.0	1.4	-2.9	-0.4
22	0.3	-0.6	0.2	3.3	12.2	13.6	10.2	15.8	10.4	1.1	-3.5	-0.4
23	0.3	-0.8	0.2	5.0	12.3	13.5	11.4	15.6	9.7	0.8	-4.1	-0.4
24	0.2	-0.8	0.2	5.2	11.7	12.8	10.6	15.0	7.9	0.9	-4.4	-0.4
25	0.3	-0.8	0.2	1.8	11.9	9.6	11.1	14.6	8.2	0.6	-4.3	-0.4
26	0.3	-0.9	0.1	5.9	12.7	8.8	11.6		8.9	0.3	-3.5	-0.3
27	0.3	-0.8	0.1	7.0	13.6	10.4	11.1		8.6	0.8	-2.8	-0.3
28	0.2	-0.7	0.2	7.1	(10.7)	10.4	10.7	(14.5)	8.3	1.9	-3.1	-0.2
29	0.2		0.2	8.1	9.0	11.6	11.6	15.5	9.5	1.6	-5.1	-0.2
30	0.2		0.2		12.9	10.9	11.3	13.3	10.5	1.8	-5.2	-0.2
31	0.1		0.2		14.4		12.1	11.8		2.1		-0.2
Average	0.4	-0.3	-0.4	(1.6)	(8.8)	(11.9)	12.5	(13.4)	10.6	3.0	-(1.4)	-0.9

Skalnaté Pleso

Daily and monthly averages of soil temperature at 20cm depth [°C]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	0.6	0.0	-0.8	0.0	2.0	12.5	10.0	11.6	11.3	9.0	2.6	-1.8
2	0.6	0.0	-0.9	0.0	3.4	10.9	8.2	12.6	10.7	9.0	2.4	-1.6
3	0.7	0.0	-1.0	0.0	3.3	11.7	8.1	12.6	10.8	8.7	2.0	-1.3
4	0.7	0.0	-0.9	0.0	2.8	13.2	8.2	12.6	11.9	8.4	1.7	-1.0
5	0.6	0.0	-1.0	-0.2	2.4	11.7	8.3	12.4	13.2	8.1	2.5	-0.9
6	0.5	0.0	-1.1	-0.1	3.4	13.6	8.2	13.2	13.0	8.3	3.0	-0.9
7	0.4	0.0	-1.2	-0.1	4.6		10.2	13.9	11.1	6.3	2.8	-1.1
8	0.4	0.0	-1.2	-0.3	3.4		13.0	13.5	10.3	5.5	(2.7)	-1.0
9	0.4	0.0	-1.3	-(0.2)	4.6		13.7	12.2	7.9	5.0	2.1	-0.8
10	0.4	0.0	-1.5	-0.1	7.3		13.8	10.9	9.1	4.7	1.6	-0.8
11	0.3	0.0	-1.4	0.0	8.6		14.3	10.8	10.2	1.5	1.2	-0.7
12	0.3	0.0	-1.3	0.0	9.2	10.6	14.4	11.2	11.6	2.7	0.8	-0.7
13	0.3	0.0	-1.1	-(0.1)	8.7	11.1	14.2	10.7	11.9	3.4	0.7	-0.7
14	0.3	0.0	-0.8	0.0	7.6	10.9	15.4	11.2	11.3	3.4	0.7	-0.6
15	0.2	0.0	-0.4	0.0	8.1	10.5	14.7	12.1	10.8	3.1	0.6	-0.6
16	0.3	0.0	-0.1	0.0	6.5	10.9	13.5	11.8	8.6	3.0	0.4	-0.7
17	0.3	-0.3	-0.1	0.0	6.5	10.9	14.0	11.6	8.3	2.9	0.1	-0.7
18	0.3	-0.5	-0.1	0.0	7.5	11.1	14.5	11.3	9.5	2.5	0.0	-0.6
19	0.3	-0.6	-0.1	0.0	9.1	10.5	13.9	12.6	11.4	2.1	-0.3	-0.5
20	0.3	-0.6	-0.1	0.0	9.9	8.6	12.7	13.2	11.4	2.3	-0.5	-0.5
21	0.3	-0.6	0.0	0.0	9.8	9.3	12.3	13.1	11.1	2.4	-0.7	-0.4
22	0.3	-0.7	0.0	1.3	10.0	11.3	10.5	14.0	10.3	2.3	-0.9	-0.3
23	0.2	-0.8	0.0	3.6	10.8	12.2	10.6	14.9	10.0	2.1	-1.3	-0.1
24	0.2	-0.8	0.0	4.1	10.7	11.9	10.7	14.2	8.6	2.0	-1.7	0.0
25	0.2	-0.9	0.0	2.3	10.4	10.1	10.6	14.0	8.0	1.7	-1.9	0.0
26	0.2	-0.9	-0.1	3.2	10.8	9.0	10.8		8.6	1.2	-1.8	0.0
27	0.1	-0.9	0.0	5.2	11.7	9.4	10.9		8.6	1.6	-1.6	0.0
28	0.1	-0.8	0.0	5.5	(10.8)	9.9	10.5	(14.2)	8.4	2.1	-1.4	0.0
29	0.1		0.0	6.2	8.8	10.6	10.9	14.2	8.7	2.3	-2.0	0.0
30	0.1		0.0		10.1	10.4	10.7	13.5	9.5	2.4	-2.6	0.0
31	0.0		0.0		12.3		11.2	12.0		2.4		0.0
Average	0.3	-0.3	-0.5	(1.0)	(7.6)	(10.9)	11.7	(12.6)	10.2	3.9	(0.4)	-0.6

Stará Lesná

Daily and monthly sums of global radiation [J/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	474	856	1416	1045	795	1922	1392	1090	1554	1430	705	280
2	631	918	1412	1470	2163	1225	873	1783	1536	1425	862	505
3	421	832	967	1689	493	2766	1283	1686	1873	1445	849	171
4	558	548	1406	1845	1558	2132	1404	2181	1841	879	613	322
5	539	511	1463	1727	2397	2442	1153	2100	1737	1172	192	255
6	236	230	781	1505	2709	1819	420	1917	1211	1112	781	498
7	362	899	1480	1358	1357	1526	2424	1688	1208	109	737	425
8	188	914	1374	2036	1533	955	2219	652	504	1209	746	274
9	-	1054	1560	1716	2694	1372	2434	2333	967	725	653	198
10	181	970	598	1740	2530	1292	1687	1477	1216	736	556	121
11	162	460	919	1416	2764	1296	2785	1984	1832	345	512	541
12	185	1023	917	491	2501	2810	1376	1326	1491	602	752	98
13	220	1008	1221	1725	1443	1611	2377	1140	1856	1011	734	211
14	254	676	551	774	2188	2126	2305	1984	1369	805	500	244
15	113	1220	1103	739	292	1560	855	1409	1787	614	696	111
16	291	172	386	1335	2104	1387	1452	713	1574	1233	476	430
17	694	329	73	1896	2494	1714	2829	1902	1246	1198	602	56
18	557	405	443	1734	2134	1050	1898	1811	1543	1166	388	467
19	319	223	337	2088	2112	624	2036	1540	1512	1205	161	224
20	359	243	1445	2503	2452	1867	1177	2174	548	138	674	335
21	758	1018	1872	2049	1955	1412	915	2317	1034	574	94	443
22	419	1124	1568	2154	2146	1722	971	1789	534	271	116	222
23	564	1012	1419	1611	1958	1675	2169	1390	523	184	145	545
24	354	931	1963	1357	2346	1499	478	1874	1435	256	711	140
25	481	609	1545	548	2103	1981	670	1487	1540	277	402	506
26	532	1034	454	1999	2940	1629	863	2028	1507	545	368	184
27	782	1331	1693	1943	2708	2208	701	2065	1462	662	419	174
28	729	1296	1477	1611	329	1231	1498	784	1223	743	585	193
29	977		1729	2032	1049	1405	1262	1993	1396	768	556	251
30	884		2028	2059	2902	782	321	1594	1442	821	648	364
31	960		1741		2415		780	1408		620		279
Sum	(14181)	21846	37342	48196	61564	49038	45004	51619	40502	24279	16232	9068

Stará Lesná

Daily and monthly sums of diffuse radiation [J/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	365	565	379	219	156	418	316	221	397	394	172	53
2	414	534	381	329	506	255	165	411	392	389	229	120
3	333	493	230	392	94	622	275	391	482	396	225	18
4	342	319	384	442	360	493	300	530	467	210	152	58
5	366	236	381	388	559	546	222	515	445	314	23	41
6	171	35	248	333	647	389	55	458	288	275	211	123
7	278	206	907	291	292	316	524	414	306	9	201	220
8	132	197	431	449	349	187	488	127	105	537	195	222
9	-	242	423	397	627	276	537	563	227	154	167	139
10	108	233	132	376	579	264	373	354	285	160	134	44
11	84	80	217	319	667	275	627	487	464	53	118	226
12	89	382	533	74	591	619	310	317	383	118	197	22
13	147	223	308	372	325	364	550	272	486	264	193	27
14	117	150	110	154	514	490	529	465	351	198	113	39
15	30	303	271	127	41	344	175	312	474	130	180	8
16	66	69	63	266	479	316	331	145	420	329	99	100
17	190	89	-	409	580	379	682	461	316	316	148	49
18	156	70	55	373	501	218	424	430	407	313	107	406
19	62	38	58	446	494	113	451	362	407	320	33	195
20	249	88	345	573	583	423	267	525	116	12	151	272
21	422	436	479	464	469	316	179	564	256	122	11	276
22	252	407	386	481	496	386	199	519	121	43	13	168
23	336	355	332	361	441	335	502	334	115	21	13	341
24	318	365	485	292	516	323	79	456	382	38	157	115
25	323	205	373	93	453	426	122	361	415	48	85	365
26	385	275	77	426	667	376	173	505	409	110	68	129
27	503	343	454	428	600	497	131	529	401	151	94	121
28	508	340	347	375	40	262	333	174	323	190	149	118
29	566		421	482	211	288	278	497	369	195	142	158
30	571		501	488	648	146	42	395	391	211	143	230
31	572		431		537		144	351		147		223
Sum	(8452)	7275	(10139)	10621	14019	10663	9784	12448	10398	6167	3923	4626

Stará Lesná

Daily and monthly sums of global UVB radiation [mJ/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	23	43	95	123	127	305	197	198	218	163	65	15
2	23	41	98	166	289	183	145	263	216	160	69	23
3	18	42	77	195	60	467	199	277	265	174	63	13
4	20	38	95	201	184	316	197	343	279	130	49	22
5	22	39	105	192	246	414	181	326	243	148	24	18
6	17	30	66	181	297	285	70	308	195	141	57	20
7	19	56	104	196	165	271	391	263	177	13	52	19
8	15	44	108	254	178	141	352	138	91	120	53	10
9	-	50	103	198	363	222	391	359	175	80	50	15
10	13	55	48	228	338	222	290	208	209	81	37	10
11	11	31	86	147	375	201	473	315	250	42	38	25
12	14	53	41	87	368	435	250	219	208	72	45	6
13	14	50	109	220	211	247	408	158	278	81	45	15
14	20	49	55	102	315	327	406	306	198	84	33	17
15	7	63	89	112	45	260	172	223	233	74	42	8
16	17	15	41	193	292	197	265	120	199	99	37	17
17	28	27	11	256	336	258	465	300	178	99	40	6
18	26	32	52	216	296	183	326	304	208	94	36	20
19	18	16	40	277	312	100	360	263	193	97	21	15
20	18	22	126	323	348	270	180	351	80	18	37	17
21	26	68	147	262	246	261	139	360	153	58	11	19
22	22	57	134	284	308	255	174	305	80	28	11	17
23	20	48	130	180	265	314	342	228	74	18	12	27
24	21	48	188	165	373	229	88	310	170	28	29	15
25	26	44	172	77	345	277	117	257	184	24	27	25
26	23	72	56	252	435	247	144	310	178	57	23	17
27	28	84	160	256	437	364	117	315	166	62	25	18
28	37	76	150	199	45	197	265	148	156	60	28	19
29	40		175	274	178	274	213	294	173	64	26	21
30	42		207	271	454	126	60	240	171	66	26	17
31	45		194		376		144	216		55		14
Sum	(672)	1292	3260	6085	8609	7848	7520	8224	5599	2490	1111	518

Stará Lesná

Daily and monthly sums of downward atmospheric radiation [J/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	2178	1914	1909	2647	2682	2682	2549	2940	2532	2573	2587	2555
2	2102	1818	1922	2422	2115	2908	2680	2739	2572	2530	2460	2438
3	2082	2104	2253	2282	2740	2340	2554	2697	2515	2496	2410	2584
4	1905	2338	1991	2359	2203	2507	2715	2486	2646	2813	2534	2648
5	1937	2532	2015	2261	1780	2549	2790	2560	2776	2695	2835	2659
6	2397	2720	2208	2409	1754	2716	3038	2702	2731	2647	2523	2305
7	2510	2458	1767	2704	2604	2868	2583	2902	2668	2886	2467	2372
8	2685	2258	1701	2112	2383	3031	2723	3136	2874	2337	2511	2452
9	2715	2021	1837	2230	2089	2817	2679	2358	2698	2473	2526	2490
10	2715	2108	2329	2201	2319	2744	2991	2512	2730	2460	2380	2595
11	2684	2503	2356	2240	2167	2786	2591	2339	2680	2912	2268	2148
12	2680	2062	2198	2696	2233	2275	2907	2739	2828	2699	2218	2603
13	2604	1923	2493	2012	2561	2707	2652	2800	2576	2355	2268	2653
14	2700	2093	2785	2431	2272	2480	2814	2557	2782	2388	2353	2589
15	2753	1727	2580	2555	2973	2624	3162	2856	2406	2453	2216	2629
16	2544	2438	2838	2307	2185	2498	2819	3087	2391	2030	2358	2430
17	2306	2524	2967	2113	2101	2103	2399	2634	2600	2143	2260	2651
18	2362	2564	2716	2263	2412	2538	2855	2670	2634	2204	2289	2250
19	2561	2576	2561	2152	2448	2709	2743	2856	2753	2311	2440	2329
20	2399	2366	2059	1989	2368	1702	2993	2437	3013	2731	2105	2350
21	2001	1794	1868	2351	2536	2255	2931	2347	2854	2435	2471	2068
22	2155	1765	2117	2311	2510	2510	2807	2791	3051	2580	2538	2395
23	2148	1900	2223	2444	2584	2236	2408	2951	2942	2763	2502	2073
24	2211	1890	2027	2623	2535	2161	3080	2773	2473	2794	2148	2497
25	2070	2102	2224	2817	2363	1708	3039	3014	2439	2779	2368	2291
26	2208	2131	2605	2346	2023	2183	2967	2841	2557	2669	2398	2493
27	2019	2086	1960	2333	2418	2039	3014	2751	2602	2583	2394	2601
28	2052	2055	2213	2557	3057	2706	2749	2973	2623	2295	2273	2612
29	1792		2113	2343	2787	2893	2874	2563	2540	2509	2182	2529
30	1917		2026	2279	2258	3027	3087	2659	2604	2466	2165	2399
31	1837		2246		2560		2959	2643		2600		2453
Sum	71228	60770	69108	70787	74021	75304	87154	84313	80091	78608	71452	76141

Stará Lesná

Daily and monthly sums of long-wave radiation balance [J/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	-292	-549	-763	-506	-409	-851	-943	-498	-769	-758	-399	-197
2	-415	-579	-768	-690	-986	-546	-429	-802	-759	-746	-465	-324
3	-279	-461	-497	-826	-276	-1332	-626	-784	-899	-755	-477	-138
4	-349	-310	-757	-857	-728	-965	-608	-994	-891	-486	-406	-244
5	-366	-293	-748	-767	-1143	-1053	-532	-944	-856	-627	-175	-241
6	-201	-127	-424	-699	-1301	-777	-236	-872	-597	-628	-508	-384
7	-219	-419	-765	-614	-653	-694	-1068	-769	-613	-133	-512	-314
8	-119	-553	-840	-1008	-717	-435	-907	-292	-295	-597	-462	-244
9	-13	-688	-812	-806	-1235	-605	-1029	-1039	-487	-417	-395	-189
10	-120	-571	-345	-853	-1144	-603	-748	-697	-614	-425	-380	-116
11	-130	-265	-469	-698	-1277	-622	-1181	-926	-892	-188	-342	-417
12	-147	-579	-582	-256	-1184	-1268	-609	-629	-739	-360	-484	-86
13	-155	-609	-640	-852	-675	-768	-1030	-514	-889	-531	-498	-154
14	-152	-426	-305	-377	-1014	-984	-1008	-909	-630	-449	-345	-229
15	-90	-743	-493	-391	-156	-879	-368	-633	-876	-381	-451	-154
16	-203	-131	-215	-671	-934	-955	-650	-335	-772	-750	-300	-285
17	-380	-206	-72	-920	-1152	-1386	-1255	-881	-611	-665	-379	-52
18	-298	-219	-197	-836	-971	-996	-861	-832	-777	-656	-253	-378
19	-208	-141	-194	-1021	-975	-469	-846	-717	-750	-649	-113	-191
20	-254	-151	-721	-1226	-1112	-1546	-497	-1038	-321	-105	-431	-240
21	-500	-558	-917	-976	-899	-1171	-388	-1092	-518	-359	-83	-342
22	-316	-571	-779	-1024	-975	-921	-440	-810	-296	-206	-102	-168
23	-350	-509	-730	-751	-888	-1302	-986	-591	-304	-150	-130	-397
24	-211	-509	-977	-640	-1017	-1294	-231	-794	-725	-187	-463	-104
25	-297	-321	-782	-277	-956	-1549	-296	-551	-772	-171	-260	-361
26	-312	-511	-255	-938	-1350	-1133	-402	-906	-745	-320	-231	-150
27	-518	-680	-821	-938	-1226	-1401	-307	-996	-724	-397	-280	-126
28	-445	-644	-707	-782	-157	-735	-673	-397	-617	-403	-418	-163
29	-634		-868	-963	-494	-607	-582	-941	-745	-435	-376	-183
30	-554		-1003	-970	-1258	-347	-157	-768	-731	-464	-464	-254
31	-638		-849		-1058		-357	-705		-359		-188
Sum	-9162	-12322	-19296	-23134	-28321	-28198	-20249	-23657	-20214	-13758	-10583	-7013

Stará Lesná

Daily and monthly sums of radiation balance [J/cm²]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	60	68	445	431	280	776	199	398	513	524	286	132
2	115	70	418	569	805	517	256	681	528	517	341	208
3	108	114	338	633	181	1050	419	643	668	522	328	55
4	138	62	450	691	550	858	523	800	700	341	200	129
5	63	150	504	637	852	1017	414	787	666	415	88	81
6	-1	134	216	575	977	760	141	751	395	366	304	144
7	33	453	121	561	560	636	1040	670	399	13	270	54
8	41	355	324	718	576	365	970	235	120	263	276	-5
9	1	307	491	627	1075	540	1038	874	292	210	278	18
10	75	316	216	618	1042	483	751	503	436	238	138	56
11	54	201	370	476	1098	475	1198	712	703	105	133	108
12	70	225	65	194	966	1146	539	499	560	185	241	51
13	23	263	464	604	577	629	1021	397	696	298	233	89
14	126	178	262	251	818	844	1032	759	499	225	172	81
15	93	302	467	281	88	473	332	543	600	168	239	51
16	149	20	225	485	823	191	560	249	538	310	144	151
17	294	111	97	707	941	47	1173	693	452	369	208	-13
18	250	176	212	671	862	-88	832	694	561	368	85	-55
19	134	83	114	808	860	8	841	635	554	410	7	61
20	5	21	518	938	1007	-14	444	796	188	20	150	-4
21	105	153	656	836	793	23	302	845	347	166	4	43
22	-8	248	563	879	893	527	309	707	168	82	18	15
23	41	216	539	679	806	110	807	550	154	62	35	61
24	7	162	701	564	984	-75	137	762	479	100	253	-13
25	31	129	552	196	842	64	226	673	532	77	129	89
26	10	344	188	823	1125	241	293	839	554	203	127	32
27	43	488	528	802	1093	472	243	809	541	238	147	16
28	94	454	520	670	109	350	568	247	456	288	203	8
29	110		581	809	394	595	486	743	480	268	174	20
30	100		706	787	1224	291	79	562	543	291	200	42
31	98		628		1037		254	452		221		25
Sum	2462	5804	12477	18522	24238	13312	17430	19508	14320	7866	5409	1727

Stará Lesná

Daily and monthly sums of sunshine duration [h]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	5.4	8.5	10.4	2.9	0.6	3.0	0.2	0.5	7.2	10.2	6.3	0.7
2	5.4	7.5	9.5	7.8	9.2	3.4	0.4	7.1	8.5	10.9	8.6	5.0
3	3.4	4.7	2.5	8.8	1.2	13.5	1.4	8.0	10.7	10.9	8.9	0.0
4	7.3	1.5	10.2	9.2	3.9	7.8	3.3	10.1	10.2	3.7	5.3	0.3
5	5.8	2.6	7.3	6.7	10.4	9.7	1.8	8.8	9.1	6.2	0.0	1.6
6	1.9	0.0	0.0	6.6	13.6	8.4	0.0	6.6	4.8	4.3	8.8	5.9
7	0.9	8.5	8.9	4.6	5.8	2.8	11.5	8.7	4.3	0.6	7.8	3.1
8	0.0	8.5	9.3	7.5	6.7	2.0	9.8	0.4	0.0	7.3	8.3	0.1
9	4.3	8.5	10.5	3.9	13.2	0.0	11.5	9.9	6.2	3.8	7.7	0.0
10	4.3	8.1	1.0	9.1	12.7	0.1	6.8	6.1	5.4	1.4	5.1	0.0
11	0.0	0.6	2.8	5.7	14.2	1.0	10.7	7.2	10.3	0.2	4.5	7.0
12	0.0	7.8	9.9	1.4	11.3	13.9	1.9	1.5	7.8	3.4	8.7	0.0
13	0.0	5.3	4.7	6.8	5.2	6.8	11.8	3.4	12.1	6.5	8.7	0.2
14	0.0	3.3	0.4	0.0	8.6	8.9	8.9	9.1	7.7	5.5	3.8	1.0
15	0.0	8.7	4.6	0.6	0.0	3.0	1.6	7.0	11.2	2.3	8.0	0.0
16	0.0	0.0	0.2	2.5	5.9	4.9	1.7	0.8	8.9	10.4	0.5	4.1
17	8.3	0.0	0.0	7.3	10.3	6.7	13.3	7.4	5.9	10.2	4.0	0.0
18	6.6	0.1	0.0	5.9	9.9	2.0	8.3	10.3	9.3	8.5	1.9	6.0
19	0.5	0.0	0.0	11.1	9.3	0.2	8.0	6.2	9.0	8.5	0.0	0.0
20	0.2	0.0	5.5	12.9	8.7	8.4	0.0	12.1	0.0	0.0	5.1	1.6
21	5.9	5.2	10.5	9.6	6.6	4.7	0.5	13.1	3.0	1.9	0.0	4.3
22	1.4	6.9	8.8	11.5	8.6	11.7	0.3	10.1	0.5	0.0	0.0	0.0
23	2.2	3.4	7.8	7.5	9.3	5.3	8.2	7.2	0.2	0.0	0.0	4.4
24	0.2	3.3	11.5	3.9	8.6	3.8	0.0	9.1	8.8	0.0	7.7	0.0
25	1.0	0.0	5.3	0.0	8.4	7.0	0.0	6.0	10.2	0.6	4.4	6.4
26	1.0	6.4	0.6	7.5	14.5	7.4	0.1	11.3	11.4	0.8	1.2	0.2
27	5.2	9.5	7.3	5.8	12.0	10.8	0.4	11.0	11.0	1.8	4.3	0.0
28	6.6	9.6	6.8	4.1	0.0	4.4	2.5	0.2	8.8	5.5	7.6	0.8
29	8.2		10.8	10.3	0.8	0.0	1.1	10.3	8.2	4.6	7.0	1.0
30	8.5		11.8	9.7	14.4	0.8	0.0	6.6	10.5	6.9	7.8	0.8
31	8.5		7.8		12.6		0.0	3.5		3.1		1.2
Sum	103.0	128.5	186.7	191.2	256.5	162.4	126.0	219.6	221.2	140.0	152.0	55.7

Stará Lesná

Daily and monthly averages of air temperature [°C]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	-7.9	-7.8	-2.5	9.2	7.9	16.1	16.0	15.2	12.6	13.0	5.4	0.3
2	-6.6	-9.9	-2.2	7.7	7.2	15.2	8.0	16.7	13.2	11.7	4.4	0.6
3	-9.9	-5.5	-1.0	7.2	6.1	18.9	9.3	15.7	14.5	11.1	3.8	-0.7
4	-13.2	-3.7	-0.8	9.5	3.2	14.4	12.0	15.1	17.1	12.5	5.2	4.2
5	-11.8	0.8	-0.7	6.3	2.5	16.9	12.2	16.0	19.6	12.9	6.9	4.6
6	-3.3	2.2	-3.4	7.2	5.2	15.7	11.9	17.6	13.9	12.0	7.1	-1.2
7	-1.0	2.6	-6.4	12.3	11.3	16.9	17.4	19.8	12.4	7.5	6.3	-1.2
8	0.7	1.1	-6.5	8.1	7.6	16.2	18.2	16.2	10.3	4.1	5.8	-0.6
9	0.5	-1.6	-3.6	3.5	11.6	14.0	19.0	14.0	10.4	3.4	4.5	-1.2
10	1.5	-2.6	-2.4	5.0	14.5	12.0	20.6	10.7	12.9	3.0	0.7	-0.1
11	1.2	0.1	1.4	5.1	14.2	13.0	20.2	11.0	17.5	9.1	-3.2	-4.4
12	1.4	-3.3	4.2	7.6	13.5	15.5	16.1	13.6	18.2	7.9	-1.4	-0.7
13	0.1	-6.7	9.0	3.2	10.8	14.8	18.8	13.3	15.8	3.8	0.2	2.1
14	2.3	-6.5	7.9	1.2	10.5	14.2	22.1	15.2	15.2	2.9	-0.8	2.2
15	2.9	-8.3	6.9	4.1	9.2	15.1	18.2	16.5	12.1	2.2	-1.6	1.5
16	-0.1	-5.1	7.0	4.4	7.7	15.3	15.3	15.7	9.3	0.2	-2.1	-0.3
17	-2.0	-1.4	7.4	5.6	9.7	15.8	18.2	16.2	10.0	1.0	-2.6	-0.6
18	-2.7	0.0	4.6	7.3	12.9	16.7	20.5	16.3	14.6	2.4	-5.0	-2.6
19	0.1	-1.3	-0.1	8.8	13.9	10.2	18.3	18.3	16.6	4.6	-5.0	-5.1
20	-2.6	-6.3	-0.2	9.1	14.8	10.0	16.5	15.5	13.6	3.1	-5.9	-4.2
21	-6.9	-11.1	-0.3	11.9	14.3	13.5	13.8	14.7	14.1	1.4	-4.7	-8.3
22	-7.5	-11.5	2.1	12.3	15.2	13.3	11.9	18.6	13.6	1.3	-2.7	-5.0
23	-7.2	-9.5	3.9	7.9	15.2	16.4	13.2	18.6	11.5	3.7	-2.7	-7.1
24	-8.8	-9.8	4.9	11.0	16.5	14.8	13.5	18.2	9.9	5.4	-3.1	-4.5
25	-10.3	-8.6	5.4	8.4	12.1	10.2	14.0	18.8	10.1	5.7	-3.1	-3.0
26	-6.8	-4.3	2.8	10.9	11.8	10.9	14.1	21.9	12.1	6.8	-3.2	-3.0
27	-6.5	-0.7	-0.4	11.0	17.9	13.4	13.7	22.1	12.7	5.6	-2.3	-0.8
28	-6.6	-1.9	3.1	12.5	11.4	14.8	14.2	15.1	10.9	-3.9	-1.1	0.2
29	-8.8		4.8	11.7	11.5	16.2	15.3	16.7	12.0	4.7	-4.6	-1.2
30	-7.6		5.6	10.3	14.5	13.8	12.4	15.4	12.8	4.3	-2.8	-2.3
31	-7.5		7.3		17.6		13.3	13.4		5.2		-2.4
Average	-4.3	-4.3	1.9	8.0	11.4	14.5	15.4	16.2	13.3	5.4	-0.3	-1.4

Stará Lesná

Daily and monthly averages of relative air humidity [%]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	82	52	59	66	77	74	77	86	76	62	85	89
2	80	68	63	67	64	80	87	76	76	70	84	88
3	76	74	70	61	77	69	83	77	75	68	81	95
4	78	76	71	56	69	70	83	74	71	74	75	84
5	80	88	72	66	59	75	82	75	66	74	75	75
6	72	98	68	69	50	79	86	74	80	73	61	74
7	92	80	63	69	59	79	68	75	78	84	55	83
8	98	57	63	45	68	83	76	89	85	82	77	78
9	98	50	60	56	56	85	80	76	79	82	81	78
10	98	61	79	54	56	80	73	79	81	80	81	92
11	98	84	78	64	46	71	71	76	74	92	78	84
12	98	46	69	76	51	52	79	81	76	81	70	96
13	96	60	52	70	63	66	73	86	73	78	68	94
14	98	49	75	82	65	65	64	79	81	73	83	87
15	92	43	85	64	88	66	83	83	74	72	83	90
16	92	70	87	65	66	79	79	86	78	67	87	88
17	91	91	90	56	66	81	64	76	82	69	87	96
18	90	89	93	54	66	81	61	78	72	70	94	83
19	96	90	90	56	66	89	79	74	74	69	94	84
20	84	84	71	41	62	79	82	70	86	88	92	83
21	76	80	72	44	65	77	89	70	81	82	94	85
22	72	77	70	48	64	79	84	76	84	81	95	91
23	75	75	71	44	70	83	75	85	81	91	93	88
24	73	77	67	64	71	79	88	84	76	84	89	93
25	75	77	72	78	64	72	90	84	76	88	93	86
26	86	82	83	58	53	64	89	75	75	83	95	90
27	75	82	75	47	53	60	90	64	76	82	90	97
28	71	80	71	47	89	64	85	84	75	66	78	94
29	72		65	52	84	77	84	78	64	81	85	90
30	61		62	63	66	89	91	77	70	82	83	87
31	55		47		63		88	76		82		88
Average	83	73	71	59	65	75	80	78	77	78	83	87

Stará Lesná

Daily and monthly averages of atmospheric pressure [hPa]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	915.9	924.6	931.6	925.2	913.4	925.0	922.6	919.0	923.3	930.9	927.1	927.0
2	916.4	924.5	933.6	925.5	915.0	927.7	915.1	923.0	922.4	929.0	926.6	919.7
3	919.3	925.5	933.1	922.5	913.1	930.0	910.9	924.6	923.7	928.3	923.8	917.3
4	922.3	925.4	931.4	919.1	918.6	927.4	914.6	923.1	923.5	927.0	922.3	910.7
5	921.3	921.2	923.0	925.6	924.9	922.9	916.2	922.1	922.5	926.1	923.5	904.4
6	917.9	923.4	921.1	927.5	928.7	920.9	915.3	920.3	926.2	922.4	927.0	912.8
7	920.9	923.7	932.1	920.9	921.3	919.2	919.4	916.7	920.4	912.6	929.4	911.2
8	921.5	920.5	933.3	912.5	925.8	916.1	921.2	916.0	915.9	911.9	930.1	914.5
9	921.3	923.6	925.9	918.1	931.2	915.2	925.6	919.8	918.3	918.1	927.9	918.3
10	923.5	924.4	922.5	918.1	929.8	917.7	925.8	923.1	923.7	920.2	927.7	915.7
11	920.3	913.6	921.9	920.8	926.0	918.8	923.0	923.5	923.4	919.0	933.3	922.5
12	918.1	914.7	923.9	914.2	921.6	920.0	924.7	921.4	920.8	918.0	937.3	919.3
13	914.8	920.5	919.1	914.1	921.7	922.2	922.1	918.2	921.4	924.1	936.8	917.6
14	916.0	918.6	923.2	915.0	921.6	922.8	920.8	918.5	921.8	930.1	931.6	917.9
15	919.0	915.7	925.3	920.7	917.3	924.1	921.2	919.9	924.2	931.4	926.6	916.0
16	927.4	913.7	924.3	925.3	922.1	924.0	920.5	922.6	925.4	933.8	928.0	903.1
17	927.8	913.4	915.4	927.9	925.1	922.8	916.2	925.0	924.4	929.7	927.7	892.7
18	924.8	915.3	916.3	927.4	925.7	917.6	914.7	925.2	919.0	923.7	926.7	909.3
19	922.0	916.6	924.1	924.0	925.2	916.4	915.8	923.9	918.3	922.1	928.5	919.7
20	921.3	918.3	930.2	924.9	925.2	920.4	909.1	926.3	924.7	924.7	927.5	914.5
21	925.8	919.5	934.6	924.3	925.8	923.4	907.4	928.3	926.2	929.3	926.4	913.5
22	926.4	917.8	935.3	922.0	925.7	920.7	910.6	927.2	923.9	930.4	926.9	921.4
23	918.9	922.7	933.9	878.8	928.7	922.7	915.4	927.9	923.8	929.1	932.8	924.2
24	919.0	927.0	930.7	921.4	928.1	920.8	913.9	926.2	925.1	927.6	935.3	919.3
25	914.7	928.6	921.8	923.4	929.3	923.1	914.4	925.7	928.4	926.3	935.1	928.8
26	911.6	926.1	915.0	923.4	927.1	924.7	919.3	925.4	930.9	927.6	878.3	936.2
27	918.6	921.1	919.3	922.8	922.0	924.9	922.3	923.9	932.5	929.1	899.7	936.7
28	925.7	925.1	916.4	921.3	920.1	920.0	922.6	926.4	933.3	845.2	913.4	931.8
29	924.1		919.7	920.2	923.1	917.7	919.4	923.0	931.8	931.4	928.9	920.9
30	922.2		921.7	916.5	928.1	916.2	914.7	921.6	932.2	928.8	927.3	910.3
31	925.2		924.6		925.7		915.3	923.1		927.4		915.2
Average	920.8	920.9	925.3	920.1	923.8	921.5	917.7	922.9	924.4	923.1	925.8	917.5

Stará Lesná

Daily and monthly averages of soil temperature at 2cm depth [°C]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	0.8	-1.2	-1.1	5.8	11.0	17.7	18.2	17.9	18.1	14.3	7.3	0.0
2	0.9	-1.3	-1.2	6.4	10.8	16.9	16.4	18.9	17.9	14.1	6.6	0.3
3	0.5	-1.1	-0.8	6.5	10.1	17.7	15.9	18.9	18.1	13.6	6.0	1.0
4	0.3	-0.5	-1.0	6.8	9.7	17.5	16.5	19.3	18.4	13.9	5.7	1.7
5	0.0	-0.2	-0.8	7.6	9.5	19.3	16.7	19.6	18.7	13.9	6.6	2.4
6	-0.1	0.0	-0.4	7.4	9.7	18.6	16.1	19.9	18.5	13.5	6.3	1.0
7	0.0	-0.2	-0.7	8.8	10.7	18.4	17.8	20.1	17.3	11.9	5.5	0.7
8	0.4	-0.4	-1.0	8.2	10.0	18.2	19.2	19.7	16.7	10.8	5.7	1.0
9	0.5	-0.5	-1.1	6.5	10.8	18.2	20.4	19.5	16.3	10.9	5.3	0.9
10	0.6	-0.8	-0.9	5.0	12.0	18.0	20.6	18.6	16.8	9.5	5.1	1.5
11	0.6	-0.7	-0.8	7.0	12.8	18.0	21.4	17.9	17.3	10.4	4.2	0.7
12	0.8	-0.2	-0.3	5.5	13.1	18.5	21.0	18.2	17.9	11.0	3.5	0.2
13	0.9	-0.7	-0.7	6.8	12.9	18.1	21.0	17.8	17.6	9.8	3.2	0.5
14	1.0	-0.9	-0.4	6.1	12.9	18.3	21.4	18.5	17.4	9.1	2.5	0.8
15	1.1	-1.6	-0.4	6.4	12.5	18.2	20.7	18.6	17.3	8.8	2.1	1.2
16	0.7	-1.3	-0.4	7.1	12.1	18.2	20.3	18.2	16.1	7.9	2.1	0.5
17	0.3	-0.7	-0.4	7.0	12.7	18.3	20.6	19.1	15.8	7.5	2.2	1.2
18	-0.2	-0.5	-0.1	7.6	13.6	18.3	20.3	19.1	15.9	7.1	1.4	1.4
19	-0.3	-0.2	0.0	8.3	14.0	17.2	20.7	19.0	16.7	7.3	2.0	1.0
20	-0.2	-0.2	0.2	8.9	14.5	16.7	19.0	19.3	16.2	7.6	1.6	1.3
21	0.0	-0.8	-0.2	9.7	14.4	17.3	18.9	19.0	16.5	7.4	1.4	1.0
22	-0.1	-1.4	0.1	10.4	14.9	17.9	18.5	19.6	16.5	6.4	1.8	1.0
23	-0.1	-1.4	0.3	6.2	14.9	19.0	18.8	19.7	16.0	7.0	2.1	0.9
24	-0.2	-1.3	1.0	10.9	15.8	19.2	18.4	19.3	15.5	7.4	1.2	1.2
25	-0.4	-1.5	1.9	10.1	15.4	18.4	18.1	19.2	14.8	7.5	0.9	1.5
26	-0.2	-1.3	2.4	10.9	15.3	17.8	18.0	20.1	15.0	7.6	1.6	1.0
27	-0.3	-1.1	2.9	11.1	16.2	18.1	17.9	20.4	15.0	7.6	1.6	1.1
28	-0.6	-1.1	3.1	11.1	14.7	17.2	18.3	19.5	14.9	-1.6	0.8	1.4
29	-0.7		3.6	11.4	14.8	18.1	18.7	19.3	14.4	7.3	0.2	1.3
30	-0.6		4.0	11.3	16.1	17.2	17.6	18.9	14.6	7.4	-0.1	0.9
31	-1.0		4.6		17.2		17.4	18.9		7.1		0.5
Average	0.1	-0.8	0.4	8.1	13.1	18.0	18.9	19.1	16.6	9.2	3.2	1.0

Stará Lesná

Daily and monthly averages of soil temperature at 20cm depth [°C]

Year 2011

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	1.5	-0.3	-0.7	4.8	10.7	16.3	17.5	17.4	18.3	14.7	8.0	1.1
2	1.5	-0.4	-0.6	5.4	10.2	16.3	16.4	18.0	18.1	14.5	7.5	1.3
3	1.2	-0.3	-0.5	5.7	10.2	16.2	16.2	18.2	18.0	14.2	7.0	1.7
4	1.1	0.0	-0.6	5.8	9.6	16.4	16.1	18.4	18.1	14.2	6.6	2.0
5	0.8	0.2	-0.4	6.6	9.5	17.9	16.3	18.7	18.3	14.2	7.1	2.6
6	0.6	0.2	-0.2	6.6	9.5	17.8	16.2	19.0	18.4	14.0	7.0	2.2
7	0.7	0.1	-0.4	7.4	9.9	17.5	16.5	19.2	17.7	13.4	6.5	1.7
8	1.0	0.0	-0.4	7.5	9.6	17.5	17.8	19.3	17.4	12.0	6.5	1.7
9	1.1	0.0	-0.4	5.1	9.9	17.4	18.6	18.9	16.8	12.0	6.3	1.7
10	1.1	-0.1	-0.4	4.4	10.7	17.4	19.2	18.7	16.8	10.9	6.1	2.2
11	1.0	-0.2	-0.5	4.9	11.5	17.5	19.5	18.0	16.9	10.8	5.7	1.8
12	1.2	0.2	-0.4	4.9	11.8	17.4	20.0	18.1	17.3	11.3	5.1	1.2
13	1.2	0.2	-0.6	5.8	12.1	17.5	19.8	17.9	17.4	10.8	4.7	1.2
14	1.3	-0.1	-0.4	6.3	11.9	17.5	20.0	18.0	17.2	10.4	4.0	1.3
15	1.4	-0.2	-0.3	6.3	12.2	17.5	20.0	18.2	17.3	10.1	3.6	1.6
16	1.2	-0.4	-0.3	6.6	11.6	17.5	19.6	18.1	16.8	9.4	3.3	1.4
17	1.0	-0.2	-0.5	6.6	11.8	17.5	19.6	18.3	16.4	8.9	3.4	1.7
18	0.5	-0.2	-0.4	6.9	12.5	17.6	19.6	18.5	16.1	8.4	2.9	1.8
19	0.4	-0.1	-0.1	7.5	12.8	17.3	19.6	18.6	16.5	8.3	3.0	1.6
20	0.5	0.1	-0.1	8.0	13.1	16.6	19.2	18.7	16.4	8.5	2.8	1.9
21	0.6	-0.2	-0.2	8.5	13.3	16.8	18.9	18.5	16.4	8.4	2.4	1.8
22	0.6	-0.4	-0.2	9.1	13.6	17.3	18.5	18.7	16.5	7.7	2.6	1.7
23	0.6	-0.4	0.0	5.1	13.8	18.0	18.3	19.1	16.3	7.9	2.9	1.6
24	0.5	-0.5	0.6	10.0	14.2	18.4	18.5	19.0	15.8	8.0	2.5	1.9
25	0.2	-0.6	1.3	9.7	14.6	18.0	18.1	18.7	15.4	8.0	2.2	2.1
26	0.4	-0.5	2.1	9.8	14.4	17.7	17.8	19.1	15.3	8.0	2.5	1.7
27	0.3	-0.5	2.3	10.2	14.8	17.5	17.8	19.5	15.2	8.2	2.6	1.6
28	0.1	-0.7	2.5	10.3	14.9	17.3	17.7	19.4	15.3	-1.0	2.0	1.8
29	0.0		2.9	10.5	14.2	17.3	18.1	18.9	14.8	8.0	1.6	1.7
30	0.1		3.4	10.5	14.7	17.2	17.8	18.8	14.8	8.1	1.2	1.5
31	-0.1		3.9		15.7		17.2	18.8		7.8		1.1
Average	0.8	-0.2	0.3	7.2	12.2	17.3	18.3	18.6	16.7	10.0	4.3	1.7

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