

Slovenský hydrometeorologický ústav



**ROČENKA MERANÍ RADIČNÝCH
TOKOV V ATMOSFÉRE
2016**

Aerologické a radiačné centrum SHMÚ, Poprad-Gánovce

A. Pribullová, N. Jakubeková: Ročenka meraní radiačných tokov v atmosfére 2016, SHMÚ 2023, ISBN 978-80-99929-44-0

Predhovor

Ročenka predstavuje súbor kompletných hodinových údajov meraných radiačných prvkov v pravom slnečnom čase. Podkladom pre vytvorenie tohto súboru sú merania na piatich meteorologických staniciach s rozšíreným programom na meranie radiačných tokov v atmosfére .

Všetky merania krátkovlnných radiačných tokov (priame, globálne, rozptýlené, odrazené slnečné žiarenie) sú prostredníctvom referenčného pyrliometra naviazané na svetovú rádiometrickú referenciu WRR (World radiation reference). Merania dlhovlnných radiačných tokov (vyžarovanie zemského povrchu, spätné žiarenie atmosféry) sú prostredníctvom referenčného pyrgeometra naviazané na svetovú referenciu pre meranie dlhovlnného žiarenia WISG (World Infrared Standard Group).

V tabuľkách sú prezentované denné sumy a pre jednotlivé mesiace priemerné hodinové sumy globálneho, rozptýleného (difúzneho), priameho, fotosynteticky aktívneho žiarenia, radiačnej bilancie a priemerné hodnoty albeda povrchu. Každá tabuľka obsahuje informácie o snímači prezentovaného prvku, systéme na ukladanie dát a prípadných ďalších použitých podporných zariadeniach (napr. tieniace zariadenie, zariadenie na sledovanie polohy slnka). Symboly +/- zodpovedajú maximálnej/minimálnej dennej hodnote v každom mesiaci.

Autori

Prehľad meteorologických staníc s rozšíreným programom na meranie radiačných tokov v atmosfére

| Stanica | WMO indikatív/ súradnice | Meraný radiačný prvok |
|--------------------|--|---------------------------------|
| Bratislava-Koliba | 11813 48,17 S z. š., 17,10 V z. d., 287 m n. m. | GLO, DIF |
| Hurbanovo | 11858 47,87 S z. š., 18,19 V z. d., 115 m n. m. | GLO |
| Banská Bystrica | 11898 48,73 S z. š., 19,12 V z. d., 427 m n. m. | GLO, DIF, FAR |
| ARC Gánovce | 11952 49,03 S z. š., 20,32 V z. d., 703 m n. m. | GLO, DIF, DIR, FAR, BIL, ALB |
| Trebišov-Milhostov | 11978 48,66 S z. š., 21,72 V z. d., 105 m n. m. | GLO, DIF, FAR |

VYSVETLIVKY:

GLO – globálne slnečné žiarenie, DIF – difúzne (rozptýlené) slnečné žiarenie, FAR – fotosynteticky aktívne žiarenie, BIL – radiačná bilancia, DIR– priame slnečné žiarenie, ALB– albedo povrchu

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Globálne slnečné žiarenie

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

Stanica : 11898 **Banská Bystrica** **2016**
 Nadm. výška : 427 m n.m. Globálne žiarenie [J cm⁻²]
 Zem. šírka : 48 ° 44 ' 1 " *****
 Zem. dĺžka : 19 ° 7 ' 1 "

| | | | |
|-------------|---------|-------|-------------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CMP21 | 140315 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | | |
|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-----|-----|
| 1 | 442 | 414 | 310 | 1515 | 1414 | 1896 | 2496 | 1990 | 2168 | + | 1183 | + | 741 | 258 | |
| 2 | 177 | 362 | 1063 | 1961 | 1336 | 1239 | - | 2998 | + | 2545 | 1238 | 917 | 447 | 415 | |
| 3 | 521 | 263 | 459 | 1963 | 1277 | 2429 | 1445 | 2569 | 1805 | 464 | 604 | 503 | | | |
| 4 | 123 | 502 | 1202 | 1856 | 2083 | 2343 | 2959 | 2255 | 1825 | 296 | 493 | 537 | | | |
| 5 | 229 | 868 | 506 | 1949 | 2014 | 1979 | 2361 | 1967 | 707 | 865 | 171 | 494 | | | |
| 6 | 370 | 506 | 104 | - | 1861 | 2204 | 2900 | 2109 | 1059 | 532 | 689 | 77 | 531 | | |
| 7 | 515 | 149 | 558 | 1556 | 2402 | 3077 | + | 2983 | 2658 | + | 1951 | 827 | 592 | 340 | |
| 8 | 364 | 78 | 636 | 666 | 2035 | 2877 | 2505 | 2598 | 1930 | 851 | 484 | 362 | | | |
| 9 | 70 | 422 | 1506 | 423 | 2030 | 1717 | 2180 | 2213 | 1878 | 756 | 771 | + | 452 | | |
| 10 | 182 | 50 | - | 1426 | 956 | 1867 | 2084 | 2962 | 320 | 1903 | 904 | 148 | 282 | | |
| 11 | 50 | - | 398 | 1307 | 1910 | 1519 | 1280 | 2703 | 2257 | 1861 | 207 | 99 | 182 | | |
| 12 | 298 | 336 | 581 | 1118 | 2119 | 1396 | 1975 | 1988 | 1809 | 1064 | 190 | 408 | | | |
| 13 | 198 | 91 | 843 | 1528 | 902 | - | 1676 | 2301 | 1645 | 1648 | 634 | 765 | 493 | | |
| 14 | 488 | 213 | 1698 | 626 | 1276 | 2770 | 1011 | 2202 | 1765 | 566 | 628 | 165 | | | |
| 15 | 252 | 136 | 482 | 1925 | 1678 | 1640 | 2463 | 1970 | 1735 | 1027 | 669 | 479 | | | |
| 16 | 632 | 408 | 598 | 1588 | 2574 | 1785 | 410 | 1494 | 1545 | 585 | 197 | 459 | | | |
| 17 | 648 | 173 | 1736 | 1805 | 1482 | 2241 | 374 | - | 1566 | 205 | - | 171 | 127 | 416 | |
| 18 | 624 | 246 | 1646 | 1377 | 1668 | 3020 | 1778 | 1720 | 1289 | 143 | 32 | - | 111 | | |
| 19 | 281 | 157 | 1546 | 2449 | 1990 | 2244 | 1645 | 1403 | 1525 | 105 | 111 | 142 | | | |
| 20 | 269 | 654 | 927 | 2007 | 1858 | 2268 | 2383 | 2021 | 1639 | 74 | - | 54 | 194 | | |
| 21 | 533 | 245 | 885 | 2501 | 2038 | 2841 | 2771 | 634 | 969 | 95 | 465 | 143 | | | |
| 22 | 701 | + | 978 | 1071 | 2282 | 2776 | + | 2892 | 2036 | 302 | - | 1521 | 1116 | 583 | 252 |
| 23 | 475 | 286 | 1035 | 902 | 2704 | 3011 | 2280 | 2371 | 1477 | 505 | 544 | 356 | | | |
| 24 | 427 | 861 | 1909 | + | 926 | 1035 | 2850 | 1513 | 2129 | 1222 | 108 | 104 | 101 | | |
| 25 | 254 | 356 | 1282 | 1276 | 2488 | 2621 | 1418 | 2318 | 1284 | 182 | 57 | 115 | | | |
| 26 | 306 | 1302 | + | 871 | 1887 | 2582 | 2375 | 1902 | 2304 | 1193 | 1017 | 211 | 177 | | |
| 27 | 342 | 678 | 1007 | 171 | - | 2553 | 1453 | 1801 | 2274 | 1551 | 579 | 340 | 76 | - | |
| 28 | 327 | 283 | 1195 | 1997 | 2328 | 2746 | 1023 | 2227 | 1202 | 828 | 533 | 455 | | | |
| 29 | 596 | | 1425 | 2523 | 1739 | 2924 | 2362 | 1656 | 1377 | 409 | 257 | 538 | | | |
| 30 | 124 | | 953 | 2602 | + | 2596 | 2897 | 2546 | 1971 | 1449 | 715 | 289 | 521 | | |
| 31 | 426 | | 1766 | | | 2756 | | 1603 | 2200 | | 737 | | 541 | + | |
| Suma | 11246 | 11417 | 32532 | 48106 | 61322 | 69471 | 63294 | 58827 | 44201 | 18620 | 10780 | 10500 | | | |
| Priemer | 363 | 408 | 1049 | 1604 | 1978 | 2316 | 2042 | 1898 | 1473 | 601 | 359 | 339 | | | |
| Ročná suma | 440316 | | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESIACHOCH

Stanica : 11898 **Banská Bystrica**

2016

| | | | |
|-------------|---------|-------|--------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CMP21 | 140315 |

Nadm. výška : 427 m n.m.
 Zem. šírka : 48° 44' 1"
 Zem. dĺžka : 19° 7' 1"

Globálne žiarenie [J cm⁻²]

| | | | |
|-----------|---------|-----|-------------|
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | 0 | 0 | 1 | 14 | 34 | 55 | 68 | 72 | 63 | 39 | 15 | 2 | 0 | 0 | | | | | |
| II | | | | | | 0 | 0 | 8 | 23 | 44 | 56 | 64 | 62 | 63 | 45 | 24 | 7 | 1 | 0 | | | | | |
| III | | | | | 0 | 1 | 10 | 42 | 82 | 122 | 140 | 151 | 134 | 133 | 107 | 77 | 40 | 9 | 0 | 0 | | | | |
| IV | | | | 0 | 0 | 9 | 43 | 87 | 134 | 174 | 205 | 213 | 204 | 172 | 142 | 109 | 74 | 32 | 7 | 0 | 0 | | | |
| V | | 0 | 0 | 0 | 3 | 26 | 71 | 119 | 160 | 195 | 218 | 220 | 227 | 211 | 167 | 148 | 115 | 66 | 25 | 4 | 0 | 0 | | |
| VI | | 0 | 0 | 1 | 9 | 41 | 87 | 136 | 190 | 233 | 249 | 258 | 255 | 241 | 204 | 162 | 125 | 83 | 36 | 8 | 0 | 0 | 0 | |
| VII | | 0 | 0 | 0 | 6 | 34 | 78 | 133 | 168 | 203 | 222 | 237 | 226 | 205 | 170 | 142 | 114 | 72 | 27 | 4 | 0 | 0 | 0 | |
| VIII | | | 0 | 0 | 1 | 15 | 52 | 103 | 156 | 195 | 216 | 228 | 228 | 201 | 172 | 145 | 115 | 59 | 12 | 1 | 0 | 0 | | |
| IX | | | | 0 | 0 | 2 | 22 | 64 | 115 | 165 | 194 | 199 | 185 | 177 | 156 | 114 | 60 | 17 | 2 | 0 | | | | |
| X | | | | | 0 | 0 | 2 | 16 | 35 | 65 | 87 | 108 | 98 | 79 | 59 | 37 | 13 | 1 | 0 | 0 | | | | |
| XI | | | | | | 0 | 0 | 3 | 19 | 43 | 64 | 65 | 60 | 53 | 36 | 14 | 2 | 0 | 0 | | | | | |
| XII | | | | | | | 0 | 1 | 12 | 34 | 55 | 68 | 70 | 54 | 35 | 10 | 1 | 0 | | | | | | |

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

Stanica : 11813 **Bratislava Koliba** **2016**
 Nadm. výška : 287 m n.m. Globálne žiarenie [J cm⁻²]
 Zem. šírka : 48 ° 10 ' 4 " *****
 Zem. dĺžka : 17 ° 6 ' 21 "

| | | | |
|-------------|----------|---------|-------------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CM21 | 930120 |
| dataloger | výrobca | typ | vzorkovanie |
| | Physicus | Easylog | 10 s |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | | |
|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-----|-----|-----|
| 1 | 169 | 331 | 214 | - | 1254 | 1279 | 2211 | 2620 | 2412 | 2187 | + | 1463 | + | 578 | 173 |
| 2 | 59 | - | 231 | 886 | 1795 | 1265 | 1931 | 886 | 2726 | + | 1808 | 630 | 331 | 412 | |
| 3 | 146 | 126 | 423 | 1938 | 1992 | 2351 | 1021 | 2274 | 1884 | 813 | 824 | 556 | | | |
| 4 | 77 | 639 | 694 | 1828 | 1425 | 2442 | 2936 | + | 2484 | 1855 | 366 | 566 | 381 | | |
| 5 | 266 | 663 | 898 | 1959 | 2383 | 1290 | 2500 | 1789 | 994 | 861 | 427 | 469 | | | |
| 6 | 108 | 881 | 934 | 1924 | 2500 | 2579 | 2640 | 2415 | 612 | - | 369 | 140 | 471 | | |
| 7 | 605 | 895 | 234 | 1427 | 2480 | 3014 | + | 2932 | 2591 | 1913 | 1391 | 354 | 530 | | |
| 8 | 512 | 391 | 748 | 482 | 2648 | 2953 | 2720 | 2655 | 1881 | 1239 | 242 | 108 | | | |
| 9 | 100 | 542 | 1169 | 487 | 2772 | 2258 | 1994 | 1933 | 1960 | 816 | 834 | + | 394 | | |
| 10 | 317 | 163 | 1558 | 977 | 2040 | 2384 | 2882 | 452 | - | 1941 | 646 | 393 | 465 | | |
| 11 | 153 | 818 | 1040 | 1601 | 1654 | 1849 | 2574 | 2363 | 1800 | 327 | 159 | 434 | | | |
| 12 | 251 | 724 | 852 | 1795 | 414 | - | 1443 | 2064 | 1619 | 1821 | 796 | 142 | 144 | | |
| 13 | 342 | 287 | 742 | 2202 | 943 | 1892 | 1898 | 1495 | 1792 | 411 | 799 | 481 | | | |
| 14 | 586 | 284 | 1713 | 804 | 1607 | 2438 | 2089 | 2516 | 1778 | 453 | 718 | 138 | | | |
| 15 | 332 | 203 | 788 | 1555 | 1767 | 1285 | 2546 | 1948 | 1801 | 833 | 655 | 430 | | | |
| 16 | 562 | 550 | 484 | 2223 | 1965 | 1940 | 590 | - | 1829 | 1563 | 921 | 87 | - | 166 | |
| 17 | 649 | 102 | 1696 | 1858 | 1648 | 2117 | 886 | 2376 | 941 | 168 | 132 | 168 | | | |
| 18 | 650 | 79 | - | 1732 | 1031 | 2046 | 1958 | 2218 | 1907 | 1085 | 182 | 342 | 140 | | |
| 19 | 447 | 137 | 834 | 2120 | 2491 | 2262 | 2188 | 1794 | 1451 | 315 | 326 | 68 | | | |
| 20 | 443 | 1092 | 1068 | 2544 | 2065 | 1416 | 2586 | 1969 | 1716 | 149 | - | 309 | 45 | | |
| 21 | 633 | 334 | 932 | 2500 | 2899 | + | 2461 | 2379 | 652 | 1516 | 369 | 501 | 54 | | |
| 22 | 670 | + | 841 | 1061 | 2476 | 2898 | 3007 | 2052 | 747 | 1790 | 1077 | 591 | 43 | - | |
| 23 | 233 | 502 | 836 | 1071 | 2818 | 2939 | 2022 | 2408 | 1590 | 241 | 447 | 258 | | | |
| 24 | 333 | 936 | 1534 | 1340 | 1466 | 2884 | 2454 | 2124 | 1521 | 485 | 132 | 114 | | | |
| 25 | 122 | 250 | 1096 | 1733 | 2734 | 2820 | 2368 | 2307 | 1497 | 405 | 119 | 94 | | | |
| 26 | 337 | 1353 | + | 468 | 2405 | 2744 | 2062 | 2570 | 2343 | 1485 | 808 | 495 | 196 | | |
| 27 | 394 | 825 | 1950 | + | 367 | - | 2321 | 1032 | - | 1889 | 2278 | 1582 | 695 | 350 | 296 |
| 28 | 338 | 461 | 1415 | 1739 | 2642 | 3010 | 1327 | 2242 | 1329 | 917 | 475 | 595 | | | |
| 29 | 349 | 118 | 1129 | 2428 | 2605 | 2959 | 2526 | 1160 | 1444 | 403 | 582 | 579 | | | |
| 30 | 239 | 1091 | 2694 | + | 2493 | 2555 | 2734 | 2105 | 1531 | 399 | 426 | 561 | | | |
| 31 | 560 | 1946 | 2403 | | | | 2246 | 2243 | 877 | | | 696 | + | | |
| Suma | 10983 | 14758 | 32165 | 50556 | 65408 | 67739 | 69107 | 62154 | 48068 | 19825 | 12477 | 9662 | | | |
| Priemer | 354 | 509 | 1038 | 1685 | 2110 | 2258 | 2229 | 2005 | 1602 | 640 | 416 | 312 | | | |
| Ročná suma | 462901 | | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESAČOCH

Stanica : 11813 Bratislava Koliba

2016

| prístroj | výrobca | typ | v.č. |
|-------------|---------|------|--------|
| pyranometer | KZ | CM21 | 930120 |

Nadm. výška : 287 m n.m.
 Zem. šírka : 48 ° 10 ' 4 "
 Zem. dĺžka : 17 ° 6 ' 21 "

Globálne žiarenie [J cm⁻²]

| dataloger | výrobca | typ | vzorkovanie |
|-----------|----------|---------|-------------|
| | Physicus | Easylog | 10 s |

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | | 2 | 18 | 41 | 62 | 68 | 64 | 53 | 35 | 10 | 1 | | | | | | | | |
| II | | | | | | 1 | 8 | 30 | 54 | 81 | 83 | 85 | 73 | 54 | 22 | 8 | 1 | | | | | | | |
| III | | | | | 1 | 10 | 40 | 78 | 107 | 128 | 142 | 147 | 135 | 114 | 81 | 45 | 11 | 1 | | | | | | |
| IV | | | 0 | 0 | 9 | 43 | 91 | 138 | 171 | 196 | 205 | 208 | 197 | 161 | 129 | 86 | 40 | 9 | 0 | 0 | | | | |
| V | | | 0 | 4 | 27 | 65 | 112 | 161 | 192 | 222 | 244 | 256 | 244 | 195 | 158 | 124 | 74 | 29 | 4 | 0 | | | | |
| VI | | | 0 | 9 | 40 | 88 | 130 | 167 | 207 | 238 | 258 | 248 | 236 | 218 | 168 | 124 | 78 | 40 | 9 | 0 | | | | |
| VII | | | 0 | 6 | 33 | 71 | 116 | 164 | 212 | 246 | 256 | 264 | 242 | 210 | 167 | 127 | 75 | 32 | 6 | 0 | | | | |
| VIII | | | 0 | 1 | 17 | 56 | 104 | 158 | 192 | 215 | 240 | 253 | 231 | 200 | 155 | 104 | 60 | 17 | 1 | 0 | | | | |
| IX | | | 0 | 0 | 2 | 23 | 69 | 123 | 169 | 199 | 215 | 223 | 204 | 168 | 116 | 66 | 22 | 2 | 0 | 0 | | | | |
| X | | | | 0 | 0 | 3 | 18 | 41 | 63 | 88 | 103 | 101 | 88 | 76 | 37 | 19 | 3 | 0 | 0 | | | | | |
| XI | | | | | 0 | 0 | 3 | 21 | 47 | 70 | 72 | 70 | 60 | 46 | 16 | 3 | 0 | 0 | | | | | | |
| XII | | | | | | 0 | 1 | 14 | 37 | 51 | 61 | 60 | 46 | 32 | 9 | 1 | 0 | | | | | | | |

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

| | | | | | | | | | |
|-------------|---------|--------------------|-----|-------------------|-----------------------|-------------|---------|-------|-------------|
| Stanica | : 11952 | ARC Gánovce | | 2016 | | prístroj | výrobca | typ | v.č. |
| Nadm. výška | : 703 | m n.m. | | Globálne žiarenie | [J cm ⁻²] | pyranometer | KZ | CMP21 | 140319 |
| Zem. šírka | : 49 ° | 2' | 6" | ***** | | dataloger | výrobca | typ | vzorkovanie |
| Zem. dĺžka | : 20 ° | 19' | 27" | | | | MPS | 6 | 5 s |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|---|
| 1 | 506 | 631 | 214 | - 1058 | 1969 | 1547 | 1353 | 844 | 2100 | + 1467 | + 430 | 347 | |
| 2 | 517 | 502 | 1058 | 2157 | 1518 | 736 | - 1675 | 2178 | 1274 | 1182 | 392 | 221 | |
| 3 | 610 | 354 | 650 | 1999 | 1382 | 1889 | 555 | 1774 | 1800 | 211 | 892 | + 627 | + |
| 4 | 225 | 814 | 599 | 1978 | 1782 | 2786 | 2641 | 2190 | 1782 | 245 | 823 | 566 | |
| 5 | 317 | 581 | 558 | 2033 | 2453 | 2252 | 2184 | 2543 | 356 | - 557 | 625 | 569 | |
| 6 | 345 | 859 | 438 | 1271 | 2667 | 3124 | + 2952 | 354 | - 576 | 325 | 160 | 553 | |
| 7 | 301 | 490 | 410 | 1701 | 2295 | 3087 | + 3143 | + 2607 | 1823 | 611 | 222 | 567 | |
| 8 | 434 | 363 | 764 | 865 | 1900 | 2612 | 2509 | 2688 | + 2035 | 801 | 349 | 333 | |
| 9 | 176 | 536 | 902 | 528 | 2042 | 1717 | 2206 | 2288 | 1971 | 527 | 147 | 518 | |
| 10 | 167 | - 205 | 241 | 304 | 2440 | 2230 | 2910 | 661 | 1974 | 792 | 469 | 223 | |
| 11 | 177 | 1028 | 1057 | 882 | 2480 | 1063 | 2993 | 561 | 1761 | 238 | 368 | 404 | |
| 12 | 414 | 767 | 350 | 1435 | 2642 | 1191 | 3017 | 2075 | 1886 | 222 | 75 | 216 | |
| 13 | 487 | 412 | 482 | 2016 | 782 | 2156 | 2147 | 1757 | 1841 | 255 | 635 | 520 | |
| 14 | 562 | 1036 | 1593 | 606 | 603 | - 2041 | 1250 | 1980 | 1693 | 803 | 218 | 137 | |
| 15 | 339 | 162 | 699 | 1645 | 1321 | 2005 | 2001 | 1602 | 1661 | 1041 | 713 | 214 | |
| 16 | 540 | 136 | - 1149 | 2165 | 1556 | 2060 | 220 | - 1582 | 1542 | 188 | 189 | 542 | |
| 17 | 506 | 552 | 1781 | + 2080 | 2109 | 2159 | 221 | 1132 | 458 | 171 | 247 | 303 | |
| 18 | 654 | 382 | 1631 | 304 | - 1415 | 2683 | 1116 | 1770 | 814 | 630 | 64 | - 158 | |
| 19 | 411 | 169 | 1212 | 2042 | 1738 | 2615 | 1470 | 1861 | 385 | 542 | 349 | 172 | |
| 20 | 576 | 965 | 1322 | 2229 | 2090 | 1953 | 2480 | 1998 | 1719 | 137 | 305 | 390 | |
| 21 | 389 | 438 | 1420 | 2570 | + 2264 | 2960 | 2394 | 1368 | 832 | 127 | - 639 | 134 | - |
| 22 | 717 | 1162 | 1375 | 2386 | 2344 | 2916 | 2736 | 427 | 1136 | 572 | 637 | 223 | |
| 23 | 687 | 513 | 865 | 1246 | 2931 | 2457 | 2464 | 2033 | 1227 | 950 | 627 | 481 | |
| 24 | 377 | 1122 | 1771 | 505 | 2299 | 2631 | 1829 | 2081 | 1119 | 468 | 323 | 271 | |
| 25 | 328 | 474 | 1474 | 1205 | 1668 | 2168 | 1422 | 1943 | 1035 | 690 | 89 | 189 | |
| 26 | 307 | 861 | 703 | 2280 | 2554 | 2765 | 1790 | 2382 | 1597 | 320 | 344 | 282 | |
| 27 | 398 | 1205 | + 917 | 536 | 2589 | 814 | 1621 | 2344 | 1610 | 673 | 311 | 279 | |
| 28 | 309 | 721 | 1691 | 2049 | 1479 | 1598 | 1309 | 2301 | 1309 | 941 | 558 | 464 | |
| 29 | 635 | | 1742 | 1772 | 2632 | 3095 | 1971 | 1791 | 1346 | 889 | 591 | 566 | |
| 30 | 790 | + 1608 | 2294 | 1617 | 2405 | 2202 | 1606 | 1530 | 722 | 317 | 556 | | |
| 31 | 502 | | 1710 | 3061 | + 2096 | 2262 | 1000 | 581 | | | | | |
| Suma | 13703 | 17443 | 32385 | 46142 | 62622 | 65716 | 60877 | 54984 | 42193 | 18297 | 12110 | 11607 | |
| Priemer | 442 | 623 | 1045 | 1538 | 2020 | 2191 | 1964 | 1774 | 1406 | 590 | 404 | 374 | |
| Ročná suma | 438079 | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESAČOCH

| | | | | | | | | | |
|-------------|---------|--------------------|-----|-------------------|-----------------------|-------------|---------|-------|-------------|
| Stanica | : 11952 | ARC Gánovce | | 2016 | | prístroj | výrobca | typ | v.č. |
| | | | | | | pyranometer | KZ | CMP21 | 140319 |
| Nadm. výška | : 703 | m n.m. | | Globálne žiarenie | [J cm ⁻²] | dataloger | výrobca | typ | vzorkovanie |
| Zem. šírka | : 49° | 2' | 6" | ***** | | | MPS | 6 | 5 s |
| Zem. dĺžka | : 20° | 19' | 27" | | | | | | |

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | 0 | 0 | 2 | 17 | 44 | 71 | 84 | 86 | 71 | 47 | 17 | 2 | 0 | 0 | | | | | |
| II | | | | | | 0 | 1 | 10 | 33 | 62 | 92 | 101 | 103 | 91 | 67 | 35 | 10 | 1 | 0 | | | | | |
| III | | | | | 0 | 1 | 12 | 40 | 73 | 106 | 126 | 148 | 150 | 130 | 115 | 87 | 43 | 12 | 1 | 0 | | | | |
| IV | | | 0 | 0 | 0 | 8 | 37 | 81 | 128 | 162 | 189 | 194 | 197 | 181 | 146 | 107 | 68 | 32 | 6 | 0 | 0 | | | |
| V | | 0 | 0 | 0 | 5 | 34 | 81 | 132 | 178 | 204 | 224 | 243 | 216 | 193 | 167 | 136 | 107 | 68 | 27 | 4 | 0 | 0 | 0 | |
| VI | | 0 | 0 | 1 | 11 | 45 | 93 | 140 | 192 | 212 | 247 | 234 | 247 | 208 | 183 | 146 | 117 | 71 | 36 | 9 | 0 | 0 | 0 | |
| VII | | 0 | 0 | 0 | 7 | 34 | 78 | 132 | 180 | 200 | 225 | 235 | 198 | 182 | 155 | 128 | 102 | 72 | 30 | 6 | 0 | 0 | 0 | |
| VIII | | | 0 | 0 | 1 | 15 | 51 | 100 | 146 | 185 | 211 | 199 | 215 | 202 | 162 | 133 | 88 | 49 | 13 | 1 | 0 | 0 | | |
| IX | | | | 0 | 0 | 2 | 24 | 67 | 113 | 159 | 188 | 187 | 189 | 167 | 136 | 96 | 58 | 20 | 2 | 0 | 0 | | | |
| X | | | | | 0 | 0 | 2 | 15 | 38 | 62 | 74 | 87 | 98 | 88 | 68 | 43 | 15 | 1 | 0 | 0 | | | | |
| XI | | | | | | 0 | 0 | 3 | 21 | 46 | 66 | 75 | 68 | 59 | 43 | 20 | 3 | 0 | 0 | | | | | |
| XII | | | | | | | 0 | 1 | 13 | 40 | 62 | 73 | 73 | 60 | 38 | 13 | 1 | 0 | | | | | | |

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

Stanica : 11858 **Hurbanovo** **2016**
 Nadm. výška : 115 m n.m. Globálne žiarenie [J cm⁻²]
 Zem. šírka : 47 ° 52 ' 21 " *****
 Zem. dĺžka : 18 ° 11 ' 35 "

| | | | |
|-------------|--------------|------------|--------------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CMP11/CM11 | 70359/840505 |
| dataloger | výrobca | typ | vzorkovanie |
| | Physicus/MPS | Easylog/06 | 10/5 s |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | | |
|-------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------|-----|-----|
| 1 | 130 | 252 | 345 | 1373 | 1317 | 2135 | 2590 | 2268 | 2202 | + | 1392 | + | 516 | 166 | |
| 2 | 183 | 374 | 950 | 1868 | 1612 | 1333 | - | 2768 | 2688 | + | 2015 | 887 | 477 | 340 | |
| 3 | 287 | 218 | 603 | 2023 | 1069 | 2660 | 1658 | 1956 | 1953 | 825 | 856 | 629 | + | | |
| 4 | 177 | 594 | 1210 | 1856 | 1575 | 1693 | 2896 | 2568 | 1729 | 436 | 573 | 567 | | | |
| 5 | 510 | 887 | 975 | 1943 | 1516 | 1469 | 2453 | 2338 | 811 | 1185 | 537 | 447 | | | |
| 6 | 224 | 882 | 816 | 1852 | 2456 | 2902 | 2711 | 2161 | 975 | 430 | 131 | 298 | | | |
| 7 | 567 | 866 | 264 | - | 1690 | 2332 | 3037 | + | 3002 | + | 2675 | 1975 | 1147 | 550 | 580 |
| 8 | 355 | 195 | 598 | 686 | 2520 | 2968 | 2591 | 2639 | 1971 | 1319 | 249 | 197 | | | |
| 9 | 90 | - | 625 | 1314 | 347 | - | 2331 | 2238 | 2052 | 2537 | 1890 | 1033 | 875 | + | 202 |
| 10 | 152 | 189 | 1426 | 717 | 873 | 1861 | 2828 | 467 | 1905 | 1119 | 440 | 320 | | | |
| 11 | 237 | 532 | 1066 | 1379 | 1753 | 1853 | 2765 | 1895 | 1735 | 310 | 387 | 476 | | | |
| 12 | 206 | 596 | 494 | 2013 | 556 | - | 1624 | 2589 | 2351 | 1840 | 460 | 79 | - | 284 | |
| 13 | 471 | 221 | 1017 | 2026 | 1494 | 1996 | 2148 | 1800 | 1618 | 390 | 818 | 562 | | | |
| 14 | 545 | 750 | 1725 | 725 | 882 | 2787 | 1382 | 2479 | 1831 | 482 | 800 | 147 | | | |
| 15 | 298 | 192 | 347 | 1925 | 1583 | 1375 | 2297 | 1981 | 1690 | 818 | 706 | 567 | | | |
| 16 | 636 | 456 | 831 | 2035 | 2242 | 2061 | 326 | - | 2228 | 1664 | 773 | 162 | 473 | | |
| 17 | 664 | 263 | 1636 | 1505 | 1689 | 2433 | 732 | 1965 | 662 | - | 290 | 332 | 531 | | |
| 18 | 679 | 479 | 1704 | 1762 | 2056 | 3009 | 2583 | 1962 | 1255 | 470 | 720 | 179 | | | |
| 19 | 349 | 158 | - | 1058 | 2410 | 2549 | 1915 | 2403 | 1502 | 1618 | 483 | 185 | 127 | | |
| 20 | 576 | 811 | 902 | 2476 | 2311 | 2326 | 2236 | 2097 | 1264 | 101 | - | 617 | 96 | | |
| 21 | 693 | 246 | 1226 | 2473 | 2455 | 3002 | 2654 | 441 | 1584 | 188 | 643 | 69 | | | |
| 22 | 855 | + | 1162 | 1434 | 2391 | 2796 | 2996 | 2379 | 523 | 1666 | 1055 | 664 | 58 | - | |
| 23 | 432 | 329 | 1041 | 1040 | 2693 | 2967 | 1872 | 2371 | 1678 | 954 | 640 | 104 | | | |
| 24 | 282 | 1110 | 1804 | 1250 | 1147 | 2817 | 1680 | 2254 | 1544 | 962 | 491 | 117 | | | |
| 25 | 195 | 326 | 1180 | 1487 | 2671 | 2868 | 1721 | 2329 | 1393 | 432 | 246 | 145 | | | |
| 26 | 245 | 1218 | + | 750 | 2427 | 2823 | + | 2805 | 2551 | 2326 | 1542 | 922 | 452 | 413 | |
| 27 | 410 | 1115 | 1635 | 419 | 2594 | 2135 | 1822 | 2269 | 1539 | 912 | 373 | 423 | | | |
| 28 | 300 | 537 | 1381 | 1235 | 2287 | 2773 | 1434 | 2245 | 1359 | 962 | 602 | 606 | | | |
| 29 | 444 | 206 | 684 | 2673 | + | 2425 | 2968 | 2355 | 1514 | 1562 | 523 | 648 | 597 | | |
| 30 | 609 | | 1310 | 2658 | 2806 | 2671 | 2614 | 0 | - | 1549 | 543 | 446 | 584 | | |
| 31 | 337 | | 1875 | + | 2700 | | 2007 | 2208 | | 1073 | | 243 | | | |
| Suma | 12138 | 15787 | 33602 | 50663 | 62111 | 71675 | 68099 | 61038 | 48017 | 22876 | 15215 | 10545 | | | |
| Priemer | 392 | 544 | 1084 | 1689 | 2004 | 2389 | 2197 | 1969 | 1601 | 738 | 507 | 340 | | | |
| Ročná suma | 471767 | | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESAČOCH

Stanica : 11858 **Hurbanovo**

2016

| prístroj | výrobca | typ | v.č. |
|-------------|---------|------------|--------------|
| pyranometer | KZ | CMP11/CM11 | 70359/840505 |

Nadm. výška : 115 m n.m.
 Zem. šírka : 47° 52' 21"
 Zem. dĺžka : 18° 11' 35"

Globálne žiarenie [J cm⁻²]

| dataloger | výrobca | typ | vzorkovanie |
|-----------|--------------|------------|-------------|
| | Physicus/MPS | Easylog/06 | 10/5 s |

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | 0 | 0 | 2 | 18 | 40 | 62 | 72 | 79 | 64 | 38 | 16 | 2 | 0 | 0 | | | | | |
| II | | | | | | 0 | 1 | 11 | 38 | 62 | 80 | 88 | 82 | 77 | 61 | 34 | 11 | 1 | 0 | | | | | |
| III | | | | | 0 | 1 | 11 | 43 | 78 | 116 | 145 | 157 | 146 | 127 | 119 | 84 | 45 | 12 | 1 | 0 | | | | |
| IV | | | | 0 | 0 | 9 | 45 | 89 | 133 | 170 | 192 | 208 | 216 | 197 | 171 | 129 | 81 | 39 | 9 | 0 | 0 | | | |
| V | | | 0 | 0 | 3 | 23 | 61 | 111 | 154 | 194 | 230 | 248 | 233 | 207 | 189 | 143 | 101 | 72 | 30 | 4 | 0 | 0 | | |
| VI | | 0 | 0 | 0 | 10 | 42 | 91 | 145 | 190 | 225 | 263 | 283 | 264 | 241 | 219 | 169 | 120 | 77 | 41 | 9 | 0 | 0 | 0 | |
| VII | | 0 | 0 | 0 | 6 | 31 | 68 | 117 | 169 | 207 | 236 | 255 | 236 | 237 | 207 | 177 | 128 | 82 | 34 | 6 | 0 | 0 | 0 | |
| VIII | | | 0 | 0 | 1 | 17 | 59 | 109 | 155 | 200 | 235 | 254 | 234 | 229 | 204 | 159 | 109 | 57 | 17 | 1 | 0 | 0 | | |
| IX | | | | 0 | 0 | 2 | 25 | 72 | 119 | 166 | 196 | 211 | 209 | 207 | 182 | 118 | 65 | 25 | 2 | 0 | 0 | | | |
| X | | | | | 0 | 0 | 2 | 21 | 53 | 84 | 102 | 116 | 110 | 103 | 80 | 47 | 18 | 2 | 0 | 0 | | | | |
| XI | | | | | | 0 | 0 | 4 | 25 | 55 | 81 | 92 | 97 | 73 | 52 | 25 | 3 | 0 | 0 | | | | | |
| XII | | | | | | | 0 | 1 | 14 | 36 | 52 | 63 | 70 | 56 | 36 | 12 | 1 | 0 | | | | | | |

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

| | | | | | | | | | |
|-------------|---------|---------------------------|------|-------------------|-----------------------|-------------|---------|-------|-------------|
| Stanica | : 11978 | Trebišov-Milhostov | | 2016 | | prístroj | výrobca | typ | v.č. |
| Nadm. výška | : 105 | m n.m. | | Globálne žiarenie | [J cm ⁻²] | pyranometer | KZ | CMP21 | 140318 |
| Zem. šírka | : 48 ° | 39 ' | 47 " | ***** | | dataloger | výrobca | typ | vzorkovanie |
| Zem. dĺžka | : 21 ° | 43 ' | 19 " | | | | MPS | 6 | 5 s |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | | |
|-------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-----|-----|----|
| 1 | 515 | 556 | 325 | 845 | 2272 | 2225 | 2391 | 1452 | 2155 | + | 1308 | + | 544 | 198 | |
| 2 | 147 | 181 | 228 | 2057 | 1936 | 777 | - | 2800 | 2212 | 1675 | 866 | 295 | 447 | | |
| 3 | 572 | 165 | 1177 | 1961 | 1864 | 1724 | 1271 | 2557 | 1878 | 128 | 535 | 443 | | | |
| 4 | 179 | 655 | 1122 | 1744 | 2188 | 2966 | 2743 | 2291 | 1826 | 146 | 656 | 458 | | | |
| 5 | 286 | 618 | 297 | 1985 | 2365 | 2464 | 2646 | 2454 | 299 | - | 421 | 274 | 211 | | |
| 6 | 279 | 395 | 313 | 1941 | 2452 | 3085 | 2271 | 2266 | 1572 | 309 | 105 | 225 | | | |
| 7 | 199 | 796 | 169 | - | 1600 | 2457 | 3051 | 2939 | + | 2628 | 1970 | 510 | 272 | 409 | |
| 8 | 230 | 164 | 905 | 565 | - | 2014 | 3091 | + | 2910 | 2661 | + | 1939 | 948 | 475 | 62 |
| 9 | 129 | 683 | 1454 | 926 | 2539 | 1993 | 2091 | 2586 | 1974 | 700 | 181 | 57 | | - | |
| 10 | 65 | - | 76 | - | 802 | 744 | 2494 | 1603 | 2610 | 1853 | 1885 | 828 | 379 | 88 | |
| 11 | 87 | 568 | 1296 | 1724 | 2527 | 1641 | 2891 | 1191 | 1860 | 321 | 211 | 71 | | | |
| 12 | 506 | 588 | 205 | 1797 | 2699 | 2113 | 2872 | 2413 | 1788 | 312 | 141 | 256 | | | |
| 13 | 516 | 209 | 1030 | 1815 | 1695 | 1955 | 2223 | 1703 | 1680 | 1170 | 534 | 531 | | | |
| 14 | 593 | + | 369 | 1659 | 1363 | 621 | - | 1459 | 1251 | 2204 | 1763 | 1038 | 143 | 118 | |
| 15 | 221 | 147 | 358 | 1757 | 1532 | 1631 | 2820 | 1110 | 1693 | 884 | 706 | + | 218 | | |
| 16 | 478 | 178 | 1606 | 1766 | 2212 | 2107 | 700 | - | 1766 | 1615 | 153 | 207 | 515 | | |
| 17 | 397 | 979 | 1696 | 1758 | 1836 | 2539 | 1354 | 999 | 845 | 121 | 86 | 73 | | | |
| 18 | 394 | 389 | 1500 | 1920 | 1189 | 3010 | 1501 | 2177 | 1068 | 448 | 83 | 78 | | | |
| 19 | 462 | 161 | 1371 | 2296 | 2472 | 2888 | 1296 | 1635 | 666 | 363 | 586 | 202 | | | |
| 20 | 373 | 316 | 1308 | 2042 | 2772 | 1872 | 2129 | 2306 | 1660 | 610 | 137 | 153 | | | |
| 21 | 525 | 160 | 804 | 2506 | + | 2701 | 1759 | 2303 | 2003 | 1421 | 106 | - | 597 | 78 | |
| 22 | 492 | 925 | 1000 | 2223 | 2715 | 2824 | 2390 | 847 | - | 1250 | 267 | 569 | 105 | | |
| 23 | 370 | 265 | 1142 | 1454 | 2767 | 2844 | 2574 | 1556 | 1642 | 405 | 306 | 82 | | | |
| 24 | 202 | 761 | 1757 | 913 | 2095 | 2851 | 2777 | 2307 | 1136 | 124 | 254 | 128 | | | |
| 25 | 118 | 443 | 1873 | + | 745 | 2507 | 2871 | 2450 | 2197 | 1291 | 146 | 131 | 103 | | |
| 26 | 280 | 791 | 804 | 2071 | 2809 | + | 2600 | 2140 | 2302 | 1471 | 787 | 406 | 226 | | |
| 27 | 149 | 1215 | + | 1238 | 1205 | 2708 | 1484 | 2432 | 2229 | 1575 | 773 | 38 | - | 316 | |
| 28 | 170 | 700 | 1508 | 2491 | 2158 | 1835 | 1288 | 2193 | 1385 | 978 | 494 | 388 | | | |
| 29 | 365 | 318 | 1463 | 627 | 2746 | 3046 | 1730 | 2148 | 1271 | 358 | 380 | 278 | | | |
| 30 | 120 | | 1477 | 2111 | 1821 | 2854 | 2174 | 1811 | 1418 | 653 | 326 | 557 | + | | |
| 31 | 257 | | 1810 | | 2573 | | 2108 | 2190 | | 518 | | 493 | | | |
| Suma | 9676 | 13771 | 33700 | 48952 | 69736 | 69162 | 68079 | 62246 | 45667 | 16698 | 10052 | 7567 | | | |
| Priemer | 312 | 475 | 1087 | 1632 | 2250 | 2305 | 2196 | 2008 | 1522 | 539 | 335 | 244 | | | |
| Ročná suma | 455305 | | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESAČOCH

Stanica : 11978 Trebišov-Milhostov

2016

| | | | |
|-------------|---------|-------|--------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CMP21 | 140318 |

Nadm. výška : 105 m n.m.
 Zem. šírka : 48 ° 39 ' 47 "
 Zem. dĺžka : 21 ° 43 ' 19 "

Globálne žiarenie [J cm⁻²]

| | | | |
|-----------|---------|-----|-------------|
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | 0 | 0 | 1 | 13 | 31 | 50 | 58 | 59 | 51 | 34 | 13 | 1 | 0 | 0 | | | | | |
| II | | | | | | 0 | 1 | 9 | 27 | 48 | 71 | 78 | 78 | 71 | 55 | 27 | 9 | 1 | 0 | | | | | |
| III | | | | | 0 | 1 | 10 | 39 | 78 | 119 | 145 | 162 | 158 | 145 | 104 | 76 | 40 | 9 | 1 | 0 | | | | |
| IV | | | 0 | 0 | 0 | 8 | 41 | 82 | 127 | 175 | 203 | 223 | 203 | 188 | 149 | 118 | 73 | 33 | 7 | 0 | 0 | | | |
| V | | 0 | 0 | 0 | 5 | 31 | 73 | 131 | 177 | 228 | 259 | 263 | 259 | 235 | 210 | 167 | 118 | 63 | 27 | 4 | 0 | 0 | 0 | |
| VI | | 0 | 0 | 0 | 11 | 44 | 85 | 132 | 176 | 216 | 244 | 253 | 252 | 240 | 210 | 171 | 133 | 87 | 40 | 10 | 0 | 0 | 0 | |
| VII | | 0 | 0 | 0 | 7 | 38 | 75 | 134 | 172 | 220 | 255 | 262 | 251 | 241 | 196 | 148 | 95 | 65 | 30 | 5 | 0 | 0 | 0 | |
| VIII | | | 0 | 0 | 1 | 17 | 59 | 109 | 154 | 191 | 227 | 246 | 249 | 228 | 194 | 155 | 109 | 54 | 14 | 1 | 0 | 0 | | |
| IX | | | | 0 | 0 | 2 | 22 | 66 | 116 | 166 | 192 | 212 | 204 | 187 | 158 | 110 | 64 | 20 | 2 | 0 | 0 | | | |
| X | | | | | 0 | 0 | 2 | 13 | 32 | 55 | 75 | 83 | 86 | 77 | 63 | 38 | 13 | 2 | 0 | 0 | | | | |
| XI | | | | | | 0 | 0 | 3 | 16 | 36 | 53 | 56 | 61 | 54 | 37 | 15 | 2 | 0 | 0 | | | | | |
| XII | | | | | | | 0 | 1 | 10 | 26 | 38 | 47 | 47 | 40 | 25 | 9 | 1 | 0 | | | | | | |

Rozptýlené (difúzne) slnečné žiarenie

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

| | | | | | | | | | | | | | |
|-------------|---------|------------------------|-----|------------------|-----------------------|--|--|--|--|--|--|--|--|
| Stanica | : 11898 | Banská Bystrica | | 2016 | | | | | | | | | |
| Nadm. výška | : 427 | m n.m. | | Difúzne žiarenie | [J cm ⁻²] | | | | | | | | |
| Zem. šírka | : 48 ° | 44 ' | 1 " | ***** | | | | | | | | | |
| Zem. dĺžka | : 19 ° | 7 ' | 1 " | | | | | | | | | | |

| | | | |
|-------------|---------|--------|-------------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CMP21 | 140317 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |
| tienenie | KZ | CM121C | prstenec |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | | |
|-------------------|---------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-----|-----|---|
| 1 | 266 | 264 | 295 | 872 | 1081 | 772 | 1001 | 984 | 300 | 593 | 394 | + | 256 | | |
| 2 | 175 | 343 | 375 | 478 | 942 | 1149 | 571 | 547 | 613 | 627 | 322 | | 322 | + | |
| 3 | 167 | 262 | 457 | 662 | 951 | 847 | 1124 | 720 | 739 | 426 | 327 | | 266 | | |
| 4 | 123 | 377 | 484 | 695 | 994 | 938 | 734 | 767 | 823 | + | 259 | 288 | 156 | | |
| 5 | 221 | 208 | 502 | 641 | 886 | 1385 | + | 1074 | 890 | 535 | 585 | 171 | 163 | | |
| 6 | 276 | 424 | 103 | - | 797 | 970 | 507 | 985 | 624 | 512 | 551 | 76 | 119 | | |
| 7 | 127 | 149 | 490 | 791 | 623 | 429 | 527 | 350 | 430 | 480 | 289 | 289 | 289 | | |
| 8 | 219 | 78 | 583 | 650 | 772 | 651 | 1080 | 325 | 383 | 698 | + | 332 | 287 | | |
| 9 | 70 | 362 | 669 | 421 | 875 | 895 | 895 | 442 | 435 | 610 | 147 | 201 | 201 | | |
| 10 | 182 | 50 | - | 486 | 916 | 1121 | 1271 | 409 | 319 | 388 | 506 | 144 | 267 | | |
| 11 | 50 | - | 383 | 611 | 786 | 987 | 1179 | 702 | 1108 | 406 | 207 | 98 | 172 | | |
| 12 | 240 | 305 | 548 | 851 | 1120 | 1141 | 1065 | 789 | 418 | 481 | 190 | 234 | 234 | | |
| 13 | 186 | 91 | 516 | 521 | 831 | 1330 | 1013 | 1323 | + | 463 | 587 | 130 | 166 | | |
| 14 | 221 | 210 | 212 | 588 | 882 | 567 | 850 | 600 | 506 | 518 | 303 | 165 | 165 | | |
| 15 | 250 | 136 | 427 | 718 | 1323 | 1159 | 1192 | + | 695 | 554 | 414 | 253 | 127 | | |
| 16 | 275 | 407 | 553 | 727 | 865 | 1365 | 410 | 1127 | 709 | 549 | 170 | 164 | 164 | | |
| 17 | 204 | 172 | 238 | 617 | 973 | 1081 | 370 | - | 784 | 205 | - | 171 | 127 | 255 | |
| 18 | 162 | 237 | 441 | 883 | 1323 | 406 | 1089 | 881 | 694 | 143 | 32 | - | 111 | | |
| 19 | 278 | 155 | 709 | 378 | 1349 | + | 913 | 1126 | 968 | 604 | 105 | 108 | 142 | | |
| 20 | 269 | 471 | 720 | 688 | 1031 | 1061 | 797 | 912 | 442 | 74 | - | 54 | 194 | | |
| 21 | 273 | 245 | 694 | 330 | 942 | 619 | 559 | 618 | 743 | 95 | 383 | 143 | 143 | | |
| 22 | 151 | 290 | 667 | 622 | 762 | 464 | 901 | 301 | 442 | 217 | 237 | 200 | 200 | | |
| 23 | 318 | 280 | 656 | 875 | 664 | 393 | - | 897 | 280 | - | 665 | 473 | 240 | 202 | |
| 24 | 374 | + | 400 | 289 | 881 | 777 | 711 | 1098 | 575 | 814 | 108 | 102 | 101 | | |
| 25 | 254 | 356 | 801 | 1156 | + | 846 | 937 | 671 | 298 | 694 | 182 | 57 | 115 | | |
| 26 | 297 | 267 | 718 | 782 | 911 | 965 | 895 | 288 | 695 | 192 | 211 | 177 | 177 | | |
| 27 | 307 | 631 | + | 898 | 168 | - | 987 | 1192 | 996 | 312 | 455 | 464 | 232 | 76 | - |
| 28 | 311 | 279 | 967 | + | 811 | 1243 | 627 | 949 | 349 | 647 | 385 | 224 | 289 | 289 | |
| 29 | 231 | 100 | 540 | 397 | 1123 | 496 | 903 | 625 | 503 | 354 | 199 | 109 | 109 | | |
| 30 | 124 | | 716 | 558 | 772 | 771 | 581 | 406 | 294 | 239 | 264 | 111 | 111 | | |
| 31 | 308 | | 613 | | 605 | - | 695 | 281 | | 223 | | 110 | 110 | | |
| Suma | 6907 | 7931 | 16975 | 20258 | 29531 | 26218 | 26157 | 19488 | 16113 | 11516 | 6103 | 5689 | | | |
| Priemer | 223 | 273 | 548 | 675 | 953 | 874 | 844 | 629 | 537 | 371 | 203 | 184 | | | |
| Ročná suma | 192886 | | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESIACHOCH

Stanica : 11898 **Banská Bystrica**

2016

Nadm. výška : 427 m n.m.
 Zem. šírka : 48° 44' 1"
 Zem. dĺžka : 19° 7' 1"

Difúzne žiarenie [J cm⁻²]

| | | | |
|-------------|---------|--------|-------------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CMP21 | 140317 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |
| tiernenie | KZ | CM121C | prstenec |

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | 0 | 0 | 1 | 10 | 21 | 35 | 41 | 39 | 37 | 24 | 12 | 2 | 0 | 0 | | | | | |
| II | | | | | | 0 | 0 | 6 | 16 | 30 | 41 | 46 | 43 | 39 | 28 | 17 | 6 | 1 | 0 | | | | | |
| III | | | | | 0 | 1 | 8 | 25 | 45 | 60 | 66 | 75 | 70 | 70 | 54 | 41 | 25 | 8 | 1 | 0 | | | | |
| IV | | | | 0 | 0 | 6 | 21 | 37 | 53 | 61 | 77 | 77 | 77 | 72 | 67 | 58 | 40 | 21 | 6 | 0 | 0 | | | |
| V | | 0 | 0 | 0 | 3 | 17 | 36 | 53 | 65 | 80 | 99 | 99 | 107 | 104 | 92 | 79 | 58 | 38 | 18 | 4 | 0 | 0 | | |
| VI | | 0 | 0 | 0 | 7 | 24 | 43 | 53 | 65 | 77 | 86 | 88 | 88 | 83 | 78 | 65 | 49 | 36 | 23 | 8 | 0 | 0 | 0 | |
| VII | | 0 | 0 | 0 | 5 | 20 | 32 | 46 | 61 | 77 | 87 | 89 | 90 | 85 | 79 | 66 | 49 | 35 | 19 | 4 | 0 | 0 | 0 | |
| VIII | | | 0 | 0 | 1 | 9 | 26 | 36 | 49 | 60 | 61 | 69 | 71 | 71 | 61 | 47 | 36 | 22 | 8 | 1 | 0 | 0 | | |
| IX | | | | 0 | 0 | 2 | 13 | 30 | 39 | 48 | 59 | 67 | 64 | 64 | 61 | 46 | 30 | 13 | 2 | 0 | | | | |
| X | | | | | 0 | 0 | 2 | 13 | 26 | 41 | 47 | 60 | 58 | 48 | 37 | 27 | 11 | 1 | 0 | 0 | | | | |
| XI | | | | | | 0 | 0 | 3 | 11 | 22 | 30 | 38 | 37 | 29 | 21 | 11 | 2 | 0 | 0 | | | | | |
| XII | | | | | | | 0 | 1 | 9 | 21 | 29 | 33 | 35 | 29 | 19 | 8 | 1 | 0 | | | | | | |

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

| | | | | | | | | | |
|-------------|---------|--------------------------|-----|------------------|-----------------------|-------------|----------|--------|-------------|
| Stanica | : 11813 | Bratislava Koliba | | 2016 | | prístroj | výrobca | typ | v.č. |
| Nadm. výška | : 287 | m n.m. | | Difúzne žiarenie | [J cm ⁻²] | pyranometer | KZ | CM11 | 913546 |
| Zem. šírka | : 48 ° | 10' | 4" | ***** | | dataloger | výrobca | typ | vzorkovanie |
| Zem. dĺžka | : 17 ° | 6' | 21" | | | | Physicus | - | 10 s |
| | | | | | | tiernenie | KZ | CM121B | prstenec |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | |
|-------------------|---------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|---|
| 1 | 169 | 311 | 213 | - 999 | 1190 | 610 | 774 | 1121 | 320 | 396 | 329 | 170 | |
| 2 | 54 | - 231 | 676 | 877 | 892 | 908 | 532 | 487 | 750 | 587 | 319 | 221 | |
| 3 | 141 | 124 | 423 | 704 | 1008 | 1059 | 785 | 798 | 764 | 676 | + 243 | 209 | |
| 4 | 75 | 277 | 592 | 760 | 1232 | 920 | 601 | 896 | 520 | 364 | 458 | + 213 | |
| 5 | 265 | 198 | 763 | 792 | 980 | 1128 | 999 | 971 | 570 | 572 | 372 | 214 | |
| 6 | 102 | 185 | 585 | 886 | 643 | 776 | 789 | 896 | 604 | 363 | 140 | 231 | |
| 7 | 174 | 268 | 234 | 1130 | 656 | 464 | 621 | 518 | 547 | 499 | 341 | 158 | |
| 8 | 170 | 234 | 708 | 481 | 511 | 589 | 887 | 364 | 524 | 503 | 241 | 108 | |
| 9 | 99 | 376 | 704 | 485 | 576 | 820 | 893 | 423 | 348 | 543 | 197 | 206 | |
| 10 | 231 | 161 | 439 | 962 | 1035 | 1088 | 472 | 450 | 420 | 602 | 340 | 251 | |
| 11 | 153 | 321 | 841 | 856 | 1168 | 1356 | 698 | 944 | 501 | 324 | 159 | 284 | + |
| 12 | 212 | 479 | 783 | 1096 | 412 | - 1250 | 842 | 1258 | + 469 | 636 | 141 | 134 | |
| 13 | 203 | 247 | 675 | 605 | 902 | 1444 | + 1017 | 980 | 481 | 376 | 169 | 232 | |
| 14 | 277 | 283 | 292 | 724 | 702 | 922 | + 1256 | 576 | 472 | 449 | 205 | 138 | |
| 15 | 288 | 202 | 691 | 896 | 1204 | 1035 | 1085 | 1207 | 471 | 491 | 331 | 186 | |
| 16 | 264 | 441 | 469 | 433 | 1060 | 1324 | 590 | 1064 | 714 | 408 | 87 | - 165 | |
| 17 | 131 | 101 | 395 | 825 | 1231 | 1089 | 752 | 510 | 642 | 168 | 131 | 166 | |
| 18 | 160 | 78 | - 425 | 906 | 1102 | 1135 | 651 | 798 | 817 | + 182 | 208 | 140 | |
| 19 | 291 | 136 | 798 | 760 | 1332 | + 1226 | 695 | 947 | 572 | 315 | 255 | 68 | |
| 20 | 267 | 293 | 708 | 421 | 1088 | 902 | 719 | 701 | 400 | 149 | - 231 | 44 | |
| 21 | 218 | 332 | 687 | 428 | 515 | 1024 | 780 | 650 | 545 | 368 | 260 | 54 | |
| 22 | 134 | 533 | 644 | 541 | 578 | 476 | 1177 | 684 | 308 | 212 | 239 | 42 | - |
| 23 | 187 | 407 | 701 | 1031 | 797 | 497 | 694 | 320 | 544 | 240 | 355 | 254 | |
| 24 | 330 | 381 | 641 | 1161 | 1119 | 723 | 806 | 569 | 642 | 410 | 132 | 114 | |
| 25 | 121 | 249 | 774 | 1159 | 879 | 799 | 945 | 359 | 492 | 367 | 119 | 94 | |
| 26 | 310 | 281 | 464 | 888 | 1054 | 1145 | 743 | 322 | 623 | 340 | 257 | 193 | |
| 27 | 387 | + 687 | + 442 | 367 | - 1081 | 870 | 1199 | 395 | 530 | 431 | 218 | 246 | |
| 28 | 273 | 461 | 892 | 1180 | + 813 | 631 | 1134 | 391 | 669 | 437 | 250 | 158 | |
| 29 | 282 | 117 | 601 | 684 | 976 | 422 | - 693 | 925 | 362 | 382 | 214 | 114 | |
| 30 | 239 | | 919 | + 410 | 732 | 848 | 406 | - 504 | 288 | - 383 | 302 | 113 | |
| 31 | 300 | | 414 | | 793 | | 760 | 287 | - | 335 | | 115 | |
| Suma | 6507 | 8394 | 18591 | 23448 | 28261 | 27483 | 24997 | 21315 | 15914 | 12508 | 7243 | 5038 | |
| Priemer | 210 | 289 | 600 | 782 | 912 | 916 | 806 | 688 | 530 | 403 | 241 | 163 | |
| Ročná suma | 199698 | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESAČOCH

Stanica : 11813 Bratislava Koliba

2016

Nadm. výška : 287 m n.m.
 Zem. šírka : 48 ° 10 ' 4 "
 Zem. dĺžka : 17 ° 6 ' 21 "

Difúzne žiarenie [J cm⁻²]

| | | | |
|-------------|----------|--------|-------------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CM11 | 913546 |
| dataloger | výrobca | typ | vzorkovanie |
| | Physicus | - | 10 s |
| tienenie | KZ | CM121B | prstenec |

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | | 1 | 12 | 23 | 33 | 37 | 36 | 34 | 24 | 10 | 1 | | | | | | | | |
| II | | | | | | 1 | 6 | 19 | 31 | 39 | 46 | 47 | 41 | 32 | 20 | 7 | 1 | | | | | | | |
| III | | | | | 1 | 7 | 24 | 45 | 61 | 77 | 82 | 84 | 77 | 63 | 44 | 27 | 8 | 1 | | | | | | |
| IV | | | 0 | 0 | 7 | 22 | 39 | 56 | 70 | 87 | 95 | 94 | 91 | 77 | 66 | 45 | 25 | 7 | 0 | 0 | | | | |
| V | | | 0 | 3 | 17 | 33 | 51 | 72 | 82 | 95 | 100 | 98 | 92 | 81 | 75 | 54 | 37 | 19 | 3 | 0 | 0 | | | |
| VI | | | 0 | 8 | 23 | 40 | 59 | 71 | 79 | 93 | 95 | 100 | 92 | 79 | 63 | 50 | 34 | 23 | 8 | 0 | 0 | | | |
| VII | | | 0 | 5 | 19 | 35 | 51 | 66 | 76 | 75 | 71 | 80 | 78 | 74 | 67 | 50 | 35 | 20 | 5 | 0 | 0 | | | |
| VIII | | | 0 | 1 | 11 | 28 | 39 | 59 | 65 | 72 | 76 | 78 | 70 | 59 | 49 | 40 | 27 | 11 | 1 | 0 | 0 | | | |
| IX | | | 0 | 0 | 2 | 14 | 29 | 42 | 49 | 56 | 65 | 63 | 61 | 56 | 45 | 31 | 14 | 2 | 0 | 0 | | | | |
| X | | | | 0 | 0 | 2 | 12 | 27 | 40 | 51 | 57 | 59 | 56 | 49 | 32 | 15 | 2 | 0 | 0 | | | | | |
| XI | | | | | 0 | 0 | 3 | 15 | 28 | 39 | 43 | 40 | 33 | 24 | 13 | 2 | 0 | 0 | | | | | | |
| XII | | | | | | 0 | 1 | 9 | 19 | 26 | 30 | 29 | 24 | 18 | 7 | 1 | 0 | | | | | | | |

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

| | | | | | | | | | |
|-------------|---------|--------------------|-----|------------------|-----------------------|-------------|---------|-------------|---------------|
| Stanica | : 11952 | ARC Gánovce | | 2016 | | prístroj | výrobca | typ | v.č. |
| Nadm. výška | : 703 | m n.m. | | Difúzne žiarenie | [J cm ⁻²] | pyranometer | KZ | CMP21 | 140316 |
| Zem. šírka | : 49 ° | 2' | 6" | ***** | | dataloger | výrobca | typ | vzorkovanie |
| Zem. dĺžka | : 20 ° | 19' | 27" | | | | MPS | 6 | 5 s |
| | | | | | | tieneň | KZ | tracker 2AP | tieniaci terč |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | | | |
|-------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-----|-----|-----|---|
| 1 | 144 | - 368 | 214 | - 869 | 1028 | 687 | 908 | 798 | 312 | 462 | 411 | 321 | | | | |
| 2 | 176 | 426 | 550 | 438 | 1299 | 729 | 789 | 852 | 719 | 620 | 337 | 212 | | | | |
| 3 | 209 | 330 | 643 | 869 | 1199 | 1503 | + | 529 | 1173 | + | 821 | + | 207 | 291 | 225 | |
| 4 | 222 | 446 | 583 | 748 | 1103 | 953 | 812 | 780 | 794 | 243 | 369 | 167 | | | | |
| 5 | 301 | 233 | 553 | 627 | 814 | 1377 | 833 | 771 | 353 | 515 | 377 | 173 | | | | |
| 6 | 259 | 308 | 432 | 621 | 726 | 403 | - | 759 | 351 | 550 | 323 | 160 | 135 | | | |
| 7 | 204 | 413 | 406 | 883 | 856 | 527 | 578 | 505 | 520 | 558 | 217 | 135 | | | | |
| 8 | 185 | 338 | 668 | 778 | 1054 | 744 | 1074 | 278 | 372 | 744 | + | 346 | 300 | | | |
| 9 | 171 | 280 | 576 | 525 | 1096 | 1158 | 790 | 497 | 424 | 493 | 147 | 226 | | | | |
| 10 | 166 | 203 | 240 | 304 | 679 | 1303 | 746 | 620 | 360 | 521 | 402 | 213 | | | | |
| 11 | 175 | 487 | 746 | 875 | 926 | 1041 | 494 | 552 | 575 | 236 | 301 | 259 | | | | |
| 12 | 191 | 384 | 348 | 972 | 813 | 1161 | 647 | 845 | 451 | 221 | 75 | 184 | | | | |
| 13 | 174 | 410 | 477 | 588 | 763 | 1112 | 1076 | 1139 | 633 | 254 | 386 | 217 | | | | |
| 14 | 259 | 220 | 397 | 573 | 595 | 1195 | 720 | 646 | 644 | 617 | 217 | 135 | | | | |
| 15 | 333 | 162 | 695 | 857 | 1216 | 1131 | 1091 | 976 | 481 | 492 | 284 | 213 | | | | |
| 16 | 265 | 136 | - 569 | 602 | 803 | 946 | 220 | - 1128 | 682 | 187 | 188 | 116 | - | | | |
| 17 | 290 | 525 | 260 | 664 | 1273 | 1003 | 221 | 772 | 449 | 170 | 245 | 253 | | | | |
| 18 | 202 | 376 | 550 | 301 | - 1231 | 664 | 954 | 940 | 732 | 572 | 63 | - 157 | | | | |
| 19 | 372 | 167 | 742 | 941 | 1193 | 923 | 1105 | + | 750 | 384 | 484 | 297 | 171 | | | |
| 20 | 386 | + | 479 | 673 | 890 | 1309 | + | 1109 | 1056 | 715 | 453 | 136 | 253 | 225 | | |
| 21 | 219 | 416 | 849 | 345 | 1124 | 618 | 897 | 894 | 721 | 127 | - 185 | 132 | | | | |
| 22 | 305 | 238 | 750 | 595 | 1071 | 675 | 751 | 426 | 773 | 392 | 177 | 222 | | | | |
| 23 | 242 | 484 | 708 | 1175 | 493 | - 947 | 914 | 558 | 520 | 440 | 151 | 168 | | | | |
| 24 | 313 | 411 | 467 | 500 | 1019 | 858 | 840 | 790 | 748 | 410 | 285 | 246 | | | | |
| 25 | 327 | 468 | 650 | 1164 | 888 | 910 | 867 | 711 | 788 | 509 | 89 | 182 | | | | |
| 26 | 303 | 556 | 690 | 687 | 926 | 862 | 1060 | 271 | 540 | 319 | 327 | 241 | | | | |
| 27 | 341 | 392 | 822 | 506 | 1084 | 808 | 807 | 259 | - 396 | 464 | 218 | 235 | | | | |
| 28 | 307 | 639 | + | 893 | + | 834 | 1059 | 1296 | 952 | 273 | 566 | 344 | 431 | + | 351 | + |
| 29 | 183 | 151 | 541 | 1387 | + | 1118 | 591 | 1088 | 439 | 581 | 332 | 274 | 121 | | | |
| 30 | 287 | | 765 | 709 | 1236 | 834 | 872 | 908 | 293 | - 279 | 283 | 125 | | | | |
| 31 | 368 | | 882 | | 620 | | 583 | 274 | | 152 | | 125 | | | | |
| Suma | 7879 | 10447 | 18340 | 21828 | 30613 | 28068 | 25031 | 20893 | 16635 | 11728 | 7786 | 6186 | | | | |
| Priemer | 254 | 360 | 592 | 728 | 988 | 936 | 807 | 674 | 555 | 378 | 260 | 200 | | | | |
| Ročná suma | 205433 | | | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESIACHOCH

Stanica : 11952 **ARC Gánovce**

2016

Nadm. výška : 703 m n.m.
 Zem. šírka : 49° 2' 6"
 Zem. dĺžka : 20° 19' 27"

Difúzne žiarenie [J cm⁻²]

| | | | |
|-------------|---------|-------------|---------------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CMP21 | 140316 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |
| tienenie | KZ | tracker 2AP | tieniaci terč |

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | 0 | 0 | 2 | 12 | 28 | 39 | 45 | 46 | 40 | 28 | 12 | 2 | 0 | 0 | | | | | |
| II | | | | | | 0 | 1 | 8 | 24 | 41 | 56 | 57 | 54 | 49 | 38 | 24 | 7 | 1 | 0 | | | | | |
| III | | | | | 0 | 1 | 8 | 25 | 42 | 61 | 74 | 80 | 83 | 77 | 64 | 44 | 24 | 8 | 1 | 0 | | | | |
| IV | | | 0 | 0 | 0 | 6 | 23 | 41 | 59 | 72 | 79 | 82 | 84 | 80 | 73 | 60 | 41 | 22 | 5 | 0 | 0 | | | |
| V | | 0 | 0 | 0 | 5 | 20 | 35 | 48 | 63 | 84 | 106 | 115 | 117 | 103 | 93 | 76 | 60 | 40 | 19 | 4 | 0 | 0 | 0 | |
| VI | | 0 | 0 | 1 | 8 | 22 | 35 | 50 | 66 | 79 | 87 | 97 | 102 | 93 | 86 | 74 | 60 | 42 | 23 | 8 | 0 | 0 | 0 | |
| VII | | 0 | 0 | 0 | 5 | 19 | 36 | 48 | 57 | 62 | 77 | 86 | 89 | 84 | 76 | 60 | 50 | 35 | 18 | 5 | 0 | 0 | 0 | |
| VIII | | | 0 | 0 | 1 | 10 | 23 | 38 | 52 | 62 | 73 | 78 | 78 | 74 | 62 | 49 | 39 | 26 | 9 | 1 | 0 | 0 | | |
| IX | | | | 0 | 0 | 2 | 13 | 29 | 40 | 53 | 61 | 65 | 70 | 67 | 61 | 48 | 32 | 14 | 1 | 0 | 0 | | | |
| X | | | | | 0 | 0 | 2 | 12 | 27 | 43 | 51 | 58 | 58 | 50 | 40 | 28 | 11 | 1 | 0 | 0 | | | | |
| XI | | | | | | 0 | 0 | 3 | 16 | 28 | 38 | 47 | 44 | 38 | 29 | 14 | 3 | 0 | 0 | | | | | |
| XII | | | | | | | 0 | 1 | 10 | 25 | 33 | 35 | 36 | 30 | 20 | 9 | 1 | 0 | | | | | | |

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

| | | | | | | | | | | | | | |
|-------------|---------|---------------------------|------|--|------------------|-----------------------|--|--|--|--|--|--|--|
| Stanica | : 11978 | Trebišov-Milhostov | | | 2016 | | | | | | | | |
| Nadm. výška | : 105 | m n.m. | | | Difúzne žiarenie | [J cm ⁻²] | | | | | | | |
| Zem. šírka | : 48 ° | 39 ' | 47 " | | ***** | | | | | | | | |
| Zem. dĺžka | : 21 ° | 43 ' | 19 " | | | | | | | | | | |

| | | | |
|-------------|---------|--------|-------------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CMP21 | 140320 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |
| tieneň | KZ | CM121C | prstenec |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | | |
|------------|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-----|-----|----|
| 1 | 159 | 289 | 303 | 807 | 871 | 733 | 911 | 1028 | 282 | - | 532 | 418 | 194 | | |
| 2 | 147 | 181 | 227 | 426 | - | 1242 | 755 | 632 | 992 | 548 | 642 | 284 | 179 | | |
| 3 | 183 | 165 | 636 | 786 | 1465 | + | 1300 | 1096 | 776 | 631 | 122 | 300 | 273 | | |
| 4 | 176 | 349 | 633 | 767 | 1106 | | 581 | 643 | 605 | 652 | 146 | 413 | 258 | | |
| 5 | 286 | 339 | 297 | 558 | 742 | 1203 | 779 | 575 | 296 | 398 | 274 | 187 | | | |
| 6 | 276 | 386 | 312 | 725 | 610 | 534 | 846 | 593 | 894 | + | 308 | 104 | 208 | | |
| 7 | 198 | 323 | 168 | - | 780 | 822 | 519 | 864 | 416 | 425 | 498 | 269 | 252 | | |
| 8 | 197 | 164 | 648 | 560 | 886 | 390 | - | 632 | 390 | 429 | 332 | 427 | 62 | | |
| 9 | 128 | 474 | 390 | 843 | 929 | 790 | 689 | 447 | 311 | 790 | 526 | 173 | 56 | | |
| 10 | 60 | - | 75 | - | 727 | 671 | 666 | 1220 | 997 | 823 | 416 | 668 | + | 347 | 88 |
| 11 | 83 | 435 | 548 | 1099 | 980 | 1359 | + | 435 | 1137 | 447 | 318 | 207 | 70 | | |
| 12 | 222 | 387 | 205 | 849 | 599 | - | 1017 | 499 | 524 | 467 | 309 | 141 | 180 | | |
| 13 | 209 | 208 | 677 | 718 | 932 | 1261 | 989 | 1204 | + | 628 | 523 | 444 | + | 133 | |
| 14 | 148 | 354 | 299 | 814 | 615 | 1306 | 841 | 567 | 503 | 477 | 143 | 118 | | | |
| 15 | 221 | 146 | 356 | 738 | 987 | 1132 | 705 | 909 | 577 | 519 | 175 | 218 | | | |
| 16 | 374 | 178 | 400 | 674 | 916 | 1203 | 662 | 969 | 653 | 153 | 207 | 146 | | | |
| 17 | 378 | 319 | 306 | 1107 | + | 1252 | 1131 | 1188 | + | 445 | 738 | 121 | 85 | 73 | |
| 18 | 297 | 377 | 626 | 951 | 935 | 533 | 1185 | 706 | 771 | 438 | 83 | 78 | | | |
| 19 | 341 | 161 | 685 | 505 | 1272 | 705 | 946 | 925 | 607 | 361 | 242 | 201 | | | |
| 20 | 357 | 315 | 767 | 778 | 708 | 1182 | 968 | 423 | 479 | 537 | 136 | 152 | | | |
| 21 | 312 | 160 | 671 | 573 | 787 | 1262 | 803 | 711 | 559 | 104 | - | 170 | 76 | | |
| 22 | 432 | + | 398 | 717 | 675 | 986 | 912 | 778 | 762 | 579 | 252 | 193 | 104 | | |
| 23 | 370 | 261 | 857 | 962 | 693 | 786 | 767 | 670 | 542 | 401 | 278 | 82 | | | |
| 24 | 202 | 329 | 386 | 899 | 778 | 791 | 413 | - | 502 | 602 | 124 | 252 | 127 | | |
| 25 | 118 | 436 | 354 | 743 | 789 | 743 | 862 | 441 | 781 | 146 | 125 | 102 | | | |
| 26 | 280 | 507 | 743 | 858 | 657 | 1051 | 716 | 288 | - | 329 | 367 | 260 | 225 | | |
| 27 | 149 | 299 | 932 | + | 971 | 726 | 1211 | 768 | 293 | 312 | 565 | 36 | - | 308 | + |
| 28 | 170 | 541 | + | 677 | 580 | 1157 | 1199 | 910 | 305 | 509 | 264 | 242 | 255 | | |
| 29 | 233 | 315 | 872 | 622 | 824 | 445 | 1056 | 369 | 541 | 328 | 231 | 268 | | | |
| 30 | 120 | 744 | 884 | 1260 | 623 | 799 | 873 | 454 | 298 | 278 | 171 | | | | |
| 31 | 256 | 613 | 664 | | | | | | | | | | | | |
| Suma | 7082 | 8871 | 16775 | 22922 | 27855 | 27880 | 25000 | 19973 | 15964 | 11162 | 6937 | 5072 | | | |
| Priemer | 228 | 306 | 541 | 764 | 899 | 929 | 806 | 644 | 532 | 360 | 231 | 164 | | | |
| Ročná suma | 195494 | | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESIACHOCH

Stanica : 11978 Trebišov-Milhostov

2016

Nadm. výška : 105 m n.m.
 Zem. šírka : 48 ° 39 ' 47 "
 Zem. dĺžka : 21 ° 43 ' 19 "

Difúzne žiarenie [J cm⁻²]

| | | | |
|-------------|---------|--------|-------------|
| prístroj | výrobca | typ | v.č. |
| pyranometer | KZ | CMP21 | 140320 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |
| tiernenie | KZ | CM121C | prstenec |

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | 0 | 0 | 1 | 11 | 25 | 37 | 41 | 41 | 36 | 24 | 12 | 1 | 0 | 0 | | | | | |
| II | | | | | | 0 | 1 | 8 | 22 | 35 | 45 | 47 | 47 | 42 | 33 | 19 | 7 | 1 | 0 | | | | | |
| III | | | | | 0 | 1 | 9 | 28 | 47 | 58 | 68 | 69 | 71 | 68 | 52 | 38 | 23 | 7 | 1 | 0 | | | | |
| IV | | | 0 | 0 | 0 | 7 | 29 | 49 | 63 | 73 | 81 | 88 | 89 | 84 | 71 | 61 | 40 | 22 | 6 | 0 | 0 | | | |
| V | | 0 | 0 | 0 | 4 | 21 | 43 | 58 | 74 | 81 | 84 | 93 | 93 | 89 | 77 | 70 | 55 | 36 | 18 | 3 | 0 | 0 | 0 | |
| VI | | 0 | 0 | 0 | 9 | 24 | 37 | 54 | 67 | 79 | 89 | 92 | 94 | 92 | 85 | 71 | 59 | 46 | 23 | 8 | 0 | 0 | 0 | |
| VII | | 0 | 0 | 0 | 6 | 23 | 38 | 53 | 66 | 72 | 76 | 83 | 86 | 78 | 68 | 55 | 43 | 35 | 20 | 4 | 0 | 0 | 0 | |
| VIII | | | 0 | 0 | 1 | 10 | 25 | 38 | 45 | 52 | 66 | 69 | 69 | 68 | 63 | 54 | 44 | 28 | 10 | 1 | 0 | 0 | | |
| IX | | | | 0 | 0 | 2 | 13 | 31 | 43 | 52 | 52 | 59 | 65 | 66 | 55 | 45 | 33 | 15 | 2 | 0 | | | | |
| X | | | | | 0 | 0 | 2 | 10 | 21 | 36 | 50 | 57 | 55 | 50 | 40 | 26 | 11 | 1 | 0 | 0 | | | | |
| XI | | | | | | 0 | 0 | 2 | 12 | 24 | 33 | 39 | 42 | 36 | 28 | 12 | 2 | 0 | 0 | | | | | |
| XII | | | | | | | 0 | 1 | 7 | 17 | 26 | 32 | 30 | 25 | 18 | 7 | 1 | 0 | | | | | | |

Priame slnečné žiarenie

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

| | | | | | | | | | |
|-------------|---------|--------------------|------|-----------------|-----------------------|-----------------|---------|------|-------------|
| Stanica | : 11952 | ARC Gánovce | | 2016 | | prístroj | výrobca | typ | v.č. |
| Nadm. výška | : 703 | m n.m. | | Priame žiarenie | [J cm ⁻²] | pyrheliometer | KZ | CHP1 | 140123 |
| Zem. šírka | : 49 ° | 2 ' | 6 " | ***** | | dataloger | výrobca | typ | vzorkovanie |
| Zem. dĺžka | : 20 ° | 19 ' | 27 " | | | | MPS | 6 | 5 s |
| | | | | | | solárny tracker | KZ | 2AP | |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | |
|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 1 | 1535 | 682 | 1 | 294 | 1689 | 1492 | 772 | 94 | 3183 | + | 2104 | 44 | 77 | |
| 2 | 1436 | 222 | 1075 | 3141 | 390 | 2 | 1652 | 2096 | 893 | 1202 | 209 | 62 | | |
| 3 | 1644 | 70 | 12 | 2011 | 229 | 518 | 68 | 983 | 1685 | 1 | 1730 | 1566 | | |
| 4 | 2 | 1037 | 29 | 2041 | 1121 | 2617 | 2845 | 2361 | 1958 | 1 | 1380 | 1524 | | |
| 5 | 43 | 1194 | 5 | 2455 | 2584 | 1330 | 2316 | 2778 | 1 | 100 | 742 | 1671 | | |
| 6 | 335 | 1561 | 10 | 1149 | 3375 | 4071 | + | 3446 | 4 | 37 | 1 | 1705 | | |
| 7 | 324 | 233 | 3 | 1369 | 2380 | 4021 | + | 3961 | + | 3578 | 2279 | 126 | 1821 | |
| 8 | 837 | 51 | 215 | 141 | 1501 | 2988 | 2482 | 4084 | + | 3134 | 562 | 4 | 119 | |
| 9 | 9 | 657 | 802 | 2 | 1458 | 1226 | 2181 | 2867 | 2860 | 62 | 1 | 1046 | | |
| 10 | 1 | 0 | 1 | 1 | 2818 | 1280 | 3105 | 82 | 2991 | 702 | 174 | 52 | | |
| 11 | 2 | 1641 | 585 | 8 | 2583 | 68 | 3875 | 56 | 2143 | 0 | 231 | 493 | | |
| 12 | 767 | 1034 | 1 | 829 | 3012 | 56 | 3574 | 2002 | 2693 | 0 | 1 | 112 | | |
| 13 | 1078 | 0 | 8 | 2352 | 23 | 1767 | 1575 | 1164 | 2287 | 1 | 984 | 1379 | | |
| 14 | 1318 | 2148 | 2712 | 48 | 3 | 1320 | 1228 | 2412 | 1965 | 432 | 1 | 21 | | |
| 15 | 18 | 1 | 2 | 1179 | 308 | 1487 | 1652 | 1031 | 2129 | 1335 | 1490 | 1 | | |
| 16 | 944 | 1 | 948 | 2518 | 1545 | 1976 | 1 | 733 | 1718 | 0 | 0 | 1931 | | |
| 17 | 728 | 51 | 3294 | + | 2250 | 1439 | 1687 | 1 | 513 | 21 | 1 | 211 | | |
| 18 | 0 | 17 | 2061 | 1 | 278 | 3001 | 332 | 1266 | 165 | 120 | 0 | 0 | | |
| 19 | 108 | 0 | 944 | 2053 | 958 | 2606 | 495 | 1615 | 1 | 124 | 160 | 1 | | |
| 20 | 645 | 1185 | 1500 | 2287 | 1382 | 1096 | 2202 | 2301 | 2302 | 0 | 165 | 752 | | |
| 21 | 712 | 90 | 1345 | 3914 | + | 1951 | 3462 | 2525 | 830 | 194 | 0 | 1595 | 0 | |
| 22 | 1552 | 2279 | + | 1162 | 2934 | 2190 | 3208 | 2891 | 3 | 1045 | 678 | 1713 | 1 | |
| 23 | 1642 | 56 | 296 | 109 | 3757 | + | 2337 | 2559 | 2408 | 1626 | 1134 | 1786 | + | 1175 |
| 24 | 185 | 1788 | 2821 | 2 | 2015 | 2533 | 1391 | 2366 | 962 | 146 | 148 | 30 | | |
| 25 | 0 | 40 | 1894 | 45 | 1307 | 1868 | 765 | 2486 | 610 | 445 | 1 | 57 | | |
| 26 | 32 | 743 | 19 | 2647 | 2468 | 2899 | 887 | 3848 | 2140 | 1 | 47 | 160 | | |
| 27 | 197 | 1901 | 153 | 31 | 2304 | 5 | 1277 | 3835 | 2445 | 526 | 414 | 294 | | |
| 28 | 3 | 154 | 1520 | 2120 | 576 | 548 | 656 | 3750 | 1481 | 1689 | 506 | 400 | | |
| 29 | 1511 | 1 | 2227 | 661 | 2351 | 3891 | 1377 | 2370 | 1570 | 1554 | 1294 | 1884 | | |
| 30 | 1660 | + | 1594 | 2321 | 575 | 2461 | 2089 | 1235 | 2767 | 1427 | 194 | 1945 | | |
| 31 | 457 | | 1757 | | 3583 | | 2164 | 3635 | | 2548 | + | 2008 | + | |
| Suma | 19726 | 18836 | 28998 | 40913 | 52152 | 57821 | 56339 | 58789 | 49284 | 17023 | 15028 | 22499 | | |
| Priemer | 636 | 650 | 935 | 1364 | 1682 | 1927 | 1817 | 1896 | 1643 | 549 | 501 | 726 | | |
| Ročná suma | 437409 | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESAČOCH

Stanica : 11952 **ARC Gánovce**

2016

| | | | |
|---------------|---------|------|--------|
| prístroj | výrobca | typ | v.č. |
| pyrheliometer | KZ | CHP1 | 140123 |

Nadm. výška : 703 m n.m.
 Zem. šírka : 49° 2' 6"
 Zem. dĺžka : 20° 19' 27"

Priame žiarenie [J cm⁻²]

| | | | |
|-----------|---------|-----|-------------|
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |

solárny tracker KZ 2AP

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | | | 7 | 38 | 73 | 108 | 116 | 118 | 105 | 84 | 35 | 5 | | | | | | | |
| II | | | | | | | 5 | 15 | 35 | 61 | 82 | 96 | 106 | 101 | 84 | 48 | 18 | 1 | | | | | | |
| III | | | | | | 0 | 31 | 59 | 75 | 85 | 85 | 103 | 103 | 87 | 97 | 107 | 72 | 29 | 2 | | | | | |
| IV | | | | | 0 | 17 | 60 | 105 | 130 | 141 | 150 | 146 | 147 | 138 | 115 | 90 | 70 | 43 | 12 | 0 | | | | |
| V | | | | | 16 | 83 | 140 | 174 | 184 | 162 | 143 | 147 | 116 | 110 | 100 | 95 | 96 | 84 | 30 | 1 | | | | |
| VI | | | 0 | 34 | 102 | 155 | 173 | 189 | 172 | 189 | 155 | 164 | 138 | 125 | 108 | 106 | 77 | 28 | 13 | 0 | | | | |
| VII | | | 0 | 23 | 67 | 118 | 164 | 192 | 183 | 178 | 174 | 127 | 123 | 105 | 106 | 102 | 103 | 43 | 9 | | | | | |
| VIII | | | | 5 | 48 | 107 | 152 | 170 | 183 | 182 | 153 | 173 | 173 | 148 | 149 | 119 | 93 | 41 | 3 | | | | | |
| IX | | | | | 0 | 58 | 131 | 171 | 192 | 200 | 178 | 173 | 157 | 137 | 111 | 88 | 42 | 6 | | | | | | |
| X | | | | | | 1 | 21 | 42 | 49 | 47 | 55 | 81 | 85 | 76 | 59 | 30 | 2 | | | | | | | |
| XI | | | | | | | 7 | 39 | 72 | 84 | 75 | 63 | 63 | 56 | 36 | 5 | | | | | | | | |
| XII | | | | | | | | 4 | 38 | 79 | 109 | 125 | 121 | 112 | 92 | 44 | 0 | | | | | | | |

Fotosynteticky aktívne slnečné žiarenie

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

Stanica : 11898 **Banská Bystrica** **2016**

Nadm. výška : 427 m n.m. **Fotosynteticky aktívne žiarenie [mol m⁻²]**

Zem. šírka : 48 ° 44 ' 1 " *****

Zem. dĺžka : 19 ° 7 ' 1 "

| | | | |
|------------|---------|------|-------------|
| prístroj | výrobca | typ | v.č. |
| rádiometer | KZ | PQS1 | 1400289 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | | |
|------------|--------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|-------|------|-----|-----|
| 1 | 865 | 981 | 777 | 3184 | 2943 | 4009 | 5443 | 4423 | 4583 | + | 2465 | + | 1594 | + | 550 |
| 2 | 332 | 850 | 2255 | 3961 | 2814 | 2713 | - | 6494 | + | 5415 | 2630 | 1964 | 948 | 876 | |
| 3 | 1005 | 621 | 1046 | 3977 | 2740 | 5136 | 3292 | 5540 | 3788 | 1054 | 1231 | 1023 | | | |
| 4 | 254 | 1108 | 2481 | 3800 | 4283 | 4948 | 6305 | 4929 | 3878 | 695 | 1036 | 1096 | + | | |
| 5 | 290 | 1897 | 1105 | 4011 | 4139 | 4129 | 5102 | 4231 | 1632 | 1842 | 385 | 1016 | | | |
| 6 | 705 | 1141 | 276 | - | 3844 | 4527 | 6057 | 4572 | 2419 | 1248 | 1516 | 212 | 1083 | | |
| 7 | 1081 | 365 | 1292 | 3255 | 4881 | 6305 | 6372 | 5644 | + | 4093 | 1742 | 1261 | 699 | | |
| 8 | 775 | 215 | 1445 | 1465 | 4204 | 5921 | 5380 | 5582 | 4066 | 1807 | 1028 | 770 | | | |
| 9 | 132 | 958 | 3101 | 1033 | 4238 | 3613 | 4748 | 4761 | 3963 | 1608 | 1584 | 948 | | | |
| 10 | 461 | 154 | - | 2972 | 2120 | 3907 | 4332 | 6446 | 788 | 4028 | 1904 | 331 | 621 | | |
| 11 | 123 | - | 934 | 2729 | 3829 | 3241 | 2758 | 5882 | 4850 | 3948 | 513 | 216 | 398 | | |
| 12 | 689 | 773 | 1295 | 2302 | 4416 | 3031 | 4290 | 4205 | 3777 | 2286 | 439 | 878 | | | |
| 13 | 461 | 261 | 1800 | 3124 | 2074 | - | 3570 | 5053 | 3623 | 3460 | 1381 | 1568 | 978 | | |
| 14 | 1049 | 514 | 3430 | 1423 | 2839 | 5793 | 2391 | 4753 | 3682 | 1245 | 1295 | 373 | | | |
| 15 | 584 | 354 | 1108 | 3885 | 3551 | 3517 | 5360 | 4226 | 3604 | 2218 | 1328 | 998 | | | |
| 16 | 1300 | 948 | 1304 | 3261 | 5270 | 3831 | 1047 | 3197 | 3271 | 1299 | 284 | 908 | | | |
| 17 | 1326 | 413 | 3552 | 3694 | 3112 | 4708 | 979 | - | 3376 | 527 | - | 456 | 340 | 688 | |
| 18 | 1294 | 563 | 3356 | 2911 | 3474 | 6275 | 3969 | 3683 | 2796 | 363 | 88 | - | 248 | | |
| 19 | 612 | 420 | 3204 | 4918 | 4076 | 4695 | 3626 | 3021 | 3242 | 275 | 259 | 312 | | | |
| 20 | 271 | 1411 | 1965 | 4077 | 3776 | 4785 | 5112 | 4332 | 3427 | 207 | - | 153 | 426 | | |
| 21 | 981 | 409 | 1890 | 5025 | 4199 | 5889 | 5973 | 1444 | 2069 | 254 | 981 | 285 | | | |
| 22 | 1484 | + | 2183 | 2281 | 4616 | 5730 | 6054 | 4410 | 736 | - | 3200 | 2362 | 1227 | 528 | |
| 23 | 990 | 660 | 2160 | 1968 | 5575 | 6254 | 4928 | 5012 | 3113 | 1088 | 1142 | 762 | | | |
| 24 | 668 | 1848 | 3892 | + | 2074 | 2258 | 5952 | 3357 | 4493 | 2595 | 272 | 240 | 225 | | |
| 25 | 571 | 756 | 2647 | 2703 | 5117 | 5509 | 3177 | 4877 | 2690 | 461 | 143 | 164 | - | | |
| 26 | 742 | 2451 | + | 1886 | 3825 | 5316 | 5071 | 4194 | 4812 | 2498 | 2141 | 474 | 396 | | |
| 27 | 802 | 1476 | 2144 | 455 | - | 5305 | 3192 | 3996 | 4769 | 3240 | 1210 | 733 | 171 | | |
| 28 | 793 | 679 | 2498 | 4082 | 4875 | 5832 | 2411 | 4688 | 2518 | 1733 | 1083 | 895 | | | |
| 29 | 1350 | 269 | 2975 | 5120 | 3659 | 6331 | + | 5106 | 3532 | 2934 | 888 | 534 | 1053 | | |
| 30 | 307 | 2061 | 5260 | + | 5437 | 6207 | 5495 | 4195 | 3076 | 1507 | 601 | 1042 | | | |
| 31 | 940 | 3694 | 5736 | + | 3518 | 4624 | 1538 | 1070 | | | | | | | |
| Suma | 23236 | 25612 | 68620 | 99203 | 127714 | 146419 | 138427 | 126179 | 93577 | 40294 | 22739 | 21479 | | | |
| Priemer | 750 | 883 | 2214 | 3307 | 4120 | 4881 | 4465 | 4070 | 3119 | 1300 | 758 | 693 | | | |
| Ročná suma | 933499 | | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESAČOCH

Stanica : 11898 **Banská Bystrica**

2016

Nadm. výška : 427 m n.m.
 Zem. šírka : 48° 44' 1"
 Zem. dĺžka : 19° 7' 1"

Fotosynteticky aktívne žiarenie [mol m⁻²]

| | | | |
|------------|---------|------|-------------|
| prístroj | výrobca | typ | v.č. |
| rádiometer | KZ | PQS1 | 1400289 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | 0 | 0 | 3 | 27 | 68 | 109 | 138 | 151 | 134 | 83 | 32 | 4 | 0 | | | | | | |
| II | | | | | | | 1 | 14 | 47 | 95 | 126 | 146 | 140 | 143 | 101 | 54 | 16 | 1 | | | | | | |
| III | | | | | 0 | 1 | 21 | 88 | 175 | 257 | 292 | 319 | 283 | 281 | 227 | 162 | 85 | 20 | 2 | | | | | |
| IV | | | | 0 | 1 | 18 | 88 | 181 | 275 | 356 | 420 | 436 | 419 | 354 | 295 | 227 | 154 | 68 | 15 | 1 | | | | |
| V | | | 0 | 0 | 7 | 55 | 151 | 249 | 332 | 403 | 451 | 457 | 473 | 440 | 349 | 311 | 240 | 139 | 55 | 9 | 0 | | | |
| VI | | | | 1 | 18 | 88 | 188 | 290 | 401 | 486 | 520 | 540 | 532 | 504 | 428 | 341 | 264 | 176 | 83 | 18 | 1 | | | |
| VII | | | | 1 | 13 | 77 | 176 | 293 | 367 | 442 | 482 | 514 | 488 | 445 | 372 | 311 | 249 | 159 | 65 | 11 | 1 | | | |
| VIII | | | | 0 | 2 | 33 | 116 | 227 | 337 | 416 | 458 | 484 | 484 | 428 | 368 | 311 | 247 | 129 | 29 | 2 | | | | |
| IX | | | | | 0 | 4 | 47 | 139 | 248 | 347 | 408 | 418 | 390 | 374 | 330 | 241 | 130 | 40 | 4 | 0 | | | | |
| X | | | | | 0 | 0 | 4 | 33 | 78 | 141 | 189 | 232 | 211 | 171 | 128 | 80 | 29 | 3 | 0 | 0 | | | | |
| XI | | | | | | 0 | 0 | 6 | 38 | 90 | 134 | 138 | 128 | 113 | 76 | 31 | 5 | 0 | 0 | | | | | |
| XII | | | | | | | 0 | 1 | 22 | 65 | 111 | 141 | 146 | 114 | 71 | 21 | 2 | 0 | | | | | | |

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

Stanica : 11952 **ARC Gánovce** **2016**

Nadm. výška : 703 m n.m. Fotosynteticky aktívne žiarenie [mol m⁻²]

Zem. šírka : 49 ° 2 ' 6 " *****

Zem. dĺžka : 20 ° 19 ' 27 "

| | | | |
|------------|---------|------|-------------|
| prístroj | výrobca | typ | v.č. |
| rádiometer | KZ | PQS1 | 1400276 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | | | | | | | |
|------------|--------|-------|-------|------|-------|------|--------|------|--------|------|--------|--------|---|-------|-------|-----|-------|-------|------|--|
| 1 | 1044 | 1399 | 550 | - | 2326 | 4182 | 3343 | 2950 | 1980 | 4543 | + | 3050 | + | 952 | 763 | | | | | |
| 2 | 1018 | 1128 | 2330 | | 4458 | 3316 | 1767 | - | 3677 | 4727 | | 2743 | | 2549 | 832 | 483 | | | | |
| 3 | 1199 | 807 | 1477 | | 4199 | 2995 | 4132 | | 1328 | 3845 | | 3815 | | 496 | 1861 | + | 1292 | + | | |
| 4 | 497 | 1502 | 1346 | | 4183 | 3775 | 5936 | | 5644 | 4854 | | 3864 | | 595 | 1734 | | 1198 | | | |
| 5 | 704 | 1263 | 1268 | | 4321 | 5213 | 4797 | | 4687 | 5553 | | 894 | | 1237 | 1353 | | 1185 | | | |
| 6 | 755 | 1907 | 1042 | | 2743 | 5633 | 6691 | + | 6333 | 878 | - | 1323 | | 730 | 380 | | 1171 | | | |
| 7 | 679 | 1083 | 994 | | 3650 | 4856 | 6450 | | 6630 | + | 5595 | | | 3882 | 1305 | | 507 | 1166 | | |
| 8 | 952 | 833 | 1711 | | 1928 | 4018 | 5548 | | 5374 | | + | 5790 | + | 4369 | 1721 | | 763 | 742 | | |
| 9 | 389 | - | 1207 | | 1957 | 1249 | 4386 | | 3667 | | | 4809 | | 4970 | 4251 | | 1141 | 329 | 1106 | |
| 10 | 432 | 501 | 588 | | 775 | 5230 | 4742 | | 6314 | | | 1540 | | 4236 | 1706 | | 1018 | 504 | | |
| 11 | 443 | 2255 | 2312 | | 1967 | 5305 | 2370 | | 6502 | | | 1293 | | 3818 | 566 | | 795 | 877 | | |
| 12 | 938 | 1686 | 819 | | 3086 | 5623 | 2585 | | 6524 | | | 4392 | | 3978 | 516 | | 184 | 475 | | |
| 13 | 1072 | 1078 | 1122 | | 4297 | 1817 | 4653 | | 4725 | | | 3839 | | 3907 | 584 | | 1346 | 1046 | | |
| 14 | 1206 | 2231 | 3420 | | 1412 | 1444 | - | 4441 | 2808 | | | 4327 | | 3544 | 1769 | | 482 | 311 | - | |
| 15 | 787 | 444 | 1569 | | 3516 | 2863 | 4434 | | 4328 | | | 3510 | | 3506 | 2313 | | 1504 | 472 | | |
| 16 | 1148 | 351 | - | 2475 | 4643 | 3274 | 4465 | | 591 | | | 3429 | | 3289 | 462 | | 435 | 1110 | | |
| 17 | 1079 | 1254 | 3732 | | 4448 | 4471 | 4613 | | 581 | - | 2529 | 1062 | | 413 | 571 | | 637 | | | |
| 18 | 1378 | 875 | 3465 | | 749 | - | 3044 | | 5711 | | 2515 | 3825 | | 1804 | 1408 | | 158 | - | 361 | |
| 19 | 893 | 443 | 2625 | | 4224 | 3710 | 5595 | | 3283 | | 4064 | 872 | - | 1209 | 786 | | 379 | | | |
| 20 | 1203 | 2112 | 2846 | | 4607 | 4338 | 4270 | | 5348 | | 4346 | 3635 | | 330 | 685 | | 839 | | | |
| 21 | 849 | 1034 | 3052 | | 5336 | + | 4785 | | 6346 | | 5159 | 3014 | | 1811 | 314 | - | 1406 | 313 | | |
| 22 | 1493 | 2542 | + | 2988 | 5001 | | 4982 | | 6261 | | 5925 | 1059 | | 2413 | 1244 | | 1395 | 502 | | |
| 23 | 1443 | 1171 | 1900 | | 2754 | | 6224 | | 5314 | | 5321 | 4444 | | 2615 | 2045 | | 1381 | 1059 | | |
| 24 | 546 | 2417 | 3734 | + | 1210 | | 4873 | | 5705 | | 4035 | 4530 | | 2366 | 1047 | | 697 | 609 | | |
| 25 | 800 | 1094 | 3101 | | 2728 | | 3604 | | 4738 | | 3204 | 4179 | | 2194 | 1550 | | 210 | 430 | | |
| 26 | 730 | 1870 | 1600 | | 4719 | | 5473 | | 6021 | | 3963 | 5098 | | 3398 | 705 | | 753 | 655 | | |
| 27 | 909 | 2529 | 2024 | | 1244 | | 5546 | | 1925 | | 3645 | 5065 | | 3381 | 1425 | | 665 | 595 | | |
| 28 | 727 | 1632 | 3587 | | 4290 | | 3215 | | 3537 | | 2991 | 4999 | | 2762 | 2005 | | 1141 | 976 | | |
| 29 | 1383 | 400 | 3715 | | 3767 | | 5682 | | 6623 | | 4335 | 3913 | | 2925 | 1911 | | 1230 | 1172 | | |
| 30 | 1692 | + | 3472 | | 4829 | | 3498 | | 5199 | | 4826 | 3529 | | 3300 | 1516 | | 674 | 1164 | | |
| 31 | 1091 | | 3688 | | 6561 | + | | | 4651 | | 4885 | | | 2116 | | | 1204 | | | |
| Suma | 29480 | 39047 | 70507 | | 98656 | | 133938 | | 141878 | | 133003 | 120001 | | 90498 | 39976 | | 26227 | 24795 | | |
| Priemer | 951 | 1346 | 2274 | | 3289 | | 4321 | | 4729 | | 4290 | 3871 | | 3017 | 1290 | | 874 | 800 | | |
| Ročná suma | 948006 | | | | | | | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESIACHOCH

Stanica : 11952 **ARC Gánovce**

2016

| prístroj | výrobca | typ | v.č. |
|------------|---------|------|---------|
| rádiometer | KZ | PQS1 | 1400276 |

Nadm. výška : 703 m n.m.

Fotosynteticky aktívne žiarenie [mol m⁻²]

| dataloger | výrobca | typ | vzorkovanie |
|-----------|---------|-----|-------------|
| | MPS | 6 | 5 s |

Zem. šírka : 49° 2' 6"

Zem. dĺžka : 20° 19' 27"

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | 0 | 0 | 4 | 34 | 93 | 153 | 184 | 186 | 155 | 101 | 37 | 5 | 0 | | | | | | |
| II | | | | | | 0 | 1 | 21 | 71 | 140 | 202 | 226 | 232 | 204 | 150 | 78 | 20 | 1 | | | | | | |
| III | | | | | 0 | 2 | 24 | 86 | 160 | 232 | 277 | 324 | 328 | 284 | 251 | 189 | 93 | 23 | 2 | | | | | |
| IV | | | | | 1 | 15 | 77 | 175 | 274 | 347 | 405 | 416 | 422 | 386 | 313 | 231 | 147 | 67 | 12 | 1 | | | | |
| V | | | 0 | 10 | 66 | 175 | 282 | 380 | 436 | 482 | 521 | 463 | 415 | 358 | 292 | 229 | 146 | 57 | 8 | 0 | | | | |
| VI | | | 1 | 19 | 89 | 206 | 305 | 416 | 458 | 534 | 506 | 534 | 451 | 394 | 315 | 252 | 154 | 76 | 20 | 1 | | | | |
| VII | | | 1 | 12 | 69 | 176 | 291 | 395 | 437 | 492 | 513 | 432 | 396 | 338 | 281 | 223 | 158 | 64 | 12 | 1 | | | | |
| VIII | | | | 3 | 32 | 114 | 222 | 320 | 405 | 460 | 435 | 469 | 439 | 352 | 289 | 194 | 107 | 27 | 2 | | | | | |
| IX | | | | 0 | 5 | 50 | 146 | 244 | 339 | 401 | 402 | 404 | 357 | 293 | 207 | 125 | 40 | 4 | | | | | | |
| X | | | | 0 | 0 | 4 | 32 | 83 | 135 | 161 | 191 | 213 | 193 | 149 | 94 | 32 | 3 | 0 | 0 | | | | | |
| XI | | | | | 0 | 0 | 6 | 44 | 99 | 143 | 164 | 149 | 129 | 92 | 41 | 6 | 0 | 0 | | | | | | |
| XII | | | | | | 0 | 2 | 26 | 84 | 134 | 159 | 160 | 130 | 78 | 25 | 2 | 0 | | | | | | | |

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

Stanica : 11978 **Trebišov-Milhostov** **2016**

Nadm. výška : 105 m n.m. **Fotosynteticky aktívne žiarenie [mol m⁻²]**

Zem. šírka : 48 ° 39 ' 47 " *****

Zem. dĺžka : 21 ° 43 ' 19 "

| | | | |
|------------|---------|------|-------------|
| prístroj | výrobca | typ | v.č. |
| rádiometer | KZ | PQS1 | 140290 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | | | | |
|------------|--------|-------|--------|--------|--------|--------|--------|--------|--------|------|-------|------|-------|-------|------|-----|
| 1 | 912 | 1178 | 686 | 1732 | 4658 | 4662 | 5182 | 3214 | 4594 | + | 2680 | + | 1137 | 218 | | |
| 2 | 8 287 | 389 | 493 | 4209 | 3932 | 1661 | - 6053 | 4796 | 3576 | | 1818 | | 631 | 929 | | |
| 3 | 8 1058 | 350 | 2355 | 3969 | 3691 | 3604 | 2854 | 5449 | 3960 | | 329 | | 1109 | 897 | | |
| 4 | 8 338 | 1320 | 2213 | 3548 | 4390 | 5839 | 5892 | 5020 | 3911 | | 396 | | 1336 | 923 | | |
| 5 | 8 236 | 1238 | 617 | 4106 | 4835 | 4823 | 5663 | 5303 | 765 | - | 942 | | 578 | 456 | | |
| 6 | 8 377 | 803 | 664 | 3967 | 4968 | 5947 | 4934 | 4947 | 3441 | | 736 | | 262 | 471 | | |
| 7 | 8 397 | 1604 | 405 | - 3297 | 4973 | 5826 | 6220 | 5602 | 4204 | | 1097 | | 596 | 851 | | |
| 8 | 8 447 | 355 | 1832 | 1194 | - 4082 | 5906 | 6274 | 5622 | + | 4129 | | 1976 | 997 | 149 | | |
| 9 | 9 271 | 1388 | 2942 | 1907 | 5163 | 4098 | 4564 | 5519 | 4216 | | 1470 | | 396 | 142 | | |
| 10 | 9 153 | - 182 | - 1618 | 1505 | 5129 | 2976 | 5668 | 3986 | 4011 | | 1757 | | 835 | 206 | | |
| 11 | 9 196 | 1128 | 2595 | 3561 | 5121 | 3354 | 6340 | + | 2620 | | 3982 | | 721 | 160 | | |
| 12 | 9 1015 | 1169 | 444 | 3681 | 5460 | 4020 | 6269 | 5101 | 3809 | | 713 | | 337 | 574 | | |
| 13 | 9 1034 | 463 | 2076 | 3700 | 3410 | 4063 | 4823 | 3677 | 3532 | | 2488 | | 1138 | 1045 | | |
| 14 | 9 1193 | + | 761 | 3342 | 2844 | 1362 | - 2853 | 2817 | 4808 | | 3711 | | 2187 | 331 | 260 | |
| 15 | 9 180 | 320 | 764 | 3578 | 3204 | 3369 | 6096 | 2440 | 3559 | | 1880 | | 1495 | + | 507 | |
| 16 | 9 1016 | 375 | 3172 | 3697 | 4483 | 4328 | 1612 | - 3800 | 3341 | | 388 | | 485 | 1040 | | |
| 17 | 9 802 | 2034 | 3371 | 3616 | 3705 | 4779 | 3046 | 2225 | 1772 | | 314 | | 207 | 149 | | |
| 18 | 9 804 | 804 | 2912 | 4021 | 2271 | 5733 | 3308 | 4663 | 2236 | | 980 | | 207 | 169 | | |
| 19 | 9 927 | 367 | 2691 | 4689 | 4925 | 5726 | 2845 | 3529 | 1453 | | 803 | | 1274 | 446 | | |
| 20 | 9 773 | 649 | 2562 | 4105 | 5462 | 3741 | 4629 | 4978 | 3369 | | 1303 | | 324 | 357 | | |
| 21 | 9 936 | 364 | 1595 | 5077 | + | 5317 | 3404 | 4886 | 4343 | | 2909 | | 266 | - | 1285 | 191 |
| 22 | 9 986 | 1910 | 1985 | 4543 | 5352 | 5518 | 5154 | 1951 | - 2610 | | 573 | | 1233 | 251 | | |
| 23 | 9 728 | 569 | 2239 | 2969 | 5479 | 5996 | 5486 | 3428 | 3365 | | 876 | | 673 | 201 | | |
| 24 | 9 425 | 1549 | 3442 | 1896 | 4251 | 6115 | 5963 | 4996 | 2376 | | 302 | | 574 | 306 | | |
| 25 | 9 224 | 907 | 3659 | 1536 | 5280 | 6258 | 5294 | 4743 | 2708 | | 341 | | 310 | 269 | | |
| 26 | 9 494 | 1561 | 1597 | 4104 | 5695 | + | 5631 | 4647 | 4930 | | 3060 | | 1618 | 869 | 578 | |
| 27 | 9 389 | 2402 | + | 2431 | 2412 | 5497 | 3290 | 5315 | 4818 | | 3290 | | 1560 | 97 | - | 699 |
| 28 | 9 436 | 1413 | 2964 | 5005 | 4355 | 4036 | 2784 | 4753 | 2866 | | 1996 | | 997 | 839 | | |
| 29 | 9 792 | 667 | 2878 | 1332 | 5401 | 6568 | + | 3808 | 4617 | | 2713 | | 766 | 794 | 636 | |
| 30 | 9 287 | | 2982 | 4288 | 3662 | 6150 | | 4719 | 3928 | | 2972 | | 1356 | 689 | 1141 | + |
| 31 | 9 516 | | 3805 | + | 5108 | | | 4606 | 4693 | | 1076 | | | 916 | | |
| Suma | 18629 | 28219 | 67331 | 100088 | 140622 | 140273 | 147747 | 134500 | 96443 | | 35707 | | 21667 | 15978 | | |
| Priemer | 601 | 973 | 2172 | 3336 | 4536 | 4676 | 4766 | 4339 | 3215 | | 1152 | | 722 | 515 | | |
| Ročná suma | 947206 | | | | | | | | | | | | | | | |

PRIEMERNÉ HODINOVÉ SUMY V JEDNOTLIVÝCH MESIACHOCH

Stanica : 11978 Trebišov-Milhostov

2016

| prístroj | výrobca | typ | v.č. |
|------------|---------|------|--------|
| rádiometer | KZ | PQS1 | 140290 |

Nadm. výška : 105 m n.m.

Fotosynteticky aktívne žiarenie [mol m⁻²]

| dataloger | výrobca | typ | vzorkovanie |
|-----------|---------|-----|-------------|
| | MPS | 6 | 5 s |

Zem. šírka : 48 ° 39 ' 47 "

Zem. dĺžka : 21 ° 43 ' 19 "

| Mesiac | Hodina | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 |
| I | | | | | | | | 3 | 22 | 56 | 93 | 112 | 115 | 102 | 68 | 26 | 3 | | | | | | | |
| II | | | | | | | 1 | 17 | 55 | 99 | 147 | 163 | 161 | 145 | 111 | 55 | 16 | 2 | | | | | | |
| III | | | | | | 2 | 19 | 77 | 157 | 241 | 295 | 328 | 318 | 289 | 206 | 147 | 76 | 17 | 2 | | | | | |
| IV | | | | | 1 | 16 | 81 | 169 | 265 | 365 | 422 | 463 | 419 | 387 | 304 | 235 | 142 | 53 | 13 | 1 | | | | |
| V | | | 0 | 9 | 61 | 152 | 274 | 372 | 479 | 542 | 548 | 539 | 486 | 431 | 327 | 157 | 100 | 51 | 7 | 0 | | | | |
| VI | | | 1 | 21 | 91 | 181 | 282 | 376 | 460 | 519 | 537 | 534 | 507 | 439 | 301 | 176 | 153 | 79 | 18 | 1 | | | | |
| VII | | | 1 | 15 | 81 | 165 | 292 | 375 | 476 | 553 | 569 | 545 | 524 | 425 | 322 | 208 | 142 | 62 | 11 | 1 | | | | |
| VIII | | | | 3 | 34 | 127 | 238 | 333 | 412 | 491 | 530 | 536 | 493 | 420 | 334 | 233 | 122 | 30 | 3 | | | | | |
| IX | | | | 0 | 5 | 47 | 140 | 246 | 352 | 406 | 447 | 430 | 395 | 334 | 232 | 133 | 44 | 5 | | | | | | |
| X | | | | | 0 | 4 | 27 | 69 | 117 | 161 | 178 | 184 | 166 | 133 | 80 | 28 | 3 | 0 | | | | | | |
| XI | | | | | | 0 | 0 | 5 | 34 | 77 | 116 | 124 | 133 | 116 | 80 | 33 | 5 | 0 | | | | | | |
| XII | | | | | | | 0 | 1 | 19 | 53 | 81 | 101 | 101 | 86 | 53 | 19 | 2 | | | | | | | |

Radiačná bilancia

DENNÉ, MESAČNÉ A ROČNÁ SUMA ŽIARENIA

| | | | | | | | | | |
|-------------|---------|--------------------|-----|-------------------|-----------------------|--------------|---------|------|-------------|
| Stanica | : 11952 | ARC Gánovce | | 2016 | | prístroj | výrobca | typ | v.č. |
| Nadm. výška | : 703 | m n.m. | | Radiačná bilancia | [J cm ⁻²] | bilancometer | KZ | CNR4 | 140210 |
| Zem. šírka | : 49 ° | 2' | 6" | ***** | | dataloger | výrobca | typ | vzorkovanie |
| Zem. dĺžka | : 20 ° | 19' | 27" | | | | MPS | 6 | 5 s |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII |
|-------------------|---------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|--------------|
| 1 | -426 | -360 | 126 | 353 | 907 | 621 | 551 | 437 | 820 | 476 | 120 | 79 |
| 2 | -292 | -75 | 412 | 761 | 735 | 352 | 828 | 1075 | 422 | 440 | -88 | -152 |
| 3 | -233 | 8 | 277 | 791 | 767 | 1152 | 218 | 899 | 736 | 66 | -24 | -347 |
| 4 | -107 | -174 | 236 | 859 | 849 | 1464 | 1319 | 1180 | 781 | 83 | -46 | -353 |
| 5 | -22 | -256 | 155 | 883 | 1240 | 1126 | 1001 | 1417 | 108 | 183 | 167 | -343 |
| 6 | -72 | 121 | 98 | 535 | 1273 | 1637 | 1556 | 157 | 334 | 143 | 110 | -185 |
| 7 | -171 | -93 | 221 | 876 | 1106 | 1359 | 1517 | 1293 | 779 | 115 | -58 | -265 |
| 8 | -148 | 177 | 322 | 386 | 958 | 1264 | 1180 | 1272 | 799 | 172 | 46 | -66 |
| 9 | -73 | 144 | 313 | 345 | 887 | 817 | 1217 | 1139 | 797 | 157 | -129 | -9 |
| 10 | -16 | 116 | 127 | 177 | 1168 | 1246 | 1446 | 312 | 778 | 172 | -64 | -156 |
| 11 | 49 | -306 | 559 | 565 | 1194 | 462 | 1573 | 157 | 713 | 53 | 23 | 13 |
| 12 | -225 | -68 | 165 | 799 | 1263 | 605 | 1592 | 925 | 722 | 97 | -16 | -176 |
| 13 | -159 | 68 | 226 | 1015 | 376 | 1066 | 1286 | 826 | 739 | 72 | -64 | -436 |
| 14 | -355 | -7 | 620 | 322 | 248 | 1013 | 566 | 972 | 674 | 371 | -80 | -98 |
| 15 | -153 | 140 | 171 | 849 | 658 | 1033 | 903 | 757 | 636 | 387 | -95 | -74 |
| 16 | -328 | 63 | 281 | 1088 | 582 | 1074 | 58 | 720 | 566 | 101 | 79 | -315 |
| 17 | -257 | 291 | 556 | 1078 | 1119 | 1116 | 111 | 562 | 47 | 60 | 122 | -229 |
| 18 | -294 | 109 | 593 | 95 | 695 | 1366 | 640 | 826 | 359 | 213 | -87 | 44 |
| 19 | -188 | 144 | 423 | 1005 | 779 | 1384 | 892 | 994 | 205 | 206 | 104 | -5 |
| 20 | -270 | 91 | 365 | 1025 | 993 | 1092 | 1375 | 920 | 692 | 31 | 69 | -96 |
| 21 | -343 | 229 | 630 | 1065 | 1089 | 1500 | 1203 | 701 | 246 | 69 | -50 | 15 |
| 22 | -403 | 310 | 574 | 1079 | 1189 | 1502 | 1500 | 120 | 273 | 109 | -111 | 36 |
| 23 | -339 | 187 | 240 | 576 | 1541 | 1253 | 1205 | 1083 | 280 | 186 | -180 | -4 |
| 24 | -76 | 154 | 541 | 277 | 1180 | 1387 | 968 | 1026 | 350 | 159 | 30 | -17 |
| 25 | 8 | 75 | 469 | 678 | 797 | 1094 | 717 | 793 | 314 | 230 | 3 | -66 |
| 26 | 67 | 203 | 337 | 988 | 1325 | 1499 | 959 | 1192 | 484 | 20 | 32 | -62 |
| 27 | -9 | 262 | 389 | 291 | 1368 | 442 | 867 | 1479 | 475 | 161 | 1 | -188 |
| 28 | 153 | 348 | 708 | 1009 | 699 | 885 | 707 | 1252 | 363 | 145 | -67 | -157 |
| 29 | -17 | 81 | 716 | 856 | 1396 | 1582 | 1115 | 787 | 480 | 160 | -143 | -502 |
| 30 | 95 | | 734 | 1162 | 818 | 1188 | 1119 | 673 | 470 | -47 | -145 | -442 |
| 31 | -73 | | 689 | | 1685 | | 1193 | 867 | | 72 | | -415 |
| Suma | -4675 | 2700 | 12274 | 21789 | 30881 | 33578 | 31379 | 26816 | 15442 | 4864 | -540 | -4972 |
| Priemer | -151 | 93 | 396 | 726 | 996 | 1119 | 1012 | 865 | 515 | 157 | -18 | -160 |
| Ročná suma | 169537 | | | | | | | | | | | |

Albedo povrchu

DENNÉ A MESAČNÉ PRIEMERY ALBEDA POVRCHU

Stanica : 11952 **ARC Gánovce** **2016**

Nadm. výška : 703 m n.m. Albedo povrchu

Zem. šírka : 49 ° 2 ' 6 " *****

Zem. dĺžka : 20 ° 19 ' 27 "

| | | | |
|-------------|---------|--------|-------------|
| prístroj | výrobca | typ | v.č. |
| albedometer | KZ | CMA 11 | 140004 |
| dataloger | výrobca | typ | vzorkovanie |
| | MPS | 6 | 5 s |

| Deň/Mesiac | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII |
|------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 0.226 | 0.206 | 0.139 | - 0.183 | 0.212 | 0.196 | 0.181 | 0.189 | 0.228 | 0.249 | 0.202 | 0.261 |
| 2 | 0.244 | 0.181 | 0.183 | 0.205 | 0.213 | 0.188 | 0.183 | 0.195 | 0.214 | 0.233 | 0.217 | 0.513 |
| 3 | 0.299 | 0.176 | 0.170 | 0.204 | 0.213 | 0.190 | 0.155 | 0.201 | 0.224 | 0.193 | 0.245 | 0.481 |
| 4 | 0.211 | 0.619 | 0.172 | 0.204 | 0.210 | 0.188 | 0.178 | 0.197 | 0.225 | 0.190 | 0.255 | 0.389 |
| 5 | 0.429 | 0.436 | 0.167 | 0.202 | 0.213 | 0.194 | 0.190 | 0.199 | 0.188 | - 0.215 | 0.228 | 0.388 |
| 6 | 0.392 | 0.277 | 0.157 | 0.204 | 0.213 | 0.188 | 0.195 | 0.173 | - 0.198 | 0.206 | 0.171 | 0.375 |
| 7 | 0.312 | 0.181 | 0.141 | 0.185 | 0.211 | 0.193 | 0.197 | 0.196 | 0.220 | 0.211 | 0.179 | 0.377 |
| 8 | 0.270 | 0.174 | 0.170 | 0.183 | 0.213 | 0.190 | 0.195 | 0.198 | 0.226 | 0.219 | 0.200 | 0.293 |
| 9 | 0.208 | 0.177 | 0.180 | 0.166 | 0.211 | 0.203 | 0.196 | 0.198 | 0.224 | 0.209 | 0.180 | 0.295 |
| 10 | 0.609 | 0.139 | 0.160 | 0.155 | - 0.211 | 0.200 | 0.195 | 0.180 | 0.226 | 0.225 | 0.216 | 0.206 |
| 11 | 0.436 | 0.788 | 0.184 | 0.172 | 0.209 | 0.205 | + 0.196 | 0.188 | 0.220 | 0.198 | 0.213 | 0.235 |
| 12 | 0.185 | - 0.578 | 0.165 | 0.181 | 0.212 | 0.203 | 0.197 | + 0.201 | 0.229 | 0.192 | 0.200 | 0.205 |
| 13 | 0.266 | 0.817 | + 0.153 | 0.185 | 0.197 | 0.202 | 0.197 | 0.202 | 0.230 | 0.197 | 0.309 | 0.505 |
| 14 | 0.693 | 0.669 | 0.199 | 0.162 | 0.194 | - 0.200 | 0.186 | 0.196 | 0.226 | 0.226 | 0.229 | 0.405 |
| 15 | 0.686 | 0.329 | 0.653 | + 0.188 | 0.206 | 0.196 | 0.196 | 0.197 | 0.223 | 0.246 | 0.256 | 0.440 |
| 16 | 0.766 | 0.247 | 0.394 | 0.192 | 0.215 | + 0.195 | 0.160 | 0.205 | 0.223 | 0.191 | 0.197 | 0.377 |
| 17 | 0.757 | 0.203 | 0.184 | 0.197 | 0.213 | 0.202 | 0.120 | - 0.198 | 0.189 | 0.185 | 0.183 | 0.337 |
| 18 | 0.639 | 0.163 | 0.195 | 0.166 | 0.215 | 0.192 | 0.183 | 0.206 | 0.208 | 0.211 | 0.158 | - 0.375 |
| 19 | 0.724 | 0.136 | - 0.190 | 0.199 | 0.212 | 0.192 | 0.189 | 0.206 | 0.201 | 0.210 | 0.205 | 0.294 |
| 20 | 0.698 | 0.518 | 0.186 | 0.207 | 0.209 | 0.192 | 0.185 | 0.209 | 0.242 | 0.190 | 0.197 | 0.291 |
| 21 | 0.761 | 0.176 | 0.187 | 0.207 | 0.206 | 0.196 | 0.186 | 0.207 | 0.215 | 0.172 | - 0.255 | 0.269 |
| 22 | 0.683 | 0.210 | 0.188 | 0.208 | 0.203 | 0.193 | 0.190 | 0.212 | 0.221 | 0.218 | 0.259 | 0.321 |
| 23 | 0.661 | 0.174 | 0.178 | 0.204 | 0.204 | 0.188 | 0.189 | 0.212 | 0.222 | 0.241 | 0.254 | 0.356 |
| 24 | 0.769 | + 0.389 | 0.203 | 0.190 | 0.206 | 0.191 | 0.187 | 0.214 | 0.225 | 0.209 | 0.212 | 0.336 |
| 25 | 0.743 | 0.169 | 0.194 | 0.207 | 0.213 | 0.185 | 0.191 | 0.213 | 0.222 | 0.216 | 0.178 | 0.644 |
| 26 | 0.589 | 0.379 | 0.177 | 0.205 | 0.198 | 0.190 | 0.186 | 0.219 | 0.240 | 0.190 | 0.184 | 0.609 |
| 27 | 0.428 | 0.190 | 0.172 | 0.191 | 0.204 | 0.182 | - 0.192 | 0.205 | 0.241 | 0.224 | 0.209 | 0.358 |
| 28 | 0.189 | 0.175 | 0.192 | 0.209 | 0.202 | 0.187 | 0.191 | 0.226 | 0.238 | 0.235 | 0.468 | + 0.778 |
| 29 | 0.195 | 0.138 | 0.195 | 0.210 | + 0.202 | 0.186 | 0.192 | 0.256 | + 0.236 | 0.237 | 0.330 | 0.836 |
| 30 | 0.196 | | 0.190 | 0.209 | 0.206 | 0.184 | 0.192 | 0.223 | 0.245 | + 0.225 | 0.254 | 0.770 |
| 31 | 0.191 | | 0.193 | | 0.198 | | 0.192 | 0.241 | | 0.260 | + 0.693 | |
| Priemer | 0.466 | 0.311 | 0.200 | 0.193 | 0.208 | 0.193 | 0.186 | 0.205 | 0.222 | 0.214 | 0.228 | 0.420 |

*denný priemer je vypočítaný v čase od 8 h do 16 h