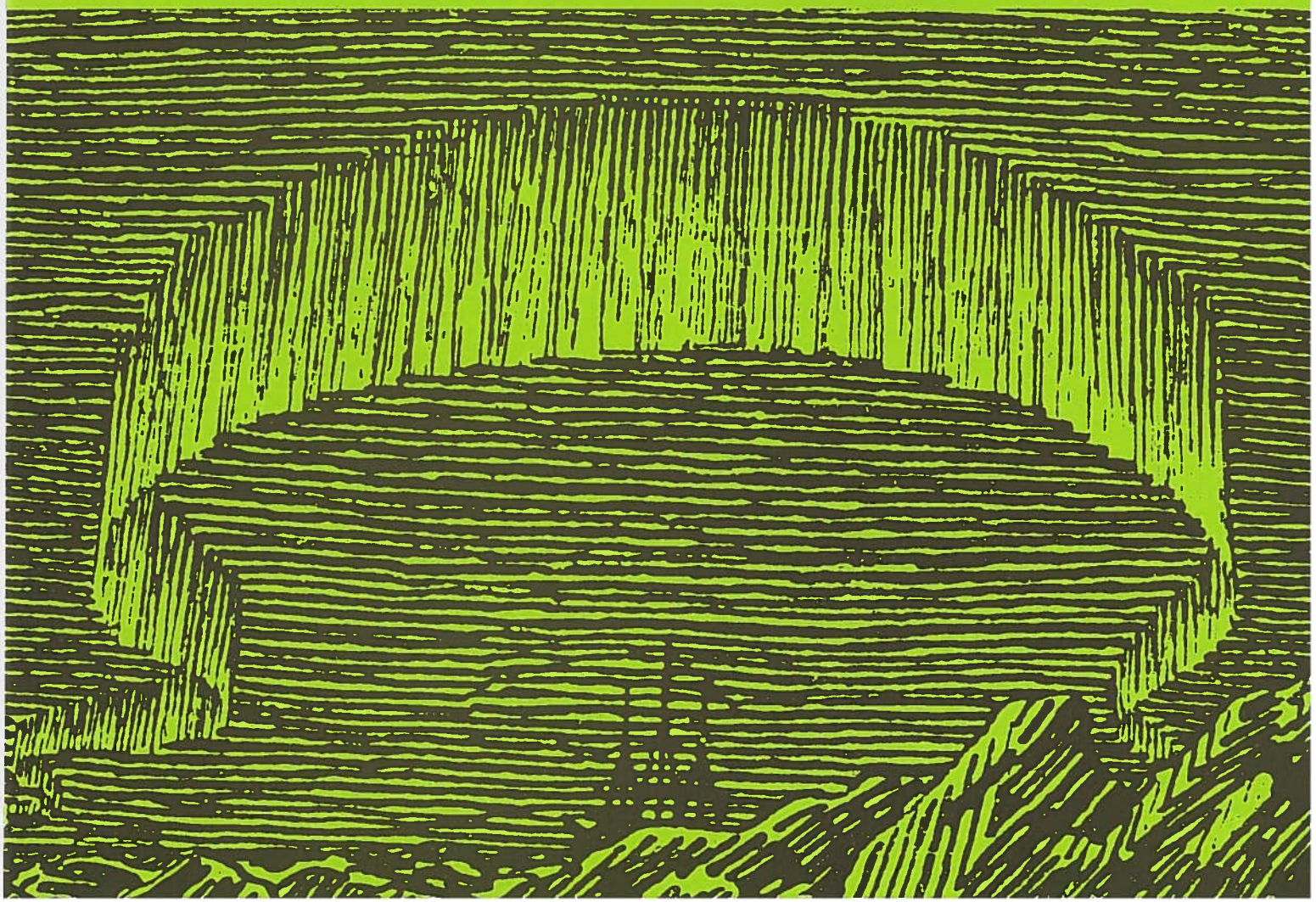
ISSN 0373 - 4854

# THE AURORAL OBSERVATORY

TROMSØ NORWAY

## MAGNETIC OBSERVATIONS 1990



# CONTENTS

# INTRODUCTION

This yearbook presents results of the geomagnetic measurements carried out in 1990 at The Auroral Observatory, University of Tromsø, Norway. The Observatory is situated 2 km NW from the centre of Tromsø. The geographic coordinates are:

| | |
|---|---|
| Latitude | 69 39'.7 N |
| Longitude | 18 56'.4 E |
| Altitude | 105 m above sea level |

## Instrument Equipment

The values presented are primarily based on digital recording with an orthogonal 3-axis fluxgate system of local design*. The instrument has a range of ± 2000 nT and resolution of 1 nT on each axis. The fluxgate data have been supplemented and checked against our classical Askania-Bamberg and La Cour variometers (see previous yearbooks) which were run in parallel with the fluxgate instrument.

Absolute calibrations have been performed with the following instruments:

- QD-10 for D-measurements
- D/I - fluxgate theodolite (Zeiss 010 B unmagnetic theodolite with a fluxgate sensor mounted on it) for D- and I- measurements
- QHM 123 and QMH 164 for H-measurements
- Geometric G 826 and Elsec 820 protonmagnetometers for F-measurements

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* For details see: A. Brekke, T. Hansen, S. Berger, T. Brattli and B. Holmeslet: "Upgraded Norwegian magnetic observatories in the Arctic", Phys. Earth and Planetary. Inter., 59, pp 89-96.

## Data availability

The hourly mean values presented in this yearbook as well as 1 minute values and the original 10 s data, are available in digital form on IBM-compatible diskettes. Analog presentations in form plots are also available. Request should be addressed to

The Auroral Observatory
University of Tromsø
N-9037 TROMSØ
Norway

In analog form the records are also found in WDC-CI for geomagnetism, Copenhagen, and the 1 min digital data in WDC-C2 for geomagnetism, Kyoto.

## Notes to the tables

1. The range of hourly mean values is -999 to 9999 inclusive. Values outside this range are marked with ***.
2. Universal time is used everywhere in this yearbook.
3. Hours are numbered from 1 to 24; Hour 1 means 0000 - 0059 U, hour 2 is 0100 - 0159 etc.
4. Declination is positive towards East. Horisontal intensity is positive North. Vertical intensity is positive down.
5. Quiet mean values are calculated from periods with K-indice less than 2.

Tromsø, September 1992

Tor Holmboe Børre Holmeslet Wenche Leirbakk

Steinar Berger Truls Lynne Hansen

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

January 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 339 | 324 | 310 | 339 | 368 | 353 | 339 | 339 | 324 | 339 | 324 | 295 | 281 | 266 | 266 | 237 | 165 | 295 | 208 | 498 | 542 | 281 | 281 | 382 | 320 |
| 2 | 328 | 498 | 353 | 324 | 310 | 310 | 310 | 324 | 324 | 306 | 285 | 309 | 261 | 246 | 240 | 206 | 127 | 182 | 189 | 227 | 290 | 267 | 454 | 446 | 296 |
| 3 | 604 | 397 | 433 | 368 | 281 | 266 | 298 | 307 | 309 | 312 | 306 | 281 | 263 | 243 | 258 | 219 | 146 | 252 | 275 | 309 | 312 | 316 | 288 | 318 | 306 |
| 4 | 348 | 351 | 355 | 371 | 315 | 331 | 328 | 327 | 321 | 325 | 276 | 273 | 239 | 240 | 177 | 201 | 202 | 230 | 242 | 266 | 272 | 231 | 377 | 518 | 296 |
| 5 | 440 | 433 | 265 | 264 | 325 | 312 | 318 | 303 | 316 | 297 | 315 | 270 | 252 | 270 | 246 | 213 | 237 | 302 | 169 | 234 | 267 | 537 | 494 | 339 | 309 |
| 6 | 602 | 505 | 351 | 264 | 295 | 304 | 316 | 310 | 306 | 306 | 291 | 288 | 264 | 276 | 279 | 276 | 261 | 261 | 286 | 262 | 260 | 299 | 213 | 328 | 308 |
| 7 | 372 | 283 | 315 | 288 | 301 | 334 | 304 | 288 | 303 | 294 | 264 | 267 | 270 | 270 | 261 | 258 | 261 | 258 | 262 | 259 | 254 | 281 | 252 | 266 | 281 |
| 8 | 295 | 324 | 339 | 324 | 339 | 310 | 310 | 306 | 297 | 285 | 267 | 245 | 246 | 255 | 255 | 190 | 177 | 211 | 244 | 326 | 275 | 370 | 317 | 327 | 284 |
| 9 | 447 | 544 | 450 | 277 | 288 | 288 | 261 | 285 | 291 | 279 | 267 | 267 | 255 | 225 | 261 | 243 | 267 | 252 | 267 | 295 | 283 | 283 | 350 | 710 | 318 |
| 10 | 630 | 411 | 327 | 310 | 307 | 288 | 279 | 306 | 282 | 239 | 243 | 242 | 222 | 217 | 172 | 130 | 280 | 207 | 222 | 216 | 292 | 285 | 529 | 567 | 300 |
| 11 | 477 | 523 | 316 | 289 | 292 | 303 | 285 | 273 | 324 | 331 | 264 | 204 | 217 | 197 | 258 | 259 | 223 | 230 | 200 | 241 | 457 | 534 | 407 | 350 | 310 |
| 12 | 484 | 551 | 418 | 333 | 332 | 277 | 252 | 251 | 288 | 300 | 270 | 329 | 211 | 208 | 207 | 257 | 227 | 236 | 239 | 254 | 470 | 343 | 348 | 458 | 314 |
| 13 | 448 | 385 | 359 | 306 | 276 | 283 | 285 | 288 | 313 | 291 | 297 | 291 | 282 | 269 | 270 | 261 | 266 | 354 | 285 | 285 | 279 | 348 | 432 | 402 | 314 |
| 14 | 354 | 315 | 300 | 294 | 298 | 298 | 298 | 297 | 300 | 288 | 291 | 254 | 236 | 240 | 258 | 235 | 255 | 258 | 273 | 291 | 295 | 304 | 303 | 365 | 287 |
| 15 | 324 | 312 | 356 | 312 | 303 | 312 | 285 | 273 | 285 | 279 | 270 | 269 | 258 | 213 | 219 | 246 | 231 | 310 | 251 | 276 | 291 | 292 | 301 | 301 | 282 |
| 16 | 294 | 294 | 297 | 291 | 288 | 288 | 291 | 294 | 297 | 285 | 276 | 267 | 260 | 252 | 239 | 213 | 270 | 264 | 122 | 221 | 437 | 480 | 342 | 417 | 290 |
| 17 | 307 | 449 | 384 | 307 | 283 | 313 | 297 | 289 | 294 | 282 | 255 | 236 | 239 | 243 | 219 | 206 | 203 | 219 | 191 | 201 | 200 | 250 | 256 | 411 | 272 |
| 18 | 468 | 460 | 397 | 292 | 295 | 289 | 309 | 306 | 310 | 297 | 267 | 249 | 282 | 264 | 237 | 231 | 244 | 238 | 198 | 199 | 239 | 253 | 444 | 418 | 299 |
| 19 | 331 | 319 | 316 | 319 | 319 | 312 | 309 | 303 | 306 | 294 | 282 | 276 | 264 | 267 | 261 | 258 | 258 | 261 | 264 | 264 | 267 | 270 | 306 | 318 | 289 |
| 20 | 327 | 372 | 370 | 322 | 297 | 291 | 283 | 295 | 291 | 279 | 255 | 240 | 222 | 219 | 232 | 191 | 188 | 146 | -28 | 179 | 259 | 235 | 284 | 322 | 252 |
| 21 | 332 | 429 | 277 | 294 | 300 | 321 | 336 | 314 | 247 | 273 | 304 | 237 | 207 | 240 | 214 | 152 | 204 | 252 | 252 | 206 | 432 | 407 | 344 | 393 | 290 |
| 22 | 474 | 396 | 517 | 627 | 416 | 269 | 315 | 307 | 312 | 316 | 282 | 252 | 240 | 240 | 222 | 182 | 180 | 205 | 188 | 237 | 189 | 344 | 346 | 308 | 306 |
| 23 | 406 | 487 | 493 | 416 | 320 | 334 | 349 | 316 | 310 | 313 | 243 | 252 | 252 | 187 | 180 | 190 | 186 | 177 | 171 | 257 | 302 | 290 | 78 | 257 | 281 |
| 24 | 608 | 537 | 336 | 325 | 289 | 364 | 303 | 262 | 282 | 318 | 268 | 274 | 235 | 196 | 189 | 152 | 50 | 335 | 207 | 272 | 190 | 404 | 361 | 301 | 294 |
| 25 | 561 | 773 | 643 | 365 | 343 | 352 | 336 | 288 | 310 | 306 | 300 | 252 | 235 | 253 | 288 | 290 | 311 | 202 | 281 | 286 | 292 | 286 | 311 | 236 | 337 |
| 26 | 254 | 354 | 342 | 330 | 339 | 327 | 327 | 324 | 334 | 337 | 258 | 275 | 257 | 234 | 245 | 255 | 229 | 254 | 217 | 260 | 225 | 339 | 331 | 308 | 289 |
| 27 | 351 | 319 | 315 | 300 | 307 | 322 | 328 | 331 | 327 | 324 | 305 | 284 | 278 | 275 | 282 | 279 | 270 | 270 | 265 | 256 | 289 | 291 | 300 | 300 | 298 |
| 28 | 303 | 300 | 294 | 294 | 295 | 298 | 304 | 310 | 309 | 303 | 291 | 263 | 251 | 245 | 230 | 240 | 243 | 246 | 193 | 221 | 192 | 266 | 259 | 256 | 266 |
| 29 | 367 | 425 | 301 | 298 | 382 | 509 | 367 | 318 | 332 | 300 | 273 | 249 | 244 | 180 | 233 | 211 | 224 | 229 | 189 | 68 | 313 | 448 | 556 | 346 | 306 |
| 30 | 645 | 489 | 478 | 457 | 234 | 328 | 301 | 328 | 325 | 313 | 285 | 245 | 212 | 268 | 144 | 157 | 129 | 188 | -2 | 100 | 251 | 126 | 350 | 422 | 282 |
| 31 | 514 | 648 | 499 | 509 | 421 | 308 | 319 | 325 | 318 | 300 | 306 | 222 | 211 | 242 | 197 | 162 | 184 | 203 | 289 | 342 | 317 | 301 | 306 | 282 | 321 |
| MEAN | 420 | 426 | 371 | 335 | 314 | 315 | 307 | 302 | 306 | 300 | 280 | 263 | 246 | 240 | 233 | 219 | 216 | 242 | 213 | 251 | 297 | 321 | 339 | 366 | 296 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

February 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 313 | 355 | 310 | 331 | 368 | 410 | 343 | 305 | 304 | 310 | 294 | 206 | 171 | 220 | 127 | 158 | 60 | 118 | -391 | 75 | 253 | 311 | 322 | 387 | 235 |
| 2 | 543 | 617 | 505 | 317 | 484 | 447 | 313 | 320 | 280 | 297 | 267 | 187 | 201 | 179 | 213 | 135 | -63 | 0 | 188 | 131 | 345 | 209 | 391 | 353 | 285 |
| 3 | 325 | 370 | 302 | 311 | 310 | 310 | 328 | 325 | 310 | 300 | 267 | 291 | 276 | 261 | 284 | 259 | 241 | 219 | 166 | 202 | 261 | 278 | 404 | 324 | 288 |
| 4 | 319 | 345 | 534 | 495 | 441 | 368 | 332 | 289 | 274 | 267 | 242 | 240 | 206 | 203 | 162 | 143 | 160 | 60 | 210 | 200 | 548 | 791 | 392 | 379 | 316 |
| 5 | 433 | 699 | 866 | 516 | 358 | 312 | 294 | 280 | 299 | 282 | 330 | 259 | 280 | 265 | 275 | 349 | 295 | 327 | 437 | 290 | 269 | 401 | 504 | 444 | 377 |
| 6 | 587 | 531 | 521 | 423 | 272 | 260 | 291 | 286 | 303 | 325 | 312 | 303 | 285 | 273 | 285 | 271 | 235 | 226 | 270 | 295 | 265 | 286 | 288 | 304 | 320 |
| 7 | 306 | 294 | 300 | 322 | 326 | 304 | 288 | 343 | 346 | 307 | 325 | 374 | 390 | 244 | 184 | 191 | 147 | 136 | 52 | 128 | 260 | 227 | 502 | 558 | 285 |
| 8 | 467 | 425 | 444 | 387 | 341 | 358 | 322 | 319 | 304 | 304 | 303 | 276 | 282 | 279 | 291 | 297 | 294 | 285 | 285 | 292 | 298 | 301 | 307 | 304 | 323 |
| 9 | 310 | 307 | 307 | 298 | 295 | 307 | 276 | 264 | 295 | 288 | 276 | 260 | 245 | 273 | 222 | 260 | 251 | 258 | 282 | 285 | 285 | 300 | 334 | 325 | 283 |
| 10 | 352 | 358 | 319 | 301 | 301 | 310 | 310 | 323 | 301 | 278 | 272 | 251 | 237 | 255 | 222 | 271 | 237 | 255 | 258 | 252 | 276 | 300 | 378 | 318 | 288 |
| 11 | 336 | 327 | 304 | 300 | 319 | 304 | 320 | 298 | 304 | 279 | 291 | 236 | 239 | 252 | 220 | 267 | 138 | 201 | 206 | 259 | 459 | 294 | 324 | 339 | 284 |
| 12 | 352 | 484 | 456 | 395 | 359 | 314 | 335 | 313 | 319 | 276 | 306 | 276 | 267 | 270 | 273 | 276 | 279 | 276 | 279 | 286 | 292 | 310 | 328 | 316 | 318 |
| 13 | 301 | 294 | 313 | 301 | 289 | 307 | 313 | 319 | 310 | 301 | 270 | 260 | 251 | 248 | 258 | 261 | 258 | 216 | 202 | 221 | 224 | 243 | 260 | 311 | 272 |
| 14 | 648 | 584 | 367 | 872 | 1001 | 865 | 453 | 415 | 357 | 290 | 283 | 295 | 261 | 297 | 294 | 279 | 273 | 276 | 280 | 298 | 304 | 301 | 313 | 331 | 414 |
| 15 | 349 | 337 | 325 | 319 | 313 | 304 | 298 | 316 | 279 | 261 | 259 | 202 | 236 | 225 | 226 | 186 | 170 | -21 | 57 | 106 | 220 | 827 | 534 | 817 | 297 |
| 16 | 896 | 1202 | 1156 | 1035 | 841 | 752 | 334 | 310 | 266 | 316 | 270 | 274 | 238 | 227 | 210 | 387 | 215 | 301 | 96 | 184 | 463 | 759 | 491 | 636 | 494 |
| 17 | 731 | 677 | 718 | 542 | 734 | 459 | 342 | 311 | 326 | 346 | 287 | 262 | 153 | 162 | 117 | 200 | 17 | -5 | 222 | 292 | 683 | 439 | 530 | 496 | 376 |
| 18 | 444 | 389 | 514 | 609 | 572 | 462 | 402 | 394 | 335 | 298 | 205 | 207 | 168 | 199 | 165 | 230 | 279 | 153 | 217 | 296 | 40 | 90 | 358 | 419 | 310 |
| 19 | 708 | 486 | 526 | 405 | 350 | 353 | 347 | 344 | 316 | 282 | 304 | 199 | 194 | 143 | 202 | 72 | -12 | 140 | 245 | 267 | 383 | 292 | 407 | 685 | 318 |
| 20 | 577 | 628 | 515 | 571 | 496 | 423 | 382 | 321 | 257 | 331 | 331 | 231 | 175 | 151 | 211 | 183 | 174 | 203 | 134 | 369 | 322 | 163 | 220 | 486 | 327 |
| 21 | 637 | 535 | 426 | 393 | 422 | 330 | 345 | 316 | 310 | 286 | 289 | 261 | 279 | 235 | 284 | 265 | 261 | 225 | 221 | 417 | 267 | 244 | 338 | 367 | 331 |
| 22 | 426 | 514 | 665 | 463 | 363 | 420 | 371 | 385 | 365 | 331 | 267 | 279 | 227 | 160 | 242 | 220 | 179 | 72 | 48 | 579 | 337 | 274 | 400 | 673 | 344 |
| 23 | 749 | 492 | 468 | 403 | 317 | 329 | 371 | 377 | 286 | 280 | 271 | 160 | 260 | 93 | 261 | 231 | 211 | -82 | 123 | 205 | 293 | 333 | 693 | 476 | 316 |
| 24 | 503 | 652 | 532 | 731 | 508 | 453 | 330 | 359 | 327 | 325 | 313 | 244 | 192 | 153 | 110 | -10 | 164 | 17 | -90 | 88 | 199 | 281 | 232 | 639 | 302 |
| 25 | 466 | 907 | 784 | 1086 | 721 | 388 | 379 | 271 | 281 | 293 | 228 | 223 | 143 | 173 | 164 | 211 | 187 | 145 | 143 | 137 | 243 | 311 | 617 | 451 | 373 |
| 26 | 372 | 547 | 429 | 529 | 466 | 441 | 396 | 347 | 338 | 307 | 287 | 202 | 108 | 158 | 146 | 267 | 291 | 303 | 304 | 317 | 445 | 343 | 323 | 409 | 336 |
| 27 | 497 | 356 | 405 | 359 | 414 | 577 | 524 | 444 | 371 | 331 | 228 | 278 | 127 | 182 | 228 | 234 | 282 | 264 | 247 | 271 | 238 | 277 | 286 | 338 | 323 |
| 28 | 394 | 367 | 512 | 523 | 596 | 670 | 481 | 454 | 417 | 337 | 315 | 322 | 205 | 129 | 228 | 207 | 233 | 292 | 241 | 142 | 519 | 386 | 241 | 273 | 353 |
| MEAN | 476 | 502 | 493 | 483 | 449 | 412 | 350 | 333 | 313 | 301 | 281 | 252 | 224 | 211 | 218 | 225 | 194 | 173 | 176 | 245 | 321 | 341 | 382 | 434 | 324 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

March 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 331 | 504 | 371 | 499 | 517 | 397 | 338 | 317 | 317 | 316 | 309 | 247 | 175 | 165 | 135 | 80 | 85 | 159 | 239 | 279 | 310 | 426 | 262 | 502 | 303 |
| 2 | 319 | 522 | 522 | 356 | 425 | 336 | 290 | 282 | 279 | 325 | 248 | 205 | 202 | 213 | 214 | 241 | 247 | 213 | 346 | 171 | 310 | 264 | 294 | 363 | 299 |
| 3 | 319 | 337 | 332 | 329 | 320 | 326 | 322 | 298 | 282 | 282 | 272 | 242 | 227 | 243 | 244 | 242 | 261 | 265 | 183 | 187 | 300 | 368 | 325 | 307 | 283 |
| 4 | 307 | 310 | 310 | 319 | 325 | 329 | 341 | 329 | 298 | 297 | 272 | 272 | 263 | 266 | 282 | 300 | 291 | 285 | 262 | 238 | 258 | 386 | 496 | 515 | 314 |
| 5 | 515 | 520 | 541 | 514 | 390 | 363 | 339 | 320 | 310 | 297 | 276 | 266 | 260 | 267 | 279 | 283 | 264 | 243 | 228 | 261 | 255 | 261 | 309 | 502 | 335 |
| 6 | 475 | 530 | 734 | 772 | 544 | 385 | 313 | 295 | 279 | 300 | 270 | 216 | 225 | 239 | 176 | 206 | 10 | 197 | 231 | 286 | 330 | 294 | 316 | 345 | 332 |
| 7 | 359 | 359 | 359 | 374 | 374 | 359 | 345 | 345 | 345 | 345 | 301 | 272 | 229 | 243 | 203 | 236 | 283 | 276 | 286 | 277 | 300 | 291 | 321 | 321 | 308 |
| 8 | 516 | 352 | 341 | 358 | 362 | 337 | 344 | 328 | 319 | 270 | 246 | 227 | 248 | 216 | 259 | 250 | 273 | 271 | 268 | 273 | 267 | 305 | 372 | 333 | 305 |
| 9 | 352 | 331 | 316 | 319 | 319 | 316 | 307 | 295 | 291 | 276 | 282 | 230 | 251 | 240 | 279 | 274 | 293 | 280 | 274 | 282 | 295 | 297 | 340 | 313 | 293 |
| 10 | 330 | 301 | 316 | 313 | 323 | 329 | 310 | 322 | 303 | 297 | 281 | 239 | 233 | 174 | 199 | 235 | 261 | 273 | 262 | 241 | 280 | 286 | 280 | 303 | 278 |
| 11 | 315 | 351 | 478 | 380 | 378 | 341 | 341 | 344 | 325 | 309 | 278 | 239 | 233 | 209 | 207 | 261 | 300 | 284 | 236 | 203 | 314 | 317 | 313 | 324 | 303 |
| 12 | 343 | 324 | 415 | 390 | 349 | 341 | 344 | 347 | 309 | 297 | 269 | 238 | 229 | 225 | 241 | 128 | 139 | 23 | 133 | 168 | -61 | 685 | 683 | 727 | 303 |
| 13 | 560 | 551 | 530 | 429 | 432 | 377 | 371 | 362 | 352 | 330 | 303 | 279 | 274 | 239 | 218 | 245 | 223 | 315 | 298 | 311 | 455 | 860 | 762 | 624 | 404 |
| 14 | 605 | 1003 | 1045 | 424 | 354 | 369 | 310 | 322 | 313 | 322 | 234 | 257 | 167 | 196 | 145 | 190 | 211 | 220 | 274 | 242 | 281 | 452 | 291 | 409 | 359 |
| 15 | 460 | 527 | 519 | 421 | 349 | 356 | 372 | 359 | 338 | 300 | 263 | 217 | 205 | 185 | 166 | 182 | 193 | 254 | 338 | 418 | 201 | 281 | 353 | 313 | 315 |
| 16 | 567 | 489 | 426 | 405 | 411 | 375 | 348 | 329 | 313 | 309 | 275 | 260 | 224 | 225 | 241 | 238 | 253 | 253 | 259 | 235 | 225 | 273 | 456 | 509 | 329 |
| 17 | 434 | 335 | 323 | 353 | 366 | 362 | 362 | 359 | 359 | 340 | 309 | 279 | 254 | 251 | 258 | 270 | 270 | 258 | 255 | 262 | 274 | 280 | 280 | 289 | 307 |
| 18 | 301 | 313 | 316 | 320 | 320 | 320 | 363 | 396 | 371 | 281 | 215 | 182 | 110 | 48 | -18 | 160 | 100 | 128 | 174 | 121 | 338 | 807 | 520 | 468 | 277 |
| 19 | 368 | 674 | 649 | 396 | 368 | 402 | 381 | 386 | 352 | 306 | 242 | 229 | 210 | 190 | 221 | 228 | 252 | 243 | 250 | 274 | 283 | 257 | 286 | 278 | 321 |
| 20 | 482 | 655 | 649 | 490 | 386 | 399 | 405 | 405 | 368 | 341 | 276 | 179 | 190 | 123 | 90 | -161 | -166 | 40 | -12 | 129 | 157 | 212 | 229 | 360 | 259 |
| 21 | 1256 | 886 | 850 | 909 | 1137 | 964 | 1003 | 608 | 460 | 294 | 418 | 169 | 141 | 109 | 269 | 218 | 3 | 100 | 97 | 169 | 237 | 191 | 271 | 411 | 465 |
| 22 | 467 | 487 | 696 | 749 | 511 | 524 | 488 | 442 | 430 | 332 | 284 | 209 | 142 | 118 | 141 | 234 | 117 | 167 | 164 | 244 | 454 | 355 | 524 | 496 | 365 |
| 23 | 502 | 793 | 749 | 531 | 524 | 510 | 441 | 353 | 342 | 370 | 289 | 215 | 125 | 107 | 156 | 176 | 144 | 75 | 188 | 212 | 469 | 552 | 340 | 366 | 355 |
| 24 | 602 | 565 | 443 | 467 | 544 | 429 | 410 | 429 | 362 | 337 | 271 | 239 | 199 | 110 | 209 | 189 | 214 | 188 | 152 | 197 | 475 | 473 | 642 | 695 | 368 |
| 25 | 1097 | 873 | 637 | 534 | 405 | 387 | 384 | 387 | 377 | 381 | 332 | 258 | 216 | -17 | -7 | -44 | -577 | -142 | 5 | 149 | 162 | 265 | 820 | 561 | 310 |
| 26 | 487 | 819 | 929 | 709 | 640 | 668 | 467 | 442 | 403 | 337 | 347 | 250 | 182 | 170 | 134 | 119 | 72 | -87 | -21 | 197 | 166 | 335 | 498 | 415 | 361 |
| 27 | 406 | 544 | 993 | 483 | 487 | 347 | 344 | 460 | 395 | 338 | 274 | 271 | 245 | 252 | 262 | 146 | 101 | -114 | 191 | 167 | 235 | 331 | 435 | 464 | 335 |
| 28 | 401 | 480 | 508 | 457 | 548 | 465 | 429 | 485 | 430 | 400 | 321 | 283 | 226 | 75 | 199 | 141 | 85 | 143 | 217 | 249 | 259 | 573 | 495 | 453 | 346 |
| 29 | 470 | 353 | 365 | 578 | 402 | 409 | 400 | 412 | 396 | 356 | 292 | 219 | 178 | 108 | -2 | 30 | 195 | -22 | 33 | 144 | 162 | 208 | 341 | 502 | 272 |
| 30 | 487 | 540 | 649 | 847 | 750 | 581 | 515 | 877 | 1585 | 1336 | 1189 | 531 | 213 | 87 | 8 | 118 | 210 | 208 | 193 | 244 | 257 | 278 | 331 | 367 | 516 |
| 31 | 385 | 398 | 428 | 423 | 429 | 441 | 435 | 429 | 407 | 370 | 320 | 283 | 238 | 204 | 249 | 287 | 309 | 309 | 316 | 310 | 273 | 394 | 463 | 391 | 353 |
| MEAN | 478 | 516 | 539 | 478 | 451 | 414 | 392 | 389 | 387 | 354 | 314 | 248 | 210 | 176 | 182 | 183 | 158 | 171 | 203 | 230 | 274 | 372 | 408 | 426 | 331 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

April 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 388 | 430 | 407 | 357 | 363 | 375 | 390 | 389 | 383 | 356 | 312 | 268 | 224 | 219 | 249 | 289 | 298 | 293 | 247 | 245 | 309 | 284 | 290 | 313 | 319 |
| 2 | 342 | 337 | 343 | 343 | 346 | 355 | 369 | 366 | 363 | 333 | 279 | 238 | 176 | 125 | 105 | 175 | 205 | 223 | 262 | 294 | 355 | 321 | 312 | 310 | 286 |
| 3 | 302 | 345 | 328 | 346 | 378 | 393 | 337 | 366 | 378 | 342 | 281 | 254 | 178 | 196 | 221 | 174 | 202 | 259 | 158 | 285 | 291 | 366 | 335 | 350 | 294 |
| 4 | 432 | 333 | 363 | 337 | 349 | 336 | 336 | 349 | 322 | 324 | 277 | 243 | 230 | 240 | 224 | 268 | 276 | 285 | 314 | 320 | 307 | 296 | 296 | 299 | 306 |
| 5 | 310 | 327 | 340 | 361 | 358 | 363 | 363 | 327 | 297 | 269 | 252 | 247 | 222 | 228 | 195 | 255 | 273 | 263 | 269 | 267 | 257 | 286 | 297 | 344 | 290 |
| 6 | 376 | 325 | 337 | 337 | 343 | 352 | 354 | 369 | 330 | 287 | 259 | 238 | 230 | 249 | 222 | 259 | 273 | 275 | 278 | 270 | 263 | 280 | 326 | 525 | 306 |
| 7 | 400 | 331 | 334 | 337 | 346 | 346 | 316 | 343 | 348 | 292 | 280 | 253 | 241 | 234 | 233 | 219 | 182 | 153 | 174 | 245 | 273 | 255 | 270 | 350 | 281 |
| 8 | 506 | 572 | 401 | 340 | 358 | 370 | 378 | 378 | 357 | 339 | 295 | 271 | 237 | 248 | 254 | 263 | 267 | 252 | 253 | 258 | 266 | 289 | 280 | 416 | 327 |
| 9 | 356 | 328 | 343 | 352 | 363 | 393 | 366 | 357 | 363 | 398 | 348 | 300 | 145 | 162 | 120 | 104 | 185 | 223 | 231 | 272 | 321 | 355 | 474 | 581 | 310 |
| 10 | 608 | 515 | 473 | 439 | 442 | 477 | 583 | 716 | 996 | 879 | 1095 | 959 | 707 | 767 | 246 | -318 | -246 | -653 | -89 | 13 | 147 | 545 | 364 | 561 | 426 |
| 11 | 644 | 1080 | 1185 | 811 | 811 | 877 | 776 | 440 | 346 | 414 | 364 | 457 | 210 | 213 | 232 | 147 | -128 | -178 | 143 | 108 | 262 | 283 | 318 | 337 | 423 |
| 12 | 434 | 541 | 828 | 920 | 1217 | 1278 | 1485 | 877 | 620 | 500 | 318 | 175 | 323 | 241 | 231 | 253 | 122 | 416 | 245 | 68 | 308 | 680 | 565 | 519 | 548 |
| 13 | 398 | 530 | 493 | 476 | 412 | 606 | 588 | 607 | 452 | 263 | 295 | 318 | 216 | 270 | 170 | 147 | 181 | 111 | 24 | 226 | 204 | 392 | 502 | 354 | 343 |
| 14 | 436 | 512 | 605 | 812 | 692 | 494 | 490 | 610 | 598 | 429 | 420 | 325 | 227 | 170 | 85 | 158 | -51 | 75 | 83 | 64 | 221 | 376 | 428 | 426 | 361 |
| 15 | 632 | 376 | 1094 | 553 | 701 | 551 | 493 | 408 | 414 | 431 | 327 | 244 | 158 | 43 | 76 | 53 | 175 | 159 | 178 | 239 | 238 | 280 | 289 | 288 | 350 |
| 16 | 364 | 375 | 475 | 562 | 445 | 364 | 402 | 413 | 365 | 328 | 323 | 249 | 192 | 196 | 176 | 168 | 190 | 217 | 219 | 172 | 308 | 255 | 411 | 485 | 318 |
| 17 | 506 | 432 | 412 | 416 | 471 | 498 | 407 | 505 | 522 | 780 | 588 | 208 | 301 | 309 | -6 | -37 | 77 | 75 | 49 | 62 | 109 | 110 | 479 | 561 | 326 |
| 18 | 499 | 744 | 975 | 928 | 680 | 512 | 415 | 403 | 386 | 357 | 300 | 204 | 164 | 181 | 177 | 202 | 231 | 227 | 223 | 159 | 166 | 181 | 497 | 515 | 388 |
| 19 | 490 | 477 | 464 | 409 | 398 | 392 | 374 | 368 | 371 | 329 | 291 | 256 | 196 | 185 | 163 | 148 | 194 | 183 | 173 | 218 | 250 | 262 | 302 | 378 | 302 |
| 20 | 579 | 557 | 562 | 472 | 393 | 451 | 412 | 332 | 339 | 333 | 297 | 238 | 223 | 198 | 155 | 168 | 52 | 11 | -24 | 25 | 114 | 246 | 297 | 261 | 278 |
| 21 | 775 | 795 | 586 | 653 | 774 | 556 | 370 | 358 | 313 | 265 | 262 | 252 | 244 | 234 | 237 | 253 | 264 | 267 | 255 | 238 | 261 | 293 | 296 | 317 | 379 |
| 22 | 337 | 340 | 348 | 360 | 423 | 464 | 389 | 330 | 322 | 287 | 252 | 209 | 182 | 150 | 29 | 152 | 178 | 214 | 203 | 257 | 234 | 213 | 450 | 655 | 290 |
| 23 | 540 | 611 | 837 | 889 | 1053 | 1092 | 511 | 399 | 326 | 293 | 287 | 204 | 177 | 56 | 111 | 238 | -368 | -68 | 168 | 231 | 116 | 246 | 272 | 399 | 359 |
| 24 | 451 | 462 | 390 | 358 | 378 | 451 | 444 | 686 | 713 | 486 | 464 | 370 | 208 | 270 | 216 | 154 | 125 | 115 | 94 | 132 | 158 | 316 | 276 | 477 | 341 |
| 25 | 580 | 530 | 605 | 719 | 603 | 414 | 403 | 421 | 400 | 377 | 269 | 243 | 276 | 284 | 236 | 211 | 200 | 252 | 219 | 147 | 208 | 224 | 439 | 490 | 364 |
| 26 | 964 | 590 | 620 | 573 | 753 | 596 | 367 | 368 | 353 | 309 | 256 | 218 | 210 | 219 | 220 | 246 | 264 | 267 | 264 | 255 | 269 | 300 | 325 | 375 | 382 |
| 27 | 476 | 395 | 505 | 810 | 591 | 459 | 422 | 396 | 428 | 342 | 266 | 232 | 212 | 209 | 133 | 8 | 87 | 56 | 85 | 118 | 90 | 208 | 334 | 366 | 301 |
| 28 | 494 | 446 | 501 | 573 | 441 | 427 | 427 | 413 | 470 | 351 | 271 | 276 | 188 | 125 | 136 | 110 | 112 | 134 | 114 | 40 | 172 | 182 | 246 | 243 | 287 |
| 29 | 424 | 523 | 632 | 780 | 913 | 722 | 659 | 475 | 448 | 437 | 325 | 319 | 284 | 267 | 217 | 14 | 114 | 163 | 153 | 201 | 246 | 282 | 306 | 467 | 390 |
| 30 | 668 | 569 | 639 | 854 | 767 | 515 | 395 | 337 | 322 | 326 | 271 | 231 | 196 | 167 | 171 | 168 | 146 | 161 | 168 | 216 | 99 | 186 | 315 | 425 | 346 |
| MEAN | 490 | 490 | 547 | 549 | 552 | 515 | 467 | 436 | 421 | 381 | 337 | 283 | 232 | 221 | 174 | 154 | 136 | 147 | 171 | 188 | 227 | 293 | 353 | 412 | 340 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

May 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 348 | 378 | 357 | 336 | 323 | 292 | 336 | 336 | 312 | 281 | 262 | 267 | 263 | 234 | 241 | 236 | 246 | 255 | 241 | 223 | 280 | 292 | 287 | 330 | 289 |
| 2 | 334 | 345 | 366 | 393 | 372 | 339 | 339 | 304 | 313 | 310 | 321 | 281 | 277 | 239 | 212 | 254 | 245 | 264 | 253 | 247 | 260 | 317 | 372 | 335 | 303 |
| 3 | 342 | 344 | 371 | 372 | 327 | 308 | 300 | 331 | 336 | 331 | 301 | 232 | 285 | 241 | 235 | 236 | 242 | 270 | 264 | 169 | 258 | 307 | 380 | 594 | 307 |
| 4 | 814 | 597 | 367 | 367 | 364 | 366 | 345 | 357 | 325 | 298 | 289 | 280 | 235 | 229 | 216 | 243 | 247 | 285 | 229 | 170 | 239 | 283 | 315 | 441 | 329 |
| 5 | 419 | 360 | 375 | 373 | 376 | 381 | 372 | 383 | 374 | 322 | 260 | 207 | 227 | 248 | 261 | 254 | 286 | 277 | 260 | 256 | 307 | 295 | 293 | 304 | 311 |
| 6 | 331 | 340 | 366 | 375 | 345 | 360 | 372 | 342 | 327 | 312 | 271 | 236 | 221 | 228 | 229 | 255 | 270 | 276 | 282 | 281 | 273 | 277 | 345 | 330 | 301 |
| 7 | 302 | 325 | 357 | 378 | 387 | 396 | 380 | 363 | 330 | 297 | 245 | 230 | 225 | 224 | 180 | 174 | 283 | 261 | 266 | 266 | 278 | 278 | 281 | 251 | 289 |
| 8 | 298 | 348 | 364 | 372 | 345 | 321 | 324 | 283 | 286 | 277 | 245 | 215 | 208 | 214 | 239 | 245 | 232 | 237 | 244 | 246 | 232 | 242 | 306 | 582 | 287 |
| 9 | 689 | 588 | 451 | 470 | 428 | 387 | 386 | 358 | 273 | 221 | 260 | 241 | 250 | 312 | 205 | 82 | 45 | 53 | 77 | -36 | 37 | 139 | 159 | 187 | 260 |
| 10 | 608 | 641 | 921 | 722 | 571 | 559 | 656 | 546 | 408 | 206 | 231 | 231 | 200 | 156 | 222 | 245 | 225 | 117 | 159 | 95 | 323 | 268 | 337 | 361 | 375 |
| 11 | 379 | 539 | 732 | 661 | 673 | 603 | 713 | 484 | 337 | 245 | 223 | 199 | 253 | 130 | 39 | -27 | -129 | -56 | 56 | 66 | 98 | 120 | 222 | 272 | 284 |
| 12 | 370 | 377 | 677 | 596 | 552 | 471 | 427 | 336 | 327 | 273 | 249 | 243 | 262 | 295 | 310 | 319 | 307 | 308 | 302 | 281 | 281 | 296 | 301 | 328 | 353 |
| 13 | 360 | 369 | 395 | 456 | 462 | 445 | 416 | 371 | 362 | 339 | 294 | 277 | 247 | 233 | 242 | 187 | -2 | 125 | 123 | 172 | 153 | 245 | 356 | 387 | 292 |
| 14 | 429 | 390 | 387 | 396 | 410 | 404 | 389 | 357 | 321 | 282 | 259 | 233 | 218 | 227 | 248 | 254 | 263 | 244 | 239 | 259 | 249 | 252 | 266 | 333 | 304 |
| 15 | 379 | 392 | 390 | 399 | 428 | 449 | 404 | 375 | 342 | 309 | 288 | 257 | 239 | 211 | 261 | 264 | 249 | 235 | 232 | 252 | 261 | 267 | 287 | 311 | 311 |
| 16 | 334 | 343 | 361 | 373 | 384 | 402 | 425 | 404 | 359 | 306 | 250 | 203 | 191 | 203 | 221 | 234 | 232 | 232 | 226 | 247 | 258 | 282 | 314 | 323 | 296 |
| 17 | 314 | 349 | 364 | 355 | 343 | 360 | 369 | 339 | 345 | 333 | 285 | 227 | 207 | 234 | 244 | 268 | 253 | 253 | 232 | 243 | 256 | 318 | 304 | 341 | 297 |
| 18 | 403 | 420 | 390 | 411 | 431 | 463 | 442 | 469 | 428 | 321 | 244 | 161 | 176 | 55 | 114 | -503 | -333 | 124 | 121 | 108 | 241 | 153 | 310 | 466 | 233 |
| 19 | 446 | 434 | 536 | 695 | 761 | 431 | 419 | 387 | 315 | 233 | 218 | 215 | 197 | 234 | 235 | 232 | 192 | 161 | 143 | 130 | 132 | 149 | 404 | 496 | 324 |
| 20 | 428 | 602 | 879 | 674 | 701 | 463 | 372 | 358 | 369 | 307 | 272 | 220 | 129 | 164 | 151 | 137 | -111 | 142 | 48 | 4 | 52 | 179 | 398 | 390 | 305 |
| 21 | 593 | 478 | 662 | 559 | 428 | 405 | 422 | 396 | 366 | 301 | 281 | 186 | 155 | 122 | 38 | 5 | -213 | 31 | 44 | 136 | 221 | 239 | 331 | 313 | 270 |
| 22 | 285 | 389 | 403 | 452 | 564 | 567 | 725 | 680 | 574 | 579 | 515 | 442 | 439 | 364 | 110 | -268 | 46 | -5 | 22 | 51 | 106 | 180 | 329 | 317 | 327 |
| 23 | 255 | 439 | 490 | 453 | 526 | 500 | 447 | 397 | 310 | 329 | 292 | 252 | 236 | 170 | 92 | 64 | 124 | 114 | 216 | 206 | 213 | 250 | 287 | 291 | 289 |
| 24 | 359 | 407 | 398 | 387 | 401 | 415 | 389 | 345 | 300 | 289 | 258 | 257 | 252 | 264 | 279 | 267 | 245 | 255 | 271 | 232 | 260 | 259 | 299 | 277 | 306 |
| 25 | 517 | 680 | 759 | 695 | 606 | 413 | 381 | 348 | 354 | 315 | 319 | 362 | 323 | 247 | 43 | 0 | -19 | -1 | -16 | 2 | 170 | 242 | 275 | 302 | 304 |
| 26 | 354 | 504 | 740 | 710 | 615 | 463 | 333 | 354 | 366 | 312 | 223 | 167 | 190 | 257 | 210 | 71 | 230 | 204 | 201 | 163 | 200 | -53 | 25 | 483 | 305 |
| 27 | 492 | 551 | 603 | 719 | 925 | 707 | 743 | 767 | 406 | 373 | 332 | 294 | 224 | 234 | 222 | 99 | 14 | 140 | 185 | 234 | 192 | 240 | 429 | 433 | 398 |
| 28 | 446 | 451 | 414 | 420 | 431 | 439 | 434 | 421 | 394 | 330 | 298 | 277 | 269 | 248 | 250 | 234 | 171 | 207 | 205 | 201 | 264 | 325 | 344 | 305 | 324 |
| 29 | 398 | 490 | 418 | 452 | 440 | 413 | 427 | 389 | 350 | 318 | 239 | 224 | 216 | 217 | 233 | 210 | 164 | 193 | 214 | 207 | 231 | 263 | 306 | 698 | 321 |
| 30 | 477 | 395 | 424 | 449 | 551 | 401 | 397 | 353 | 324 | 469 | 245 | 198 | 173 | 229 | 132 | 155 | 125 | 53 | 133 | 184 | 194 | 241 | 403 | 444 | 297 |
| 31 | 502 | 529 | 600 | 535 | 433 | 405 | 396 | 360 | 333 | 306 | 274 | 239 | 243 | 246 | 259 | 179 | 183 | 210 | 192 | 189 | 197 | 233 | 286 | 372 | 320 |
| MEAN | 419 | 444 | 494 | 484 | 480 | 429 | 428 | 396 | 350 | 313 | 275 | 243 | 233 | 222 | 199 | 148 | 139 | 176 | 182 | 176 | 216 | 238 | 308 | 374 | 306 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

June 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 382 | 392 | 455 | 400 | 446 | 412 | 421 | 389 | 332 | 303 | 273 | 257 | 252 | 262 | 278 | 223 | 249 | 201 | 195 | 203 | 245 | 265 | 297 | 329 | 310 |
| 2 | 365 | 447 | 422 | 392 | 401 | 389 | 353 | 309 | 295 | 304 | 269 | 251 | 248 | 255 | 278 | 271 | 297 | 271 | 255 | 250 | 260 | 278 | 292 | 315 | 311 |
| 3 | 354 | 366 | 378 | 392 | 413 | 416 | 413 | 389 | 359 | 300 | 241 | 259 | 252 | 267 | 262 | 273 | 281 | 276 | 255 | 198 | 221 | 246 | 228 | 294 | 305 |
| 4 | 348 | 375 | 378 | 381 | 357 | 404 | 368 | 354 | 351 | 304 | 275 | 227 | 206 | 216 | 251 | 248 | 268 | 279 | 267 | 264 | 246 | 233 | 329 | 306 | 301 |
| 5 | 322 | 364 | 381 | 399 | 387 | 380 | 360 | 333 | 310 | 292 | 289 | 275 | 249 | 234 | 222 | 183 | 185 | 168 | 175 | 203 | 242 | 277 | 261 | 309 | 283 |
| 6 | 404 | 560 | 759 | 722 | 469 | 437 | 422 | 386 | 374 | 300 | 253 | 229 | 239 | 239 | 198 | 117 | 181 | 173 | 178 | 215 | 208 | 184 | 333 | 444 | 334 |
| 7 | 610 | 756 | 814 | 874 | 759 | 770 | 428 | 352 | 308 | 290 | 248 | 181 | 176 | 228 | 184 | 142 | 65 | 112 | 101 | 111 | 183 | 300 | 396 | 450 | 368 |
| 8 | 568 | 855 | 559 | 529 | 542 | 449 | 428 | 436 | 406 | 311 | 278 | 224 | 202 | 177 | 159 | 204 | 187 | 183 | 165 | 159 | 148 | 282 | 340 | 417 | 342 |
| 9 | 518 | 477 | 605 | 638 | 483 | 469 | 580 | 645 | 545 | 426 | 445 | 405 | 383 | 35 | -12 | 78 | 241 | 230 | 183 | 149 | 177 | 188 | 241 | 314 | 351 |
| 10 | 421 | 964 | 1020 | 821 | 542 | 423 | 405 | 404 | 362 | 315 | 282 | 217 | 227 | 224 | 133 | 109 | 155 | 134 | 184 | 157 | 185 | 170 | 385 | 372 | 358 |
| 11 | 519 | 562 | 549 | 656 | 677 | 564 | 513 | 440 | 333 | 310 | 229 | 193 | 160 | 81 | 80 | 78 | 120 | 187 | 165 | 162 | 166 | 211 | 278 | 362 | 316 |
| 12 | 423 | 620 | 740 | 585 | 522 | 472 | 463 | 413 | 531 | 401 | 439 | 298 | 177 | -176 | -386 | -278 | 7 | -396 | -419 | -435 | -251 | -5 | 555 | 595 | 203 |
| 13 | 360 | 800 | 1437 | 1436 | 1199 | 841 | 581 | 728 | 581 | 416 | 328 | 278 | 240 | 205 | 131 | 173 | 192 | 271 | 254 | 185 | 264 | 334 | 380 | 337 | 497 |
| 14 | 214 | 971 | 1303 | 1407 | 954 | 643 | 543 | 516 | 463 | 383 | 305 | 369 | 32 | 16 | -31 | -353 | -247 | -74 | 142 | 233 | 238 | 331 | 325 | 310 | 374 |
| 15 | 380 | 384 | 390 | 392 | 397 | 407 | 419 | 387 | 360 | 330 | 294 | 259 | 253 | 251 | 243 | 228 | 146 | 187 | 185 | 139 | 248 | 315 | 338 | 382 | 304 |
| 16 | 430 | 488 | 533 | 477 | 448 | 416 | 434 | 430 | 395 | 338 | 297 | 253 | 227 | 226 | 217 | 232 | 252 | 253 | 245 | 226 | 257 | 300 | 318 | 360 | 335 |
| 17 | 375 | 381 | 378 | 387 | 419 | 434 | 422 | 422 | 386 | 338 | 305 | 276 | 259 | 248 | 239 | 243 | 258 | 278 | 290 | 276 | 267 | 289 | 327 | 354 | 327 |
| 18 | 357 | 366 | 384 | 422 | 454 | 466 | 436 | 401 | 380 | 288 | 267 | 268 | 231 | 200 | 221 | 183 | 127 | 55 | 278 | 190 | 171 | 231 | 439 | 506 | 305 |
| 19 | 504 | 686 | 774 | 813 | 565 | 422 | 396 | 364 | 322 | 292 | 269 | 254 | 220 | 239 | 240 | 282 | 278 | 263 | 258 | 258 | 294 | 281 | 307 | 339 | 371 |
| 20 | 366 | 363 | 358 | 381 | 398 | 407 | 421 | 395 | 347 | 297 | 262 | 244 | 228 | 246 | 255 | 272 | 293 | 284 | 270 | 264 | 255 | 272 | 304 | 325 | 312 |
| 21 | 334 | 355 | 384 | 390 | 401 | 425 | 389 | 374 | 344 | 315 | 282 | 250 | 216 | 212 | 255 | 261 | 235 | 198 | 199 | 203 | 275 | 322 | 366 | 410 | 308 |
| 22 | 457 | 498 | 615 | 594 | 448 | 407 | 395 | 395 | 357 | 303 | 259 | 230 | 204 | 188 | 209 | 222 | 251 | 264 | 258 | 238 | 229 | 239 | 319 | 455 | 334 |
| 23 | 424 | 514 | 468 | 413 | 422 | 425 | 401 | 395 | 339 | 306 | 292 | 222 | 199 | 184 | 184 | 199 | 233 | 246 | 248 | 224 | 232 | 268 | 290 | 305 | 309 |
| 24 | 335 | 335 | 382 | 364 | 384 | 370 | 363 | 354 | 318 | 318 | 280 | 233 | 213 | 201 | 207 | 160 | 169 | 184 | 206 | 225 | 228 | 309 | 293 | 358 | 282 |
| 25 | 368 | 383 | 407 | 413 | 375 | 425 | 372 | 366 | 360 | 312 | 274 | 236 | 220 | 211 | 189 | 207 | 209 | 218 | 212 | 204 | 273 | 279 | 322 | 356 | 299 |
| 26 | 412 | 418 | 387 | 378 | 375 | 407 | 395 | 395 | 374 | 329 | 292 | 241 | 207 | 208 | 243 | 251 | 236 | 245 | 188 | 194 | 187 | 258 | 331 | 412 | 306 |
| 27 | 452 | 415 | 422 | 408 | 405 | 390 | 383 | 392 | 330 | 291 | 247 | 246 | 245 | 198 | 189 | 215 | 220 | 207 | 193 | 196 | 220 | 161 | 241 | 439 | 296 |
| 28 | 324 | 474 | 493 | 485 | 450 | 380 | 389 | 327 | 386 | 294 | 307 | 278 | 271 | 263 | 267 | 270 | 246 | 253 | 253 | 256 | 256 | 284 | 310 | 343 | 327 |
| 29 | 358 | 378 | 384 | 390 | 451 | 483 | 439 | 398 | 357 | 348 | 301 | 264 | 235 | 224 | 217 | 174 | 191 | 174 | 158 | 202 | 229 | 248 | 276 | 329 | 300 |
| 30 | 368 | 389 | 392 | 375 | 372 | 384 | 401 | 386 | 359 | 338 | 277 | 236 | 201 | 208 | 218 | 184 | 219 | 232 | 232 | 243 | 240 | 243 | 255 | 311 | 294 |
| MEAN | 401 | 511 | 565 | 557 | 497 | 457 | 424 | 409 | 375 | 323 | 288 | 255 | 222 | 192 | 178 | 168 | 191 | 185 | 192 | 186 | 213 | 253 | 322 | 371 | 322 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

July 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 362 | 398 | 404 | 425 | 425 | 404 | 433 | 410 | 377 | 330 | 273 | 253 | 236 | 240 | 240 | 221 | 229 | 224 | 186 | 163 | 142 | 176 | 434 | 418 | 308 |
| 2 | 445 | 528 | 578 | 653 | 524 | 451 | 410 | 390 | 327 | 297 | 283 | 259 | 218 | 207 | 202 | 254 | 285 | 279 | 290 | 272 | 269 | 284 | 319 | 340 | 348 |
| 3 | 355 | 360 | 413 | 416 | 468 | 435 | 392 | 402 | 362 | 323 | 291 | 257 | 227 | 261 | 252 | 256 | 251 | 250 | 258 | 247 | 264 | 301 | 331 | 342 | 321 |
| 4 | 367 | 414 | 393 | 384 | 396 | 393 | 372 | 351 | 354 | 309 | 264 | 229 | 209 | 187 | 197 | 183 | 116 | 124 | 145 | 119 | 129 | 190 | 270 | 369 | 269 |
| 5 | 495 | 553 | 433 | 480 | 370 | 372 | 422 | 389 | 371 | 327 | 308 | 269 | 301 | 185 | 31 | -10 | 44 | 73 | 95 | 101 | 166 | 248 | 262 | 341 | 276 |
| 6 | 421 | 419 | 431 | 431 | 445 | 451 | 439 | 386 | 335 | 282 | 261 | 235 | 215 | 214 | 234 | 185 | 158 | 118 | 95 | 147 | 172 | 247 | 335 | 400 | 294 |
| 7 | 395 | 370 | 384 | 416 | 428 | 433 | 404 | 351 | 328 | 286 | 274 | 230 | 199 | 172 | 216 | 267 | 256 | 235 | 218 | 233 | 220 | 233 | 413 | 364 | 305 |
| 8 | 388 | 375 | 395 | 433 | 456 | 459 | 367 | 323 | 333 | 257 | 204 | 209 | 216 | 185 | 163 | 202 | 202 | 213 | 181 | 172 | 222 | 266 | 279 | 378 | 286 |
| 9 | 469 | 479 | 467 | 425 | 384 | 404 | 404 | 389 | 359 | 321 | 270 | 259 | 236 | 237 | 225 | 270 | 284 | 311 | 293 | 264 | 278 | 272 | 278 | 327 | 329 |
| 10 | 380 | 416 | 422 | 419 | 434 | 349 | 336 | 369 | 368 | 336 | 277 | 204 | 195 | 139 | 178 | 224 | 240 | 243 | 238 | 250 | 264 | 293 | 288 | 308 | 298 |
| 11 | 319 | 352 | 384 | 410 | 413 | 419 | 451 | 418 | 344 | 306 | 235 | 182 | 154 | 167 | 216 | 202 | 219 | 213 | 190 | 172 | 288 | 278 | 295 | 358 | 291 |
| 12 | 431 | 476 | 491 | 503 | 403 | 450 | 379 | 389 | 336 | 281 | 261 | 251 | 184 | 214 | 256 | 269 | 267 | 259 | 251 | 235 | 255 | 272 | 286 | 294 | 320 |
| 13 | 457 | 698 | 602 | 784 | 756 | 593 | 376 | 385 | 403 | 296 | 292 | 262 | 233 | 248 | 289 | 307 | 284 | 193 | 161 | 139 | 178 | 308 | 375 | 303 | 371 |
| 14 | 428 | 464 | 396 | 402 | 396 | 398 | 425 | 430 | 386 | 345 | 275 | 234 | 278 | 260 | 226 | 244 | 176 | 143 | 110 | 193 | 285 | 236 | 363 | 486 | 315 |
| 15 | 508 | 477 | 549 | 624 | 565 | 489 | 384 | 336 | 319 | 295 | 259 | 213 | 210 | 194 | 183 | 197 | 197 | 192 | 190 | 221 | 248 | 341 | 394 | 391 | 332 |
| 16 | 449 | 402 | 398 | 401 | 404 | 381 | 395 | 357 | 306 | 300 | 285 | 242 | 232 | 213 | 224 | 251 | 272 | 260 | 228 | 261 | 279 | 290 | 311 | 308 | 310 |
| 17 | 343 | 358 | 372 | 352 | 366 | 350 | 315 | 304 | 304 | 280 | 277 | 247 | 209 | 206 | 205 | 231 | 226 | 226 | 210 | 204 | 200 | 259 | 437 | 401 | 286 |
| 18 | 418 | 566 | 615 | 486 | 422 | 405 | 395 | 377 | 359 | 315 | 289 | 247 | 233 | 196 | 220 | 235 | 225 | 204 | 203 | 201 | 206 | 228 | 286 | 333 | 319 |
| 19 | 352 | 375 | 422 | 419 | 447 | 444 | 374 | 380 | 371 | 307 | 269 | 364 | 310 | 256 | 151 | 189 | 242 | 215 | 161 | 139 | 176 | 136 | 236 | 298 | 293 |
| 20 | 416 | 606 | 609 | 433 | 435 | 300 | 309 | 439 | 323 | 216 | 237 | 248 | 276 | 187 | 196 | 241 | 241 | 211 | 117 | 144 | 247 | 287 | 522 | 457 | 320 |
| 21 | 491 | 425 | 419 | 401 | 398 | 395 | 386 | 377 | 347 | 303 | 280 | 281 | 229 | 214 | 243 | 287 | 229 | 185 | 171 | 156 | 171 | 272 | 301 | 359 | 305 |
| 22 | 374 | 417 | 432 | 446 | 432 | 388 | 359 | 345 | 316 | 287 | 287 | 258 | 258 | 272 | 287 | 287 | 272 | 272 | 287 | 287 | 229 | 301 | 316 | 330 | 322 |
| 23 | 345 | 374 | 388 | 359 | 374 | 374 | 388 | 374 | 335 | 294 | 259 | 242 | 234 | 243 | 255 | 274 | 291 | 358 | 229 | 243 | 272 | 330 | 345 | 330 | 312 |
| 24 | 374 | 403 | 388 | 388 | 417 | 388 | 403 | 388 | 388 | 324 | 276 | 244 | 235 | 246 | 258 | 256 | 274 | 273 | 262 | 277 | 261 | 275 | 307 | 331 | 318 |
| 25 | 310 | 369 | 381 | 384 | 407 | 431 | 433 | 403 | 320 | 297 | 271 | 226 | 203 | 192 | 199 | 219 | 225 | 238 | 250 | 256 | 250 | 273 | 290 | 308 | 297 |
| 26 | 334 | 358 | 373 | 399 | 419 | 434 | 436 | 401 | 365 | 308 | 270 | 247 | 223 | 227 | 231 | 254 | 261 | 191 | 213 | 221 | 220 | 256 | 369 | 289 | 304 |
| 27 | 418 | 386 | 381 | 405 | 454 | 460 | 413 | 404 | 345 | 283 | 205 | 203 | 206 | 213 | 212 | 188 | 269 | 227 | 162 | 164 | 237 | 328 | 354 | 371 | 303 |
| 28 | 400 | 433 | 443 | 408 | 516 | 566 | 497 | 416 | 413 | 464 | 266 | 200 | 206 | 201 | 147 | 144 | -343 | -234 | -213 | -282 | 357 | 271 | 121 | 481 | 244 |
| 29 | 898 | 668 | 1631 | 1070 | 881 | 870 | 926 | 728 | 687 | 515 | 417 | 468 | 540 | 202 | 171 | -31 | 68 | 134 | 139 | 71 | 227 | 210 | 453 | 368 | 512 |
| 30 | 369 | 387 | 410 | 425 | 448 | 433 | 442 | 442 | 368 | 335 | 289 | 239 | 219 | 214 | 232 | 237 | 237 | 249 | 238 | 215 | 228 | 226 | 364 | 506 | 323 |
| 31 | 759 | 561 | 591 | 425 | 411 | 431 | 480 | 412 | 344 | 321 | 259 | 227 | 239 | 260 | 286 | 295 | 298 | 298 | 298 | 298 | 292 | 307 | 327 | 344 | 365 |
| MEAN | 428 | 447 | 483 | 464 | 454 | 437 | 417 | 395 | 361 | 314 | 273 | 249 | 237 | 214 | 213 | 220 | 209 | 205 | 188 | 186 | 233 | 264 | 331 | 362 | 316 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

August 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 371 | 395 | 438 | 430 | 435 | 438 | 456 | 456 | 428 | 282 | 246 | 227 | 175 | 66 | -2 | 154 | 144 | 196 | 100 | 71 | 134 | 209 | 265 | 419 | 272 |
| 2 | 579 | 641 | 684 | 610 | 481 | 415 | 426 | 344 | 325 | 294 | 261 | 233 | 229 | 269 | 293 | 329 | 325 | 319 | 298 | 289 | 287 | 301 | 362 | 383 | 374 |
| 3 | 396 | 533 | 492 | 435 | 424 | 423 | 444 | 383 | 389 | 387 | 322 | 287 | 216 | 153 | 236 | 264 | 276 | 242 | 176 | 210 | 272 | 271 | 370 | 441 | 335 |
| 4 | 680 | 668 | 520 | 466 | 409 | 426 | 435 | 435 | 364 | 328 | 273 | 221 | 201 | 252 | 253 | 263 | 284 | 284 | 279 | 294 | 293 | 283 | 325 | 359 | 358 |
| 5 | 381 | 386 | 408 | 432 | 439 | 448 | 432 | 410 | 373 | 337 | 279 | 226 | 208 | 190 | 179 | 140 | 139 | 185 | 222 | 236 | 253 | 257 | 297 | 429 | 303 |
| 6 | 473 | 407 | 420 | 441 | 388 | 417 | 359 | 345 | 345 | 301 | 272 | 229 | 223 | 240 | 235 | 209 | 174 | 96 | 100 | 154 | 235 | 324 | 378 | 415 | 299 |
| 7 | 448 | 559 | 457 | 387 | 418 | 414 | 386 | 340 | 325 | 297 | 276 | 233 | 195 | 199 | 197 | 224 | 205 | 208 | 275 | 286 | 283 | 304 | 386 | 499 | 325 |
| 8 | 481 | 435 | 471 | 445 | 416 | 426 | 408 | 386 | 358 | 337 | 312 | 279 | 255 | 235 | 249 | 280 | 275 | 270 | 284 | 283 | 301 | 301 | 283 | 314 | 336 |
| 9 | 417 | 582 | 669 | 626 | 445 | 408 | 399 | 365 | 346 | 309 | 282 | 242 | 206 | 189 | 163 | 185 | 181 | 189 | 176 | 192 | 221 | 265 | 307 | 335 | 320 |
| 10 | 350 | 378 | 405 | 430 | 445 | 420 | 420 | 404 | 380 | 331 | 279 | 234 | 203 | 209 | 243 | 256 | 277 | 251 | 229 | 268 | 230 | 220 | 249 | 327 | 309 |
| 11 | 696 | 539 | 454 | 460 | 441 | 429 | 453 | 410 | 288 | 279 | 279 | 248 | 187 | 178 | 251 | 278 | 269 | 252 | 263 | 267 | 256 | 283 | 315 | 484 | 344 |
| 12 | 502 | 534 | 567 | 622 | 598 | 438 | 379 | 378 | 371 | 341 | 279 | 240 | 198 | 189 | 204 | 232 | 256 | 257 | 254 | 270 | 254 | 274 | 335 | 444 | 350 |
| 13 | 458 | 503 | 450 | 547 | 626 | 436 | 437 | 364 | 328 | 350 | 330 | 199 | 166 | 99 | 114 | 144 | 145 | 151 | 229 | 242 | 193 | 183 | 291 | 385 | 307 |
| 14 | 429 | 480 | 440 | 540 | 443 | 370 | 372 | 542 | 401 | 356 | 255 | 193 | 190 | 183 | 200 | 198 | 249 | 229 | 237 | 212 | 288 | 388 | 421 | 429 | 335 |
| 15 | 421 | 465 | 417 | 429 | 429 | 432 | 429 | 405 | 370 | 331 | 348 | 401 | 440 | 340 | 124 | 55 | 81 | 46 | 72 | 134 | 173 | 300 | 417 | 380 | 309 |
| 16 | 905 | 632 | 508 | 405 | 405 | 415 | 356 | 419 | 303 | 363 | 245 | 262 | 220 | 234 | 218 | 140 | 67 | 227 | 214 | 245 | 240 | 277 | 296 | 300 | 329 |
| 17 | 465 | 506 | 659 | 465 | 390 | 407 | 426 | 386 | 344 | 306 | 260 | 221 | 205 | 214 | 231 | 212 | 135 | 97 | 112 | 106 | 236 | 302 | 293 | 384 | 306 |
| 18 | 319 | 480 | 561 | 570 | 429 | 378 | 368 | 331 | 319 | 291 | 246 | 212 | 219 | 220 | 214 | 228 | 231 | 285 | 214 | 247 | 279 | 315 | 324 | 340 | 317 |
| 19 | 558 | 511 | 747 | 1020 | 660 | 463 | 426 | 374 | 334 | 285 | 243 | 238 | 209 | 176 | 216 | 279 | 296 | 271 | 260 | 241 | 244 | 286 | 261 | 532 | 380 |
| 20 | 784 | 555 | 477 | 625 | 718 | 555 | 431 | 350 | 341 | 287 | 268 | 291 | 268 | 182 | 169 | 4 | 141 | 117 | 149 | 334 | 298 | 316 | 358 | 368 | 349 |
| 21 | 363 | 389 | 395 | 448 | 444 | 389 | 382 | 317 | 241 | 209 | 232 | 199 | 192 | 37 | -114 | -626 | -396 | -68 | -29 | 299 | 200 | 324 | 731 | 528 | 211 |
| 22 | 482 | 747 | 686 | 530 | 817 | 892 | 935 | 608 | 639 | 589 | 486 | 433 | 196 | 77 | 56 | -44 | -184 | -90 | 47 | 131 | 269 | 289 | 345 | 367 | 387 |
| 23 | 772 | 753 | 820 | 822 | 674 | 672 | 672 | 583 | 599 | 590 | 585 | 333 | 317 | 228 | -145 | -178 | -355 | -150 | -111 | 147 | 180 | 191 | 332 | 405 | 364 |
| 24 | 523 | 439 | 592 | 643 | 922 | 659 | 488 | 388 | 368 | 346 | 321 | 258 | 315 | 243 | 127 | 236 | 292 | 261 | 286 | 277 | 301 | 322 | 333 | 348 | 387 |
| 25 | 372 | 389 | 393 | 402 | 417 | 435 | 453 | 471 | 440 | 373 | 293 | 245 | 211 | 210 | 261 | 274 | 238 | 169 | 196 | 144 | 214 | 306 | 327 | 290 | 313 |
| 26 | 350 | 362 | 369 | 371 | 380 | 399 | 596 | 673 | 700 | 256 | 469 | 472 | 425 | 314 | 115 | -63 | 45 | 9 | 110 | 242 | 240 | 321 | 295 | 474 | 330 |
| 27 | 339 | 434 | 453 | 454 | 432 | 444 | 428 | 394 | 336 | 320 | 275 | 254 | 237 | 243 | 267 | 288 | 295 | 316 | 295 | 322 | 313 | 319 | 341 | 350 | 339 |
| 28 | 365 | 380 | 386 | 411 | 426 | 432 | 438 | 419 | 391 | 348 | 317 | 284 | 251 | 252 | 279 | 298 | 317 | 317 | 305 | 302 | 295 | 310 | 335 | 338 | 341 |
| 29 | 347 | 350 | 365 | 402 | 444 | 435 | 441 | 422 | 355 | 334 | 268 | 221 | 194 | 206 | 264 | 283 | 277 | 293 | 201 | 131 | 352 | 345 | 346 | 361 | 318 |
| 30 | 403 | 417 | 417 | 432 | 491 | 436 | 410 | 386 | 388 | 330 | 272 | 257 | 166 | 115 | 33 | -15 | -24 | 135 | 112 | 184 | 211 | 247 | 189 | 241 | 259 |
| 31 | 513 | 573 | 628 | 432 | 414 | 461 | 422 | 333 | 298 | 268 | 259 | 231 | 199 | 221 | 258 | 278 | 280 | 290 | 266 | 247 | 290 | 295 | 326 | 322 | 337 |
| MEAN | 482 | 497 | 508 | 507 | 493 | 458 | 448 | 413 | 380 | 334 | 301 | 261 | 229 | 198 | 173 | 155 | 159 | 182 | 187 | 226 | 252 | 288 | 336 | 386 | 327 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

September 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 404 | 382 | 394 | 449 | 425 | 411 | 389 | 371 | 345 | 287 | 287 | 185 | 245 | 113 | 156 | 156 | 229 | 156 | 142 | 171 | 243 | 316 | 374 | 359 | 291 |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | 386 | 349 | 315 | 297 | 273 | 241 | 267 | 277 | 289 | 292 | 301 | 298 | 301 | 301 | 305 | 311 | 314 | 332 | 302 |
| 4 | 338 | 341 | 350 | 371 | 374 | 374 | 374 | 365 | 346 | 309 | 276 | 255 | 231 | 244 | 277 | 251 | 196 | 136 | 97 | 195 | 154 | 277 | 381 | 349 | 285 |
| 5 | 483 | 601 | 510 | 523 | 526 | 433 | 397 | 399 | 331 | 292 | 246 | 233 | 216 | 233 | 183 | 221 | 208 | 242 | 254 | 244 | 244 | 336 | 293 | 343 | 332 |
| 6 | 373 | 452 | 426 | 405 | 399 | 417 | 411 | 352 | 315 | 261 | 223 | 203 | 186 | 226 | 269 | 287 | 257 | 211 | 228 | 211 | 234 | 381 | 367 | 390 | 311 |
| 7 | 427 | 446 | 467 | 446 | 430 | 444 | 429 | 389 | 386 | 331 | 230 | 184 | 137 | 108 | 117 | 53 | 283 | 289 | 264 | 295 | 345 | 298 | 325 | 378 | 312 |
| 8 | 397 | 386 | 410 | 414 | 387 | 389 | 392 | 331 | 279 | 237 | 219 | 186 | 224 | 246 | 277 | 274 | 249 | 282 | 281 | 254 | 300 | 649 | 397 | 432 | 328 |
| 9 | 519 | 454 | 441 | 399 | 393 | 399 | 386 | 355 | 315 | 264 | 242 | 198 | 224 | 247 | 242 | 220 | 269 | 266 | 239 | 247 | 245 | 500 | 345 | 359 | 323 |
| 10 | 402 | 501 | 422 | 381 | 393 | 407 | 383 | 389 | 359 | 328 | 297 | 276 | 249 | 246 | 271 | 289 | 286 | 289 | 280 | 257 | 270 | 321 | 395 | 778 | 352 |
| 11 | 451 | 476 | 429 | 457 | 415 | 427 | 402 | 380 | 407 | 266 | 222 | 240 | 234 | 196 | 159 | 130 | 101 | 79 | 127 | 193 | 311 | 400 | 354 | 498 | 306 |
| 12 | 627 | 756 | 707 | 548 | 635 | 374 | 359 | 330 | 322 | 335 | 318 | 236 | 206 | 238 | 233 | 242 | 168 | 166 | 190 | 213 | 376 | 349 | 368 | 341 | 359 |
| 13 | 391 | 618 | 709 | 547 | 441 | 411 | 393 | 362 | 344 | 323 | 268 | 279 | 234 | 235 | 204 | 202 | 156 | 123 | 262 | 203 | 235 | 359 | 382 | 562 | 343 |
| 14 | 670 | 498 | 762 | 549 | 427 | 410 | 333 | 338 | 337 | 306 | 273 | 251 | 253 | 224 | 170 | 254 | 234 | 204 | 225 | 243 | 548 | 421 | 389 | 344 | 360 |
| 15 | 341 | 394 | 687 | 630 | 491 | 402 | 420 | 373 | 355 | 325 | 270 | 208 | 251 | 237 | 160 | 143 | 302 | 220 | 197 | 393 | 398 | 362 | 376 | 362 | 345 |
| 16 | 355 | 444 | 618 | 582 | 492 | 412 | 383 | 352 | 280 | 278 | 280 | 252 | 241 | 255 | 164 | 182 | 275 | 273 | 260 | 309 | 295 | 295 | 337 | 372 | 332 |
| 17 | 560 | 549 | 454 | 366 | 342 | 371 | 404 | 379 | 353 | 319 | 284 | 260 | 240 | 267 | 285 | 291 | 291 | 285 | 316 | 323 | 319 | 357 | 466 | 364 | 351 |
| 18 | 344 | 362 | 365 | 368 | 353 | 340 | 294 | 313 | 376 | 365 | 233 | 204 | 229 | 167 | 218 | 132 | 106 | 248 | 302 | 252 | 311 | 514 | 358 | 410 | 298 |
| 19 | 415 | 884 | 1133 | 466 | 404 | 416 | 364 | 337 | 303 | 291 | 294 | 292 | 285 | 281 | 317 | 305 | 190 | 310 | 226 | 175 | 279 | 327 | 358 | 504 | 381 |
| 20 | 652 | 791 | 526 | 392 | 389 | 380 | 383 | 361 | 346 | 319 | 279 | 256 | 250 | 271 | 278 | 242 | 200 | 254 | 251 | 194 | 168 | 461 | 497 | 512 | 360 |
| 21 | 492 | 528 | 412 | 371 | 374 | 389 | 379 | 334 | 313 | 302 | 282 | 246 | 225 | 224 | 226 | 177 | 227 | 231 | 263 | 338 | 366 | 326 | 757 | 578 | 348 |
| 22 | 892 | 748 | 711 | 511 | 610 | 468 | 340 | 322 | 319 | 298 | 280 | 269 | 248 | 167 | 137 | 173 | 181 | 277 | 288 | 291 | 393 | 466 | 533 | 446 | 390 |
| 23 | 541 | 513 | 445 | 610 | 414 | 398 | 395 | 379 | 346 | 314 | 284 | 275 | 265 | 256 | 216 | 189 | 284 | 276 | 287 | 281 | 338 | 320 | 326 | 355 | 346 |
| 24 | 375 | 395 | 349 | 341 | 358 | 388 | 368 | 356 | 303 | 301 | 282 | 246 | 203 | 209 | 226 | 150 | 144 | 270 | 283 | 293 | 438 | 376 | 329 | 331 | 304 |
| 25 | 367 | 411 | 525 | 498 | 466 | 414 | 398 | 368 | 359 | 423 | 636 | 585 | 282 | 262 | 265 | 263 | 291 | 270 | 228 | 273 | 341 | 427 | 385 | 393 | 380 |
| 26 | 373 | 332 | 371 | 407 | 365 | 371 | 374 | 383 | 383 | 352 | 298 | 276 | 237 | 188 | 160 | 136 | 188 | 262 | 281 | 326 | 507 | 386 | 355 | 350 | 319 |
| 27 | 446 | 394 | 450 | 346 | 371 | 371 | 383 | 383 | 356 | 334 | 292 | 270 | 218 | 228 | 206 | 216 | 267 | 288 | 294 | 314 | 339 | 425 | 379 | 355 | 330 |
| 28 | 332 | 358 | 501 | 387 | 374 | 380 | 380 | 377 | 352 | 334 | 294 | 229 | 256 | 247 | 277 | 295 | 305 | 296 | 296 | 287 | 320 | 370 | 409 | 487 | 339 |
| 29 | 494 | 572 | 459 | 354 | 347 | 356 | 359 | 374 | 350 | 322 | 271 | 279 | 246 | 259 | 271 | 290 | 296 | 305 | 293 | 291 | 349 | 340 | 359 | 607 | 351 |
| 30 | 426 | 344 | 335 | 341 | 347 | 365 | 371 | 376 | 364 | 318 | 300 | 270 | 270 | 280 | 286 | 298 | 293 | 296 | 299 | 302 | 308 | 374 | 311 | 334 | 325 |
| MEAN | 460 | 497 | 513 | 444 | 419 | 397 | 380 | 361 | 339 | 311 | 283 | 254 | 236 | 228 | 225 | 219 | 233 | 244 | 250 | 264 | 319 | 380 | 386 | 421 | 335 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

October 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 332 | 329 | 347 | 358 | 346 | 359 | 368 | 368 | 367 | 346 | 321 | 300 | 283 | 283 | 280 | 289 | 299 | 299 | 308 | 311 | 311 | 314 | 311 | 320 | 322 |
| 2 | 323 | 332 | 341 | 338 | 347 | 356 | 368 | 380 | 361 | 319 | 291 | 276 | 200 | 206 | 262 | 277 | 284 | 249 | 215 | 268 | 281 | 287 | 302 | 317 | 299 |
| 3 | 350 | 359 | 383 | 386 | 368 | 347 | 347 | 350 | 343 | 331 | 289 | 265 | 244 | 226 | 263 | 254 | 269 | 266 | 254 | 242 | 339 | 273 | 315 | 481 | 314 |
| 4 | 384 | 367 | 365 | 377 | 359 | 404 | 356 | 329 | 310 | 307 | 289 | 291 | 276 | 233 | 188 | 219 | 236 | 195 | 190 | 370 | 320 | 345 | 431 | 406 | 314 |
| 5 | 432 | 546 | 492 | 449 | 398 | 374 | 437 | 364 | 346 | 311 | 313 | 272 | 248 | 227 | 289 | 290 | 278 | 296 | 302 | 296 | 299 | 310 | 380 | 564 | 354 |
| 6 | 379 | 383 | 356 | 371 | 365 | 383 | 358 | 355 | 378 | 286 | 285 | 256 | 265 | 271 | 280 | 279 | 300 | 279 | 314 | 308 | 287 | 371 | 576 | 394 | 336 |
| 7 | 427 | 475 | 368 | 368 | 359 | 362 | 353 | 356 | 340 | 322 | 310 | 286 | 262 | 239 | 309 | 263 | 287 | 275 | 285 | 371 | 356 | 408 | 391 | 424 | 341 |
| 8 | 453 | 392 | 374 | 362 | 356 | 362 | 371 | 374 | 358 | 349 | 300 | 285 | 264 | 259 | 236 | 261 | 284 | 278 | 302 | 308 | 308 | 311 | 314 | 347 | 325 |
| 9 | 359 | 373 | 365 | 353 | 356 | 359 | 356 | 362 | 356 | 334 | 307 | 271 | 188 | 244 | 209 | 236 | 272 | 174 | 189 | 230 | 273 | 313 | 399 | 810 | 320 |
| 10 | 1186 | 1357 | 971 | 1266 | 641 | 457 | 511 | 602 | 468 | 539 | 283 | 241 | 215 | 295 | 279 | 125 | 303 | 326 | 312 | 290 | 286 | 334 | 355 | 378 | 500 |
| 11 | 379 | 663 | 708 | 508 | 423 | 405 | 419 | 463 | 332 | 309 | 258 | 302 | 266 | 212 | 216 | 220 | 379 | -17 | 152 | 291 | 334 | 402 | 559 | 630 | 367 |
| 12 | 572 | 570 | 596 | 686 | 680 | 486 | 404 | 308 | 357 | 428 | 358 | 339 | 231 | 248 | 278 | 287 | 357 | 306 | 471 | 542 | 367 | 385 | 797 | 550 | 441 |
| 13 | 477 | 634 | 616 | 394 | 430 | 362 | 362 | 374 | 375 | 344 | 334 | 310 | 286 | 254 | 299 | 325 | 285 | 297 | 305 | 259 | 569 | 533 | 414 | 461 | 387 |
| 14 | 417 | 603 | 720 | 475 | 398 | 340 | 325 | 344 | 362 | 346 | 307 | 307 | 298 | 261 | 297 | 283 | 282 | 225 | 318 | 347 | 453 | 374 | 564 | 773 | 392 |
| 15 | 861 | 1227 | 695 | 446 | 419 | 320 | 326 | 345 | 353 | 341 | 299 | 248 | 243 | 250 | 264 | 334 | 69 | 129 | 259 | 339 | 502 | 534 | 464 | 385 | 402 |
| 16 | 422 | 412 | 350 | 359 | 377 | 371 | 374 | 357 | 392 | 352 | 337 | 295 | 298 | 281 | 307 | 323 | 306 | 368 | 326 | 296 | 338 | 392 | 637 | 564 | 368 |
| 17 | 516 | 435 | 376 | 362 | 374 | 389 | 386 | 368 | 358 | 328 | 313 | 295 | 304 | 304 | 307 | 304 | 304 | 311 | 316 | 314 | 320 | 323 | 329 | 352 | 345 |
| 18 | 338 | 338 | 341 | 341 | 344 | 353 | 359 | 359 | 355 | 337 | 331 | 310 | 271 | 260 | 289 | 234 | 176 | 47 | 248 | 241 | 271 | 372 | 456 | 461 | 309 |
| 19 | 503 | 573 | 533 | 479 | 415 | 395 | 350 | 344 | 349 | 337 | 271 | 240 | 163 | 190 | 240 | 257 | 296 | 305 | 302 | 292 | 275 | 345 | 434 | 376 | 344 |
| 20 | 382 | 418 | 373 | 359 | 353 | 356 | 359 | 350 | 340 | 335 | 279 | 257 | 269 | 248 | 216 | 46 | 245 | 305 | 253 | 617 | 509 | 442 | 485 | 573 | 348 |
| 21 | 516 | 483 | 436 | 374 | 371 | 385 | 349 | 343 | 337 | 326 | 279 | 250 | 203 | 274 | 220 | 305 | 313 | 329 | 329 | 334 | 400 | 349 | 375 | 405 | 345 |
| 22 | 430 | 628 | 610 | 495 | 406 | 383 | 350 | 346 | 334 | 319 | 268 | 265 | 271 | 263 | 241 | 318 | 252 | 312 | 293 | 305 | 317 | 326 | 314 | 323 | 348 |
| 23 | 320 | 332 | 338 | 353 | 353 | 359 | 362 | 362 | 349 | 331 | 303 | 292 | 271 | 271 | 268 | 272 | 272 | 270 | 273 | 269 | 559 | 704 | 561 | 486 | 355 |
| 24 | 523 | 677 | 928 | 701 | 806 | 442 | 378 | 353 | 335 | 311 | 290 | 230 | 218 | 197 | 234 | 130 | 272 | 291 | 501 | 414 | 316 | 332 | 332 | 381 | 399 |
| 25 | 520 | 763 | 544 | 465 | 398 | 368 | 359 | 365 | 331 | 355 | 328 | 310 | 272 | 286 | 278 | 320 | 313 | 314 | 311 | 323 | 371 | 343 | 400 | 407 | 376 |
| 26 | 421 | 380 | 365 | 377 | 368 | 362 | 362 | 371 | 364 | 358 | 340 | 304 | 280 | 185 | 238 | 236 | 162 | 222 | 172 | 245 | 367 | 264 | 316 | 310 | 307 |
| 27 | 379 | 367 | 362 | 397 | 432 | 403 | 388 | 361 | 358 | 322 | 286 | 286 | 274 | 289 | 284 | 294 | 294 | 299 | 344 | 311 | 370 | 401 | 443 | 478 | 350 |
| 28 | 467 | 376 | 365 | 356 | 337 | 326 | 350 | 331 | 316 | 334 | 313 | 328 | 313 | 322 | 322 | 325 | 331 | 332 | 329 | 332 | 332 | 335 | 335 | 335 | 339 |
| 29 | 341 | 347 | 353 | 356 | 362 | 353 | 359 | 358 | 358 | 343 | 289 | 292 | 286 | 284 | 302 | 290 | 264 | 188 | 165 | 233 | 293 | 366 | 335 | 235 | 306 |
| 30 | 304 | 803 | 1082 | 446 | 353 | 341 | 329 | 338 | 349 | 346 | 322 | 304 | 304 | 298 | 287 | 295 | 284 | 243 | 290 | 300 | 305 | 276 | 386 | 560 | 381 |
| 31 | 420 | 356 | 383 | 463 | 398 | 403 | 355 | 281 | 331 | 338 | 303 | 274 | 275 | 248 | 185 | 239 | 235 | 455 | 428 | 298 | 541 | 498 | 527 | 518 | 364 |
| MEAN | 455 | 525 | 497 | 445 | 409 | 376 | 368 | 363 | 353 | 341 | 303 | 283 | 259 | 255 | 263 | 262 | 274 | 263 | 292 | 319 | 360 | 372 | 427 | 451 | 354 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

November 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 528 | 359 | 365 | 368 | 347 | 332 | 341 | 359 | 362 | 337 | 310 | 289 | 298 | 292 | 301 | 310 | 308 | 288 | 305 | 308 | 292 | 367 | 534 | 523 | 350 |
| 2 | 423 | 435 | 526 | 469 | 398 | 347 | 315 | 338 | 346 | 331 | 322 | 298 | 289 | 292 | 298 | 284 | 288 | 297 | 300 | 273 | 337 | 520 | 524 | 402 | 360 |
| 3 | 370 | 382 | 337 | 368 | 341 | 344 | 347 | 344 | 335 | 322 | 289 | 283 | 265 | 262 | 248 | 278 | 281 | 296 | 300 | 323 | 305 | 382 | 394 | 364 | 323 |
| 4 | 399 | 308 | 347 | 353 | 353 | 347 | 347 | 350 | 350 | 334 | 328 | 316 | 307 | 304 | 307 | 307 | 311 | 311 | 326 | 308 | 326 | 323 | 335 | 329 | 330 |
| 5 | 329 | 329 | 332 | 338 | 341 | 344 | 353 | 359 | 355 | 340 | 316 | 304 | 298 | 304 | 307 | 307 | 308 | 308 | 314 | 320 | 320 | 323 | 347 | 376 | 328 |
| 6 | 344 | 332 | 344 | 347 | 350 | 350 | 350 | 356 | 359 | 346 | 325 | 310 | 298 | 292 | 295 | 293 | 293 | 296 | 311 | 311 | 314 | 332 | 350 | 326 | 326 |
| 7 | 323 | 326 | 326 | 329 | 329 | 335 | 338 | 344 | 350 | 331 | 304 | 283 | 238 | 235 | 268 | 260 | 221 | 221 | 274 | 311 | 317 | 331 | 401 | 515 | 312 |
| 8 | 411 | 332 | 335 | 353 | 347 | 359 | 356 | 346 | 338 | 316 | 313 | 274 | 238 | 268 | 269 | 239 | 207 | 147 | 225 | 258 | 281 | 305 | 446 | 490 | 310 |
| 9 | 444 | 528 | 557 | 531 | 388 | 338 | 359 | 365 | 371 | 356 | 301 | 274 | 263 | 260 | 289 | 281 | 268 | 270 | 332 | 318 | 326 | 336 | 381 | 524 | 360 |
| 10 | 539 | 531 | 631 | 469 | 401 | 341 | 360 | 359 | 381 | 327 | 293 | 266 | 245 | 223 | 188 | 193 | 240 | 198 | 289 | 332 | 393 | 409 | 475 | 776 | 369 |
| 11 | 633 | 549 | 468 | 394 | 391 | 359 | 338 | 317 | 332 | 317 | 302 | 302 | 287 | 267 | 367 | 272 | 301 | 313 | 287 | 296 | 317 | 305 | 337 | 375 | 351 |
| 12 | 387 | 335 | 332 | 332 | 341 | 356 | 356 | 359 | 355 | 355 | 340 | 331 | 319 | 313 | 308 | 311 | 314 | 326 | 317 | 323 | 323 | 322 | 346 | 369 | 336 |
| 13 | 354 | 326 | 326 | 332 | 341 | 344 | 347 | 344 | 343 | 331 | 319 | 313 | 304 | 298 | 301 | 296 | 302 | 296 | 305 | 299 | 320 | 337 | 343 | 335 | 323 |
| 14 | 323 | 319 | 326 | 329 | 347 | 347 | 353 | 353 | 343 | 334 | 322 | 307 | 310 | 310 | 311 | 311 | 311 | 311 | 314 | 317 | 317 | 320 | 320 | 332 | 324 |
| 15 | 335 | 341 | 338 | 335 | 344 | 350 | 344 | 347 | 347 | 340 | 319 | 298 | 295 | 292 | 296 | 302 | 302 | 293 | 278 | 276 | 291 | 287 | 346 | 334 | 317 |
| 16 | 318 | 318 | 321 | 318 | 334 | 292 | 286 | 317 | 349 | 394 | 370 | 303 | 207 | 205 | 55 | 249 | 255 | 231 | 307 | 319 | 340 | 453 | 654 | 502 | 320 |
| 17 | 458 | 427 | 380 | 396 | 373 | 330 | 337 | 352 | 324 | 337 | 292 | 238 | 217 | 238 | 225 | 285 | 218 | 192 | 349 | 285 | 411 | 407 | 498 | 517 | 336 |
| 18 | 567 | 403 | 375 | 353 | 380 | 339 | 328 | 328 | 343 | 330 | 312 | 265 | 247 | 357 | 392 | 127 | 223 | 158 | 361 | 294 | 318 | 357 | 360 | 657 | 340 |
| 19 | 543 | 625 | 668 | 408 | 416 | 351 | 347 | 334 | 340 | 334 | 318 | 308 | 305 | 308 | 315 | 299 | 288 | 357 | 356 | 334 | 325 | 412 | 395 | 401 | 378 |
| 20 | 377 | 343 | 347 | 337 | 325 | 337 | 341 | 337 | 337 | 324 | 312 | 296 | 293 | 302 | 283 | 296 | 306 | 312 | 318 | 325 | 322 | 272 | 301 | 279 | 317 |
| 21 | 319 | 307 | 349 | 376 | 401 | 424 | 376 | 379 | 350 | 327 | 302 | 324 | 252 | 250 | 269 | 265 | 309 | 272 | 283 | 326 | 338 | 384 | 453 | 387 | 337 |
| 22 | 356 | 337 | 334 | 334 | 337 | 340 | 343 | 350 | 346 | 334 | 318 | 305 | 305 | 309 | 312 | 306 | 306 | 303 | 338 | 361 | 328 | 331 | 337 | 334 | 329 |
| 23 | 325 | 328 | 334 | 337 | 344 | 340 | 340 | 340 | 337 | 330 | 315 | 277 | 296 | 261 | 249 | 229 | 284 | 223 | 307 | 340 | 318 | 558 | 601 | 512 | 338 |
| 24 | 444 | 423 | 368 | 340 | 344 | 344 | 343 | 343 | 337 | 327 | 311 | 292 | 286 | 302 | 309 | 312 | 318 | 321 | 321 | 325 | 331 | 331 | 321 | 315 | 333 |
| 25 | 327 | 331 | 334 | 337 | 347 | 344 | 340 | 347 | 340 | 318 | 305 | 308 | 286 | 283 | 312 | 321 | 321 | 303 | 272 | 279 | 308 | 402 | 395 | 418 | 328 |
| 26 | 331 | 368 | 406 | 381 | 324 | 350 | 344 | 344 | 347 | 315 | 312 | 305 | 290 | 300 | 220 | 217 | 297 | 308 | 330 | 346 | 346 | 334 | 337 | 373 | 326 |
| 27 | 469 | 465 | 726 | 553 | 450 | 425 | 318 | 349 | 372 | 321 | 309 | 262 | 286 | 217 | 239 | 181 | 142 | 76 | 58 | 356 | 271 | 406 | 435 | 472 | 339 |
| 28 | 520 | 519 | 579 | 528 | 377 | 419 | 360 | 363 | 369 | 365 | 349 | 336 | 336 | 337 | 337 | 334 | 335 | 320 | 345 | 533 | 443 | 306 | 393 | 402 | 396 |
| 29 | 372 | 381 | 371 | 368 | 404 | 388 | 362 | 356 | 362 | 352 | 343 | 327 | 318 | 327 | 331 | 334 | 312 | 325 | 313 | 328 | 332 | 392 | 346 | 387 | 351 |
| 30 | 434 | 406 | 389 | 391 | 369 | 362 | 356 | 353 | 353 | 340 | 321 | 305 | 315 | 302 | 237 | 213 | 347 | 206 | 308 | 313 | 376 | 320 | 303 | 444 | 335 |
| MEAN | 410 | 393 | 405 | 380 | 362 | 352 | 344 | 347 | 349 | 335 | 316 | 296 | 283 | 283 | 281 | 273 | 283 | 269 | 301 | 321 | 329 | 362 | 400 | 425 | 337 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

December 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 478 | 431 | 321 | 362 | 345 | 359 | 341 | 340 | 340 | 330 | 317 | 314 | 315 | 308 | 302 | 316 | 296 | 321 | 328 | 319 | 312 | 331 | 337 | 343 | 337 |
| 2 | 350 | 353 | 350 | 353 | 350 | 350 | 350 | 347 | 343 | 340 | 330 | 315 | 280 | 318 | 312 | 309 | 290 | 266 | 403 | 280 | 289 | 325 | 346 | 344 | 328 |
| 3 | 416 | 368 | 343 | 350 | 350 | 350 | 347 | 350 | 359 | 350 | 340 | 333 | 315 | 308 | 296 | 271 | 263 | 237 | 229 | 217 | 252 | 325 | 338 | 342 | 318 |
| 4 | 626 | 642 | 775 | 798 | 454 | 402 | 347 | 347 | 334 | 340 | 308 | 299 | 302 | 241 | 181 | 223 | 235 | 310 | 322 | 396 | 461 | 348 | 397 | 557 | 401 |
| 5 | 566 | 415 | 350 | 350 | 344 | 344 | 318 | 362 | 381 | 359 | 340 | 309 | 282 | 259 | 212 | 318 | 380 | 309 | 392 | 279 | 333 | 385 | 404 | 405 | 349 |
| 6 | 380 | 355 | 365 | 368 | 350 | 362 | 353 | 359 | 350 | 347 | 330 | 302 | 265 | 240 | 244 | 309 | 313 | 336 | 329 | 310 | 347 | 350 | 364 | 398 | 334 |
| 7 | 408 | 359 | 371 | 353 | 347 | 347 | 338 | 356 | 356 | 343 | 340 | 330 | 321 | 318 | 321 | 324 | 299 | 306 | 306 | 325 | 344 | 362 | 353 | 340 | 340 |
| 8 | 334 | 337 | 337 | 340 | 347 | 347 | 290 | 309 | 337 | 330 | 311 | 314 | 305 | 290 | 285 | 242 | 259 | 228 | 248 | 243 | 266 | 360 | 451 | 389 | 312 |
| 9 | 337 | 358 | 340 | 343 | 353 | 353 | 359 | 362 | 356 | 349 | 321 | 273 | 248 | 268 | 277 | 272 | 275 | 301 | 329 | 325 | 330 | 380 | 374 | 359 | 326 |
| 10 | 346 | 337 | 340 | 343 | 347 | 353 | 353 | 359 | 353 | 346 | 327 | 311 | 302 | 309 | 318 | 318 | 325 | 315 | 300 | 297 | 321 | 340 | 337 | 334 | 330 |
| 11 | 343 | 350 | 343 | 340 | 337 | 340 | 347 | 350 | 346 | 337 | 324 | 318 | 315 | 308 | 312 | 315 | 309 | 303 | 319 | 325 | 324 | 334 | 337 | 340 | 329 |
| 12 | 343 | 350 | 353 | 353 | 356 | 353 | 350 | 343 | 346 | 334 | 318 | 308 | 299 | 290 | 284 | 237 | 219 | 212 | 222 | 269 | 318 | 279 | 409 | 629 | 323 |
| 13 | 768 | 778 | 430 | 439 | 325 | 287 | 303 | 378 | 421 | 333 | 297 | 311 | 324 | 330 | 324 | 343 | 324 | 318 | 315 | 331 | 342 | 358 | 407 | 482 | 386 |
| 14 | 467 | 478 | 396 | 399 | 369 | 359 | 363 | 356 | 343 | 356 | 333 | 330 | 324 | 315 | 305 | 300 | 297 | 411 | 302 | 334 | 334 | 352 | 352 | 346 | 355 |
| 15 | 343 | 340 | 330 | 375 | 330 | 340 | 315 | 349 | 372 | 316 | 324 | 318 | 315 | 318 | 324 | 321 | 325 | 348 | 293 | 273 | 334 | 343 | 380 | 414 | 335 |
| 16 | 461 | 421 | 402 | 362 | 363 | 353 | 344 | 328 | 324 | 308 | 308 | 299 | 299 | 303 | 266 | 245 | 291 | 295 | 320 | 338 | 348 | 380 | 353 | 346 | 335 |
| 17 | 349 | 337 | 336 | 352 | 366 | 331 | 337 | 334 | 337 | 340 | 321 | 315 | 305 | 302 | 293 | 287 | 307 | 332 | 314 | 293 | 342 | 341 | 331 | 346 | 327 |
| 18 | 334 | 313 | 363 | 356 | 356 | 353 | 350 | 347 | 343 | 318 | 318 | 311 | 318 | 293 | 306 | 288 | 325 | 321 | 337 | 343 | 343 | 347 | 343 | 343 | 332 |
| 19 | 347 | 343 | 343 | 347 | 347 | 350 | 350 | 353 | 350 | 340 | 337 | 324 | 308 | 318 | 321 | 306 | 312 | 318 | 318 | 325 | 328 | 334 | 340 | 340 | 333 |
| 20 | 356 | 362 | 372 | 378 | 381 | 365 | 359 | 362 | 346 | 340 | 349 | 321 | 287 | 312 | 260 | 309 | 285 | 272 | 297 | 327 | 340 | 356 | 412 | 369 | 338 |
| 21 | 369 | 378 | 372 | 378 | 362 | 375 | 359 | 356 | 353 | 346 | 330 | 324 | 321 | 327 | 324 | 325 | 325 | 321 | 315 | 313 | 329 | 303 | 334 | 328 | 340 |
| 22 | 347 | 365 | 353 | 344 | 343 | 353 | 347 | 340 | 337 | 334 | 318 | 312 | 315 | 312 | 321 | 318 | 321 | 325 | 328 | 334 | 337 | 337 | 328 | 321 | 332 |
| 23 | 318 | 321 | 325 | 328 | 331 | 334 | 334 | 362 | 368 | 340 | 314 | 324 | 311 | 315 | 315 | 309 | 312 | 315 | 328 | 334 | 334 | 318 | 515 | 409 | 338 |
| 24 | 306 | 337 | 337 | 390 | 374 | 386 | 358 | 340 | 312 | 308 | 302 | 252 | 217 | 241 | 255 | 156 | 156 | 239 | 90 | 319 | 360 | 429 | 437 | 607 | 312 |
| 25 | 478 | 537 | 563 | 547 | 472 | 413 | 345 | 350 | 347 | 350 | 315 | 302 | 343 | 334 | 312 | 250 | 227 | 248 | 287 | 322 | 312 | 405 | 391 | 495 | 372 |
| 26 | 458 | 408 | 371 | 359 | 331 | 340 | 340 | 331 | 321 | 334 | 330 | 314 | 318 | 321 | 321 | 321 | 318 | 318 | 315 | 324 | 334 | 337 | 337 | 337 | 339 |
| 27 | 337 | 331 | 349 | 351 | 447 | 356 | 337 | 334 | 337 | 327 | 315 | 289 | 296 | 259 | 243 | 290 | 296 | 306 | 306 | 318 | 328 | 325 | 352 | 380 | 325 |
| 28 | 353 | 326 | 356 | 347 | 350 | 337 | 344 | 340 | 340 | 330 | 318 | 308 | 305 | 309 | 309 | 306 | 309 | 309 | 306 | 310 | 322 | 328 | 340 | 343 | 326 |
| 29 | 340 | 353 | 362 | 353 | 337 | 350 | 344 | 343 | 337 | 324 | 305 | 302 | 296 | 296 | 274 | 287 | 259 | 264 | 320 | 300 | 337 | 340 | 340 | 353 | 321 |
| 30 | 359 | 417 | 378 | 350 | 353 | 341 | 306 | 315 | 312 | 324 | 312 | 305 | 305 | 302 | 305 | 302 | 299 | 293 | 312 | 316 | 331 | 337 | 331 | 325 | 326 |
| 31 | 328 | 325 | 322 | 322 | 325 | 334 | 344 | 347 | 340 | 337 | 327 | 286 | 240 | 250 | 244 | 178 | 208 | 242 | 302 | 304 | 436 | 539 | 520 | 518 | 329 |
| MEAN | 398 | 391 | 375 | 378 | 359 | 352 | 341 | 346 | 346 | 335 | 321 | 308 | 299 | 297 | 289 | 286 | 289 | 298 | 304 | 311 | 334 | 352 | 373 | 392 | 336 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

January 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 137 | 162 | 162 | 152 | 131 | 62 | 111 | 147 | 173 | 162 | 178 | 167 | 183 | 193 | 178 | 188 | 260 | 265 | 270 | 18 | -126 | 80 | 44 | 49 | 139 |
| 2 | 39 | 137 | 198 | 188 | 173 | 167 | 167 | 167 | 160 | 158 | 166 | 154 | 169 | 178 | 185 | 223 | 279 | 288 | 262 | 228 | 219 | 99 | -15 | -171 | 159 |
| 3 | -105 | 141 | 128 | 190 | 226 | 218 | 187 | 184 | 166 | 164 | 161 | 157 | 161 | 173 | 185 | 181 | 247 | 243 | 215 | 159 | 168 | 170 | 179 | 157 | 168 |
| 4 | 134 | 137 | 83 | 112 | 165 | 174 | 170 | 164 | 165 | 170 | 170 | 164 | 171 | 178 | 194 | 186 | 206 | 229 | 226 | 225 | 216 | 183 | 111 | -56 | 161 |
| 5 | 53 | 114 | 203 | 185 | 167 | 166 | 168 | 163 | 182 | 173 | 166 | 172 | 173 | 171 | 174 | 186 | 306 | 217 | 286 | 241 | 168 | -39 | -17 | -102 | 153 |
| 6 | -68 | 52 | 131 | 185 | 182 | 179 | 171 | 176 | 170 | 167 | 162 | 163 | 168 | 167 | 165 | 169 | 177 | 187 | 198 | 210 | 223 | 205 | 192 | 110 | 160 |
| 7 | 145 | 189 | 147 | 164 | 180 | 180 | 185 | 178 | 167 | 165 | 165 | 170 | 168 | 172 | 172 | 168 | 172 | 181 | 198 | 210 | 226 | 198 | 204 | 193 | 179 |
| 8 | 162 | 147 | 147 | 162 | 162 | 173 | 167 | 171 | 167 | 166 | 164 | 166 | 170 | 171 | 178 | 207 | 250 | 212 | 132 | 53 | 77 | 148 | 129 | 142 | 159 |
| 9 | -43 | 1 | 98 | 186 | 173 | 171 | 187 | 180 | 172 | 165 | 166 | 171 | 177 | 186 | 170 | 179 | 171 | 182 | 180 | 179 | 184 | 193 | 32 | -64 | 141 |
| 10 | -27 | 101 | 165 | 175 | 174 | 173 | 170 | 167 | 168 | 162 | 189 | 170 | 190 | 218 | 285 | 331 | 185 | 198 | 193 | 198 | 115 | 103 | -101 | -91 | 150 |
| 11 | 57 | 66 | 185 | 192 | 185 | 172 | 171 | 170 | 166 | 169 | 181 | 247 | 266 | 227 | 188 | 206 | 265 | 221 | 231 | 127 | -110 | -46 | 86 | 120 | 155 |
| 12 | -32 | -130 | 49 | 160 | 136 | 124 | 171 | 163 | 163 | 164 | 172 | 203 | 273 | 220 | 253 | 233 | 235 | 228 | 152 | 96 | 2 | 92 | 132 | 48 | 137 |
| 13 | 21 | 55 | 113 | 162 | 174 | 187 | 178 | 171 | 174 | 171 | 161 | 156 | 161 | 161 | 163 | 172 | 215 | 214 | 179 | 172 | 173 | 156 | 92 | 107 | 153 |
| 14 | 128 | 158 | 167 | 167 | 179 | 182 | 182 | 176 | 172 | 167 | 158 | 166 | 172 | 175 | 183 | 199 | 180 | 180 | 181 | 178 | 186 | 175 | 167 | 114 | 170 |
| 15 | 160 | 154 | 103 | 149 | 164 | 168 | 170 | 171 | 174 | 169 | 166 | 160 | 168 | 194 | 196 | 186 | 246 | 255 | 221 | 181 | 174 | 180 | 177 | 178 | 177 |
| 16 | 173 | 173 | 167 | 169 | 170 | 173 | 174 | 175 | 173 | 168 | 165 | 164 | 164 | 170 | 171 | 179 | 246 | 249 | 249 | 231 | 49 | 46 | 155 | 97 | 168 |
| 17 | 99 | 33 | 134 | 181 | 196 | 176 | 173 | 180 | 175 | 169 | 172 | 172 | 168 | 171 | 184 | 226 | 294 | 250 | 232 | 253 | 239 | 197 | 70 | 100 | 176 |
| 18 | 78 | 113 | 139 | 187 | 185 | 184 | 171 | 172 | 173 | 169 | 170 | 173 | 164 | 171 | 180 | 189 | 209 | 205 | 249 | 271 | 228 | 203 | 79 | 129 | 174 |
| 19 | 181 | 179 | 174 | 172 | 171 | 169 | 170 | 171 | 169 | 166 | 162 | 164 | 166 | 168 | 171 | 172 | 172 | 174 | 180 | 181 | 183 | 183 | 164 | 168 | 172 |
| 20 | 161 | 144 | 157 | 173 | 174 | 178 | 184 | 178 | 171 | 169 | 172 | 175 | 177 | 184 | 199 | 244 | 244 | 126 | 242 | 111 | 197 | 204 | 155 | 169 | 178 |
| 21 | 135 | 101 | 183 | 175 | 167 | 159 | 149 | 130 | 140 | 182 | 187 | 183 | 192 | 190 | 212 | 307 | 252 | 187 | 186 | 178 | 77 | 76 | 116 | 107 | 165 |
| 22 | 47 | 112 | -109 | -41 | 162 | 216 | 169 | 180 | 170 | 174 | 172 | 171 | 177 | 173 | 178 | 236 | 262 | 268 | 235 | 180 | 130 | -44 | 80 | 146 | 143 |
| 23 | 150 | -33 | 93 | 166 | 199 | 190 | 173 | 176 | 173 | 172 | 182 | 184 | 178 | 208 | 254 | 208 | 203 | 266 | 262 | 154 | 69 | 131 | 123 | 75 | 164 |
| 24 | -24 | -3 | 151 | 169 | 182 | 161 | 164 | 190 | 171 | 166 | 198 | 187 | 216 | 211 | 186 | 233 | 303 | 197 | 123 | 156 | 162 | -7 | 64 | -340 | 134 |
| 25 | -83 | -150 | 17 | 189 | 176 | 168 | 142 | 158 | 174 | 167 | 165 | 181 | 201 | 200 | 247 | 221 | 201 | 206 | 221 | 195 | 188 | 185 | 223 | 218 | 158 |
| 26 | 148 | 134 | 158 | 164 | 158 | 152 | 164 | 164 | 164 | 163 | 172 | 151 | 162 | 180 | 220 | 241 | 205 | 224 | 220 | 228 | 181 | 137 | 168 | 146 | 175 |
| 27 | 151 | 170 | 165 | 154 | 176 | 180 | 178 | 170 | 160 | 154 | 147 | 147 | 153 | 157 | 161 | 165 | 171 | 177 | 208 | 207 | 180 | 176 | 174 | 171 | 168 |
| 28 | 172 | 173 | 175 | 177 | 181 | 181 | 179 | 177 | 170 | 162 | 157 | 157 | 161 | 167 | 173 | 174 | 175 | 182 | 209 | 176 | 188 | 210 | 192 | 204 | 178 |
| 29 | 169 | -39 | 194 | 182 | 159 | 105 | 59 | 153 | 197 | 163 | 162 | 173 | 204 | 196 | 173 | 205 | 237 | 214 | 260 | 248 | 181 | -6 | 20 | 98 | 154 |
| 30 | -118 | 48 | 87 | 114 | 254 | 184 | 194 | 175 | 172 | 171 | 171 | 165 | 175 | 207 | 269 | 335 | 315 | 176 | 91 | 133 | 23 | 94 | 41 | 58 | 147 |
| 31 | 36 | -83 | -50 | 100 | 145 | 199 | 187 | 185 | 161 | 160 | 167 | 190 | 207 | 236 | 234 | 316 | 285 | 239 | 123 | -13 | 123 | 183 | 151 | 167 | 152 |
| MEAN | 72 | 82 | 126 | 160 | 175 | 170 | 167 | 170 | 169 | 166 | 169 | 171 | 181 | 186 | 196 | 215 | 231 | 214 | 206 | 173 | 138 | 124 | 109 | 78 | 160 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

February 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161 | 143 | 172 | 163 | 152 | 140 | 151 | 193 | 176 | 166 | 160 | 183 | 208 | 269 | 251 | 251 | 387 | -26 | 99 | 238 | 203 | 184 | 90 | 72 | 174 |
| 2 | -191 | -137 | 84 | 200 | 106 | 9 | 155 | 193 | 176 | 152 | 176 | 232 | 258 | 301 | 253 | 271 | 300 | 205 | 186 | -70 | 44 | -75 | 116 | 80 | 126 |
| 3 | 7 | 121 | 195 | 191 | 177 | 173 | 164 | 161 | 162 | 159 | 166 | 158 | 163 | 183 | 212 | 202 | 203 | 252 | 283 | 277 | 242 | 137 | 33 | 123 | 172 |
| 4 | 154 | 106 | 11 | 79 | 127 | 160 | 181 | 188 | 182 | 167 | 168 | 171 | 182 | 188 | 223 | 267 | 351 | 102 | 126 | 181 | -258 | -238 | 48 | 106 | 123 |
| 5 | 80 | -102 | -320 | 49 | 141 | 138 | 146 | 185 | 190 | 153 | 199 | 263 | 176 | 202 | 210 | 216 | 247 | 223 | 203 | 206 | 146 | 35 | 42 | -4 | 126 |
| 6 | -29 | 20 | -6 | 25 | 137 | 160 | 151 | 185 | 150 | 156 | 154 | 150 | 158 | 164 | 165 | 183 | 214 | 218 | 170 | 179 | 187 | 174 | 167 | 161 | 141 |
| 7 | 155 | 145 | 142 | 173 | 173 | 173 | 166 | 156 | 227 | 249 | 248 | 260 | 261 | 342 | 348 | 360 | 211 | 23 | 115 | 96 | 87 | 101 | -21 | -43 | 172 |
| 8 | 67 | 127 | 26 | 86 | 164 | 145 | 170 | 165 | 173 | 162 | 150 | 156 | 151 | 153 | 157 | 163 | 163 | 164 | 169 | 168 | 165 | 163 | 162 | 164 | 147 |
| 9 | 166 | 166 | 165 | 171 | 176 | 174 | 165 | 167 | 167 | 162 | 160 | 160 | 166 | 162 | 191 | 209 | 229 | 173 | 166 | 169 | 168 | 156 | 151 | 155 | 170 |
| 10 | 130 | 129 | 171 | 180 | 178 | 175 | 176 | 177 | 165 | 149 | 153 | 161 | 173 | 171 | 250 | 263 | 190 | 171 | 173 | 181 | 169 | 152 | 96 | 148 | 170 |
| 11 | 126 | 144 | 164 | 162 | 164 | 179 | 187 | 174 | 165 | 162 | 153 | 167 | 166 | 170 | 210 | 235 | 278 | 270 | 184 | 138 | 97 | 150 | 122 | 123 | 170 |
| 12 | 136 | -16 | 13 | 131 | 165 | 184 | 187 | 178 | 168 | 170 | 152 | 160 | 161 | 169 | 172 | 169 | 172 | 172 | 173 | 174 | 173 | 168 | 166 | 163 | 152 |
| 13 | 164 | 159 | 161 | 173 | 172 | 174 | 175 | 172 | 168 | 163 | 160 | 159 | 159 | 163 | 167 | 170 | 172 | 201 | 214 | 233 | 232 | 185 | 148 | -109 | 163 |
| 14 | -191 | 20 | 130 | -111 | -333 | -262 | 117 | 179 | 204 | 196 | 184 | 167 | 165 | 162 | 163 | 167 | 174 | 174 | 182 | 173 | 170 | 177 | 171 | 159 | 97 |
| 15 | 145 | 159 | 167 | 167 | 165 | 164 | 163 | 156 | 163 | 163 | 138 | 155 | 163 | 247 | 268 | 327 | 302 | 163 | 101 | -5 | -232 | -336 | -156 | -278 | 102 |
| 16 | -194 | -354 | -333 | -163 | -94 | -16 | 238 | 244 | 212 | 176 | 171 | 181 | 199 | 231 | 314 | 283 | 242 | 166 | 128 | 235 | -90 | -310 | -95 | -101 | 52 |
| 17 | -211 | -188 | -34 | -71 | -85 | 101 | 195 | 187 | 179 | 148 | 195 | 274 | 327 | 339 | 344 | 304 | 424 | 350 | 246 | 178 | -91 | -69 | -194 | -11 | 118 |
| 18 | 130 | 128 | -80 | 15 | 52 | 124 | 162 | 113 | 177 | 179 | 209 | 203 | 269 | 213 | 214 | 236 | 246 | 267 | 84 | 118 | 118 | 83 | 55 | 25 | 139 |
| 19 | -137 | 64 | 53 | 164 | 185 | 172 | 175 | 161 | 161 | 150 | 162 | 231 | 301 | 377 | 230 | 392 | 381 | 259 | 167 | -54 | -223 | 106 | -65 | -443 | 123 |
| 20 | -69 | -5 | 6 | -5 | 108 | 152 | 124 | 48 | 151 | 165 | 153 | 181 | 239 | 349 | 279 | 215 | 264 | 53 | 40 | -182 | -71 | 53 | 93 | -45 | 95 |
| 21 | -47 | 41 | 138 | 179 | 126 | 129 | 180 | 196 | 179 | 187 | 179 | 179 | 171 | 214 | 202 | 193 | 168 | 193 | 236 | 165 | 162 | 142 | 95 | 117 | 155 |
| 22 | 38 | -43 | -86 | 12 | 182 | 154 | 62 | 106 | 151 | 167 | 170 | 157 | 174 | 228 | 300 | 281 | 240 | 291 | -43 | -343 | -21 | 123 | 91 | -183 | 92 |
| 23 | -87 | 84 | 103 | 114 | 199 | 190 | 144 | 148 | 180 | 185 | 183 | 289 | 214 | 337 | 314 | 255 | 274 | 55 | 166 | 165 | 54 | -194 | -163 | -77 | 130 |
| 24 | 23 | -80 | 49 | 39 | 72 | 105 | 199 | 172 | 215 | 163 | 162 | 204 | 274 | 272 | 381 | 367 | 310 | 156 | 68 | 97 | 105 | 72 | 68 | -115 | 140 |
| 25 | -212 | -112 | -86 | -181 | 5 | 202 | 211 | 199 | 208 | 196 | 255 | 336 | 427 | 367 | 319 | 283 | 288 | 238 | 100 | 33 | 114 | 44 | -104 | 58 | 132 |
| 26 | 15 | 36 | 146 | 80 | 15 | 119 | 159 | 171 | 174 | 166 | 210 | 273 | 340 | 425 | 266 | 176 | 163 | 160 | 162 | 114 | -160 | -17 | 111 | -101 | 133 |
| 27 | -3 | 162 | 165 | 177 | 147 | -49 | -182 | 135 | 163 | 160 | 243 | 282 | 301 | 371 | 312 | 187 | 155 | 168 | 194 | 186 | 203 | 184 | 175 | 94 | 163 |
| 28 | 107 | 138 | 5 | -238 | -239 | -172 | -3 | 55 | 147 | 162 | 213 | 154 | 226 | 336 | 255 | 207 | 238 | 175 | 203 | 25 | -122 | 46 | 146 | 167 | 92 |
| MEAN | 15 | 37 | 47 | 70 | 90 | 110 | 147 | 163 | 176 | 169 | 179 | 201 | 220 | 253 | 248 | 244 | 249 | 179 | 153 | 109 | 56 | 49 | 55 | 14 | 134 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

March 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | -78 | 68 | 152 | 93 | 64 | 102 | 186 | 183 | 179 | 168 | 146 | 200 | 235 | 337 | 284 | 329 | 303 | 275 | 221 | 165 | 95 | 28 | -19 | -41 | 153 |
| 2 | 155 | 42 | 35 | 78 | 119 | 115 | 138 | 164 | 164 | 147 | 162 | 151 | 158 | 188 | 218 | 211 | 200 | 257 | 217 | 98 | 92 | 91 | 157 | 107 | 144 |
| 3 | 158 | 144 | 172 | 176 | 188 | 177 | 165 | 165 | 165 | 157 | 151 | 159 | 170 | 170 | 199 | 223 | 245 | 258 | 212 | 108 | -79 | -13 | 168 | 179 | 159 |
| 4 | 171 | 167 | 169 | 169 | 171 | 172 | 168 | 172 | 164 | 159 | 140 | 143 | 147 | 148 | 151 | 159 | 166 | 169 | 196 | 197 | 171 | 42 | -16 | -23 | 144 |
| 5 | -37 | 52 | 40 | 98 | 184 | 182 | 194 | 188 | 169 | 155 | 157 | 154 | 153 | 168 | 168 | 175 | 179 | 185 | 184 | 175 | 168 | 161 | 67 | -21 | 137 |
| 6 | 19 | -187 | -188 | -113 | 13 | 104 | 156 | 171 | 173 | 158 | 167 | 194 | 189 | 229 | 310 | 435 | 364 | 243 | 115 | 101 | 116 | 160 | 152 | 131 | 133 |
| 7 | 111 | 131 | 126 | 142 | 126 | 157 | 162 | 152 | 157 | 147 | 157 | 157 | 214 | 281 | 303 | 222 | 189 | 172 | 192 | 192 | 153 | 148 | 137 | 124 | 168 |
| 8 | 19 | 146 | 163 | 151 | 152 | 164 | 169 | 168 | 159 | 166 | 180 | 164 | 151 | 199 | 193 | 278 | 240 | 183 | 180 | 169 | 177 | 125 | 99 | 136 | 163 |
| 9 | 134 | 157 | 173 | 176 | 175 | 174 | 165 | 165 | 157 | 152 | 160 | 164 | 165 | 183 | 165 | 190 | 197 | 187 | 182 | 171 | 165 | 151 | 139 | 159 | 166 |
| 10 | 133 | 171 | 172 | 172 | 178 | 181 | 174 | 167 | 156 | 139 | 139 | 159 | 170 | 205 | 223 | 206 | 170 | 169 | 191 | 205 | 186 | 176 | 175 | 155 | 173 |
| 11 | 151 | 123 | -17 | 58 | 171 | 179 | 170 | 164 | 155 | 155 | 147 | 156 | 160 | 177 | 202 | 252 | 214 | 217 | 220 | 183 | 116 | 122 | 155 | 145 | 157 |
| 12 | 136 | 139 | 77 | 66 | 155 | 180 | 181 | 171 | 156 | 143 | 146 | 147 | 154 | 184 | 201 | 377 | 345 | 290 | 195 | 209 | -48 | -465 | -231 | -124 | 116 |
| 13 | 77 | 54 | 89 | 139 | 147 | 151 | 162 | 160 | 155 | 142 | 151 | 154 | 179 | 222 | 234 | 234 | 151 | 61 | 107 | 41 | -48 | -395 | -253 | -84 | 84 |
| 14 | -63 | -288 | -96 | 172 | 203 | 188 | 165 | 166 | 161 | 153 | 186 | 160 | 198 | 166 | 241 | 282 | 224 | 212 | 193 | 154 | 140 | 75 | 84 | 102 | 132 |
| 15 | 46 | -25 | 10 | 85 | 148 | 167 | 174 | 177 | 169 | 157 | 151 | 153 | 154 | 191 | 240 | 254 | 294 | 231 | 165 | -11 | 143 | 128 | 90 | -78 | 133 |
| 16 | -84 | 76 | 128 | 161 | 169 | 175 | 187 | 179 | 161 | 151 | 139 | 146 | 169 | 183 | 201 | 202 | 192 | 193 | 199 | 208 | 185 | 161 | -7 | -18 | 144 |
| 17 | 87 | 183 | 184 | 178 | 176 | 176 | 175 | 174 | 160 | 154 | 151 | 151 | 156 | 164 | 168 | 172 | 178 | 178 | 180 | 184 | 186 | 190 | 191 | 184 | 170 |
| 18 | 179 | 178 | 178 | 181 | 184 | 188 | 184 | 167 | 163 | 145 | 171 | 187 | 271 | 351 | 427 | 352 | 303 | 264 | 208 | 133 | -150 | -194 | -96 | 98 | 169 |
| 19 | 147 | -112 | -1 | 155 | 167 | 166 | 170 | 153 | 145 | 141 | 153 | 139 | 135 | 154 | 168 | 187 | 168 | 177 | 205 | 188 | 192 | 212 | 177 | 129 | 146 |
| 20 | 41 | -36 | 3 | 102 | 147 | 170 | 177 | 167 | 157 | 164 | 169 | 184 | 234 | 341 | 544 | 590 | 485 | 370 | 200 | 115 | 177 | 115 | 151 | -77 | 195 |
| 21 | -661 | -203 | -47 | -248 | -445 | -422 | -164 | 170 | 152 | 229 | 286 | 285 | 216 | 301 | 429 | 367 | 309 | 246 | 96 | 3 | 50 | 66 | 119 | -33 | 45 |
| 22 | -43 | -8 | -100 | -65 | 103 | 136 | 159 | 177 | 164 | 174 | 280 | 248 | 356 | 300 | 275 | 249 | 292 | 190 | 132 | -58 | -67 | 52 | -22 | -15 | 121 |
| 23 | -26 | -68 | -71 | 12 | -34 | 53 | 120 | 180 | 194 | 214 | 339 | 290 | 311 | 320 | 437 | 365 | 338 | 199 | -122 | 115 | -89 | -32 | 136 | 86 | 136 |
| 24 | -80 | -25 | 84 | 57 | 13 | 126 | 136 | 148 | 154 | 160 | 188 | 167 | 164 | 273 | 236 | 197 | 221 | 254 | 152 | 113 | -101 | -60 | -141 | -378 | 85 |
| 25 | -330 | -148 | -10 | 8 | 150 | 189 | 182 | 172 | 165 | 173 | 252 | 308 | 326 | 404 | 453 | 273 | 291 | 152 | -31 | -83 | 50 | 44 | -294 | -97 | 108 |
| 26 | -31 | -169 | -271 | -3 | 20 | -57 | 50 | 178 | 208 | 222 | 268 | 273 | 191 | 191 | 261 | 434 | 350 | 266 | 84 | 58 | 112 | 99 | 43 | -33 | 114 |
| 27 | 97 | 11 | -129 | 96 | 1 | 100 | 171 | 170 | 153 | 182 | 198 | 183 | 152 | 168 | 184 | 364 | 377 | 200 | -66 | 69 | 0 | -21 | 15 | 71 | 114 |
| 28 | 136 | 67 | -44 | -98 | 56 | 115 | 155 | 182 | 195 | 187 | 221 | 248 | 211 | 335 | 289 | 287 | 251 | 256 | 142 | 112 | 66 | -111 | -56 | -2 | 133 |
| 29 | 67 | 162 | 152 | 10 | 150 | 194 | 184 | 177 | 165 | 157 | 171 | 246 | 342 | 345 | 356 | 494 | 324 | 196 | 206 | 156 | 93 | 28 | 2 | -18 | 181 |
| 30 | -133 | -1 | -73 | -136 | -148 | 31 | 121 | 238 | -75 | 1 | 0 | 162 | 388 | 399 | 333 | 297 | 268 | 160 | 164 | 144 | 142 | 141 | 147 | 135 | 112 |
| 31 | 126 | 129 | 122 | 131 | 140 | 141 | 136 | 146 | 141 | 131 | 120 | 119 | 146 | 197 | 177 | 141 | 144 | 154 | 154 | 157 | 154 | 108 | 35 | 97 | 135 |
| MEAN | 20 | 30 | 38 | 71 | 98 | 124 | 150 | 171 | 156 | 157 | 175 | 185 | 205 | 241 | 266 | 283 | 257 | 211 | 150 | 121 | 82 | 42 | 42 | 32 | 137 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

April 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 103 | 26 | 64 | 169 | 171 | 169 | 165 | 155 | 147 | 130 | 127 | 132 | 155 | 176 | 176 | 156 | 155 | 165 | 196 | 220 | 122 | 169 | 176 | 162 | 149 |
| 2 | 158 | 175 | 174 | 175 | 174 | 177 | 177 | 165 | 155 | 145 | 131 | 137 | 180 | 228 | 286 | 289 | 249 | 261 | 198 | 133 | 97 | 143 | 142 | 160 | 179 |
| 3 | 175 | 159 | 182 | 175 | 170 | 167 | 166 | 163 | 166 | 141 | 176 | 297 | 480 | 234 | 154 | 276 | 309 | 286 | 180 | 39 | 57 | 75 | 118 | 116 | 185 |
| 4 | -16 | 137 | 159 | 173 | 173 | 156 | 160 | 169 | 158 | 148 | 143 | 171 | 156 | 168 | 273 | 210 | 185 | 201 | 189 | 113 | 164 | 178 | 185 | 177 | 163 |
| 5 | 155 | 131 | 168 | 179 | 177 | 173 | 165 | 153 | 137 | 174 | 117 | 132 | 172 | 230 | 291 | 243 | 192 | 222 | 244 | 185 | 165 | 159 | 131 | 118 | 175 |
| 6 | 115 | 163 | 175 | 176 | 174 | 172 | 162 | 157 | 147 | 161 | 144 | 131 | 156 | 183 | 227 | 213 | 193 | 171 | 174 | 181 | 174 | 158 | 106 | 0 | 158 |
| 7 | 127 | 178 | 180 | 178 | 183 | 175 | 169 | 164 | 156 | 142 | 143 | 139 | 135 | 169 | 206 | 301 | 314 | 312 | 272 | 215 | 183 | 194 | 125 | 116 | 186 |
| 8 | -53 | -27 | 135 | 185 | 187 | 185 | 177 | 164 | 150 | 144 | 147 | 137 | 167 | 164 | 151 | 169 | 198 | 242 | 204 | 177 | 155 | 159 | 153 | 50 | 146 |
| 9 | 138 | 176 | 178 | 170 | 173 | 171 | 148 | 149 | 153 | 264 | 318 | 436 | 276 | 199 | 236 | 316 | 307 | 319 | 233 | 97 | -22 | 102 | 1 | -95 | 185 |
| 10 | -100 | -245 | -46 | 121 | -116 | -136 | 90 | 177 | 137 | 299 | 262 | 212 | 42 | -113 | 27 | 144 | 54 | -327 | -38 | 74 | 82 | -81 | -179 | -225 | 4 |
| 11 | -86 | -446 | -492 | -293 | -209 | -153 | 56 | 178 | 178 | 204 | 284 | 400 | 421 | 416 | 333 | 309 | 269 | 124 | 122 | 13 | -13 | 78 | 54 | 77 | 76 |
| 12 | 40 | -305 | -151 | -515 | -886 | -300 | -193 | 39 | 318 | 374 | 206 | 237 | 376 | 270 | 233 | 264 | 275 | 160 | -46 | 43 | -383 | -199 | -162 | -29 | -13 |
| 13 | 162 | 94 | 47 | 77 | 114 | -3 | 28 | 122 | 204 | 161 | 235 | 399 | 435 | 414 | 313 | 258 | 285 | 289 | 54 | 114 | -41 | -168 | -123 | 63 | 147 |
| 14 | 1 | -60 | -73 | -49 | 43 | 114 | 53 | 119 | 113 | 218 | 409 | 423 | 352 | 358 | 450 | 241 | 202 | 122 | 157 | 25 | 11 | 19 | 48 | -26 | 136 |
| 15 | -107 | -88 | -222 | 45 | -185 | -96 | 167 | 178 | 185 | 191 | 217 | 209 | 353 | 467 | 436 | 444 | 281 | 262 | 237 | 159 | 49 | 143 | 147 | 113 | 149 |
| 16 | -75 | 72 | 42 | 60 | 158 | 198 | 180 | 149 | 139 | 161 | 198 | 257 | 221 | 247 | 311 | 256 | 241 | 246 | 225 | 107 | 38 | 51 | -28 | -37 | 142 |
| 17 | -85 | 93 | 124 | 146 | 133 | 117 | 156 | 183 | 193 | 218 | 324 | 510 | 380 | 388 | 407 | 332 | 254 | 173 | 82 | 88 | 139 | 46 | -213 | -199 | 166 |
| 18 | -104 | -289 | -221 | -124 | -99 | 78 | 136 | 135 | 148 | 155 | 141 | 166 | 250 | 224 | 205 | 187 | 181 | 204 | 252 | 202 | 157 | 118 | -57 | -47 | 83 |
| 19 | 43 | 103 | 75 | 125 | 146 | 149 | 151 | 143 | 136 | 117 | 134 | 135 | 183 | 192 | 223 | 279 | 263 | 222 | 253 | 81 | 54 | 66 | 109 | 62 | 143 |
| 20 | -3 | -62 | 84 | 163 | 166 | 133 | 110 | 119 | 156 | 148 | 137 | 187 | 179 | 213 | 246 | 324 | 381 | 320 | 297 | 215 | 70 | -32 | 40 | 121 | 154 |
| 21 | -368 | -121 | 64 | -30 | -196 | 68 | 195 | 175 | 161 | 137 | 150 | 120 | 136 | 174 | 181 | 194 | 192 | 179 | 180 | 204 | 182 | 172 | 179 | 183 | 104 |
| 22 | 171 | 168 | 159 | 162 | 80 | 83 | 136 | 143 | 156 | 167 | 169 | 211 | 263 | 425 | 517 | 349 | 298 | 248 | 204 | 164 | 178 | 155 | -122 | -355 | 172 |
| 23 | -25 | -110 | -377 | -344 | -267 | -243 | 21 | 180 | 201 | 176 | 171 | 280 | 566 | 644 | 560 | 341 | 410 | 296 | 199 | 161 | 58 | 33 | 17 | -37 | 121 |
| 24 | 42 | 113 | 176 | 189 | 171 | 138 | 85 | 0 | 87 | 140 | 348 | 399 | 387 | 190 | 221 | 326 | 286 | 262 | 183 | 136 | 67 | 70 | 110 | -170 | 164 |
| 25 | -113 | -39 | -86 | -109 | 45 | 195 | 129 | 121 | 131 | 222 | 159 | 235 | 203 | 242 | 219 | 179 | 254 | 256 | 227 | 201 | 193 | 80 | 31 | -108 | 119 |
| 26 | -261 | -29 | -109 | -200 | -171 | -50 | 101 | 145 | 134 | 132 | 136 | 136 | 151 | 160 | 188 | 189 | 182 | 180 | 181 | 177 | 169 | 136 | 92 | 78 | 76 |
| 27 | 75 | 134 | 60 | -200 | -4 | 130 | 155 | 169 | 168 | 161 | 158 | 184 | 271 | 403 | 431 | 368 | 333 | 294 | 234 | 204 | 179 | 112 | -5 | -16 | 166 |
| 28 | -66 | 74 | 13 | 16 | 120 | 138 | 133 | 150 | 202 | 320 | 288 | 331 | 450 | 384 | 201 | 209 | 253 | 275 | 242 | 75 | 50 | 60 | 39 | 99 | 169 |
| 29 | 8 | 60 | -97 | -134 | -146 | -179 | -102 | 10 | 154 | 198 | 241 | 335 | 335 | 418 | 506 | 454 | 350 | 281 | 247 | 97 | -103 | 56 | -18 | -78 | 120 |
| 30 | -108 | -36 | 14 | -52 | -12 | 101 | 158 | 163 | 173 | 191 | 212 | 241 | 233 | 254 | 327 | 266 | 240 | 243 | 210 | 229 | 182 | 153 | 40 | -47 | 140 |
| MEAN | -1 | 6 | 13 | 21 | 15 | 67 | 114 | 141 | 161 | 184 | 200 | 243 | 268 | 270 | 284 | 269 | 252 | 216 | 186 | 137 | 80 | 80 | 37 | 7 | 135 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

May 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 151 | 169 | 167 | 158 | 118 | 147 | 156 | 156 | 136 | 166 | 136 | 124 | 166 | 174 | 205 | 219 | 180 | 181 | 196 | 181 | 147 | 152 | 164 | 154 | 162 |
| 2 | 167 | 161 | 164 | 171 | 156 | 153 | 140 | 146 | 152 | 158 | 216 | 167 | 298 | 279 | 211 | 153 | 164 | 177 | 214 | 203 | 160 | 22 | 65 | 123 | 167 |
| 3 | 134 | 131 | 142 | 177 | 151 | 110 | 140 | 160 | 150 | 165 | 150 | 184 | 345 | 348 | 190 | 153 | 156 | 180 | 180 | 235 | 177 | 84 | 36 | -224 | 152 |
| 4 | -249 | 41 | 184 | 182 | 182 | 171 | 164 | 165 | 166 | 154 | 145 | 214 | 206 | 187 | 169 | 166 | 202 | 196 | 255 | 190 | 153 | 156 | 124 | -11 | 146 |
| 5 | 65 | 161 | 180 | 184 | 187 | 182 | 169 | 152 | 150 | 158 | 160 | 166 | 152 | 164 | 185 | 223 | 231 | 223 | 227 | 205 | 157 | 162 | 171 | 162 | 174 |
| 6 | 168 | 172 | 177 | 179 | 163 | 162 | 157 | 160 | 151 | 146 | 149 | 147 | 154 | 164 | 190 | 182 | 191 | 197 | 187 | 177 | 186 | 156 | 67 | 137 | 163 |
| 7 | 170 | 166 | 169 | 185 | 188 | 169 | 154 | 146 | 136 | 135 | 149 | 147 | 178 | 209 | 265 | 324 | 226 | 181 | 168 | 165 | 168 | 171 | 174 | 168 | 179 |
| 8 | 81 | 139 | 180 | 177 | 154 | 124 | 148 | 144 | 137 | 135 | 151 | 148 | 177 | 181 | 217 | 235 | 195 | 181 | 190 | 189 | 205 | 161 | 46 | -202 | 145 |
| 9 | -107 | 12 | 147 | 201 | 185 | 167 | 147 | 99 | 116 | 137 | 221 | 261 | 403 | 537 | 497 | 548 | 402 | 335 | 256 | 167 | 73 | 100 | 83 | 113 | 212 |
| 10 | -103 | -99 | -86 | 50 | 84 | 48 | -132 | 6 | 77 | 196 | 310 | 239 | 203 | 314 | 234 | 218 | 237 | 292 | 201 | 58 | 17 | 58 | 83 | 107 | 108 |
| 11 | 19 | -224 | -275 | -316 | -256 | 31 | 39 | 199 | 187 | 152 | 133 | 175 | 350 | 438 | 406 | 432 | 449 | 352 | 287 | 215 | 152 | 123 | 102 | 93 | 135 |
| 12 | -5 | -60 | -164 | -90 | 29 | 103 | 137 | 157 | 143 | 125 | 116 | 118 | 132 | 149 | 160 | 160 | 170 | 176 | 174 | 172 | 168 | 166 | 161 | 160 | 106 |
| 13 | 162 | 157 | 146 | 130 | 130 | 142 | 150 | 144 | 140 | 134 | 131 | 134 | 141 | 138 | 145 | 235 | 419 | 343 | 250 | 163 | 136 | 85 | 20 | -7 | 157 |
| 14 | 111 | 181 | 183 | 169 | 156 | 147 | 153 | 153 | 142 | 129 | 139 | 142 | 150 | 154 | 149 | 168 | 171 | 189 | 215 | 216 | 190 | 178 | 165 | 132 | 161 |
| 15 | 102 | 134 | 183 | 182 | 169 | 174 | 166 | 157 | 144 | 138 | 132 | 150 | 163 | 179 | 190 | 196 | 186 | 193 | 200 | 187 | 181 | 186 | 179 | 174 | 168 |
| 16 | 182 | 184 | 182 | 183 | 178 | 172 | 164 | 155 | 142 | 131 | 125 | 131 | 131 | 146 | 155 | 171 | 183 | 192 | 194 | 196 | 192 | 185 | 185 | 194 | 168 |
| 17 | 196 | 185 | 184 | 177 | 165 | 166 | 162 | 160 | 149 | 148 | 135 | 144 | 165 | 179 | 190 | 206 | 197 | 194 | 192 | 171 | 147 | 130 | 153 | 130 | 167 |
| 18 | 103 | 105 | 172 | 182 | 175 | 163 | 154 | 159 | 183 | 213 | 189 | 249 | 316 | 478 | 666 | 471 | 419 | 324 | 254 | 117 | 62 | 76 | -172 | -96 | 206 |
| 19 | 63 | 40 | -54 | -212 | -49 | 169 | 172 | 172 | 137 | 144 | 154 | 198 | 389 | 384 | 191 | 187 | 274 | 300 | 298 | 216 | 182 | 114 | -60 | -99 | 137 |
| 20 | -60 | -316 | -330 | -80 | -80 | 147 | 180 | 175 | 157 | 163 | 240 | 256 | 347 | 301 | 340 | 284 | 497 | 272 | 203 | 122 | -67 | 15 | -55 | -24 | 111 |
| 21 | -76 | 14 | -22 | 72 | 188 | 204 | 184 | 166 | 162 | 160 | 182 | 268 | 294 | 225 | 482 | 452 | 408 | 308 | 241 | 208 | 140 | 90 | 99 | 159 | 192 |
| 22 | 207 | 147 | 133 | 74 | 16 | 39 | -27 | 48 | 124 | 293 | 446 | 504 | 508 | 388 | 597 | 505 | 324 | 243 | 262 | 217 | 96 | 92 | 24 | 13 | 219 |
| 23 | 30 | 9 | 35 | 109 | 30 | 76 | 119 | 131 | 159 | 207 | 236 | 332 | 435 | 487 | 465 | 388 | 366 | 282 | 230 | 201 | 153 | 59 | 101 | 138 | 199 |
| 24 | 127 | 147 | 166 | 160 | 148 | 143 | 140 | 138 | 135 | 149 | 173 | 168 | 174 | 196 | 195 | 250 | 282 | 255 | 214 | 195 | 160 | 132 | 113 | 66 | 167 |
| 25 | -90 | -140 | -187 | -69 | 8 | 154 | 181 | 159 | 141 | 139 | 242 | 421 | 616 | 682 | 660 | 544 | 385 | 304 | 243 | 217 | 190 | 92 | 19 | 32 | 205 |
| 26 | 54 | -3 | -61 | -62 | 9 | 46 | 144 | 154 | 149 | 127 | 119 | 127 | 432 | 302 | 477 | 457 | 339 | 296 | 284 | 217 | 76 | -122 | 166 | -14 | 154 |
| 27 | 112 | 161 | -7 | 44 | -156 | -183 | 8 | 78 | 125 | 196 | 215 | 215 | 212 | 302 | 359 | 332 | 317 | 223 | 203 | 230 | 164 | -41 | -10 | 15 | 129 |
| 28 | 67 | 147 | 189 | 188 | 178 | 160 | 157 | 145 | 127 | 132 | 143 | 133 | 164 | 167 | 196 | 235 | 322 | 291 | 250 | 218 | 126 | 77 | 115 | 106 | 168 |
| 29 | 31 | 55 | 116 | 175 | 173 | 162 | 148 | 141 | 134 | 142 | 140 | 141 | 156 | 191 | 226 | 291 | 356 | 297 | 242 | 215 | 175 | 155 | 62 | -213 | 154 |
| 30 | 0 | 142 | 128 | 80 | -82 | 53 | 122 | 113 | 141 | 161 | 148 | 210 | 306 | 385 | 301 | 359 | 334 | 287 | -80 | -80 | 190 | 56 | 15 | -17 | 136 |
| 31 | 22 | 75 | 19 | 50 | 140 | 179 | 168 | 148 | 134 | 141 | 138 | 140 | 174 | 240 | 280 | 315 | 276 | 234 | 213 | 163 | 144 | 72 | 70 | 75 | 150 |
| MEAN | 59 | 70 | 69 | 90 | 91 | 125 | 131 | 141 | 142 | 157 | 176 | 198 | 259 | 279 | 296 | 292 | 285 | 248 | 214 | 178 | 141 | 101 | 79 | 49 | 161 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

June 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 118 | 135 | 81 | 106 | 61 | 129 | 134 | 149 | 127 | 131 | 120 | 168 | 192 | 218 | 249 | 266 | 243 | 280 | 278 | 258 | 148 | 149 | 116 | 115 | 165 |
| 2 | 129 | 122 | 171 | 163 | 166 | 152 | 138 | 134 | 150 | 164 | 164 | 156 | 147 | 174 | 172 | 205 | 215 | 206 | 194 | 192 | 170 | 164 | 162 | 135 | 164 |
| 3 | 148 | 162 | 159 | 160 | 156 | 150 | 148 | 146 | 142 | 141 | 141 | 139 | 192 | 199 | 203 | 181 | 174 | 191 | 193 | 211 | 200 | 180 | 164 | 127 | 166 |
| 4 | 150 | 167 | 177 | 174 | 167 | 161 | 139 | 147 | 147 | 149 | 171 | 156 | 199 | 220 | 215 | 234 | 218 | 197 | 193 | 180 | 178 | 156 | 100 | 144 | 172 |
| 5 | 156 | 178 | 180 | 183 | 163 | 155 | 155 | 154 | 151 | 145 | 155 | 180 | 173 | 231 | 235 | 282 | 314 | 273 | 226 | 198 | 160 | 144 | 181 | 120 | 187 |
| 6 | 58 | -79 | -163 | -63 | 150 | 181 | 161 | 141 | 130 | 136 | 141 | 198 | 223 | 293 | 411 | 355 | 285 | 242 | 231 | 210 | 172 | 170 | 51 | -23 | 150 |
| 7 | -141 | -283 | -214 | -195 | -176 | -62 | 168 | 186 | 176 | 167 | 219 | 224 | 309 | 297 | 306 | 318 | 347 | 312 | 208 | 172 | 99 | -25 | -32 | -17 | 98 |
| 8 | -144 | -124 | 99 | 68 | 116 | 177 | 173 | 146 | 129 | 109 | 175 | 217 | 177 | 207 | 257 | 278 | 306 | 267 | 202 | 195 | 225 | 35 | -86 | 80 | 136 |
| 9 | 82 | 127 | -67 | -78 | 146 | 164 | 99 | 33 | 125 | 217 | 371 | 411 | 531 | 665 | 579 | 418 | 256 | 219 | 222 | 181 | 204 | 202 | 141 | 100 | 222 |
| 10 | 28 | -260 | -203 | -64 | 141 | 204 | 178 | 149 | 129 | 131 | 134 | 180 | 271 | 344 | 313 | 361 | 305 | 285 | 235 | 170 | 76 | 56 | -200 | -36 | 121 |
| 11 | 21 | 47 | -7 | 0 | -116 | 20 | 158 | 175 | 158 | 167 | 123 | 177 | 275 | 473 | 404 | 329 | 287 | 236 | 211 | 210 | 154 | 109 | -52 | 30 | 149 |
| 12 | -25 | -74 | -120 | 15 | 160 | 158 | 171 | 156 | 158 | 169 | 258 | 391 | 628 | 624 | 790 | 521 | 209 | 272 | 273 | 150 | -39 | 102 | -217 | -416 | 179 |
| 13 | -18 | -380 | -747 | -460 | -187 | 25 | 171 | 164 | 153 | 146 | 159 | 174 | 180 | 176 | 221 | 241 | 270 | 280 | 229 | 194 | 41 | 92 | 139 | 167 | 59 |
| 14 | 174 | -419 | -410 | -341 | 30 | 218 | 191 | 173 | 158 | 154 | 255 | 258 | 322 | 628 | 336 | 356 | 419 | 329 | 205 | 90 | 60 | 89 | 88 | 87 | 143 |
| 15 | 141 | 163 | 167 | 155 | 127 | 170 | 170 | 160 | 147 | 138 | 129 | 129 | 136 | 156 | 182 | 227 | 295 | 291 | 259 | 218 | 167 | 124 | 125 | 22 | 166 |
| 16 | -94 | 68 | 104 | 145 | 166 | 176 | 163 | 151 | 133 | 123 | 125 | 140 | 157 | 188 | 181 | 183 | 185 | 197 | 219 | 191 | 166 | 141 | 143 | 153 | 146 |
| 17 | 167 | 170 | 170 | 167 | 170 | 169 | 163 | 153 | 139 | 125 | 116 | 124 | 137 | 150 | 158 | 167 | 172 | 172 | 175 | 190 | 191 | 154 | 151 | 162 | 158 |
| 18 | 170 | 167 | 165 | 159 | 161 | 157 | 145 | 146 | 150 | 134 | 177 | 220 | 236 | 320 | 216 | 212 | 266 | 281 | 240 | 180 | 155 | 113 | -87 | -69 | 167 |
| 19 | -158 | -137 | -206 | -133 | 111 | 180 | 200 | 177 | 153 | 143 | 170 | 153 | 184 | 281 | 244 | 186 | 169 | 170 | 176 | 173 | 193 | 160 | 153 | 151 | 120 |
| 20 | 168 | 174 | 182 | 171 | 164 | 153 | 145 | 140 | 129 | 124 | 130 | 140 | 166 | 168 | 171 | 175 | 172 | 172 | 179 | 183 | 183 | 171 | 162 | 172 | 162 |
| 21 | 179 | 180 | 183 | 176 | 166 | 158 | 161 | 145 | 131 | 132 | 123 | 137 | 161 | 201 | 182 | 175 | 192 | 220 | 232 | 204 | 105 | 93 | 71 | 47 | 156 |
| 22 | 38 | -10 | 31 | 54 | 137 | 149 | 143 | 148 | 142 | 128 | 135 | 146 | 158 | 186 | 203 | 226 | 225 | 184 | 183 | 204 | 183 | 149 | 74 | 49 | 136 |
| 23 | 26 | 69 | 122 | 170 | 163 | 160 | 156 | 147 | 135 | 136 | 139 | 107 | 174 | 163 | 165 | 185 | 214 | 242 | 233 | 223 | 187 | 146 | 176 | 190 | 159 |
| 24 | 195 | 188 | 192 | 177 | 169 | 183 | 159 | 145 | 143 | 133 | 139 | 145 | 167 | 229 | 215 | 273 | 287 | 306 | 261 | 225 | 175 | 65 | 108 | 97 | 182 |
| 25 | 127 | 156 | 152 | 168 | 163 | 160 | 167 | 177 | 166 | 134 | 131 | 150 | 189 | 189 | 206 | 227 | 202 | 202 | 210 | 232 | 188 | 128 | 73 | 115 | 167 |
| 26 | 129 | 145 | 175 | 171 | 163 | 144 | 154 | 151 | 145 | 121 | 148 | 135 | 156 | 183 | 184 | 215 | 285 | 299 | 261 | 198 | 170 | 104 | 73 | 6 | 163 |
| 27 | 83 | 140 | 183 | 184 | 179 | 169 | 154 | 134 | 129 | 131 | 128 | 167 | 219 | 210 | 205 | 200 | 190 | 218 | 245 | 241 | 244 | 174 | 138 | 36 | 170 |
| 28 | 135 | 5 | 57 | 76 | 112 | 127 | 139 | 132 | 145 | 132 | 161 | 159 | 143 | 174 | 199 | 199 | 238 | 214 | 203 | 204 | 205 | 177 | 158 | 165 | 152 |
| 29 | 174 | 181 | 185 | 189 | 147 | 133 | 139 | 151 | 149 | 148 | 156 | 175 | 207 | 205 | 197 | 266 | 269 | 262 | 176 | 124 | 181 | 156 | 124 | 117 | 175 |
| 30 | 131 | 139 | 158 | 163 | 169 | 163 | 152 | 139 | 130 | 129 | 141 | 157 | 163 | 178 | 198 | 228 | 229 | 204 | 193 | 178 | 178 | 175 | 105 | 118 | 163 |
| MEAN | 78 | 37 | 31 | 62 | 114 | 146 | 156 | 148 | 143 | 141 | 161 | 180 | 219 | 264 | 259 | 256 | 247 | 240 | 218 | 192 | 157 | 128 | 76 | 71 | 155 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

July 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 137 | 165 | 171 | 156 | 165 | 161 | 147 | 146 | 140 | 128 | 114 | 129 | 159 | 164 | 178 | 205 | 196 | 214 | 215 | 222 | 206 | 7 | -58 | -1 | 144 |
| 2 | 13 | 24 | -31 | -15 | 137 | 139 | 159 | 168 | 154 | 138 | 138 | 141 | 142 | 162 | 235 | 219 | 186 | 200 | 179 | 169 | 164 | 166 | 170 | 178 | 138 |
| 3 | 186 | 164 | 164 | 162 | 105 | 94 | 136 | 173 | 141 | 124 | 128 | 148 | 156 | 179 | 187 | 210 | 222 | 204 | 193 | 211 | 180 | 162 | 167 | 146 | 164 |
| 4 | 113 | 98 | 167 | 175 | 178 | 167 | 170 | 162 | 160 | 129 | 116 | 122 | 135 | 173 | 189 | 209 | 266 | 316 | 276 | 227 | 195 | 107 | 116 | 58 | 167 |
| 5 | 9 | 48 | 144 | 112 | 182 | 178 | 171 | 153 | 132 | 138 | 192 | 238 | 486 | 571 | 498 | 433 | 337 | 284 | 264 | 207 | 155 | 160 | 134 | 117 | 222 |
| 6 | 144 | 177 | 171 | 171 | 160 | 158 | 148 | 135 | 123 | 115 | 121 | 126 | 143 | 180 | 170 | 255 | 353 | 311 | 255 | 146 | 116 | 130 | 121 | 100 | 167 |
| 7 | 148 | 185 | 173 | 170 | 153 | 132 | 143 | 142 | 156 | 143 | 134 | 147 | 178 | 230 | 236 | 198 | 199 | 201 | 215 | 208 | 177 | 145 | 36 | 103 | 164 |
| 8 | 118 | 156 | 163 | 141 | 127 | 110 | 106 | 122 | 146 | 148 | 162 | 266 | 226 | 245 | 339 | 316 | 296 | 223 | 222 | 232 | 177 | 166 | 120 | -22 | 179 |
| 9 | 26 | 81 | 80 | 151 | 187 | 167 | 146 | 137 | 130 | 127 | 129 | 135 | 148 | 162 | 168 | 179 | 179 | 176 | 182 | 182 | 178 | 174 | 159 | 142 | 146 |
| 10 | 132 | 144 | 150 | 162 | 157 | 103 | 157 | 154 | 147 | 151 | 146 | 220 | 158 | 161 | 165 | 154 | 166 | 181 | 191 | 192 | 181 | 181 | 193 | 185 | 163 |
| 11 | 172 | 169 | 160 | 170 | 174 | 163 | 151 | 142 | 130 | 135 | 134 | 136 | 167 | 192 | 232 | 244 | 221 | 218 | 228 | 220 | 192 | 160 | 142 | 101 | 173 |
| 12 | 72 | 79 | 89 | 109 | 125 | 100 | 111 | 132 | 153 | 166 | 248 | 233 | 114 | 117 | 132 | 161 | 185 | 203 | 217 | 205 | 189 | 165 | 148 | 52 | 146 |
| 13 | 5 | -109 | -332 | -282 | -202 | -46 | 211 | 216 | 216 | 169 | 143 | 139 | 154 | 148 | 149 | 160 | 171 | 238 | 246 | 203 | 104 | 100 | 68 | 131 | 83 |
| 14 | 50 | 59 | 187 | 182 | 176 | 165 | 152 | 148 | 147 | 147 | 173 | 235 | 253 | 225 | 187 | 192 | 257 | 240 | 263 | 119 | 48 | 88 | 57 | -19 | 155 |
| 15 | 59 | 103 | 21 | 22 | 76 | 114 | 166 | 157 | 152 | 148 | 139 | 170 | 160 | 202 | 208 | 188 | 197 | 224 | 241 | 216 | 148 | 126 | 99 | 111 | 143 |
| 16 | 44 | 89 | 139 | 164 | 157 | 169 | 164 | 161 | 134 | 130 | 131 | 146 | 134 | 160 | 151 | 158 | 164 | 173 | 178 | 184 | 187 | 177 | 182 | 190 | 152 |
| 17 | 176 | 181 | 180 | 181 | 152 | 134 | 138 | 152 | 148 | 138 | 135 | 136 | 143 | 149 | 181 | 175 | 182 | 196 | 221 | 227 | 201 | 143 | 78 | 48 | 158 |
| 18 | 27 | -71 | 79 | 152 | 176 | 174 | 165 | 150 | 138 | 128 | 143 | 140 | 147 | 174 | 177 | 191 | 236 | 289 | 263 | 216 | 194 | 175 | 158 | 149 | 157 |
| 19 | 186 | 176 | 162 | 159 | 108 | 118 | 141 | 153 | 144 | 147 | 171 | 285 | 253 | 424 | 265 | 226 | 225 | 281 | 251 | 211 | 182 | 156 | 156 | 144 | 196 |
| 20 | 65 | -3 | 73 | 149 | 108 | 128 | 135 | 134 | 118 | 157 | 166 | 217 | 344 | 353 | 236 | 200 | 269 | 310 | 236 | 186 | 131 | 102 | 19 | 33 | 161 |
| 21 | 69 | 151 | 164 | 159 | 154 | 156 | 142 | 131 | 127 | 134 | 148 | 177 | 166 | 217 | 258 | 248 | 269 | 269 | 238 | 150 | 171 | 135 | 161 | 140 | 172 |
| 22 | 124 | 109 | 109 | 104 | 145 | 150 | 140 | 135 | 145 | 140 | 140 | 150 | 202 | 248 | 248 | 217 | 186 | 176 | 171 | 191 | 171 | 88 | 114 | 99 | 154 |
| 23 | 57 | 166 | 166 | 150 | 155 | 155 | 150 | 135 | 124 | 125 | 136 | 152 | 166 | 178 | 190 | 204 | 211 | 243 | 243 | 197 | 161 | 140 | 109 | 145 | 160 |
| 24 | 161 | 176 | 171 | 161 | 135 | 114 | 124 | 140 | 145 | 143 | 126 | 133 | 137 | 167 | 175 | 202 | 206 | 198 | 208 | 214 | 181 | 163 | 164 | 172 | 163 |
| 25 | 167 | 152 | 168 | 158 | 156 | 162 | 147 | 130 | 119 | 120 | 132 | 133 | 147 | 156 | 175 | 170 | 173 | 186 | 202 | 200 | 198 | 187 | 183 | 183 | 162 |
| 26 | 182 | 184 | 184 | 179 | 175 | 166 | 158 | 147 | 128 | 118 | 115 | 122 | 129 | 140 | 160 | 170 | 182 | 249 | 230 | 214 | 194 | 134 | 72 | 141 | 161 |
| 27 | 124 | 157 | 185 | 178 | 155 | 147 | 143 | 145 | 136 | 146 | 116 | 128 | 142 | 161 | 201 | 263 | 240 | 221 | 256 | 237 | 162 | 84 | 145 | 146 | 167 |
| 28 | 132 | 143 | 170 | 193 | 169 | 183 | 105 | 151 | 150 | 194 | 229 | 269 | 323 | 548 | 365 | 254 | 313 | 188 | 262 | 152 | -660 | -150 | 45 | -96 | 151 |
| 29 | -349 | -22 | -720 | -494 | -55 | 91 | -39 | 23 | 225 | 241 | 324 | 385 | 591 | 317 | 259 | 380 | 359 | 231 | 210 | 143 | 86 | 151 | -6 | 121 | 102 |
| 30 | 171 | 172 | 168 | 163 | 154 | 143 | 138 | 132 | 120 | 121 | 150 | 140 | 159 | 186 | 183 | 183 | 185 | 179 | 192 | 204 | 169 | 134 | 93 | -209 | 142 |
| 31 | -135 | 32 | 62 | 170 | 177 | 161 | 135 | 112 | 114 | 145 | 138 | 149 | 161 | 155 | 144 | 144 | 144 | 150 | 158 | 156 | 153 | 148 | 145 | 135 | 127 |
| MEAN | 83 | 107 | 94 | 113 | 132 | 137 | 140 | 142 | 143 | 143 | 152 | 175 | 197 | 220 | 214 | 216 | 225 | 224 | 222 | 194 | 138 | 129 | 112 | 94 | 156 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

August 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 135 | 137 | 158 | 170 | 165 | 152 | 141 | 130 | 123 | 129 | 140 | 137 | 304 | 391 | 616 | 366 | 243 | 245 | 260 | 172 | -68 | -60 | -46 | -1 | 172 |
| 2 | -28 | -37 | 27 | 32 | 176 | 178 | 151 | 152 | 146 | 134 | 136 | 140 | 168 | 178 | 176 | 158 | 152 | 155 | 161 | 166 | 170 | 142 | 63 | 52 | 122 |
| 3 | 60 | -21 | 121 | 164 | 173 | 158 | 141 | 131 | 144 | 178 | 230 | 324 | 221 | 343 | 331 | 203 | 205 | 195 | 209 | 159 | 101 | 84 | 26 | -70 | 158 |
| 4 | -215 | -62 | 113 | 160 | 189 | 171 | 143 | 142 | 130 | 133 | 135 | 130 | 170 | 147 | 177 | 189 | 189 | 171 | 210 | 209 | 171 | 154 | 131 | 149 | 134 |
| 5 | 160 | 152 | 158 | 168 | 167 | 161 | 148 | 133 | 126 | 122 | 143 | 175 | 186 | 238 | 269 | 324 | 308 | 260 | 215 | 186 | 167 | 129 | 130 | -64 | 173 |
| 6 | -55 | 139 | 149 | 161 | 144 | 134 | 129 | 124 | 129 | 124 | 129 | 139 | 177 | 151 | 164 | 192 | 282 | 303 | 261 | 138 | 117 | 34 | 72 | -8 | 138 |
| 7 | 50 | 64 | 161 | 182 | 176 | 167 | 151 | 139 | 134 | 136 | 135 | 135 | 163 | 185 | 211 | 259 | 308 | 253 | 181 | 152 | 159 | 141 | -43 | -7 | 149 |
| 8 | 18 | 131 | 104 | 56 | 122 | 167 | 163 | 152 | 131 | 130 | 128 | 129 | 142 | 176 | 208 | 170 | 191 | 209 | 192 | 169 | 159 | 160 | 161 | 90 | 144 |
| 9 | -68 | -37 | -32 | 61 | 176 | 167 | 159 | 142 | 132 | 127 | 132 | 128 | 147 | 158 | 189 | 212 | 253 | 297 | 270 | 236 | 205 | 170 | 155 | 159 | 147 |
| 10 | 171 | 168 | 167 | 170 | 163 | 160 | 155 | 144 | 132 | 131 | 146 | 145 | 134 | 145 | 153 | 166 | 161 | 200 | 232 | 235 | 201 | 188 | 153 | 103 | 163 |
| 11 | -172 | -6 | 179 | 173 | 157 | 153 | 148 | 127 | 130 | 143 | 126 | 129 | 188 | 248 | 189 | 181 | 192 | 207 | 191 | 203 | 176 | 157 | 118 | 41 | 140 |
| 12 | 19 | 46 | 37 | -42 | -17 | 151 | 194 | 173 | 147 | 149 | 143 | 142 | 159 | 162 | 167 | 173 | 176 | 180 | 188 | 205 | 193 | 162 | 80 | 43 | 126 |
| 13 | 82 | 54 | 127 | 88 | 17 | 62 | 95 | 123 | 152 | 163 | 190 | 176 | 123 | 243 | 350 | 342 | 315 | 308 | 234 | 190 | 183 | 162 | 63 | 19 | 160 |
| 14 | 31 | -25 | 103 | 55 | 86 | 124 | 171 | 146 | 141 | 238 | 144 | 178 | 240 | 235 | 257 | 294 | 278 | 236 | 215 | 205 | 50 | 0 | -39 | 49 | 142 |
| 15 | 97 | 110 | 141 | 146 | 167 | 161 | 166 | 150 | 132 | 144 | 186 | 345 | 546 | 564 | 359 | 417 | 353 | 219 | 238 | 159 | 147 | 131 | -40 | -134 | 204 |
| 16 | -104 | 21 | 117 | 155 | 168 | 91 | 157 | 108 | 128 | 196 | 200 | 238 | 303 | 488 | 324 | 440 | 214 | 254 | 239 | 185 | 159 | 93 | 15 | 38 | 176 |
| 17 | 20 | 33 | -43 | 115 | 87 | 132 | 139 | 147 | 149 | 132 | 115 | 133 | 176 | 185 | 221 | 270 | 356 | 263 | 257 | 201 | 64 | 88 | 115 | 71 | 142 |
| 18 | 132 | -33 | -7 | 24 | 138 | 173 | 158 | 135 | 134 | 140 | 143 | 140 | 155 | 182 | 303 | 293 | 293 | 276 | 188 | 176 | 137 | 113 | 121 | 41 | 148 |
| 19 | -154 | -154 | -367 | -291 | -12 | 170 | 167 | 143 | 128 | 130 | 148 | 162 | 211 | 339 | 284 | 278 | 252 | 246 | 190 | 166 | 168 | 81 | -131 | -201 | 81 |
| 20 | -198 | -1 | 113 | -29 | -233 | 14 | 97 | 147 | 170 | 169 | 168 | 288 | 382 | 444 | 419 | 403 | 399 | 286 | 36 | -22 | 152 | 143 | 42 | 57 | 143 |
| 21 | 86 | 52 | 134 | 163 | 158 | 150 | 100 | 86 | 109 | 133 | 174 | 244 | 341 | 413 | 562 | 605 | 476 | 348 | 176 | 28 | 18 | -56 | -363 | -70 | 169 |
| 22 | -64 | -315 | -336 | 1 | -391 | -222 | -21 | 95 | 176 | 280 | 364 | 425 | 498 | 477 | 424 | 425 | 426 | 329 | 231 | 169 | 36 | -79 | 16 | -53 | 120 |
| 23 | -338 | -287 | -359 | -266 | -106 | 58 | 49 | 85 | 122 | 109 | 222 | 444 | 577 | 480 | 393 | 386 | 446 | 367 | 96 | -161 | 113 | 74 | 94 | 62 | 110 |
| 24 | -58 | -156 | 1 | -84 | -358 | -111 | 181 | 188 | 142 | 127 | 190 | 205 | 364 | 354 | 303 | 269 | 229 | 274 | 243 | 171 | 143 | 140 | 122 | 114 | 124 |
| 25 | 97 | 127 | 154 | 158 | 158 | 155 | 144 | 134 | 122 | 114 | 107 | 121 | 185 | 217 | 220 | 243 | 246 | 259 | 247 | 178 | 121 | 127 | 40 | 108 | 157 |
| 26 | 74 | 138 | 170 | 161 | 153 | 165 | 131 | 105 | 48 | 95 | 309 | 702 | 549 | 183 | 578 | 461 | 341 | 210 | 269 | 192 | 144 | 120 | 83 | -16 | 223 |
| 27 | 34 | 97 | 123 | 157 | 157 | 141 | 133 | 119 | 100 | 99 | 112 | 124 | 149 | 140 | 135 | 135 | 144 | 147 | 148 | 148 | 152 | 142 | 148 | 158 | 130 |
| 28 | 152 | 149 | 151 | 150 | 152 | 148 | 138 | 128 | 119 | 102 | 99 | 113 | 126 | 143 | 141 | 150 | 173 | 178 | 175 | 171 | 165 | 154 | 158 | 153 | 145 |
| 29 | 157 | 160 | 162 | 154 | 143 | 130 | 129 | 123 | 118 | 132 | 155 | 141 | 137 | 146 | 147 | 152 | 167 | 179 | 220 | 170 | -126 | 89 | 123 | 126 | 134 |
| 30 | 99 | 53 | 143 | 154 | 82 | 54 | 135 | 136 | 134 | 144 | 196 | 322 | 432 | 465 | 337 | 420 | 412 | 236 | 201 | 182 | 172 | 176 | 169 | 101 | 206 |
| 31 | 92 | -38 | -88 | 134 | 171 | 107 | 130 | 112 | 151 | 152 | 172 | 163 | 184 | 191 | 207 | 172 | 170 | 168 | 178 | 176 | 168 | 165 | 156 | 146 | 139 |
| MEAN | 10 | 21 | 57 | 83 | 81 | 116 | 136 | 132 | 131 | 143 | 165 | 210 | 252 | 271 | 284 | 282 | 269 | 240 | 204 | 158 | 126 | 107 | 61 | 40 | 149 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

September 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 31 | 108 | 119 | 91 | 129 | 150 | 141 | 135 | 124 | 129 | 201 | 165 | 458 | 422 | 263 | 268 | 227 | 242 | 196 | 165 | 160 | 165 | 139 | 144 | 182 |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | 133 | 131 | 127 | 123 | 134 | 165 | 149 | 151 | 150 | 150 | 150 | 153 | 161 | 163 | 164 | 162 | 160 | 163 | 149 |
| 4 | 162 | 165 | 162 | 161 | 161 | 158 | 153 | 147 | 132 | 124 | 131 | 136 | 153 | 181 | 157 | 200 | 254 | 318 | 252 | 236 | 188 | 149 | 67 | -55 | 162 |
| 5 | -6 | -7 | -83 | -12 | 103 | 171 | 188 | 151 | 141 | 143 | 154 | 121 | 155 | 195 | 232 | 271 | 248 | 197 | 183 | 181 | 168 | 114 | 173 | 143 | 138 |
| 6 | 105 | -31 | 141 | 174 | 172 | 164 | 155 | 137 | 126 | 137 | 117 | 142 | 174 | 175 | 177 | 180 | 199 | 238 | 229 | 190 | 94 | 89 | 126 | 80 | 145 |
| 7 | 66 | 116 | 65 | 107 | 170 | 155 | 144 | 130 | 148 | 151 | 204 | 244 | 320 | 449 | 457 | 428 | 237 | 165 | 146 | 146 | 178 | 142 | 140 | 84 | 191 |
| 8 | 105 | 126 | 132 | 164 | 166 | 143 | 134 | 131 | 131 | 155 | 151 | 164 | 131 | 142 | 149 | 169 | 219 | 217 | 183 | 192 | 57 | -169 | 98 | 44 | 130 |
| 9 | -64 | 51 | 137 | 167 | 171 | 164 | 150 | 139 | 130 | 132 | 129 | 170 | 143 | 170 | 190 | 251 | 263 | 254 | 206 | 165 | 66 | 39 | 116 | 139 | 144 |
| 10 | 66 | -35 | 135 | 173 | 167 | 142 | 128 | 140 | 141 | 133 | 130 | 132 | 144 | 150 | 158 | 158 | 161 | 165 | 169 | 180 | 143 | 120 | 40 | -140 | 120 |
| 11 | 54 | 79 | 146 | 163 | 187 | 171 | 166 | 150 | 144 | 111 | 146 | 287 | 425 | 489 | 473 | 375 | 326 | 257 | 208 | 118 | 26 | 14 | -170 | -171 | 173 |
| 12 | -128 | -73 | 0 | 88 | -36 | 118 | 124 | 144 | 152 | 169 | 190 | 200 | 200 | 233 | 257 | 269 | 299 | 260 | 127 | 28 | -74 | 30 | 147 | 150 | 119 |
| 13 | 89 | -156 | -53 | 119 | 132 | 165 | 156 | 150 | 148 | 179 | 173 | 144 | 220 | 309 | 283 | 313 | 285 | 238 | 160 | 150 | 112 | 69 | 9 | -90 | 137 |
| 14 | -260 | -32 | -126 | 20 | 171 | 130 | 181 | 152 | 147 | 125 | 141 | 184 | 174 | 201 | 333 | 266 | 221 | 234 | 212 | 82 | -46 | -6 | 135 | 168 | 116 |
| 15 | 155 | 109 | -162 | -179 | 57 | 180 | 149 | 130 | 125 | 136 | 136 | 250 | 198 | 155 | 249 | 325 | 340 | 247 | 195 | 66 | -62 | 49 | 100 | 153 | 129 |
| 16 | 132 | 80 | -112 | -2 | 70 | 130 | 155 | 143 | 142 | 175 | 218 | 255 | 208 | 402 | 344 | 351 | 234 | 196 | 174 | 107 | 149 | 151 | 133 | 88 | 163 |
| 17 | -67 | -3 | 122 | 190 | 205 | 172 | 153 | 140 | 151 | 135 | 157 | 167 | 191 | 198 | 191 | 184 | 188 | 199 | 133 | 99 | 54 | 18 | -122 | 132 | 124 |
| 18 | 177 | 166 | 165 | 165 | 158 | 150 | 117 | 129 | 139 | 154 | 296 | 260 | 289 | 414 | 433 | 355 | 318 | 237 | 160 | 133 | 0 | -72 | 124 | 69 | 189 |
| 19 | -201 | -411 | -186 | 115 | 155 | 160 | 137 | 139 | 127 | 129 | 125 | 132 | 132 | 168 | 157 | 176 | 271 | 232 | 209 | 152 | 58 | 29 | 121 | -78 | 85 |
| 20 | -140 | -121 | 90 | 167 | 169 | 167 | 157 | 145 | 134 | 130 | 127 | 140 | 140 | 154 | 174 | 239 | 289 | 243 | 232 | 175 | 74 | -103 | 3 | -27 | 114 |
| 21 | 55 | 44 | 132 | 169 | 163 | 145 | 133 | 133 | 149 | 165 | 204 | 191 | 184 | 239 | 291 | 304 | 236 | 249 | 171 | 2 | 103 | 98 | -8 | -75 | 144 |
| 22 | -75 | -164 | -53 | 75 | 38 | 71 | 52 | 149 | 142 | 150 | 156 | 164 | 166 | 241 | 344 | 407 | 386 | 224 | 194 | 185 | -1 | -152 | -38 | 46 | 112 |
| 23 | -85 | -115 | 119 | 0 | 79 | 161 | 167 | 140 | 149 | 157 | 176 | 158 | 138 | 147 | 187 | 310 | 253 | 189 | 179 | 171 | 165 | 174 | 154 | 141 | 138 |
| 24 | 109 | 70 | 140 | 153 | 135 | 128 | 160 | 177 | 205 | 218 | 206 | 261 | 308 | 303 | 223 | 309 | 298 | 193 | 221 | 159 | 90 | 130 | 172 | 125 | 187 |
| 25 | 120 | 99 | 8 | 65 | 112 | 179 | 164 | 150 | 154 | 183 | 241 | 224 | 126 | 142 | 150 | 176 | 190 | 193 | 202 | 131 | -9 | -4 | 115 | 91 | 133 |
| 26 | 126 | 166 | 159 | 148 | 163 | 178 | 177 | 162 | 146 | 131 | 139 | 120 | 135 | 174 | 216 | 268 | 290 | 227 | 178 | -89 | 45 | 146 | 149 | 152 | 154 |
| 27 | 49 | 123 | 84 | 136 | 166 | 166 | 163 | 164 | 165 | 147 | 139 | 131 | 176 | 187 | 183 | 192 | 188 | 191 | 186 | 166 | 104 | 48 | 125 | 128 | 146 |
| 28 | 160 | 140 | 48 | 105 | 157 | 170 | 164 | 156 | 145 | 131 | 126 | 160 | 153 | 155 | 152 | 153 | 156 | 163 | 173 | 178 | 160 | 118 | 23 | -20 | 134 |
| 29 | -132 | -106 | 51 | 179 | 175 | 170 | 161 | 159 | 151 | 134 | 144 | 127 | 133 | 137 | 154 | 159 | 159 | 161 | 167 | 188 | 145 | 143 | 86 | -18 | 117 |
| 30 | 73 | 165 | 169 | 168 | 167 | 161 | 155 | 144 | 134 | 125 | 121 | 129 | 129 | 140 | 148 | 154 | 159 | 166 | 165 | 165 | 168 | 170 | 172 | 145 | 149 |
| MEAN | 24 | 19 | 55 | 109 | 137 | 154 | 148 | 144 | 143 | 145 | 162 | 176 | 194 | 228 | 237 | 253 | 242 | 215 | 185 | 137 | 85 | 64 | 85 | 59 | 141 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

October 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 156 | 161 | 158 | 138 | 146 | 164 | 161 | 151 | 137 | 126 | 121 | 123 | 134 | 145 | 151 | 154 | 158 | 161 | 165 | 167 | 166 | 166 | 167 | 165 | 151 |
| 2 | 165 | 165 | 164 | 166 | 166 | 165 | 159 | 150 | 140 | 134 | 117 | 123 | 166 | 180 | 144 | 151 | 161 | 189 | 237 | 210 | 178 | 171 | 168 | 165 | 163 |
| 3 | 163 | 162 | 149 | 158 | 163 | 167 | 165 | 158 | 147 | 138 | 137 | 136 | 139 | 156 | 160 | 170 | 177 | 171 | 182 | 170 | 204 | 184 | 125 | -24 | 152 |
| 4 | 103 | 144 | 164 | 164 | 166 | 153 | 150 | 155 | 149 | 137 | 140 | 126 | 133 | 165 | 239 | 254 | 238 | 254 | -93 | 41 | 158 | 107 | 41 | 9 | 137 |
| 5 | 81 | 18 | 54 | 31 | 65 | 93 | 157 | 136 | 139 | 157 | 151 | 167 | 163 | 175 | 227 | 176 | 164 | 156 | 159 | 171 | 176 | 146 | -21 | -23 | 121 |
| 6 | 127 | 153 | 162 | 157 | 159 | 150 | 145 | 146 | 183 | 214 | 193 | 220 | 142 | 137 | 151 | 191 | 184 | 189 | 178 | 176 | 176 | 81 | -16 | 120 | 154 |
| 7 | 115 | 89 | 153 | 153 | 158 | 155 | 153 | 153 | 148 | 145 | 134 | 139 | 141 | 172 | 194 | 179 | 160 | 177 | 199 | 69 | 68 | 78 | 19 | -101 | 127 |
| 8 | 65 | 152 | 158 | 159 | 160 | 158 | 157 | 153 | 144 | 131 | 130 | 125 | 127 | 140 | 176 | 184 | 160 | 165 | 162 | 168 | 164 | 167 | 168 | 163 | 151 |
| 9 | 155 | 144 | 152 | 158 | 161 | 164 | 160 | 157 | 150 | 142 | 136 | 136 | 165 | 153 | 172 | 164 | 171 | 190 | 136 | 113 | 133 | 138 | 94 | -218 | 134 |
| 10 | -336 | -404 | -171 | -242 | 42 | -9 | 108 | 125 | 211 | 294 | 301 | 159 | 232 | 300 | 277 | 398 | 267 | 157 | 114 | 172 | 145 | 132 | 136 | 99 | 104 |
| 11 | -152 | -287 | -59 | 94 | 95 | 81 | 56 | 91 | 165 | 118 | 185 | 237 | 182 | 180 | 200 | 276 | 213 | 60 | -173 | -34 | -108 | -14 | -142 | -112 | 48 |
| 12 | -69 | -5 | 70 | 24 | -56 | 76 | 146 | 178 | 183 | 162 | 234 | 199 | 203 | 233 | 169 | 161 | 198 | 204 | -42 | -40 | -35 | -48 | -47 | -103 | 83 |
| 13 | 67 | -16 | 17 | 119 | 137 | 159 | 167 | 176 | 187 | 157 | 132 | 132 | 145 | 165 | 232 | 222 | 195 | 192 | 173 | 152 | -89 | -40 | 74 | 29 | 120 |
| 14 | 104 | -75 | -190 | 99 | 160 | 144 | 130 | 158 | 165 | 150 | 139 | 129 | 132 | 187 | 196 | 221 | 261 | 184 | 122 | 65 | -45 | 81 | -203 | -313 | 83 |
| 15 | -301 | -213 | -12 | 152 | 142 | 167 | 180 | 182 | 177 | 156 | 179 | 232 | 261 | 356 | 401 | 386 | 200 | 248 | 210 | 21 | -344 | -120 | 31 | 140 | 117 |
| 16 | 42 | 108 | 161 | 169 | 176 | 157 | 174 | 198 | 152 | 148 | 132 | 139 | 139 | 164 | 151 | 162 | 188 | 171 | 163 | 158 | -5 | -237 | -68 | -15 | 113 |
| 17 | 28 | 75 | 143 | 170 | 166 | 163 | 153 | 151 | 138 | 142 | 135 | 134 | 137 | 143 | 146 | 151 | 153 | 156 | 153 | 156 | 164 | 162 | 160 | 142 | 142 |
| 18 | 157 | 158 | 160 | 161 | 161 | 160 | 159 | 154 | 145 | 141 | 129 | 129 | 142 | 172 | 220 | 251 | 293 | 278 | 247 | 206 | 153 | 89 | 61 | 37 | 165 |
| 19 | -3 | -10 | -18 | 0 | 118 | 168 | 173 | 167 | 146 | 135 | 154 | 198 | 222 | 207 | 187 | 182 | 179 | 174 | 165 | 151 | 94 | 27 | 31 | 133 | 124 |
| 20 | 139 | 127 | 144 | 151 | 160 | 160 | 158 | 154 | 149 | 152 | 200 | 232 | 240 | 173 | 266 | 261 | 247 | 166 | 142 | -205 | -141 | -5 | -106 | -9 | 123 |
| 21 | 54 | 72 | 111 | 166 | 149 | 138 | 126 | 136 | 151 | 179 | 202 | 224 | 231 | 220 | 222 | 166 | 152 | 153 | 155 | 146 | 121 | 129 | 102 | 92 | 149 |
| 22 | -103 | -49 | -8 | 55 | 140 | 164 | 161 | 147 | 144 | 132 | 139 | 138 | 146 | 169 | 226 | 198 | 193 | 189 | 170 | 160 | 157 | 160 | 167 | 165 | 131 |
| 23 | 165 | 163 | 162 | 159 | 159 | 158 | 157 | 150 | 144 | 133 | 129 | 137 | 144 | 143 | 151 | 158 | 169 | 185 | 183 | 176 | 52 | -262 | -191 | 48 | 115 |
| 24 | -66 | -43 | -207 | -75 | -153 | 131 | 199 | 176 | 159 | 170 | 168 | 178 | 227 | 296 | 338 | 369 | 236 | 182 | 38 | -30 | 147 | 160 | 162 | 112 | 119 |
| 25 | -60 | -74 | 56 | 84 | 75 | 162 | 161 | 154 | 145 | 133 | 139 | 139 | 158 | 149 | 161 | 154 | 151 | 155 | 160 | 164 | 154 | 130 | 136 | 65 | 118 |
| 26 | 133 | 151 | 154 | 152 | 153 | 154 | 152 | 150 | 145 | 137 | 132 | 139 | 146 | 177 | 154 | 169 | 254 | 261 | 280 | 182 | 56 | 189 | 151 | 148 | 163 |
| 27 | 132 | 135 | 155 | 137 | 90 | 114 | 139 | 143 | 145 | 143 | 154 | 147 | 148 | 140 | 163 | 182 | 194 | 167 | 172 | 174 | 125 | 72 | 28 | -10 | 132 |
| 28 | 45 | 134 | 155 | 160 | 150 | 154 | 161 | 148 | 130 | 133 | 152 | 138 | 145 | 143 | 150 | 149 | 151 | 153 | 154 | 154 | 152 | 152 | 153 | 158 | 144 |
| 29 | 156 | 155 | 154 | 153 | 154 | 157 | 151 | 148 | 145 | 142 | 146 | 136 | 153 | 158 | 157 | 166 | 192 | 293 | 260 | 242 | 162 | 107 | 157 | 214 | 169 |
| 30 | 139 | -124 | -245 | 55 | 175 | 156 | 159 | 158 | 141 | 133 | 146 | 147 | 144 | 151 | 168 | 152 | 164 | 190 | 178 | 194 | 167 | 132 | 70 | -97 | 110 |
| 31 | 87 | 169 | 156 | 122 | 70 | 116 | 121 | 98 | 144 | 168 | 192 | 215 | 163 | 172 | 286 | 243 | 287 | 133 | 59 | 55 | -281 | -74 | -23 | -16 | 110 |
| MEAN | 48 | 43 | 71 | 108 | 122 | 141 | 151 | 151 | 153 | 151 | 157 | 159 | 166 | 181 | 201 | 206 | 197 | 183 | 142 | 119 | 71 | 69 | 51 | 37 | 128 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

November 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 51 | 160 | 167 | 159 | 171 | 174 | 164 | 156 | 150 | 147 | 145 | 152 | 152 | 145 | 148 | 154 | 160 | 183 | 174 | 173 | 152 | -60 | 42 | 60 | 136 |
| 2 | -25 | 66 | 91 | 109 | 146 | 169 | 182 | 160 | 150 | 144 | 139 | 141 | 142 | 148 | 155 | 164 | 202 | 183 | 196 | 195 | 150 | 75 | -35 | 99 | 131 |
| 3 | 144 | 134 | 143 | 148 | 172 | 169 | 164 | 159 | 154 | 146 | 149 | 145 | 150 | 158 | 180 | 175 | 178 | 172 | 184 | 170 | 163 | 133 | 142 | 127 | 156 |
| 4 | 103 | 168 | 156 | 155 | 158 | 163 | 160 | 156 | 152 | 144 | 140 | 137 | 138 | 143 | 147 | 152 | 157 | 163 | 170 | 162 | 161 | 161 | 158 | 156 | 152 |
| 5 | 158 | 159 | 159 | 159 | 160 | 158 | 156 | 152 | 147 | 140 | 137 | 139 | 141 | 144 | 148 | 152 | 157 | 160 | 161 | 163 | 165 | 162 | 153 | 139 | 152 |
| 6 | 158 | 162 | 161 | 161 | 161 | 161 | 160 | 155 | 149 | 143 | 139 | 137 | 140 | 148 | 153 | 159 | 162 | 163 | 162 | 166 | 165 | 174 | 166 | 169 | 157 |
| 7 | 164 | 163 | 164 | 166 | 166 | 165 | 164 | 161 | 152 | 144 | 140 | 139 | 159 | 152 | 150 | 170 | 241 | 242 | 216 | 172 | 162 | 146 | -31 | -24 | 151 |
| 8 | 91 | 159 | 167 | 166 | 166 | 164 | 151 | 148 | 165 | 152 | 141 | 146 | 157 | 155 | 159 | 181 | 256 | 246 | 191 | 199 | 170 | 94 | 49 | -23 | 152 |
| 9 | 67 | 21 | -90 | 13 | 122 | 176 | 177 | 163 | 159 | 155 | 154 | 153 | 159 | 160 | 154 | 175 | 209 | 197 | 157 | 188 | 157 | 123 | 89 | -22 | 125 |
| 10 | -12 | -130 | -85 | 114 | 148 | 178 | 179 | 166 | 178 | 183 | 180 | 165 | 164 | 210 | 294 | 338 | 260 | 248 | 230 | 89 | -13 | 22 | -7 | -168 | 122 |
| 11 | -114 | 29 | 75 | 125 | 122 | 152 | 167 | 169 | 163 | 179 | 172 | 164 | 162 | 195 | 223 | 162 | 152 | 151 | 167 | 175 | 161 | 166 | 144 | 102 | 140 |
| 12 | 103 | 153 | 157 | 160 | 156 | 161 | 160 | 154 | 148 | 143 | 137 | 134 | 139 | 148 | 155 | 159 | 161 | 163 | 167 | 169 | 165 | 137 | 124 | 101 | 148 |
| 13 | 107 | 156 | 163 | 164 | 165 | 165 | 161 | 158 | 149 | 141 | 140 | 140 | 143 | 148 | 153 | 160 | 165 | 172 | 169 | 174 | 166 | 150 | 147 | 156 | 154 |
| 14 | 157 | 149 | 158 | 165 | 163 | 161 | 158 | 153 | 148 | 142 | 139 | 142 | 145 | 150 | 155 | 158 | 161 | 162 | 163 | 164 | 164 | 163 | 161 | 161 | 155 |
| 15 | 161 | 160 | 158 | 167 | 165 | 164 | 161 | 157 | 151 | 147 | 144 | 147 | 152 | 155 | 158 | 160 | 162 | 169 | 181 | 202 | 186 | 160 | 144 | 139 | 160 |
| 16 | 154 | 159 | 152 | 150 | 158 | 130 | 76 | 118 | 146 | 140 | 198 | 260 | 270 | 226 | 300 | 243 | 230 | 122 | 127 | 182 | 145 | 9 | -151 | 26 | 148 |
| 17 | 69 | 103 | 126 | 107 | 93 | 142 | 147 | 130 | 141 | 142 | 140 | 194 | 221 | 264 | 324 | 274 | 239 | 105 | 42 | 110 | -1 | -24 | -15 | -21 | 127 |
| 18 | -80 | 137 | 148 | 151 | 126 | 128 | 169 | 159 | 147 | 142 | 154 | 165 | 187 | 254 | 291 | 409 | 292 | 230 | 197 | 182 | 148 | 101 | 81 | -163 | 156 |
| 19 | 18 | -147 | -54 | 97 | 136 | 176 | 176 | 162 | 148 | 148 | 143 | 143 | 147 | 149 | 151 | 163 | 185 | 184 | 160 | 164 | 178 | 125 | -1 | 87 | 118 |
| 20 | 130 | 155 | 153 | 164 | 170 | 155 | 162 | 163 | 155 | 153 | 151 | 151 | 150 | 154 | 157 | 158 | 157 | 161 | 162 | 170 | 167 | 188 | 192 | 200 | 161 |
| 21 | 180 | 140 | 147 | 81 | 71 | 93 | 170 | 171 | 155 | 151 | 154 | 151 | 170 | 182 | 183 | 169 | 159 | 185 | 222 | 182 | 170 | 128 | 107 | 129 | 152 |
| 22 | 147 | 157 | 157 | 158 | 157 | 155 | 154 | 151 | 147 | 144 | 142 | 145 | 151 | 153 | 156 | 160 | 161 | 163 | 171 | 192 | 164 | 155 | 157 | 157 | 156 |
| 23 | 158 | 158 | 157 | 157 | 157 | 156 | 154 | 153 | 149 | 146 | 146 | 155 | 152 | 158 | 170 | 220 | 250 | 292 | 195 | 152 | 152 | 103 | 37 | 31 | 156 |
| 24 | 32 | 75 | 123 | 156 | 165 | 157 | 154 | 152 | 148 | 144 | 142 | 145 | 149 | 151 | 153 | 154 | 155 | 156 | 158 | 158 | 157 | 157 | 156 | 151 | 143 |
| 25 | 151 | 154 | 158 | 158 | 160 | 159 | 157 | 155 | 152 | 149 | 147 | 143 | 146 | 152 | 154 | 156 | 158 | 165 | 192 | 195 | 128 | 111 | 82 | 98 | 149 |
| 26 | 151 | 123 | 32 | 135 | 154 | 163 | 172 | 162 | 156 | 155 | 149 | 148 | 160 | 183 | 219 | 224 | 174 | 151 | 147 | 149 | 150 | 154 | 154 | 98 | 152 |
| 27 | 10 | 86 | -61 | 43 | 133 | 120 | 142 | 147 | 170 | 160 | 159 | 164 | 155 | 221 | 226 | 130 | -100 | -537 | -53 | -191 | 25 | 45 | 47 | 109 | 56 |
| 28 | 126 | 80 | 46 | 67 | 196 | 138 | 184 | 181 | 162 | 143 | 138 | 134 | 138 | 142 | 144 | 167 | 171 | 198 | 120 | -163 | 105 | 176 | 135 | 120 | 127 |
| 29 | 146 | 137 | 129 | 127 | 160 | 154 | 153 | 147 | 141 | 140 | 139 | 144 | 146 | 148 | 150 | 151 | 157 | 160 | 173 | 178 | 190 | 183 | 151 | 119 | 150 |
| 30 | 119 | 121 | 98 | 148 | 162 | 156 | 155 | 151 | 151 | 148 | 147 | 152 | 151 | 159 | 190 | 261 | 263 | 264 | 219 | 186 | 186 | 190 | 162 | 119 | 169 |
| MEAN | 94 | 111 | 108 | 134 | 151 | 155 | 159 | 155 | 152 | 148 | 148 | 152 | 157 | 168 | 183 | 188 | 181 | 159 | 164 | 146 | 144 | 120 | 91 | 81 | 143 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

December 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 84 | 107 | 160 | 150 | 115 | 148 | 163 | 156 | 144 | 140 | 139 | 142 | 144 | 150 | 155 | 172 | 167 | 159 | 161 | 171 | 169 | 154 | 155 | 155 | 148 |
| 2 | 151 | 153 | 152 | 153 | 154 | 155 | 153 | 152 | 149 | 148 | 144 | 146 | 151 | 148 | 154 | 157 | 162 | 204 | 232 | 215 | 214 | 176 | 145 | 76 | 160 |
| 3 | 133 | 147 | 154 | 156 | 158 | 158 | 160 | 158 | 156 | 151 | 146 | 143 | 145 | 149 | 154 | 172 | 191 | 256 | 284 | 281 | 242 | 180 | 170 | 43 | 170 |
| 4 | -77 | -68 | -139 | -175 | 48 | 116 | 172 | 163 | 162 | 150 | 150 | 161 | 225 | 200 | 247 | 284 | 270 | 190 | 177 | 124 | 54 | 118 | 42 | -131 | 102 |
| 5 | 18 | 118 | 160 | 165 | 162 | 161 | 155 | 144 | 140 | 139 | 151 | 167 | 188 | 170 | 243 | 240 | 203 | 231 | 104 | 201 | 126 | 76 | 72 | 115 | 152 |
| 6 | 116 | 134 | 139 | 142 | 160 | 155 | 157 | 155 | 154 | 154 | 146 | 139 | 170 | 173 | 199 | 164 | 183 | 197 | 188 | 181 | 172 | 166 | 115 | 94 | 156 |
| 7 | 81 | 140 | 138 | 149 | 157 | 160 | 171 | 162 | 154 | 147 | 140 | 142 | 142 | 146 | 149 | 150 | 161 | 172 | 171 | 164 | 160 | 143 | 148 | 152 | 149 |
| 8 | 153 | 152 | 153 | 155 | 159 | 158 | 153 | 161 | 153 | 145 | 148 | 135 | 145 | 154 | 197 | 216 | 187 | 190 | 215 | 181 | 113 | 86 | 24 | 110 | 151 |
| 9 | 154 | 130 | 145 | 147 | 146 | 155 | 157 | 155 | 149 | 145 | 144 | 148 | 152 | 165 | 234 | 177 | 193 | 201 | 187 | 167 | 141 | 119 | 129 | 139 | 157 |
| 10 | 146 | 148 | 148 | 151 | 153 | 153 | 151 | 150 | 146 | 144 | 145 | 147 | 152 | 153 | 154 | 156 | 157 | 160 | 174 | 178 | 158 | 153 | 154 | 155 | 153 |
| 11 | 155 | 154 | 155 | 158 | 160 | 159 | 155 | 150 | 146 | 144 | 142 | 145 | 149 | 151 | 155 | 157 | 157 | 165 | 170 | 157 | 154 | 153 | 155 | 154 | 154 |
| 12 | 154 | 154 | 154 | 156 | 157 | 157 | 156 | 153 | 148 | 146 | 144 | 148 | 153 | 159 | 164 | 173 | 208 | 310 | 265 | 182 | 146 | 125 | 13 | -32 | 153 |
| 13 | -92 | -32 | 77 | 49 | 82 | 94 | 175 | 159 | 197 | 220 | 173 | 143 | 142 | 146 | 152 | 155 | 150 | 152 | 159 | 151 | 129 | 113 | 55 | -2 | 114 |
| 14 | 49 | 89 | 105 | 123 | 149 | 157 | 157 | 155 | 153 | 145 | 140 | 140 | 141 | 147 | 153 | 175 | 168 | 177 | 157 | 150 | 145 | 126 | 128 | 134 | 140 |
| 15 | 138 | 135 | 127 | 140 | 145 | 153 | 153 | 147 | 160 | 177 | 152 | 147 | 148 | 151 | 151 | 156 | 158 | 184 | 226 | 202 | 166 | 144 | 110 | 94 | 152 |
| 16 | 61 | 93 | 98 | 143 | 157 | 158 | 159 | 153 | 144 | 141 | 139 | 150 | 153 | 169 | 199 | 223 | 251 | 217 | 190 | 166 | 96 | 123 | 152 | 145 | 153 |
| 17 | 138 | 145 | 136 | 139 | 155 | 165 | 165 | 161 | 155 | 148 | 145 | 146 | 151 | 155 | 156 | 164 | 182 | 194 | 215 | 230 | 198 | 177 | 152 | 149 | 163 |
| 18 | 151 | 174 | 157 | 158 | 158 | 158 | 156 | 154 | 152 | 151 | 150 | 142 | 147 | 160 | 159 | 186 | 179 | 156 | 155 | 155 | 156 | 155 | 153 | 154 | 157 |
| 19 | 154 | 154 | 155 | 157 | 159 | 156 | 153 | 153 | 148 | 146 | 146 | 148 | 151 | 150 | 153 | 160 | 159 | 160 | 162 | 161 | 161 | 158 | 158 | 159 | 155 |
| 20 | 153 | 152 | 151 | 155 | 149 | 145 | 152 | 148 | 147 | 141 | 142 | 160 | 164 | 164 | 205 | 232 | 269 | 188 | 27 | 146 | 156 | 52 | 119 | 157 | 153 |
| 21 | 152 | 144 | 148 | 150 | 150 | 149 | 155 | 153 | 149 | 147 | 146 | 146 | 149 | 151 | 155 | 156 | 158 | 159 | 164 | 183 | 184 | 174 | 161 | 160 | 155 |
| 22 | 153 | 148 | 152 | 159 | 155 | 155 | 156 | 154 | 153 | 150 | 148 | 149 | 151 | 152 | 153 | 155 | 156 | 156 | 156 | 156 | 155 | 155 | 156 | 158 | 153 |
| 23 | 158 | 158 | 159 | 159 | 162 | 163 | 164 | 151 | 147 | 140 | 143 | 145 | 147 | 149 | 150 | 157 | 161 | 159 | 156 | 155 | 153 | 150 | 30 | 140 | 148 |
| 24 | 173 | 152 | 152 | 130 | 110 | 94 | 120 | 136 | 157 | 151 | 144 | 157 | 166 | 204 | 307 | 266 | 196 | 94 | 47 | 21 | 3 | 53 | 9 | -57 | 124 |
| 25 | 74 | 18 | 46 | 47 | 102 | 155 | 185 | 171 | 156 | 148 | 154 | 159 | 139 | 151 | 158 | 192 | 228 | 218 | 159 | 183 | 88 | 90 | 71 | 8 | 129 |
| 26 | 47 | 108 | 127 | 141 | 155 | 155 | 157 | 151 | 146 | 144 | 142 | 141 | 142 | 149 | 150 | 150 | 152 | 152 | 153 | 155 | 152 | 153 | 154 | 154 | 142 |
| 27 | 151 | 149 | 128 | 112 | 118 | 158 | 159 | 156 | 148 | 145 | 147 | 151 | 154 | 178 | 177 | 169 | 158 | 156 | 161 | 160 | 158 | 161 | 141 | 117 | 150 |
| 28 | 146 | 115 | 147 | 156 | 153 | 164 | 167 | 156 | 148 | 146 | 146 | 149 | 152 | 155 | 154 | 158 | 159 | 163 | 175 | 200 | 171 | 164 | 153 | 151 | 156 |
| 29 | 158 | 150 | 154 | 165 | 164 | 162 | 158 | 154 | 150 | 146 | 145 | 146 | 149 | 151 | 154 | 157 | 179 | 211 | 212 | 186 | 159 | 158 | 154 | 150 | 161 |
| 30 | 141 | 76 | 135 | 158 | 163 | 179 | 176 | 164 | 162 | 149 | 151 | 149 | 151 | 152 | 150 | 152 | 159 | 162 | 161 | 169 | 162 | 156 | 152 | 157 | 153 |
| 31 | 160 | 162 | 165 | 165 | 165 | 165 | 161 | 156 | 153 | 149 | 148 | 155 | 168 | 183 | 264 | 377 | 299 | 287 | 222 | 117 | -22 | -50 | -18 | 12 | 155 |
| MEAN | 113 | 121 | 130 | 132 | 144 | 152 | 159 | 154 | 152 | 149 | 146 | 147 | 154 | 159 | 177 | 185 | 185 | 186 | 173 | 169 | 142 | 131 | 113 | 102 | 148 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

January 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 222 | 222 | 242 | 236 | 229 | 203 | 177 | 184 | 216 | 236 | 223 | 223 | 236 | 236 | 236 | 229 | 190 | 171 | 210 | 262 | 288 | 249 | 327 | 307 | 231 |
| 2 | 327 | 106 | 190 | 229 | 236 | 236 | 236 | 229 | 234 | 228 | 227 | 235 | 223 | 225 | 233 | 248 | 235 | 175 | 143 | 177 | 128 | 210 | 335 | 328 | 223 |
| 3 | 236 | 186 | 212 | 143 | 199 | 230 | 246 | 236 | 234 | 233 | 233 | 231 | 230 | 235 | 243 | 237 | 225 | 140 | 220 | 245 | 237 | 224 | 220 | 229 | 221 |
| 4 | 233 | 233 | 231 | 194 | 208 | 221 | 220 | 215 | 214 | 221 | 221 | 221 | 217 | 228 | 231 | 245 | 241 | 228 | 228 | 221 | 203 | 217 | 264 | 179 | 222 |
| 5 | 165 | 175 | 189 | 245 | 229 | 220 | 227 | 213 | 226 | 231 | 231 | 224 | 223 | 225 | 221 | 227 | 185 | 47 | 53 | 223 | 249 | 182 | 235 | 308 | 206 |
| 6 | 190 | 180 | 145 | 190 | 230 | 232 | 227 | 236 | 233 | 235 | 236 | 237 | 233 | 230 | 228 | 226 | 230 | 236 | 226 | 210 | 181 | 189 | 157 | 161 | 211 |
| 7 | 176 | 204 | 216 | 218 | 212 | 218 | 211 | 218 | 228 | 229 | 228 | 228 | 229 | 226 | 226 | 228 | 227 | 234 | 234 | 222 | 199 | 197 | 197 | 197 | 216 |
| 8 | 223 | 216 | 210 | 210 | 216 | 216 | 216 | 219 | 215 | 212 | 214 | 215 | 216 | 219 | 217 | 219 | 161 | 120 | 177 | 262 | 200 | 197 | 237 | 229 | 209 |
| 9 | 359 | 212 | 215 | 175 | 191 | 207 | 199 | 219 | 224 | 216 | 219 | 226 | 237 | 252 | 246 | 241 | 234 | 227 | 236 | 234 | 226 | 215 | 256 | 266 | 230 |
| 10 | 229 | 170 | 211 | 212 | 208 | 212 | 212 | 223 | 229 | 237 | 231 | 236 | 229 | 242 | 274 | 286 | 300 | 234 | 195 | 167 | 212 | 269 | 300 | 221 | 230 |
| 11 | 196 | 206 | 187 | 218 | 223 | 216 | 212 | 218 | 232 | 234 | 229 | 235 | 239 | 252 | 253 | 232 | 207 | 176 | 189 | 229 | 380 | 285 | 235 | 264 | 231 |
| 12 | 332 | 246 | 155 | 154 | 185 | 169 | 188 | 208 | 215 | 222 | 231 | 269 | 267 | 257 | 253 | 249 | 192 | 211 | 229 | 228 | 189 | 176 | 206 | 250 | 220 |
| 13 | 285 | 202 | 138 | 184 | 199 | 225 | 221 | 221 | 228 | 227 | 229 | 234 | 230 | 231 | 228 | 229 | 251 | 244 | 230 | 229 | 228 | 202 | 165 | 156 | 217 |
| 14 | 165 | 189 | 208 | 210 | 212 | 215 | 218 | 220 | 220 | 218 | 224 | 216 | 216 | 232 | 255 | 250 | 234 | 230 | 235 | 232 | 220 | 213 | 215 | 198 | 218 |
| 15 | 203 | 210 | 192 | 182 | 200 | 205 | 212 | 212 | 217 | 214 | 217 | 221 | 223 | 224 | 248 | 229 | 216 | 216 | 246 | 239 | 228 | 223 | 220 | 217 | 217 |
| 16 | 214 | 214 | 212 | 212 | 213 | 213 | 214 | 213 | 213 | 212 | 212 | 213 | 213 | 212 | 213 | 219 | 216 | 103 | 52 | 171 | 228 | 212 | 213 | 231 | 201 |
| 17 | 231 | 237 | 215 | 207 | 222 | 226 | 212 | 221 | 218 | 214 | 212 | 217 | 219 | 221 | 226 | 233 | 223 | 232 | 227 | 207 | 214 | 229 | 238 | 267 | 223 |
| 18 | 263 | 246 | 212 | 200 | 217 | 226 | 227 | 222 | 219 | 214 | 212 | 217 | 232 | 224 | 214 | 232 | 237 | 231 | 205 | 194 | 229 | 211 | 175 | 193 | 218 |
| 19 | 220 | 226 | 227 | 222 | 218 | 216 | 214 | 213 | 213 | 213 | 214 | 213 | 216 | 216 | 213 | 214 | 217 | 218 | 217 | 217 | 217 | 218 | 228 | 218 | 217 |
| 20 | 191 | 201 | 202 | 211 | 215 | 212 | 213 | 212 | 209 | 208 | 206 | 213 | 217 | 214 | 226 | 196 | 90 | -42 | 60 | 166 | 214 | 212 | 198 | 179 | 184 |
| 21 | 198 | 141 | 201 | 218 | 217 | 217 | 213 | 203 | 196 | 225 | 222 | 198 | 212 | 217 | 204 | 184 | 242 | 242 | 216 | 195 | 146 | 232 | 248 | 250 | 209 |
| 22 | 234 | 253 | 279 | 149 | 160 | 215 | 212 | 211 | 209 | 217 | 222 | 219 | 227 | 229 | 228 | 232 | 231 | 190 | 168 | 131 | 188 | 248 | 223 | 236 | 212 |
| 23 | 240 | 296 | 121 | 179 | 212 | 211 | 195 | 212 | 212 | 215 | 212 | 227 | 240 | 222 | 221 | 242 | 256 | 265 | 173 | 191 | 231 | 189 | 229 | 314 | 221 |
| 24 | 284 | 166 | 103 | 158 | 212 | 197 | 206 | 214 | 227 | 231 | 237 | 243 | 237 | 217 | 242 | 241 | 148 | 43 | 135 | 240 | 245 | 468 | 397 | 78 | 215 |
| 25 | 307 | 373 | 160 | 149 | 192 | 205 | 201 | 202 | 207 | 219 | 219 | 222 | 245 | 226 | 225 | 208 | 220 | 228 | 221 | 238 | 243 | 219 | 167 | 218 | 221 |
| 26 | 165 | 207 | 213 | 221 | 219 | 206 | 197 | 209 | 218 | 227 | 228 | 233 | 229 | 226 | 242 | 260 | 244 | 204 | 223 | 226 | 201 | 221 | 223 | 218 | 219 |
| 27 | 216 | 212 | 213 | 196 | 200 | 215 | 220 | 222 | 222 | 222 | 221 | 221 | 221 | 222 | 223 | 223 | 221 | 219 | 226 | 225 | 231 | 221 | 218 | 218 | 218 |
| 28 | 217 | 216 | 215 | 216 | 214 | 213 | 213 | 213 | 213 | 215 | 213 | 212 | 210 | 211 | 209 | 212 | 214 | 214 | 194 | 130 | 162 | 224 | 216 | 196 | 206 |
| 29 | 266 | 236 | 164 | 212 | 222 | 184 | 153 | 112 | 181 | 195 | 209 | 218 | 225 | 231 | 235 | 231 | 232 | 245 | 204 | 127 | 234 | 315 | 238 | 246 | 213 |
| 30 | 306 | 154 | 206 | 191 | 211 | 230 | 229 | 223 | 210 | 212 | 212 | 216 | 213 | 235 | 198 | 147 | 87 | 117 | 51 | 158 | 254 | 212 | 286 | 204 | 198 |
| 31 | 281 | 320 | 145 | 152 | 185 | 218 | 221 | 221 | 219 | 224 | 224 | 213 | 227 | 238 | 219 | 126 | 214 | 240 | 171 | 165 | 207 | 223 | 205 | 193 | 210 |
| MEAN | 237 | 214 | 194 | 196 | 209 | 213 | 211 | 212 | 217 | 221 | 221 | 224 | 226 | 228 | 230 | 225 | 213 | 188 | 186 | 205 | 219 | 229 | 234 | 224 | 215 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

February 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 206 | 204 | 206 | 222 | 218 | 194 | 147 | 186 | 214 | 215 | 215 | 205 | 208 | 210 | 220 | 234 | -5 | -97 | -116 | 104 | 218 | 219 | 274 | 388 | 178 |
| 2 | 527 | 335 | 124 | 189 | 187 | 180 | 154 | 201 | 208 | 223 | 226 | 210 | 207 | 205 | 216 | 74 | -141 | -6 | 195 | 319 | 283 | 304 | 258 | 302 | 207 |
| 3 | 243 | 206 | 204 | 232 | 227 | 228 | 225 | 224 | 224 | 225 | 224 | 233 | 228 | 232 | 253 | 249 | 244 | 191 | -4 | 163 | 206 | 248 | 234 | 175 | 213 |
| 4 | 203 | 215 | 288 | 151 | 166 | 178 | 189 | 196 | 217 | 213 | 214 | 221 | 218 | 228 | 226 | 240 | 161 | 190 | 91 | 158 | 448 | 197 | 229 | 296 | 213 |
| 5 | 360 | 514 | 499 | 148 | 122 | 147 | 194 | 204 | 224 | 229 | 227 | 207 | 236 | 230 | 239 | 241 | 206 | 146 | 120 | 191 | 196 | 203 | 191 | 178 | 227 |
| 6 | 167 | 178 | 230 | 127 | 108 | 168 | 198 | 207 | 217 | 211 | 211 | 207 | 213 | 214 | 219 | 218 | 232 | 250 | 238 | 227 | 228 | 225 | 222 | 214 | 205 |
| 7 | 210 | 202 | 175 | 196 | 204 | 196 | 202 | 212 | 225 | 205 | 195 | 123 | -16 | 92 | 82 | -30 | -36 | 103 | 256 | 146 | 269 | 265 | 457 | 347 | 178 |
| 8 | 270 | 220 | 297 | 192 | 188 | 207 | 212 | 214 | 212 | 216 | 224 | 228 | 230 | 225 | 226 | 225 | 224 | 226 | 225 | 224 | 221 | 217 | 215 | 216 | 223 |
| 9 | 217 | 216 | 214 | 212 | 215 | 213 | 207 | 202 | 208 | 211 | 215 | 222 | 225 | 228 | 224 | 265 | 259 | 240 | 225 | 221 | 218 | 216 | 204 | 202 | 219 |
| 10 | 213 | 202 | 192 | 208 | 216 | 216 | 216 | 211 | 216 | 219 | 214 | 215 | 220 | 226 | 248 | 262 | 254 | 233 | 223 | 218 | 200 | 220 | 255 | 206 | 220 |
| 11 | 205 | 196 | 203 | 201 | 203 | 210 | 215 | 210 | 214 | 211 | 223 | 218 | 218 | 210 | 231 | 259 | 198 | 117 | 142 | 201 | 163 | 196 | 258 | 250 | 206 |
| 12 | 224 | 357 | 185 | 143 | 149 | 191 | 203 | 204 | 212 | 215 | 219 | 214 | 212 | 210 | 218 | 221 | 220 | 220 | 219 | 217 | 218 | 212 | 205 | 201 | 212 |
| 13 | 204 | 203 | 191 | 202 | 207 | 213 | 213 | 208 | 204 | 204 | 204 | 213 | 218 | 215 | 216 | 218 | 217 | 212 | 218 | 215 | 200 | 203 | 271 | 468 | 222 |
| 14 | 416 | 296 | 259 | 400 | 357 | 127 | 30 | 134 | 165 | 197 | 200 | 212 | 206 | 221 | 220 | 221 | 224 | 225 | 223 | 222 | 225 | 215 | 221 | 231 | 226 |
| 15 | 225 | 213 | 214 | 214 | 211 | 206 | 207 | 213 | 199 | 205 | 227 | 208 | 221 | 227 | 256 | 116 | -84 | 26 | 185 | 239 | 581 | 355 | 399 | 623 | 236 |
| 16 | 656 | 543 | 506 | 359 | 260 | 108 | 94 | 187 | 221 | 238 | 227 | 229 | 229 | 240 | 190 | 199 | 232 | 138 | 133 | 185 | 264 | 223 | 225 | 413 | 262 |
| 17 | 538 | 496 | 340 | 253 | 147 | 97 | 162 | 202 | 220 | 228 | 226 | 200 | 155 | 201 | 181 | 111 | -44 | 85 | 199 | 238 | 283 | 329 | 225 | 249 | 221 |
| 18 | 248 | 321 | 349 | 113 | 96 | 150 | 199 | 197 | 199 | 229 | 227 | 242 | 217 | 242 | 240 | 251 | 230 | 118 | 71 | 206 | 136 | 262 | 393 | 435 | 223 |
| 19 | 429 | 367 | 336 | 178 | 190 | 196 | 201 | 214 | 210 | 217 | 233 | 214 | 226 | 147 | 54 | -7 | 93 | 162 | 159 | 279 | 286 | 233 | 445 | 416 | 228 |
| 20 | 200 | 348 | 329 | 216 | 164 | 160 | 207 | 178 | 186 | 234 | 248 | 222 | 224 | 169 | 220 | 259 | 178 | 106 | 132 | 372 | 254 | 170 | 237 | 314 | 221 |
| 21 | 177 | 286 | 186 | 173 | 265 | 177 | 210 | 229 | 242 | 240 | 250 | 254 | 251 | 242 | 259 | 249 | 238 | 210 | 193 | 195 | 208 | 277 | 274 | 249 | 230 |
| 22 | 251 | 239 | 197 | 174 | 200 | 221 | 184 | 169 | 181 | 213 | 214 | 228 | 231 | 234 | 274 | 262 | 265 | 198 | 222 | 295 | 224 | 187 | 311 | 440 | 233 |
| 23 | 347 | 270 | 319 | 207 | 180 | 216 | 205 | 202 | 207 | 228 | 224 | 207 | 264 | 189 | 118 | 76 | 56 | 129 | 163 | 161 | 190 | 326 | 327 | 357 | 215 |
| 24 | 331 | 347 | 302 | 196 | 199 | 133 | 190 | 218 | 224 | 238 | 247 | 243 | 250 | 257 | 81 | -12 | 70 | 68 | 136 | 230 | 284 | 353 | 397 | 367 | 222 |
| 25 | 354 | 380 | 385 | 358 | 233 | 146 | 200 | 217 | 225 | 238 | 236 | 218 | 103 | 190 | 129 | 223 | 257 | 108 | 114 | 316 | 252 | 328 | 335 | 270 | 242 |
| 26 | 298 | 218 | 220 | 281 | 238 | 190 | 194 | 212 | 219 | 225 | 226 | 215 | 141 | 144 | 270 | 288 | 254 | 243 | 230 | 205 | 221 | 307 | 274 | 292 | 233 |
| 27 | 267 | 268 | 264 | 227 | 239 | 300 | 196 | 143 | 180 | 212 | 199 | 245 | 229 | 236 | 212 | 270 | 254 | 237 | 216 | 165 | 208 | 220 | 218 | 234 | 226 |
| 28 | 220 | 220 | 314 | 227 | 136 | 174 | 143 | 144 | 196 | 210 | 226 | 241 | 204 | 182 | 237 | 248 | 265 | 222 | 189 | 207 | 271 | 220 | 199 | 213 | 212 |
| MEAN | 293 | 287 | 268 | 214 | 197 | 183 | 185 | 197 | 209 | 219 | 222 | 217 | 206 | 208 | 205 | 193 | 161 | 153 | 164 | 218 | 248 | 247 | 276 | 305 | 219 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

March 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 382 | 226 | 217 | 250 | 230 | 178 | 203 | 233 | 229 | 237 | 240 | 241 | 238 | 251 | 256 | 178 | 201 | 258 | 227 | 164 | 220 | 273 | 336 | 243 | 237 |
| 2 | 172 | 231 | 304 | 172 | 178 | 141 | 172 | 210 | 232 | 260 | 270 | 251 | 232 | 255 | 243 | 258 | 253 | 198 | 146 | 120 | 195 | 180 | 234 | 259 | 215 |
| 3 | 248 | 241 | 222 | 228 | 231 | 232 | 229 | 230 | 230 | 234 | 233 | 233 | 236 | 252 | 266 | 252 | 255 | 165 | 132 | 218 | 257 | 150 | 199 | 225 | 224 |
| 4 | 228 | 225 | 223 | 224 | 224 | 222 | 226 | 222 | 230 | 245 | 229 | 215 | 220 | 222 | 227 | 227 | 225 | 223 | 221 | 201 | 218 | 285 | 333 | 333 | 235 |
| 5 | 341 | 267 | 274 | 172 | 181 | 177 | 213 | 219 | 228 | 233 | 227 | 230 | 226 | 233 | 240 | 240 | 236 | 223 | 221 | 223 | 226 | 239 | 312 | 358 | 239 |
| 6 | 349 | 468 | 146 | 145 | 151 | 172 | 189 | 214 | 228 | 237 | 226 | 227 | 253 | 272 | 234 | 130 | 123 | 145 | 202 | 199 | 221 | 222 | 237 | 250 | 218 |
| 7 | 217 | 211 | 204 | 204 | 211 | 198 | 204 | 217 | 217 | 211 | 217 | 224 | 224 | 269 | 280 | 295 | 269 | 243 | 224 | 201 | 214 | 204 | 207 | 243 | 225 |
| 8 | 249 | 189 | 211 | 197 | 197 | 210 | 212 | 212 | 211 | 204 | 241 | 253 | 233 | 216 | 243 | 267 | 268 | 247 | 232 | 222 | 212 | 212 | 236 | 208 | 224 |
| 9 | 221 | 208 | 215 | 217 | 214 | 213 | 212 | 206 | 208 | 212 | 238 | 225 | 239 | 240 | 247 | 236 | 254 | 231 | 226 | 218 | 211 | 218 | 220 | 212 | 222 |
| 10 | 217 | 206 | 217 | 212 | 211 | 208 | 207 | 213 | 215 | 214 | 214 | 213 | 228 | 227 | 283 | 286 | 243 | 231 | 225 | 205 | 207 | 219 | 215 | 212 | 222 |
| 11 | 205 | 205 | 214 | 139 | 175 | 195 | 211 | 213 | 216 | 208 | 221 | 224 | 229 | 226 | 237 | 277 | 266 | 234 | 224 | 195 | 239 | 231 | 226 | 222 | 218 |
| 12 | 223 | 196 | 206 | 165 | 177 | 210 | 208 | 206 | 208 | 222 | 217 | 208 | 198 | 206 | 234 | 121 | 161 | 132 | 156 | 139 | 400 | 486 | 468 | 531 | 236 |
| 13 | 440 | 433 | 347 | 269 | 244 | 223 | 223 | 227 | 232 | 228 | 226 | 243 | 257 | 254 | 244 | 227 | 228 | 240 | 243 | 307 | 517 | 601 | 487 | 427 | 306 |
| 14 | 381 | 468 | 238 | 109 | 224 | 223 | 212 | 217 | 231 | 237 | 218 | 267 | 229 | 263 | 236 | 224 | 252 | 219 | 204 | 204 | 237 | 162 | 316 | 346 | 246 |
| 15 | 378 | 312 | 254 | 187 | 189 | 207 | 224 | 236 | 230 | 226 | 223 | 224 | 237 | 239 | 245 | 276 | 283 | 290 | 213 | 150 | 186 | 252 | 259 | 275 | 241 |
| 16 | 230 | 136 | 160 | 196 | 210 | 208 | 207 | 204 | 207 | 206 | 211 | 221 | 224 | 242 | 250 | 240 | 244 | 239 | 239 | 222 | 185 | 284 | 223 | 134 | 213 |
| 17 | 169 | 207 | 224 | 226 | 222 | 218 | 220 | 219 | 222 | 222 | 220 | 221 | 224 | 232 | 236 | 239 | 232 | 224 | 222 | 223 | 222 | 218 | 218 | 217 | 220 |
| 18 | 215 | 212 | 213 | 210 | 211 | 211 | 219 | 219 | 205 | 203 | 192 | 210 | 248 | 267 | 2 | 92 | 129 | 54 | 146 | 237 | 411 | 461 | 312 | 243 | 213 |
| 19 | 277 | 476 | 192 | 170 | 206 | 218 | 224 | 228 | 225 | 225 | 220 | 230 | 226 | 227 | 244 | 248 | 243 | 233 | 242 | 240 | 223 | 219 | 223 | 275 | 238 |
| 20 | 387 | 222 | 252 | 205 | 185 | 196 | 206 | 211 | 207 | 203 | 219 | 223 | 280 | 254 | 141 | -70 | 71 | 140 | 134 | 232 | 281 | 255 | 253 | 670 | 223 |
| 21 | 577 | 476 | 525 | 255 | 450 | 380 | 231 | 109 | 177 | 220 | 145 | 166 | 230 | 210 | -52 | -190 | 37 | 122 | 220 | 342 | 251 | 178 | 258 | 338 | 235 |
| 22 | 291 | 250 | 278 | 307 | 255 | 208 | 217 | 217 | 224 | 216 | 166 | 206 | 160 | 229 | 248 | 252 | 154 | 199 | 236 | 342 | 317 | 270 | 384 | 299 | 246 |
| 23 | 337 | 210 | 266 | 272 | 135 | 99 | 201 | 191 | 218 | 222 | 170 | 192 | 187 | 182 | 148 | 205 | 163 | 201 | 252 | 271 | 289 | 188 | 203 | 297 | 212 |
| 24 | 283 | 247 | 232 | 190 | 167 | 181 | 187 | 213 | 227 | 225 | 232 | 242 | 234 | 229 | 279 | 255 | 250 | 228 | 120 | 228 | 370 | 326 | 481 | 397 | 250 |
| 25 | 559 | 367 | 265 | 181 | 132 | 211 | 221 | 219 | 220 | 231 | 213 | 102 | 151 | 129 | 71 | 24 | -118 | 144 | 278 | 241 | 251 | 406 | 536 | 492 | 230 |
| 26 | 487 | 458 | 491 | 275 | 250 | 274 | 153 | 180 | 201 | 206 | 231 | 230 | 227 | 250 | 228 | 9 | -86 | 70 | 263 | 331 | 264 | 263 | 312 | 317 | 245 |
| 27 | 376 | 467 | 236 | 177 | 300 | 171 | 190 | 228 | 221 | 231 | 247 | 254 | 244 | 239 | 246 | 189 | 57 | 178 | 400 | 264 | 465 | 445 | 442 | 270 | 272 |
| 28 | 210 | 308 | 308 | 199 | 161 | 194 | 179 | 217 | 228 | 230 | 216 | 222 | 246 | 204 | 253 | 175 | 195 | 224 | 241 | 281 | 323 | 344 | 304 | 262 | 238 |
| 29 | 181 | 204 | 233 | 254 | 194 | 223 | 241 | 249 | 243 | 243 | 228 | 218 | 144 | -6 | -65 | -12 | 28 | 149 | 210 | 268 | 274 | 342 | 420 | 458 | 205 |
| 30 | 372 | 282 | 384 | 206 | 180 | 192 | 208 | 315 | 572 | 192 | 82 | -137 | 6 | 178 | 198 | 193 | 216 | 264 | 237 | 252 | 277 | 275 | 268 | 277 | 228 |
| 31 | 275 | 270 | 255 | 241 | 242 | 242 | 244 | 238 | 231 | 227 | 231 | 238 | 239 | 263 | 275 | 250 | 243 | 239 | 241 | 237 | 237 | 242 | 289 | 205 | 245 |
| MEAN | 305 | 286 | 258 | 208 | 210 | 207 | 209 | 217 | 231 | 222 | 214 | 210 | 217 | 224 | 207 | 180 | 179 | 199 | 218 | 231 | 270 | 279 | 303 | 306 | 232 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

April 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 239 | 204 | 158 | 202 | 230 | 238 | 236 | 238 | 239 | 239 | 235 | 235 | 236 | 254 | 260 | 253 | 235 | 227 | 223 | 218 | 182 | 215 | 230 | 234 | 227 |
| 2 | 219 | 226 | 226 | 226 | 226 | 226 | 223 | 222 | 218 | 215 | 226 | 227 | 231 | 238 | 250 | 270 | 268 | 232 | 225 | 241 | 215 | 226 | 218 | 215 | 229 |
| 3 | 223 | 224 | 223 | 231 | 232 | 226 | 219 | 224 | 225 | 232 | 210 | 197 | 126 | 291 | 281 | 243 | 174 | 177 | 236 | 351 | 331 | 326 | 282 | 353 | 243 |
| 4 | 327 | 205 | 201 | 227 | 218 | 216 | 206 | 215 | 227 | 240 | 239 | 252 | 270 | 268 | 270 | 280 | 238 | 234 | 217 | 166 | 209 | 224 | 226 | 228 | 233 |
| 5 | 219 | 194 | 208 | 219 | 219 | 217 | 213 | 218 | 225 | 248 | 254 | 212 | 216 | 260 | 281 | 290 | 264 | 236 | 206 | 229 | 229 | 222 | 218 | 231 | 230 |
| 6 | 190 | 202 | 226 | 226 | 226 | 225 | 228 | 228 | 218 | 225 | 242 | 231 | 226 | 243 | 246 | 287 | 258 | 231 | 217 | 214 | 216 | 205 | 225 | 257 | 228 |
| 7 | 163 | 210 | 222 | 216 | 214 | 213 | 205 | 210 | 211 | 226 | 232 | 240 | 232 | 235 | 255 | 267 | 235 | 216 | 230 | 233 | 229 | 217 | 262 | 321 | 228 |
| 8 | 358 | 210 | 177 | 212 | 222 | 226 | 224 | 220 | 217 | 217 | 217 | 228 | 222 | 252 | 246 | 239 | 231 | 236 | 241 | 218 | 202 | 205 | 213 | 188 | 225 |
| 9 | 167 | 209 | 224 | 216 | 217 | 218 | 208 | 218 | 233 | 287 | 294 | 179 | 254 | 256 | 220 | 188 | 190 | 181 | 199 | 212 | 268 | 184 | 231 | 227 | 220 |
| 10 | 356 | 459 | 434 | 383 | 454 | 285 | 407 | 409 | 360 | 187 | 110 | -88 | -104 | -58 | -172 | -92 | 103 | 47 | 214 | 319 | 322 | 525 | 606 | 584 | 252 |
| 11 | 621 | 710 | 570 | 553 | 597 | 500 | 207 | 195 | 232 | 259 | 184 | 97 | 95 | 18 | 31 | 80 | 2 | -50 | 202 | 520 | 313 | 269 | 315 | 328 | 285 |
| 12 | 475 | 480 | 385 | 724 | 275 | 161 | 515 | 202 | 290 | 142 | 222 | 186 | 110 | 225 | 260 | 229 | 182 | 32 | 88 | 294 | 498 | 329 | 438 | 312 | 293 |
| 13 | 296 | 409 | 236 | 199 | 191 | 292 | 330 | 287 | 251 | 247 | 227 | 166 | 93 | 93 | 212 | 261 | 259 | 91 | 176 | 222 | 449 | 396 | 337 | 282 | 250 |
| 14 | 409 | 520 | 258 | 275 | 233 | 204 | 232 | 330 | 302 | 224 | 185 | 183 | 243 | 226 | 82 | 104 | 88 | 181 | 256 | 308 | 328 | 376 | 413 | 454 | 267 |
| 15 | 468 | 350 | 198 | 225 | 251 | 105 | 175 | 227 | 240 | 239 | 231 | 255 | 205 | 147 | 214 | 178 | 244 | 239 | 214 | 173 | 244 | 250 | 244 | 265 | 232 |
| 16 | 293 | 214 | 233 | 207 | 201 | 243 | 259 | 253 | 262 | 266 | 263 | 259 | 262 | 286 | 236 | 273 | 270 | 262 | 239 | 229 | 200 | 267 | 365 | 401 | 260 |
| 17 | 461 | 215 | 215 | 224 | 224 | 228 | 194 | 228 | 210 | 289 | 304 | -78 | -229 | -189 | 72 | 134 | 129 | 125 | 216 | 256 | 237 | 387 | 418 | 407 | 194 |
| 18 | 515 | 506 | 499 | 386 | 335 | 106 | 184 | 226 | 232 | 248 | 243 | 238 | 256 | 293 | 272 | 276 | 268 | 248 | 195 | 189 | 213 | 260 | 276 | 176 | 276 |
| 19 | 241 | 260 | 246 | 226 | 227 | 230 | 230 | 233 | 237 | 236 | 231 | 243 | 243 | 258 | 271 | 267 | 251 | 250 | 240 | 250 | 274 | 281 | 292 | 380 | 254 |
| 20 | 301 | 207 | 177 | 185 | 222 | 217 | 213 | 195 | 217 | 233 | 242 | 235 | 281 | 268 | 269 | 272 | 203 | 227 | 194 | 217 | 399 | 378 | 332 | 287 | 248 |
| 21 | 526 | 229 | 268 | 441 | 354 | 115 | 156 | 207 | 224 | 253 | 253 | 265 | 252 | 250 | 258 | 263 | 257 | 248 | 238 | 226 | 227 | 219 | 225 | 237 | 257 |
| 22 | 241 | 238 | 239 | 239 | 242 | 203 | 207 | 215 | 241 | 248 | 251 | 256 | 283 | 272 | 218 | 308 | 284 | 267 | 236 | 168 | 217 | 254 | 348 | 225 | 245 |
| 23 | 293 | 410 | 410 | 386 | 517 | 372 | 137 | 162 | 206 | 232 | 245 | 215 | 154 | 39 | 13 | -5 | -305 | 112 | 222 | 264 | 261 | 330 | 303 | 284 | 219 |
| 24 | 277 | 237 | 227 | 238 | 242 | 259 | 261 | 447 | 352 | 229 | 223 | 195 | 241 | 336 | 248 | 219 | 193 | 149 | 203 | 246 | 293 | 439 | 341 | 321 | 267 |
| 25 | 386 | 394 | 425 | 337 | 156 | 207 | 228 | 218 | 213 | 196 | 236 | 233 | 281 | 253 | 228 | 252 | 244 | 237 | 215 | 226 | 239 | 279 | 289 | 291 | 260 |
| 26 | 318 | 250 | 390 | 503 | 404 | 291 | 146 | 204 | 226 | 228 | 230 | 238 | 244 | 254 | 258 | 266 | 265 | 255 | 244 | 237 | 230 | 233 | 194 | 203 | 262 |
| 27 | 225 | 234 | 299 | 351 | 112 | 129 | 172 | 200 | 220 | 240 | 241 | 268 | 284 | 275 | 176 | 114 | 235 | 181 | 241 | 232 | 261 | 344 | 396 | 437 | 244 |
| 28 | 362 | 307 | 311 | 268 | 199 | 175 | 215 | 226 | 239 | 231 | 227 | 213 | 138 | 169 | 264 | 250 | 235 | 181 | 137 | 235 | 281 | 286 | 337 | 366 | 243 |
| 29 | 413 | 338 | 422 | 255 | 163 | 239 | 250 | 142 | 209 | 272 | 321 | 289 | 253 | 243 | 191 | 185 | 230 | 253 | 234 | 322 | 364 | 288 | 408 | 507 | 282 |
| 30 | 587 | 551 | 455 | 335 | 283 | 140 | 156 | 189 | 210 | 224 | 239 | 243 | 262 | 240 | 217 | 242 | 244 | 241 | 198 | 166 | 189 | 257 | 331 | 316 | 271 |
| MEAN | 338 | 313 | 292 | 297 | 262 | 223 | 227 | 232 | 239 | 235 | 235 | 203 | 195 | 206 | 204 | 213 | 199 | 191 | 213 | 246 | 270 | 289 | 310 | 310 | 247 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

May 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 219 | 232 | 234 | 232 | 237 | 222 | 234 | 238 | 241 | 239 | 238 | 241 | 244 | 265 | 267 | 279 | 257 | 243 | 235 | 217 | 216 | 240 | 218 | 236 | 238 |
| 2 | 237 | 234 | 230 | 228 | 227 | 209 | 216 | 210 | 224 | 220 | 233 | 287 | 284 | 260 | 267 | 266 | 238 | 234 | 233 | 230 | 245 | 254 | 233 | 207 | 237 |
| 3 | 215 | 222 | 203 | 207 | 214 | 211 | 178 | 207 | 223 | 235 | 281 | 251 | 273 | 284 | 268 | 246 | 231 | 233 | 230 | 205 | 265 | 293 | 397 | 316 | 245 |
| 4 | 359 | 162 | 200 | 217 | 220 | 219 | 220 | 224 | 227 | 228 | 230 | 243 | 276 | 270 | 229 | 231 | 227 | 250 | 222 | 216 | 251 | 235 | 245 | 236 | 234 |
| 5 | 194 | 197 | 225 | 226 | 224 | 226 | 220 | 237 | 252 | 256 | 267 | 233 | 232 | 232 | 240 | 242 | 258 | 239 | 229 | 207 | 202 | 222 | 231 | 223 | 229 |
| 6 | 229 | 236 | 232 | 232 | 225 | 216 | 204 | 197 | 211 | 224 | 226 | 240 | 231 | 230 | 231 | 244 | 238 | 237 | 225 | 219 | 213 | 237 | 210 | 196 | 224 |
| 7 | 218 | 229 | 224 | 223 | 225 | 222 | 214 | 211 | 210 | 208 | 220 | 229 | 225 | 236 | 246 | 268 | 292 | 241 | 225 | 218 | 217 | 217 | 217 | 211 | 226 |
| 8 | 200 | 187 | 216 | 223 | 215 | 194 | 186 | 197 | 207 | 211 | 203 | 225 | 232 | 248 | 279 | 291 | 258 | 230 | 224 | 222 | 226 | 231 | 319 | 287 | 229 |
| 9 | 298 | 167 | 180 | 210 | 210 | 202 | 222 | 236 | 226 | 238 | 258 | 268 | 282 | 176 | 204 | 135 | 174 | 159 | 182 | 183 | 234 | 295 | 532 | 379 | 235 |
| 10 | 409 | 359 | 347 | 316 | 243 | 234 | 141 | 157 | 162 | 202 | 191 | 238 | 257 | 210 | 243 | 275 | 240 | 161 | 183 | 286 | 270 | 264 | 264 | 243 | 245 |
| 11 | 347 | 378 | 369 | 412 | 253 | 386 | 208 | 191 | 206 | 218 | 237 | 218 | 240 | 145 | 135 | 206 | 173 | 191 | 207 | 212 | 247 | 298 | 356 | 389 | 259 |
| 12 | 490 | 473 | 379 | 230 | 193 | 179 | 183 | 201 | 233 | 239 | 256 | 261 | 257 | 247 | 243 | 236 | 232 | 238 | 235 | 232 | 231 | 234 | 230 | 234 | 256 |
| 13 | 231 | 227 | 236 | 236 | 213 | 207 | 210 | 214 | 216 | 218 | 218 | 219 | 222 | 229 | 229 | 220 | 177 | 186 | 141 | 211 | 230 | 304 | 346 | 290 | 226 |
| 14 | 212 | 212 | 230 | 231 | 231 | 229 | 228 | 226 | 223 | 228 | 226 | 226 | 222 | 228 | 235 | 233 | 236 | 229 | 234 | 228 | 215 | 214 | 216 | 227 | 225 |
| 15 | 201 | 184 | 206 | 218 | 217 | 211 | 207 | 206 | 209 | 212 | 213 | 215 | 234 | 255 | 283 | 271 | 244 | 228 | 227 | 234 | 228 | 226 | 228 | 227 | 224 |
| 16 | 224 | 224 | 224 | 227 | 226 | 224 | 217 | 210 | 210 | 207 | 203 | 202 | 212 | 215 | 224 | 226 | 229 | 228 | 223 | 225 | 227 | 225 | 228 | 223 | 220 |
| 17 | 220 | 224 | 216 | 215 | 212 | 209 | 210 | 208 | 216 | 219 | 223 | 217 | 228 | 247 | 254 | 260 | 232 | 230 | 224 | 220 | 207 | 209 | 212 | 212 | 221 |
| 18 | 232 | 196 | 206 | 215 | 223 | 220 | 200 | 189 | 178 | 169 | 213 | 257 | 274 | 155 | -150 | -271 | 67 | 217 | 204 | 309 | 238 | 276 | 370 | 283 | 186 |
| 19 | 244 | 318 | 454 | 376 | 108 | 138 | 208 | 216 | 228 | 241 | 245 | 251 | 250 | 270 | 265 | 233 | 226 | 210 | 151 | 172 | 212 | 258 | 433 | 263 | 248 |
| 20 | 337 | 451 | 430 | 426 | 292 | 126 | 197 | 210 | 223 | 223 | 224 | 265 | 231 | 252 | 275 | 264 | 51 | 129 | 148 | 240 | 377 | 324 | 331 | 389 | 267 |
| 21 | 372 | 201 | 196 | 137 | 161 | 223 | 236 | 234 | 233 | 225 | 241 | 233 | 287 | 280 | 198 | 78 | 54 | 176 | 250 | 292 | 418 | 382 | 432 | 291 | 242 |
| 22 | 276 | 261 | 262 | 394 | 259 | 207 | 215 | 205 | 208 | 217 | 193 | 138 | -50 | -122 | -154 | -21 | 113 | 84 | 155 | 205 | 359 | 351 | 491 | 371 | 192 |
| 23 | 484 | 480 | 304 | 245 | 289 | 234 | 247 | 247 | 255 | 283 | 300 | 304 | 304 | 277 | 257 | 248 | 201 | 222 | 260 | 239 | 232 | 289 | 226 | 220 | 276 |
| 24 | 225 | 230 | 226 | 227 | 229 | 223 | 223 | 230 | 236 | 239 | 247 | 258 | 255 | 260 | 257 | 243 | 261 | 262 | 251 | 227 | 230 | 190 | 204 | 270 | 237 |
| 25 | 398 | 308 | 417 | 159 | 154 | 135 | 188 | 209 | 246 | 277 | 272 | 289 | 139 | -55 | 80 | 181 | 152 | 128 | 210 | 215 | 331 | 384 | 371 | 400 | 232 |
| 26 | 399 | 418 | 315 | 159 | 186 | 185 | 165 | 201 | 233 | 259 | 255 | 242 | 210 | 328 | 235 | 189 | 266 | 266 | 270 | 257 | 266 | 426 | 421 | 642 | 283 |
| 27 | 388 | 269 | 330 | 499 | 575 | 178 | 276 | 397 | 277 | 228 | 318 | 325 | 273 | 282 | 291 | 183 | 108 | 137 | 218 | 224 | 237 | 326 | 206 | 264 | 283 |
| 28 | 284 | 232 | 228 | 234 | 232 | 241 | 225 | 226 | 230 | 229 | 224 | 231 | 224 | 235 | 234 | 268 | 255 | 256 | 248 | 236 | 259 | 241 | 234 | 252 | 239 |
| 29 | 311 | 231 | 207 | 211 | 227 | 223 | 223 | 212 | 213 | 212 | 217 | 219 | 231 | 254 | 280 | 285 | 215 | 242 | 246 | 241 | 246 | 246 | 335 | 321 | 243 |
| 30 | 190 | 173 | 176 | 213 | 212 | 96 | 163 | 212 | 224 | 263 | 257 | 253 | 267 | 267 | 226 | 182 | 187 | 138 | 223 | 321 | 224 | 284 | 326 | 229 | 221 |
| 31 | 261 | 263 | 292 | 183 | 177 | 206 | 215 | 215 | 216 | 227 | 220 | 239 | 232 | 262 | 285 | 260 | 262 | 256 | 200 | 199 | 190 | 247 | 270 | 282 | 235 |
| MEAN | 287 | 263 | 264 | 250 | 229 | 207 | 209 | 218 | 222 | 228 | 237 | 242 | 234 | 223 | 214 | 208 | 204 | 209 | 216 | 230 | 249 | 271 | 301 | 284 | 237 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

June 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 263 | 235 | 230 | 207 | 167 | 177 | 210 | 219 | 220 | 219 | 207 | 207 | 228 | 254 | 281 | 232 | 257 | 234 | 207 | 183 | 137 | 202 | 211 | 206 | 216 |
| 2 | 223 | 211 | 210 | 212 | 209 | 222 | 218 | 216 | 212 | 217 | 234 | 245 | 231 | 227 | 232 | 226 | 250 | 222 | 207 | 211 | 215 | 219 | 218 | 217 | 221 |
| 3 | 211 | 214 | 214 | 215 | 218 | 209 | 208 | 209 | 209 | 210 | 215 | 210 | 208 | 253 | 276 | 265 | 232 | 213 | 210 | 207 | 222 | 216 | 216 | 220 | 220 |
| 4 | 220 | 222 | 222 | 211 | 213 | 216 | 209 | 207 | 224 | 228 | 230 | 245 | 248 | 275 | 269 | 250 | 235 | 231 | 225 | 224 | 208 | 211 | 201 | 194 | 225 |
| 5 | 205 | 218 | 225 | 226 | 223 | 212 | 210 | 207 | 204 | 202 | 207 | 218 | 237 | 243 | 266 | 263 | 261 | 234 | 237 | 217 | 203 | 195 | 213 | 230 | 223 |
| 6 | 270 | 303 | 254 | 119 | 125 | 208 | 216 | 207 | 209 | 205 | 201 | 205 | 240 | 290 | 246 | 233 | 287 | 263 | 248 | 241 | 205 | 227 | 268 | 189 | 227 |
| 7 | 206 | 321 | 425 | 369 | 445 | 146 | 171 | 186 | 187 | 200 | 227 | 237 | 260 | 268 | 241 | 216 | 214 | 207 | 163 | 207 | 207 | 205 | 245 | 243 | 241 |
| 8 | 323 | 213 | 128 | 118 | 170 | 202 | 218 | 235 | 243 | 241 | 234 | 287 | 241 | 216 | 222 | 253 | 217 | 232 | 226 | 219 | 212 | 323 | 292 | 204 | 227 |
| 9 | 255 | 219 | 309 | 169 | 138 | 202 | 245 | 310 | 286 | 270 | 293 | 248 | 40 | -113 | 112 | 227 | 281 | 259 | 198 | 158 | 189 | 229 | 260 | 301 | 211 |
| 10 | 447 | 469 | 143 | 68 | 97 | 178 | 212 | 223 | 230 | 228 | 224 | 223 | 251 | 238 | 211 | 229 | 265 | 210 | 212 | 196 | 209 | 310 | 309 | 217 | 233 |
| 11 | 259 | 270 | 188 | 90 | 68 | 47 | 110 | 181 | 203 | 207 | 236 | 213 | 237 | 217 | 232 | 245 | 255 | 258 | 225 | 216 | 202 | 205 | 315 | 280 | 206 |
| 12 | 274 | 384 | 351 | 139 | 129 | 182 | 220 | 227 | 244 | 234 | 228 | 258 | 152 | 102 | -121 | -258 | -92 | -52 | 135 | 521 | 624 | 451 | 722 | 530 | 232 |
| 13 | 490 | 802 | 721 | 608 | 400 | 36 | 84 | 184 | 195 | 185 | 167 | 183 | 208 | 250 | 230 | 275 | 259 | 267 | 217 | 201 | 325 | 350 | 315 | 286 | 301 |
| 14 | 294 | 761 | 626 | 227 | -31 | 113 | 163 | 174 | 180 | 189 | 195 | 264 | 152 | -301 | -265 | -296 | -186 | 74 | 176 | 210 | 187 | 230 | 198 | 216 | 147 |
| 15 | 243 | 229 | 226 | 231 | 218 | 220 | 225 | 217 | 214 | 223 | 227 | 224 | 229 | 224 | 227 | 250 | 250 | 207 | 183 | 186 | 217 | 225 | 243 | 296 | 226 |
| 16 | 253 | 150 | 165 | 176 | 190 | 210 | 233 | 235 | 236 | 230 | 228 | 224 | 223 | 234 | 233 | 232 | 242 | 238 | 224 | 215 | 207 | 204 | 211 | 223 | 217 |
| 17 | 224 | 226 | 226 | 228 | 227 | 228 | 225 | 228 | 222 | 222 | 225 | 214 | 211 | 208 | 210 | 210 | 215 | 218 | 219 | 223 | 219 | 212 | 213 | 223 | 219 |
| 18 | 222 | 224 | 225 | 225 | 217 | 215 | 205 | 197 | 201 | 209 | 211 | 251 | 293 | 276 | 282 | 234 | 230 | 201 | 202 | 200 | 219 | 241 | 295 | 183 | 227 |
| 19 | 180 | 240 | 165 | 89 | 105 | 170 | 232 | 234 | 229 | 231 | 232 | 256 | 252 | 261 | 237 | 237 | 218 | 211 | 217 | 222 | 206 | 208 | 212 | 222 | 211 |
| 20 | 224 | 219 | 220 | 228 | 226 | 223 | 216 | 209 | 207 | 207 | 199 | 207 | 218 | 236 | 232 | 230 | 230 | 216 | 211 | 215 | 209 | 213 | 217 | 217 | 217 |
| 21 | 220 | 223 | 225 | 225 | 220 | 215 | 207 | 207 | 202 | 201 | 206 | 202 | 205 | 215 | 258 | 242 | 212 | 207 | 219 | 197 | 218 | 191 | 185 | 204 | 212 |
| 22 | 238 | 179 | 129 | 86 | 129 | 178 | 191 | 201 | 210 | 210 | 200 | 207 | 212 | 220 | 247 | 236 | 244 | 241 | 227 | 220 | 205 | 204 | 239 | 207 | 202 |
| 23 | 187 | 161 | 162 | 190 | 207 | 208 | 207 | 210 | 209 | 215 | 232 | 247 | 264 | 291 | 243 | 223 | 245 | 252 | 256 | 235 | 212 | 219 | 229 | 228 | 222 |
| 24 | 230 | 225 | 223 | 215 | 214 | 211 | 225 | 218 | 215 | 224 | 222 | 235 | 228 | 246 | 274 | 256 | 259 | 248 | 238 | 232 | 234 | 253 | 231 | 253 | 233 |
| 25 | 262 | 234 | 212 | 207 | 208 | 209 | 207 | 214 | 228 | 236 | 233 | 226 | 257 | 287 | 273 | 253 | 231 | 226 | 222 | 217 | 191 | 191 | 220 | 222 | 227 |
| 26 | 222 | 210 | 207 | 212 | 208 | 210 | 197 | 211 | 211 | 227 | 223 | 258 | 274 | 263 | 236 | 234 | 237 | 242 | 236 | 230 | 215 | 230 | 232 | 272 | 229 |
| 27 | 237 | 195 | 210 | 213 | 215 | 220 | 215 | 214 | 211 | 213 | 226 | 216 | 260 | 337 | 268 | 255 | 242 | 227 | 217 | 198 | 206 | 228 | 314 | 250 | 232 |
| 28 | 275 | 293 | 182 | 151 | 133 | 160 | 187 | 207 | 237 | 235 | 237 | 241 | 241 | 233 | 230 | 220 | 214 | 240 | 234 | 232 | 226 | 224 | 229 | 229 | 220 |
| 29 | 229 | 226 | 223 | 219 | 224 | 212 | 204 | 197 | 196 | 207 | 224 | 246 | 242 | 269 | 259 | 251 | 264 | 238 | 161 | 206 | 225 | 210 | 199 | 195 | 221 |
| 30 | 210 | 212 | 214 | 207 | 210 | 217 | 224 | 224 | 216 | 215 | 208 | 215 | 217 | 223 | 236 | 233 | 260 | 250 | 232 | 225 | 215 | 219 | 211 | 189 | 220 |
| MEAN | 253 | 276 | 248 | 202 | 190 | 188 | 203 | 213 | 216 | 218 | 221 | 230 | 225 | 214 | 212 | 205 | 217 | 217 | 212 | 222 | 225 | 234 | 255 | 238 | 222 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

July 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 207 | 215 | 215 | 203 | 196 | 207 | 215 | 209 | 212 | 225 | 227 | 219 | 218 | 226 | 227 | 247 | 253 | 229 | 208 | 212 | 203 | 302 | 208 | 283 | 223 |
| 2 | 321 | 293 | 319 | 149 | 148 | 188 | 193 | 195 | 200 | 215 | 208 | 208 | 210 | 217 | 234 | 266 | 269 | 242 | 231 | 216 | 211 | 220 | 226 | 226 | 225 |
| 3 | 226 | 222 | 214 | 216 | 193 | 175 | 162 | 179 | 203 | 208 | 208 | 218 | 240 | 248 | 254 | 260 | 248 | 224 | 224 | 224 | 231 | 222 | 227 | 225 | 218 |
| 4 | 209 | 190 | 200 | 206 | 209 | 213 | 205 | 209 | 207 | 217 | 201 | 207 | 211 | 217 | 236 | 223 | 212 | 208 | 195 | 207 | 197 | 194 | 207 | 293 | 211 |
| 5 | 273 | 183 | 180 | 183 | 189 | 230 | 229 | 225 | 224 | 217 | 235 | 264 | 321 | 282 | 284 | 269 | 276 | 260 | 232 | 241 | 266 | 230 | 239 | 270 | 241 |
| 6 | 251 | 228 | 224 | 216 | 223 | 212 | 215 | 209 | 207 | 203 | 199 | 212 | 208 | 213 | 227 | 217 | 228 | 202 | 222 | 212 | 199 | 203 | 231 | 251 | 217 |
| 7 | 219 | 218 | 222 | 218 | 223 | 208 | 195 | 196 | 199 | 207 | 209 | 208 | 217 | 234 | 274 | 258 | 230 | 215 | 217 | 210 | 207 | 204 | 113 | 166 | 211 |
| 8 | 178 | 198 | 200 | 204 | 183 | 172 | 163 | 190 | 240 | 271 | 247 | 271 | 343 | 276 | 265 | 244 | 218 | 211 | 206 | 196 | 206 | 212 | 209 | 254 | 223 |
| 9 | 189 | 171 | 158 | 168 | 203 | 230 | 229 | 220 | 217 | 210 | 205 | 203 | 202 | 202 | 207 | 212 | 220 | 217 | 212 | 207 | 209 | 208 | 203 | 208 | 204 |
| 10 | 203 | 201 | 200 | 201 | 211 | 201 | 158 | 185 | 193 | 191 | 187 | 161 | 237 | 200 | 206 | 207 | 209 | 205 | 202 | 204 | 206 | 205 | 202 | 207 | 199 |
| 11 | 207 | 209 | 212 | 201 | 208 | 209 | 204 | 188 | 182 | 188 | 191 | 194 | 197 | 214 | 240 | 227 | 229 | 220 | 219 | 206 | 183 | 176 | 177 | 178 | 202 |
| 12 | 176 | 154 | 139 | 113 | 137 | 185 | 165 | 189 | 208 | 213 | 240 | 271 | 239 | 213 | 214 | 207 | 213 | 219 | 228 | 211 | 208 | 209 | 207 | 191 | 197 |
| 13 | 154 | 182 | 123 | 337 | 275 | 41 | 137 | 191 | 224 | 219 | 207 | 208 | 211 | 216 | 211 | 210 | 206 | 193 | 203 | 143 | 241 | 261 | 246 | 217 | 202 |
| 14 | 270 | 184 | 196 | 220 | 222 | 222 | 222 | 222 | 211 | 208 | 200 | 217 | 281 | 346 | 256 | 247 | 219 | 214 | 158 | 220 | 186 | 226 | 257 | 229 | 226 |
| 15 | 273 | 242 | 231 | 155 | 121 | 154 | 175 | 201 | 214 | 218 | 210 | 211 | 236 | 229 | 228 | 235 | 224 | 219 | 208 | 207 | 184 | 198 | 207 | 190 | 207 |
| 16 | 224 | 171 | 175 | 198 | 198 | 207 | 200 | 185 | 184 | 204 | 200 | 195 | 203 | 198 | 202 | 202 | 207 | 204 | 198 | 209 | 209 | 211 | 208 | 210 | 200 |
| 17 | 213 | 213 | 210 | 213 | 220 | 210 | 184 | 183 | 202 | 212 | 211 | 208 | 210 | 212 | 208 | 228 | 218 | 215 | 219 | 208 | 197 | 198 | 233 | 291 | 213 |
| 18 | 246 | 146 | 152 | 156 | 184 | 207 | 219 | 225 | 228 | 217 | 208 | 208 | 209 | 211 | 240 | 230 | 227 | 226 | 189 | 205 | 212 | 215 | 213 | 216 | 207 |
| 19 | 225 | 222 | 217 | 204 | 181 | 155 | 171 | 185 | 196 | 210 | 217 | 282 | 359 | 346 | 275 | 268 | 237 | 231 | 117 | 218 | 242 | 268 | 301 | 329 | 235 |
| 20 | 325 | 361 | 214 | 187 | 181 | 170 | 189 | 230 | 243 | 230 | 218 | 232 | 303 | 251 | 262 | 243 | 208 | 180 | 190 | 196 | 237 | 265 | 238 | 211 | 231 |
| 21 | 222 | 217 | 213 | 212 | 209 | 211 | 213 | 215 | 215 | 213 | 225 | 238 | 246 | 233 | 246 | 253 | 240 | 214 | 194 | 253 | 246 | 253 | 259 | 259 | 229 |
| 22 | 233 | 227 | 201 | 175 | 175 | 188 | 188 | 174 | 187 | 214 | 214 | 207 | 207 | 246 | 279 | 266 | 227 | 214 | 207 | 201 | 194 | 155 | 168 | 181 | 205 |
| 23 | 188 | 194 | 194 | 201 | 194 | 194 | 214 | 207 | 200 | 202 | 195 | 191 | 210 | 227 | 235 | 241 | 259 | 233 | 233 | 220 | 214 | 220 | 194 | 201 | 210 |
| 24 | 214 | 220 | 220 | 220 | 214 | 194 | 168 | 214 | 207 | 214 | 214 | 220 | 207 | 207 | 214 | 209 | 232 | 229 | 216 | 207 | 207 | 210 | 217 | 215 | 212 |
| 25 | 211 | 210 | 209 | 201 | 198 | 205 | 210 | 206 | 204 | 204 | 194 | 198 | 196 | 197 | 199 | 216 | 217 | 223 | 224 | 215 | 208 | 213 | 209 | 209 | 207 |
| 26 | 212 | 211 | 213 | 215 | 216 | 211 | 209 | 208 | 209 | 204 | 202 | 194 | 197 | 202 | 206 | 214 | 210 | 200 | 227 | 213 | 202 | 185 | 223 | 218 | 208 |
| 27 | 220 | 201 | 205 | 208 | 211 | 199 | 188 | 188 | 196 | 207 | 230 | 202 | 199 | 204 | 208 | 233 | 264 | 217 | 195 | 152 | 179 | 279 | 220 | 211 | 209 |
| 28 | 214 | 197 | 186 | 203 | 205 | 188 | 204 | 137 | 158 | 178 | 244 | 218 | 232 | -3 | -341 | -196 | -166 | 24 | 212 | 226 | 502 | 404 | 347 | 650 | 175 |
| 29 | 745 | 614 | 789 | 873 | 592 | 494 | 305 | 251 | 227 | 263 | 218 | 188 | 43 | 179 | 240 | 171 | 123 | 148 | 135 | 140 | 211 | 288 | 472 | 260 | 332 |
| 30 | 233 | 239 | 237 | 234 | 218 | 216 | 216 | 220 | 217 | 230 | 244 | 241 | 241 | 244 | 247 | 246 | 247 | 241 | 232 | 214 | 217 | 285 | 358 | 241 | 239 |
| 31 | 202 | 328 | 238 | 201 | 212 | 219 | 227 | 220 | 218 | 218 | 211 | 208 | 223 | 235 | 231 | 226 | 218 | 214 | 217 | 218 | 214 | 224 | 215 | 210 | 222 |
| MEAN | 241 | 227 | 222 | 222 | 211 | 203 | 199 | 201 | 207 | 213 | 213 | 216 | 227 | 223 | 216 | 218 | 213 | 209 | 205 | 206 | 220 | 230 | 233 | 241 | 217 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

August 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 216 | 216 | 221 | 219 | 223 | 222 | 223 | 227 | 208 | 195 | 202 | 208 | 161 | 203 | 119 | 240 | 252 | 261 | 185 | 193 | 344 | 354 | 399 | 431 | 238 |
| 2 | 483 | 335 | 258 | 209 | 195 | 212 | 222 | 211 | 219 | 221 | 223 | 221 | 225 | 246 | 232 | 232 | 222 | 216 | 214 | 216 | 217 | 209 | 224 | 199 | 235 |
| 3 | 239 | 202 | 188 | 205 | 214 | 225 | 226 | 222 | 228 | 240 | 228 | 221 | 247 | 227 | 272 | 274 | 250 | 231 | 206 | 190 | 225 | 230 | 296 | 349 | 234 |
| 4 | 206 | 146 | 153 | 186 | 207 | 228 | 230 | 233 | 229 | 215 | 211 | 218 | 218 | 245 | 233 | 249 | 248 | 228 | 216 | 205 | 201 | 209 | 208 | 216 | 214 |
| 5 | 219 | 221 | 220 | 210 | 215 | 219 | 212 | 211 | 210 | 210 | 203 | 210 | 234 | 249 | 265 | 263 | 256 | 245 | 235 | 219 | 214 | 207 | 235 | 300 | 228 |
| 6 | 139 | 170 | 208 | 198 | 194 | 207 | 214 | 207 | 214 | 220 | 220 | 214 | 217 | 228 | 212 | 208 | 224 | 201 | 186 | 239 | 318 | 248 | 253 | 211 | 214 |
| 7 | 184 | 191 | 182 | 219 | 217 | 219 | 217 | 216 | 221 | 220 | 225 | 223 | 220 | 240 | 233 | 267 | 252 | 207 | 217 | 222 | 224 | 216 | 227 | 151 | 217 |
| 8 | 162 | 193 | 193 | 186 | 175 | 204 | 208 | 216 | 215 | 215 | 213 | 207 | 206 | 206 | 224 | 236 | 226 | 232 | 229 | 221 | 214 | 208 | 202 | 189 | 207 |
| 9 | 162 | 172 | 131 | 108 | 170 | 205 | 214 | 212 | 215 | 218 | 218 | 215 | 206 | 209 | 207 | 230 | 243 | 235 | 214 | 215 | 222 | 226 | 224 | 223 | 203 |
| 10 | 222 | 226 | 224 | 222 | 222 | 212 | 214 | 212 | 211 | 209 | 203 | 221 | 220 | 224 | 225 | 214 | 216 | 210 | 222 | 212 | 207 | 209 | 208 | 234 | 216 |
| 11 | 199 | 71 | 190 | 207 | 206 | 203 | 214 | 218 | 213 | 215 | 213 | 206 | 210 | 246 | 264 | 241 | 221 | 213 | 225 | 207 | 210 | 208 | 187 | 172 | 206 |
| 12 | 191 | 183 | 201 | 137 | 109 | 129 | 206 | 227 | 228 | 235 | 233 | 214 | 207 | 216 | 217 | 214 | 222 | 218 | 216 | 218 | 209 | 213 | 223 | 200 | 202 |
| 13 | 188 | 181 | 165 | 185 | 180 | 136 | 164 | 170 | 193 | 228 | 250 | 240 | 246 | 197 | 237 | 254 | 231 | 164 | 170 | 196 | 215 | 223 | 277 | 331 | 209 |
| 14 | 318 | 256 | 178 | 200 | 131 | 117 | 165 | 220 | 238 | 227 | 256 | 242 | 220 | 275 | 251 | 255 | 227 | 213 | 219 | 212 | 220 | 132 | 194 | 209 | 215 |
| 15 | 236 | 230 | 210 | 204 | 206 | 207 | 213 | 220 | 222 | 214 | 242 | 253 | 75 | 128 | 226 | 164 | 51 | 141 | 173 | 209 | 269 | 326 | 478 | 396 | 220 |
| 16 | 228 | 253 | 207 | 203 | 219 | 208 | 212 | 277 | 259 | 271 | 280 | 267 | 264 | 166 | 245 | 74 | 125 | 247 | 226 | 212 | 202 | 247 | 323 | 309 | 230 |
| 17 | 375 | 273 | 301 | 191 | 189 | 185 | 213 | 216 | 237 | 225 | 216 | 209 | 221 | 244 | 248 | 223 | 191 | 205 | 200 | 219 | 260 | 277 | 304 | 359 | 240 |
| 18 | 333 | 417 | 291 | 242 | 201 | 232 | 236 | 226 | 239 | 228 | 243 | 236 | 243 | 236 | 252 | 265 | 239 | 220 | 209 | 228 | 232 | 214 | 211 | 274 | 247 |
| 19 | 460 | 254 | 138 | 175 | 97 | 180 | 214 | 216 | 235 | 240 | 246 | 262 | 274 | 260 | 263 | 283 | 261 | 222 | 200 | 228 | 229 | 278 | 294 | 325 | 243 |
| 20 | 276 | 202 | 220 | 305 | 267 | 139 | 193 | 200 | 220 | 244 | 258 | 236 | 212 | 182 | 206 | 198 | 190 | 183 | 228 | 346 | 228 | 203 | 206 | 216 | 223 |
| 21 | 247 | 258 | 212 | 223 | 217 | 207 | 232 | 236 | 236 | 247 | 239 | 235 | 264 | 196 | -45 | -287 | -24 | 155 | 246 | 314 | 336 | 478 | 391 | 460 | 219 |
| 22 | 536 | 453 | 472 | 432 | 509 | 520 | 326 | 151 | 198 | 167 | 119 | 38 | 74 | 134 | 8 | -3 | 89 | 177 | 199 | 283 | 393 | 382 | 343 | 474 | 269 |
| 23 | 420 | 299 | 244 | 439 | 487 | 389 | 276 | 207 | 258 | 217 | -53 | -96 | -12 | 47 | -292 | 69 | 56 | 93 | 256 | 498 | 248 | 286 | 315 | 401 | 210 |
| 24 | 459 | 352 | 196 | 439 | 374 | 350 | 210 | 224 | 238 | 228 | 232 | 249 | 230 | 192 | 177 | 259 | 279 | 209 | 215 | 227 | 242 | 232 | 227 | 218 | 260 |
| 25 | 231 | 221 | 229 | 228 | 229 | 230 | 233 | 229 | 224 | 226 | 222 | 220 | 219 | 246 | 301 | 289 | 261 | 246 | 228 | 236 | 313 | 307 | 314 | 222 | 246 |
| 26 | 235 | 211 | 228 | 228 | 219 | 223 | 267 | 273 | 392 | 219 | 153 | 269 | 170 | -41 | -193 | -116 | 164 | 89 | 68 | 167 | 250 | 243 | 298 | 305 | 180 |
| 27 | 211 | 225 | 240 | 223 | 225 | 228 | 224 | 228 | 228 | 228 | 217 | 216 | 213 | 228 | 240 | 237 | 235 | 240 | 229 | 234 | 229 | 227 | 228 | 225 | 227 |
| 28 | 227 | 228 | 228 | 228 | 229 | 228 | 226 | 220 | 223 | 227 | 220 | 218 | 221 | 220 | 228 | 230 | 239 | 243 | 234 | 227 | 221 | 224 | 220 | 222 | 226 |
| 29 | 225 | 225 | 227 | 232 | 233 | 218 | 198 | 199 | 207 | 211 | 212 | 216 | 217 | 220 | 235 | 228 | 214 | 224 | 204 | 206 | 262 | 230 | 247 | 242 | 222 |
| 30 | 221 | 188 | 193 | 222 | 206 | 203 | 194 | 223 | 214 | 227 | 240 | 242 | 159 | 111 | 190 | 138 | 126 | 144 | 125 | 229 | 218 | 215 | 209 | 129 | 190 |
| 31 | 246 | 382 | 320 | 189 | 206 | 226 | 216 | 206 | 214 | 219 | 230 | 225 | 222 | 239 | 230 | 228 | 224 | 230 | 214 | 212 | 209 | 220 | 220 | 227 | 231 |
| MEAN | 267 | 239 | 221 | 228 | 224 | 222 | 219 | 217 | 228 | 222 | 213 | 211 | 203 | 200 | 184 | 188 | 200 | 204 | 206 | 233 | 244 | 247 | 264 | 271 | 223 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

September 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 249 | 198 | 209 | 203 | 187 | 209 | 214 | 216 | 214 | 220 | 201 | 214 | 129 | 162 | 259 | 220 | 259 | 181 | 188 | 220 | 227 | 240 | 233 | 220 | 211 |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | 202 | 202 | 206 | 211 | 212 | 210 | 228 | 217 | 216 | 219 | 216 | 212 | 210 | 212 | 213 | 213 | 212 | 213 | 212 |
| 4 | 217 | 217 | 220 | 221 | 219 | 216 | 210 | 206 | 210 | 211 | 209 | 208 | 215 | 239 | 260 | 250 | 230 | 175 | 198 | 211 | 208 | 224 | 286 | 335 | 224 |
| 5 | 173 | 246 | 292 | 152 | 138 | 185 | 225 | 226 | 221 | 214 | 218 | 242 | 245 | 254 | 228 | 261 | 249 | 251 | 235 | 215 | 200 | 196 | 190 | 216 | 219 |
| 6 | 223 | 230 | 178 | 211 | 217 | 218 | 214 | 209 | 224 | 217 | 223 | 213 | 221 | 247 | 237 | 232 | 222 | 207 | 212 | 205 | 251 | 187 | 203 | 213 | 217 |
| 7 | 207 | 223 | 216 | 189 | 207 | 213 | 211 | 218 | 218 | 222 | 230 | 228 | 232 | 166 | 144 | 86 | 238 | 247 | 225 | 209 | 200 | 177 | 204 | 242 | 206 |
| 8 | 218 | 203 | 200 | 191 | 215 | 211 | 214 | 211 | 213 | 211 | 223 | 223 | 233 | 210 | 212 | 214 | 221 | 253 | 226 | 209 | 288 | 268 | 152 | 206 | 217 |
| 9 | 225 | 151 | 184 | 211 | 217 | 222 | 220 | 220 | 217 | 220 | 225 | 227 | 248 | 242 | 218 | 234 | 247 | 226 | 237 | 228 | 229 | 192 | 190 | 208 | 218 |
| 10 | 292 | 156 | 163 | 199 | 212 | 213 | 195 | 204 | 219 | 217 | 208 | 209 | 210 | 220 | 221 | 219 | 214 | 214 | 212 | 209 | 187 | 170 | 300 | 267 | 213 |
| 11 | 152 | 189 | 188 | 204 | 211 | 217 | 200 | 199 | 207 | 225 | 256 | 294 | 286 | 233 | 145 | 196 | 200 | 181 | 181 | 250 | 361 | 298 | 472 | 320 | 236 |
| 12 | 389 | 353 | 194 | 207 | 246 | 181 | 194 | 201 | 222 | 235 | 241 | 229 | 245 | 270 | 245 | 248 | 213 | 202 | 218 | 235 | 246 | 219 | 219 | 232 | 236 |
| 13 | 305 | 431 | 190 | 113 | 138 | 194 | 207 | 210 | 213 | 229 | 253 | 267 | 239 | 257 | 250 | 161 | 179 | 189 | 214 | 256 | 307 | 267 | 359 | 492 | 246 |
| 14 | 402 | 210 | 324 | 202 | 185 | 204 | 207 | 219 | 220 | 230 | 226 | 247 | 253 | 235 | 241 | 255 | 235 | 208 | 187 | 157 | 161 | 257 | 177 | 209 | 227 |
| 15 | 222 | 228 | 370 | 161 | 93 | 179 | 190 | 194 | 208 | 222 | 223 | 208 | 261 | 253 | 209 | 191 | 149 | 196 | 216 | 230 | 229 | 275 | 253 | 224 | 216 |
| 16 | 254 | 344 | 374 | 202 | 143 | 152 | 183 | 223 | 248 | 227 | 266 | 254 | 266 | 222 | 201 | 239 | 267 | 225 | 190 | 209 | 227 | 217 | 241 | 324 | 237 |
| 17 | 324 | 211 | 194 | 196 | 216 | 226 | 227 | 236 | 235 | 234 | 230 | 235 | 248 | 273 | 263 | 247 | 237 | 225 | 138 | 208 | 274 | 338 | 302 | 168 | 236 |
| 18 | 216 | 225 | 222 | 221 | 216 | 210 | 206 | 205 | 237 | 260 | 229 | 273 | 288 | 220 | 181 | 69 | 170 | 239 | 240 | 218 | 419 | 344 | 209 | 275 | 233 |
| 19 | 426 | 263 | 247 | 123 | 192 | 209 | 220 | 226 | 233 | 235 | 229 | 233 | 233 | 246 | 271 | 252 | 200 | 142 | 196 | 222 | 284 | 299 | 240 | 436 | 244 |
| 20 | 371 | 329 | 181 | 198 | 221 | 217 | 221 | 215 | 215 | 214 | 215 | 215 | 230 | 235 | 236 | 239 | 209 | 136 | 170 | 211 | 268 | 432 | 228 | 345 | 239 |
| 21 | 362 | 298 | 196 | 204 | 211 | 219 | 216 | 209 | 224 | 243 | 250 | 253 | 263 | 279 | 279 | 254 | 281 | 204 | 182 | 262 | 223 | 267 | 364 | 396 | 255 |
| 22 | 312 | 231 | 193 | 149 | 185 | 186 | 167 | 194 | 212 | 228 | 239 | 251 | 242 | 236 | 221 | 153 | 138 | 241 | 225 | 210 | 282 | 161 | 226 | 305 | 216 |
| 23 | 359 | 250 | 168 | 216 | 149 | 173 | 211 | 222 | 230 | 225 | 231 | 247 | 235 | 228 | 222 | 218 | 248 | 250 | 241 | 230 | 208 | 206 | 214 | 217 | 224 |
| 24 | 225 | 210 | 195 | 212 | 186 | 194 | 202 | 231 | 227 | 235 | 252 | 260 | 254 | 231 | 261 | 245 | 131 | 199 | 252 | 231 | 242 | 203 | 218 | 217 | 221 |
| 25 | 224 | 250 | 306 | 178 | 160 | 176 | 212 | 215 | 220 | 230 | 184 | 190 | 219 | 222 | 226 | 226 | 238 | 227 | 176 | 206 | 387 | 278 | 203 | 227 | 224 |
| 26 | 211 | 211 | 218 | 199 | 206 | 214 | 218 | 223 | 224 | 224 | 218 | 220 | 217 | 217 | 227 | 237 | 221 | 241 | 207 | 220 | 214 | 194 | 221 | 217 | 217 |
| 27 | 239 | 194 | 218 | 189 | 197 | 196 | 199 | 209 | 218 | 222 | 219 | 225 | 225 | 250 | 241 | 242 | 246 | 243 | 232 | 224 | 219 | 214 | 199 | 203 | 219 |
| 28 | 205 | 205 | 206 | 186 | 195 | 209 | 212 | 211 | 213 | 220 | 218 | 219 | 248 | 232 | 226 | 217 | 216 | 214 | 219 | 223 | 218 | 217 | 190 | 237 | 214 |
| 29 | 153 | 58 | 95 | 173 | 207 | 209 | 210 | 224 | 222 | 223 | 220 | 225 | 212 | 219 | 219 | 220 | 217 | 215 | 212 | 209 | 194 | 207 | 243 | 166 | 198 |
| 30 | 107 | 188 | 212 | 215 | 216 | 219 | 218 | 219 | 221 | 219 | 218 | 216 | 219 | 219 | 217 | 218 | 214 | 211 | 212 | 210 | 195 | 194 | 210 | 212 | 208 |
| MEAN | 259 | 232 | 219 | 190 | 192 | 202 | 207 | 213 | 220 | 224 | 226 | 232 | 236 | 232 | 226 | 215 | 217 | 212 | 208 | 218 | 246 | 239 | 239 | 260 | 223 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

October 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 204 | 211 | 212 | 206 | 193 | 203 | 210 | 213 | 216 | 218 | 216 | 215 | 211 | 210 | 209 | 211 | 210 | 209 | 209 | 208 | 207 | 209 | 209 | 213 | 209 |
| 2 | 213 | 213 | 213 | 211 | 212 | 212 | 212 | 211 | 208 | 206 | 219 | 215 | 210 | 227 | 242 | 233 | 222 | 215 | 193 | 202 | 223 | 214 | 214 | 210 | 214 |
| 3 | 209 | 210 | 206 | 203 | 206 | 204 | 206 | 199 | 196 | 199 | 200 | 206 | 209 | 212 | 228 | 225 | 228 | 210 | 207 | 191 | 151 | 196 | 249 | 233 | 207 |
| 4 | 202 | 198 | 209 | 207 | 209 | 208 | 206 | 206 | 206 | 208 | 213 | 221 | 213 | 213 | 229 | 251 | 250 | 188 | 215 | 206 | 215 | 283 | 304 | 178 | 218 |
| 5 | 194 | 240 | 228 | 191 | 170 | 182 | 212 | 204 | 209 | 212 | 222 | 217 | 226 | 222 | 267 | 233 | 222 | 218 | 215 | 219 | 212 | 219 | 239 | 156 | 213 |
| 6 | 171 | 203 | 208 | 206 | 211 | 213 | 211 | 206 | 237 | 224 | 221 | 213 | 236 | 225 | 224 | 233 | 233 | 223 | 155 | 162 | 211 | 283 | 214 | 185 | 212 |
| 7 | 193 | 182 | 189 | 201 | 209 | 215 | 215 | 218 | 218 | 220 | 224 | 224 | 225 | 232 | 248 | 247 | 240 | 224 | 192 | 135 | 130 | 186 | 243 | 143 | 206 |
| 8 | 132 | 168 | 201 | 208 | 212 | 214 | 214 | 214 | 210 | 216 | 216 | 222 | 219 | 218 | 219 | 250 | 232 | 223 | 221 | 223 | 215 | 216 | 217 | 210 | 212 |
| 9 | 209 | 190 | 197 | 196 | 206 | 208 | 209 | 208 | 209 | 208 | 207 | 206 | 202 | 238 | 235 | 232 | 221 | 200 | 200 | 233 | 243 | 324 | 373 | 344 | 229 |
| 10 | 296 | 400 | 352 | 153 | 178 | 197 | 244 | 296 | 222 | 134 | 148 | 235 | 226 | 162 | 223 | 71 | 243 | 212 | 179 | 175 | 209 | 236 | 250 | 304 | 222 |
| 11 | 443 | 103 | 101 | 107 | 128 | 170 | 214 | 245 | 234 | 228 | 219 | 244 | 257 | 244 | 229 | 130 | 55 | 84 | 343 | 361 | 440 | 375 | 682 | 378 | 250 |
| 12 | 255 | 376 | 317 | 280 | 162 | 151 | 190 | 193 | 226 | 253 | 231 | 257 | 225 | 232 | 239 | 235 | 223 | 86 | 149 | 151 | 278 | 421 | 202 | 295 | 234 |
| 13 | 231 | 274 | 261 | 206 | 199 | 189 | 215 | 229 | 242 | 246 | 237 | 235 | 235 | 229 | 252 | 256 | 258 | 251 | 247 | 245 | 185 | 240 | 310 | 354 | 242 |
| 14 | 258 | 395 | 276 | 95 | 154 | 165 | 189 | 217 | 243 | 236 | 228 | 230 | 228 | 234 | 264 | 234 | 211 | 108 | 184 | 274 | 333 | 232 | 405 | 349 | 239 |
| 15 | 286 | 366 | 233 | 190 | 190 | 191 | 219 | 233 | 239 | 249 | 249 | 256 | 253 | 140 | 97 | 138 | 51 | 198 | 244 | 247 | 223 | 238 | 253 | 226 | 217 |
| 16 | 252 | 229 | 218 | 230 | 226 | 209 | 222 | 230 | 252 | 234 | 237 | 233 | 235 | 232 | 242 | 238 | 234 | 236 | 228 | 225 | 168 | 209 | 137 | 151 | 221 |
| 17 | 229 | 232 | 209 | 207 | 223 | 221 | 222 | 224 | 232 | 236 | 229 | 227 | 226 | 226 | 226 | 225 | 223 | 223 | 224 | 224 | 224 | 224 | 221 | 209 | 223 |
| 18 | 217 | 220 | 221 | 221 | 220 | 222 | 222 | 218 | 221 | 225 | 236 | 236 | 230 | 247 | 267 | 256 | 224 | 190 | 228 | 219 | 206 | 241 | 250 | 281 | 229 |
| 19 | 255 | 254 | 305 | 134 | 111 | 184 | 206 | 222 | 227 | 229 | 238 | 256 | 245 | 267 | 276 | 278 | 263 | 253 | 240 | 226 | 236 | 262 | 272 | 224 | 235 |
| 20 | 220 | 229 | 212 | 208 | 209 | 214 | 212 | 208 | 213 | 225 | 232 | 226 | 245 | 238 | 125 | -196 | 203 | 254 | 228 | 348 | 354 | 367 | 452 | 344 | 232 |
| 21 | 276 | 275 | 216 | 220 | 220 | 222 | 223 | 219 | 230 | 227 | 211 | 230 | 253 | 235 | 252 | 280 | 260 | 242 | 232 | 224 | 202 | 221 | 204 | 200 | 232 |
| 22 | 229 | 136 | 202 | 187 | 152 | 188 | 204 | 212 | 214 | 214 | 213 | 224 | 226 | 236 | 249 | 266 | 258 | 242 | 233 | 237 | 230 | 225 | 223 | 224 | 217 |
| 23 | 220 | 221 | 218 | 217 | 220 | 220 | 219 | 219 | 219 | 222 | 222 | 228 | 224 | 223 | 220 | 221 | 228 | 233 | 227 | 221 | 215 | 338 | 214 | 260 | 227 |
| 24 | 372 | 413 | 375 | 243 | 154 | 130 | 185 | 212 | 215 | 236 | 242 | 227 | 231 | 209 | 178 | 169 | 272 | 250 | 173 | 138 | 196 | 227 | 232 | 250 | 230 |
| 25 | 302 | 153 | 174 | 241 | 199 | 208 | 234 | 231 | 221 | 228 | 218 | 220 | 223 | 226 | 236 | 235 | 228 | 225 | 228 | 228 | 214 | 223 | 204 | 236 | 222 |
| 26 | 197 | 223 | 223 | 220 | 218 | 221 | 223 | 222 | 221 | 222 | 221 | 215 | 211 | 206 | 223 | 217 | 161 | 172 | 175 | 204 | 217 | 178 | 225 | 228 | 210 |
| 27 | 209 | 197 | 214 | 209 | 195 | 190 | 191 | 199 | 208 | 209 | 225 | 236 | 246 | 237 | 218 | 247 | 232 | 197 | 230 | 222 | 212 | 227 | 231 | 221 | 216 |
| 28 | 163 | 175 | 196 | 205 | 201 | 194 | 209 | 217 | 224 | 222 | 223 | 226 | 227 | 226 | 223 | 220 | 218 | 215 | 217 | 220 | 218 | 215 | 218 | 217 | 212 |
| 29 | 219 | 219 | 219 | 218 | 218 | 215 | 218 | 217 | 216 | 215 | 214 | 223 | 210 | 213 | 215 | 214 | 223 | 187 | 235 | 222 | 222 | 109 | 193 | 173 | 209 |
| 30 | 232 | 424 | 203 | 13 | 127 | 188 | 206 | 214 | 224 | 221 | 215 | 215 | 220 | 221 | 220 | 231 | 227 | 205 | 184 | 192 | 228 | 211 | 177 | 138 | 205 |
| 31 | 189 | 215 | 228 | 195 | 199 | 189 | 201 | 206 | 204 | 228 | 222 | 228 | 232 | 217 | 190 | 162 | 163 | 177 | 97 | 218 | 565 | 293 | 427 | 323 | 232 |
| MEAN | 234 | 243 | 226 | 194 | 191 | 197 | 211 | 218 | 221 | 220 | 220 | 227 | 227 | 222 | 224 | 207 | 216 | 204 | 210 | 219 | 238 | 246 | 265 | 240 | 221 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

November 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 218 | 212 | 225 | 223 | 218 | 226 | 220 | 224 | 222 | 221 | 220 | 226 | 232 | 230 | 224 | 223 | 220 | 224 | 225 | 222 | 157 | 164 | 134 | 221 | 213 |
| 2 | 230 | 130 | 143 | 167 | 196 | 206 | 210 | 219 | 216 | 216 | 215 | 217 | 219 | 219 | 221 | 223 | 237 | 232 | 229 | 213 | 218 | 132 | 92 | 164 | 198 |
| 3 | 192 | 209 | 206 | 211 | 210 | 220 | 216 | 214 | 213 | 216 | 218 | 223 | 221 | 228 | 235 | 258 | 240 | 228 | 222 | 178 | 179 | 201 | 208 | 209 | 214 |
| 4 | 207 | 208 | 223 | 227 | 221 | 222 | 221 | 220 | 220 | 221 | 221 | 219 | 220 | 220 | 220 | 220 | 221 | 222 | 221 | 212 | 222 | 216 | 212 | 208 | 218 |
| 5 | 211 | 216 | 217 | 217 | 217 | 218 | 218 | 215 | 215 | 215 | 216 | 212 | 209 | 211 | 213 | 215 | 215 | 216 | 216 | 214 | 214 | 215 | 209 | 183 | 213 |
| 6 | 200 | 213 | 219 | 217 | 215 | 215 | 214 | 213 | 213 | 213 | 212 | 211 | 210 | 209 | 209 | 211 | 212 | 214 | 217 | 213 | 217 | 214 | 203 | 209 | 212 |
| 7 | 212 | 214 | 213 | 211 | 212 | 213 | 214 | 214 | 214 | 214 | 213 | 216 | 225 | 242 | 233 | 230 | 223 | 214 | 231 | 236 | 225 | 242 | 230 | 161 | 218 |
| 8 | 164 | 192 | 214 | 213 | 212 | 209 | 214 | 217 | 229 | 228 | 217 | 219 | 221 | 229 | 223 | 233 | 209 | 151 | 132 | 201 | 206 | 246 | 331 | 280 | 216 |
| 9 | 264 | 280 | 223 | 96 | 110 | 154 | 198 | 215 | 226 | 221 | 222 | 220 | 223 | 234 | 244 | 237 | 209 | 152 | 198 | 245 | 231 | 229 | 257 | 305 | 216 |
| 10 | 303 | 229 | 85 | 129 | 171 | 190 | 211 | 216 | 234 | 230 | 233 | 242 | 248 | 257 | 232 | 202 | 170 | 147 | 205 | 247 | 226 | 295 | 344 | 369 | 225 |
| 11 | 145 | 163 | 178 | 170 | 160 | 184 | 217 | 228 | 230 | 232 | 237 | 242 | 247 | 241 | 257 | 219 | 224 | 221 | 217 | 213 | 220 | 215 | 221 | 238 | 213 |
| 12 | 200 | 209 | 213 | 211 | 211 | 214 | 212 | 214 | 214 | 217 | 221 | 222 | 219 | 217 | 219 | 223 | 226 | 224 | 217 | 227 | 221 | 203 | 211 | 208 | 215 |
| 13 | 195 | 209 | 219 | 218 | 212 | 212 | 213 | 210 | 211 | 217 | 221 | 222 | 220 | 217 | 216 | 216 | 221 | 222 | 221 | 223 | 218 | 201 | 194 | 208 | 214 |
| 14 | 213 | 209 | 211 | 218 | 219 | 215 | 214 | 213 | 211 | 213 | 214 | 213 | 214 | 212 | 211 | 212 | 211 | 210 | 211 | 213 | 211 | 211 | 212 | 213 | 212 |
| 15 | 214 | 216 | 210 | 214 | 216 | 211 | 209 | 210 | 210 | 211 | 210 | 209 | 209 | 210 | 210 | 211 | 210 | 207 | 213 | 206 | 211 | 204 | 198 | 192 | 209 |
| 16 | 190 | 201 | 197 | 190 | 182 | 187 | 184 | 146 | 195 | 222 | 199 | 165 | 88 | 88 | 7 | 251 | 205 | 190 | 156 | 200 | 228 | 283 | 316 | 203 | 186 |
| 17 | 190 | 184 | 199 | 209 | 179 | 181 | 199 | 220 | 221 | 232 | 234 | 216 | 230 | 223 | 136 | 136 | 203 | 154 | 257 | 253 | 388 | 328 | 344 | 324 | 226 |
| 18 | 164 | 169 | 201 | 213 | 220 | 209 | 207 | 221 | 225 | 233 | 243 | 247 | 236 | 273 | 176 | 57 | 149 | 137 | 159 | 210 | 234 | 252 | 257 | 245 | 205 |
| 19 | 213 | 204 | 154 | 105 | 168 | 208 | 222 | 217 | 216 | 214 | 213 | 215 | 217 | 219 | 219 | 222 | 231 | 230 | 225 | 212 | 205 | 182 | 181 | 173 | 202 |
| 20 | 176 | 200 | 218 | 216 | 217 | 202 | 204 | 213 | 212 | 216 | 216 | 214 | 215 | 214 | 219 | 224 | 224 | 222 | 219 | 213 | 208 | 206 | 208 | 196 | 211 |
| 21 | 222 | 216 | 214 | 185 | 124 | 116 | 192 | 205 | 207 | 208 | 212 | 218 | 215 | 229 | 246 | 226 | 239 | 223 | 221 | 235 | 227 | 224 | 193 | 179 | 207 |
| 22 | 199 | 210 | 216 | 214 | 216 | 217 | 218 | 218 | 215 | 214 | 212 | 210 | 209 | 211 | 212 | 213 | 215 | 218 | 223 | 195 | 224 | 217 | 214 | 212 | 213 |
| 23 | 212 | 212 | 213 | 212 | 213 | 214 | 214 | 214 | 212 | 213 | 211 | 207 | 222 | 221 | 238 | 237 | 215 | 199 | 258 | 232 | 225 | 194 | 195 | 199 | 215 |
| 24 | 201 | 188 | 193 | 205 | 216 | 214 | 215 | 216 | 217 | 218 | 215 | 214 | 218 | 215 | 213 | 212 | 213 | 212 | 214 | 218 | 217 | 215 | 212 | 207 | 211 |
| 25 | 209 | 214 | 214 | 214 | 212 | 211 | 212 | 214 | 212 | 212 | 212 | 216 | 215 | 216 | 212 | 209 | 209 | 209 | 214 | 193 | 170 | 205 | 230 | 212 | 210 |
| 26 | 202 | 205 | 164 | 139 | 180 | 194 | 213 | 219 | 215 | 209 | 213 | 214 | 220 | 255 | 258 | 277 | 251 | 220 | 212 | 205 | 209 | 210 | 208 | 225 | 213 |
| 27 | 279 | 297 | 278 | 158 | 177 | 176 | 185 | 192 | 212 | 214 | 206 | 209 | 216 | 203 | 205 | 139 | 185 | 203 | 218 | 420 | 357 | 442 | 325 | 272 | 240 |
| 28 | 306 | 354 | 370 | 220 | 176 | 191 | 209 | 233 | 222 | 226 | 229 | 227 | 227 | 230 | 237 | 238 | 238 | 204 | 198 | 224 | 193 | 193 | 231 | 219 | 233 |
| 29 | 223 | 235 | 233 | 216 | 218 | 214 | 218 | 224 | 224 | 224 | 226 | 228 | 229 | 226 | 226 | 228 | 229 | 236 | 233 | 236 | 208 | 169 | 200 | 184 | 220 |
| 30 | 194 | 210 | 208 | 203 | 219 | 222 | 219 | 215 | 215 | 218 | 217 | 219 | 229 | 233 | 234 | 222 | 137 | 207 | 249 | 210 | 191 | 226 | 219 | 203 | 213 |
| MEAN | 211 | 213 | 209 | 194 | 197 | 202 | 210 | 213 | 216 | 218 | 218 | 217 | 217 | 221 | 213 | 214 | 213 | 204 | 214 | 223 | 222 | 224 | 226 | 220 | 213 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

December 1990

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 181 | 195 | 214 | 236 | 205 | 210 | 220 | 226 | 225 | 229 | 229 | 228 | 228 | 227 | 226 | 249 | 244 | 229 | 222 | 224 | 225 | 227 | 225 | 225 | 222 |
| 2 | 225 | 224 | 223 | 222 | 219 | 218 | 217 | 216 | 215 | 217 | 220 | 220 | 220 | 227 | 224 | 221 | 221 | 208 | 160 | 208 | 212 | 225 | 220 | 166 | 214 |
| 3 | 203 | 216 | 222 | 228 | 224 | 218 | 214 | 214 | 216 | 214 | 212 | 217 | 217 | 220 | 218 | 230 | 241 | 211 | 176 | 162 | 197 | 225 | 203 | 164 | 210 |
| 4 | 222 | 174 | 176 | 247 | 140 | 185 | 211 | 220 | 216 | 222 | 228 | 230 | 240 | 218 | 217 | 173 | 235 | 266 | 244 | 206 | 162 | 203 | 345 | 190 | 215 |
| 5 | 146 | 172 | 207 | 214 | 219 | 222 | 212 | 220 | 227 | 238 | 237 | 231 | 225 | 237 | 238 | 228 | 124 | 91 | 153 | 211 | 224 | 202 | 165 | 184 | 201 |
| 6 | 197 | 197 | 218 | 205 | 211 | 210 | 221 | 220 | 218 | 219 | 222 | 236 | 232 | 245 | 257 | 247 | 233 | 230 | 219 | 230 | 229 | 216 | 234 | 245 | 224 |
| 7 | 241 | 200 | 207 | 201 | 204 | 199 | 210 | 220 | 217 | 217 | 218 | 218 | 217 | 214 | 215 | 218 | 223 | 239 | 229 | 227 | 225 | 211 | 212 | 216 | 216 |
| 8 | 217 | 217 | 215 | 214 | 212 | 213 | 203 | 205 | 224 | 226 | 226 | 230 | 232 | 233 | 247 | 258 | 258 | 222 | 187 | 194 | 248 | 190 | 201 | 219 | 220 |
| 9 | 215 | 212 | 207 | 207 | 209 | 219 | 226 | 225 | 226 | 226 | 226 | 229 | 225 | 249 | 224 | 244 | 264 | 240 | 236 | 218 | 215 | 211 | 205 | 201 | 223 |
| 10 | 210 | 212 | 217 | 216 | 215 | 215 | 216 | 215 | 215 | 216 | 214 | 215 | 212 | 212 | 213 | 213 | 215 | 213 | 214 | 220 | 222 | 214 | 216 | 211 | 214 |
| 11 | 216 | 216 | 214 | 212 | 211 | 213 | 215 | 215 | 214 | 215 | 216 | 216 | 213 | 212 | 211 | 212 | 212 | 213 | 226 | 215 | 212 | 211 | 213 | 213 | 214 |
| 12 | 215 | 216 | 214 | 213 | 213 | 211 | 211 | 211 | 213 | 213 | 214 | 214 | 212 | 208 | 207 | 205 | 227 | 196 | 210 | 235 | 220 | 203 | 335 | 317 | 222 |
| 13 | 413 | 238 | 192 | 162 | 121 | 136 | 187 | 228 | 225 | 193 | 214 | 226 | 231 | 232 | 236 | 238 | 224 | 221 | 220 | 210 | 206 | 209 | 256 | 271 | 220 |
| 14 | 160 | 158 | 167 | 187 | 205 | 216 | 219 | 218 | 218 | 221 | 219 | 220 | 221 | 222 | 232 | 249 | 238 | 211 | 213 | 227 | 215 | 207 | 198 | 205 | 210 |
| 15 | 205 | 209 | 192 | 194 | 194 | 194 | 203 | 214 | 227 | 230 | 228 | 220 | 220 | 219 | 221 | 223 | 229 | 241 | 210 | 222 | 228 | 218 | 206 | 198 | 214 |
| 16 | 174 | 173 | 183 | 187 | 208 | 210 | 212 | 211 | 217 | 217 | 222 | 227 | 249 | 240 | 229 | 242 | 152 | 209 | 216 | 218 | 169 | 204 | 215 | 212 | 208 |
| 17 | 205 | 209 | 210 | 195 | 194 | 199 | 208 | 205 | 208 | 214 | 211 | 211 | 212 | 212 | 214 | 224 | 239 | 231 | 223 | 215 | 244 | 226 | 215 | 213 | 214 |
| 18 | 207 | 174 | 209 | 218 | 219 | 218 | 217 | 213 | 211 | 209 | 212 | 220 | 229 | 229 | 221 | 238 | 242 | 221 | 216 | 213 | 213 | 214 | 213 | 215 | 216 |
| 19 | 214 | 214 | 214 | 213 | 213 | 214 | 214 | 212 | 211 | 210 | 210 | 208 | 207 | 209 | 210 | 210 | 216 | 216 | 214 | 212 | 212 | 212 | 211 | 209 | 211 |
| 20 | 214 | 215 | 215 | 218 | 217 | 207 | 205 | 205 | 205 | 208 | 214 | 223 | 216 | 217 | 230 | 261 | 201 | 111 | 184 | 200 | 228 | 216 | 183 | 210 | 208 |
| 21 | 217 | 217 | 216 | 216 | 210 | 210 | 206 | 213 | 214 | 212 | 210 | 212 | 212 | 212 | 215 | 215 | 214 | 213 | 214 | 223 | 223 | 209 | 216 | 217 | 214 |
| 22 | 220 | 216 | 210 | 210 | 210 | 208 | 207 | 208 | 211 | 212 | 213 | 215 | 215 | 213 | 213 | 212 | 213 | 213 | 215 | 214 | 214 | 211 | 208 | 207 | 212 |
| 23 | 209 | 209 | 208 | 208 | 208 | 208 | 207 | 215 | 215 | 219 | 215 | 217 | 216 | 215 | 210 | 211 | 217 | 219 | 219 | 215 | 213 | 212 | 258 | 191 | 213 |
| 24 | 214 | 223 | 220 | 204 | 192 | 171 | 166 | 180 | 208 | 209 | 211 | 216 | 235 | 240 | 176 | 204 | 107 | 80 | 132 | 319 | 169 | 273 | 301 | 305 | 206 |
| 25 | 245 | 226 | 219 | 170 | 135 | 203 | 208 | 230 | 233 | 226 | 226 | 230 | 239 | 222 | 220 | 224 | 187 | 145 | 166 | 205 | 236 | 271 | 190 | 170 | 209 |
| 26 | 173 | 177 | 186 | 189 | 202 | 210 | 210 | 213 | 217 | 221 | 222 | 222 | 220 | 217 | 221 | 218 | 215 | 216 | 217 | 218 | 217 | 213 | 214 | 216 | 210 |
| 27 | 214 | 212 | 208 | 188 | 155 | 186 | 204 | 210 | 215 | 215 | 215 | 216 | 223 | 236 | 245 | 245 | 224 | 218 | 218 | 226 | 222 | 215 | 208 | 209 | 213 |
| 28 | 201 | 167 | 191 | 209 | 209 | 216 | 219 | 216 | 212 | 213 | 215 | 216 | 214 | 214 | 217 | 214 | 216 | 214 | 219 | 210 | 220 | 221 | 217 | 217 | 211 |
| 29 | 219 | 213 | 206 | 211 | 216 | 213 | 212 | 210 | 211 | 212 | 213 | 216 | 217 | 219 | 223 | 224 | 230 | 226 | 220 | 240 | 224 | 219 | 215 | 209 | 217 |
| 30 | 222 | 186 | 135 | 196 | 207 | 206 | 193 | 209 | 211 | 218 | 217 | 215 | 214 | 216 | 220 | 221 | 222 | 221 | 217 | 205 | 210 | 206 | 205 | 206 | 207 |
| 31 | 209 | 209 | 208 | 207 | 208 | 208 | 209 | 208 | 208 | 209 | 209 | 219 | 230 | 217 | 196 | 140 | 21 | 113 | 203 | 209 | 283 | 239 | 247 | 256 | 202 |
| MEAN | 213 | 203 | 203 | 206 | 200 | 205 | 209 | 213 | 216 | 216 | 218 | 220 | 222 | 222 | 220 | 222 | 209 | 203 | 206 | 217 | 217 | 217 | 224 | 215 | 213 |

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (All day)

Summary 1990

| Mnt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan. | 420 | 426 | 371 | 336 | 315 | 316 | 308 | 303 | 306 | 300 | 280 | 263 | 247 | 240 | 233 | 219 | 216 | 243 | 213 | 252 | 298 | 321 | 339 | 367 | 297 |
| Feb. | 476 | 503 | 494 | 483 | 449 | 412 | 351 | 334 | 313 | 301 | 282 | 252 | 225 | 211 | 218 | 225 | 195 | 173 | 176 | 246 | 321 | 342 | 383 | 434 | 324 |
| Mar. | 478 | 517 | 540 | 479 | 451 | 414 | 392 | 389 | 387 | 354 | 315 | 248 | 210 | 177 | 182 | 184 | 159 | 171 | 204 | 230 | 275 | 373 | 408 | 427 | 331 |
| Apr. | 490 | 491 | 547 | 549 | 552 | 516 | 467 | 437 | 421 | 382 | 337 | 283 | 233 | 222 | 174 | 155 | 136 | 147 | 171 | 188 | 227 | 293 | 353 | 413 | 341 |
| May. | 419 | 445 | 494 | 484 | 481 | 430 | 428 | 396 | 350 | 314 | 275 | 244 | 233 | 223 | 199 | 148 | 139 | 176 | 183 | 177 | 217 | 238 | 308 | 374 | 307 |
| Jun. | 402 | 511 | 565 | 557 | 497 | 457 | 424 | 409 | 375 | 323 | 289 | 255 | 222 | 192 | 178 | 168 | 191 | 185 | 192 | 186 | 213 | 253 | 322 | 371 | 322 |
| Jul. | 428 | 447 | 484 | 465 | 455 | 437 | 418 | 396 | 361 | 314 | 273 | 249 | 238 | 214 | 213 | 220 | 209 | 206 | 189 | 186 | 233 | 264 | 331 | 362 | 316 |
| Aug. | 482 | 497 | 508 | 507 | 493 | 458 | 448 | 413 | 380 | 334 | 301 | 261 | 229 | 199 | 174 | 155 | 159 | 182 | 188 | 226 | 253 | 288 | 337 | 387 | 327 |
| Sep. | 460 | 497 | 513 | 445 | 419 | 397 | 380 | 361 | 340 | 311 | 284 | 254 | 236 | 229 | 225 | 219 | 234 | 245 | 250 | 264 | 320 | 381 | 387 | 421 | 336 |
| Oct. | 456 | 526 | 498 | 446 | 409 | 376 | 369 | 363 | 354 | 341 | 303 | 283 | 259 | 255 | 263 | 262 | 274 | 263 | 292 | 319 | 360 | 373 | 427 | 452 | 355 |
| Nov. | 410 | 393 | 406 | 380 | 363 | 353 | 344 | 348 | 349 | 336 | 316 | 297 | 283 | 284 | 281 | 274 | 284 | 269 | 301 | 321 | 329 | 362 | 400 | 426 | 337 |
| Dec. | 398 | 391 | 376 | 378 | 359 | 352 | 341 | 347 | 346 | 336 | 322 | 309 | 300 | 297 | 289 | 287 | 289 | 298 | 304 | 311 | 334 | 352 | 374 | 393 | 336 |
| MEAN | 443 | 470 | 483 | 459 | 436 | 409 | 389 | 374 | 356 | 328 | 298 | 266 | 242 | 228 | 219 | 209 | 207 | 213 | 221 | 242 | 281 | 320 | 364 | 402 | 327 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

Summary 1990

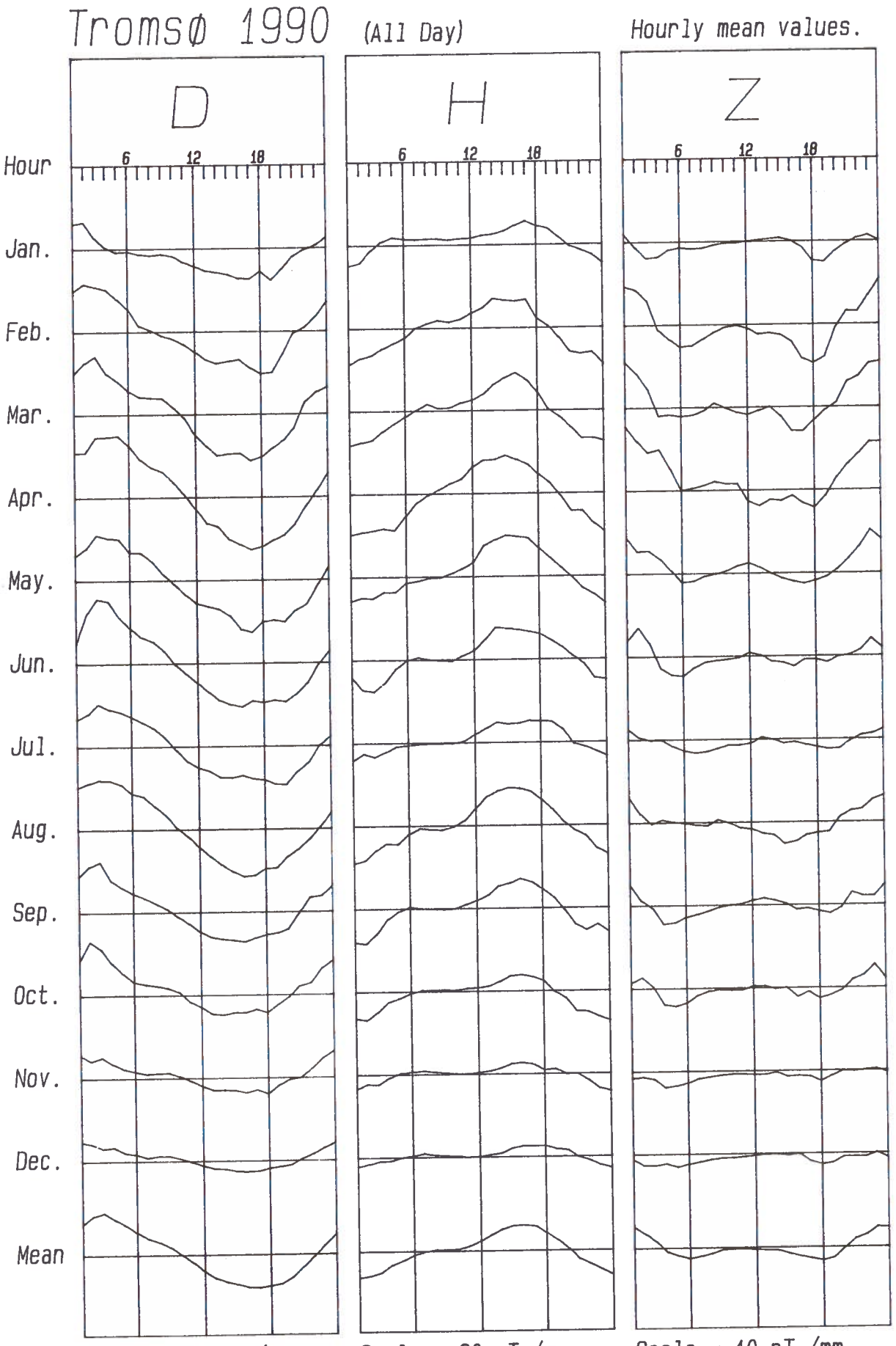
| Mnt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan. | 72 | 82 | 126 | 160 | 175 | 170 | 167 | 170 | 169 | 166 | 169 | 171 | 181 | 186 | 196 | 215 | 231 | 214 | 206 | 173 | 138 | 124 | 109 | 78 | 160 |
| Feb. | 15 | 37 | 47 | 70 | 90 | 110 | 147 | 163 | 176 | 169 | 179 | 201 | 220 | 253 | 248 | 244 | 249 | 179 | 153 | 109 | 56 | 49 | 55 | 14 | 134 |
| Mar. | 20 | 30 | 38 | 71 | 98 | 124 | 150 | 171 | 156 | 157 | 175 | 185 | 205 | 241 | 266 | 283 | 257 | 211 | 150 | 121 | 82 | 42 | 42 | 32 | 137 |
| Apr. | -1 | 6 | 13 | 21 | 15 | 67 | 114 | 141 | 161 | 184 | 200 | 243 | 268 | 270 | 284 | 269 | 252 | 216 | 186 | 137 | 80 | 80 | 37 | 7 | 135 |
| May. | 59 | 70 | 69 | 90 | 91 | 125 | 131 | 141 | 142 | 157 | 176 | 198 | 259 | 279 | 296 | 292 | 285 | 248 | 214 | 178 | 141 | 101 | 79 | 49 | 161 |
| Jun. | 78 | 37 | 31 | 62 | 114 | 146 | 156 | 148 | 143 | 141 | 161 | 180 | 219 | 264 | 259 | 256 | 247 | 240 | 218 | 192 | 157 | 128 | 76 | 71 | 155 |
| Jul. | 83 | 107 | 94 | 113 | 132 | 137 | 140 | 142 | 143 | 143 | 152 | 175 | 197 | 220 | 214 | 216 | 225 | 224 | 222 | 194 | 138 | 129 | 112 | 94 | 156 |
| Aug. | 10 | 21 | 57 | 83 | 81 | 116 | 136 | 132 | 131 | 143 | 165 | 210 | 252 | 271 | 284 | 282 | 269 | 240 | 204 | 158 | 126 | 107 | 61 | 40 | 149 |
| Sep. | 24 | 19 | 55 | 109 | 137 | 154 | 148 | 144 | 143 | 145 | 162 | 176 | 194 | 228 | 237 | 253 | 242 | 215 | 185 | 137 | 85 | 64 | 85 | 59 | 141 |
| Oct. | 48 | 43 | 71 | 108 | 122 | 141 | 151 | 151 | 153 | 151 | 157 | 159 | 166 | 181 | 201 | 206 | 197 | 183 | 142 | 119 | 71 | 69 | 51 | 37 | 128 |
| Nov. | 94 | 111 | 108 | 134 | 151 | 155 | 159 | 155 | 152 | 148 | 148 | 152 | 157 | 168 | 183 | 188 | 181 | 159 | 164 | 146 | 144 | 120 | 91 | 81 | 143 |
| Dec. | 113 | 121 | 130 | 132 | 144 | 152 | 159 | 154 | 152 | 149 | 146 | 147 | 154 | 159 | 177 | 185 | 185 | 186 | 173 | 169 | 142 | 131 | 113 | 102 | 148 |
| MEAN | 51 | 57 | 69 | 96 | 112 | 133 | 146 | 151 | 151 | 154 | 165 | 183 | 206 | 226 | 237 | 240 | 235 | 209 | 184 | 152 | 113 | 95 | 75 | 55 | 146 |

Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (All day)

Summary 1990

| Mnt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan. | 237 | 214 | 194 | 196 | 209 | 213 | 211 | 212 | 217 | 221 | 221 | 224 | 226 | 228 | 230 | 225 | 213 | 188 | 186 | 205 | 219 | 229 | 234 | 224 | 215 |
| Feb. | 293 | 287 | 268 | 214 | 197 | 183 | 185 | 197 | 209 | 219 | 222 | 217 | 206 | 208 | 205 | 193 | 161 | 153 | 164 | 218 | 248 | 247 | 276 | 305 | 219 |
| Mar. | 305 | 286 | 258 | 208 | 210 | 207 | 209 | 217 | 231 | 222 | 214 | 210 | 217 | 224 | 207 | 180 | 179 | 199 | 218 | 231 | 270 | 279 | 303 | 306 | 232 |
| Apr. | 338 | 313 | 292 | 297 | 262 | 223 | 227 | 232 | 239 | 235 | 235 | 203 | 195 | 206 | 204 | 213 | 199 | 191 | 213 | 246 | 270 | 289 | 310 | 310 | 247 |
| May. | 287 | 263 | 264 | 250 | 229 | 207 | 209 | 218 | 222 | 228 | 237 | 242 | 234 | 223 | 214 | 208 | 204 | 209 | 216 | 230 | 249 | 271 | 301 | 284 | 237 |
| Jun. | 253 | 276 | 248 | 202 | 190 | 188 | 203 | 213 | 216 | 218 | 221 | 230 | 225 | 214 | 212 | 205 | 217 | 217 | 212 | 222 | 225 | 234 | 255 | 238 | 222 |
| Jul. | 241 | 227 | 222 | 222 | 211 | 203 | 199 | 201 | 207 | 213 | 213 | 216 | 227 | 223 | 216 | 218 | 213 | 209 | 205 | 206 | 220 | 230 | 233 | 241 | 217 |
| Aug. | 267 | 239 | 221 | 228 | 224 | 222 | 219 | 217 | 228 | 222 | 213 | 211 | 203 | 200 | 184 | 188 | 200 | 204 | 206 | 233 | 244 | 247 | 264 | 271 | 223 |
| Sep. | 259 | 232 | 219 | 190 | 192 | 202 | 207 | 213 | 220 | 224 | 226 | 232 | 236 | 232 | 226 | 215 | 217 | 212 | 208 | 218 | 246 | 239 | 239 | 260 | 223 |
| Oct. | 234 | 243 | 226 | 194 | 191 | 197 | 211 | 218 | 221 | 220 | 220 | 227 | 227 | 222 | 224 | 207 | 216 | 204 | 210 | 219 | 238 | 246 | 265 | 240 | 221 |
| Nov. | 211 | 213 | 209 | 194 | 197 | 202 | 210 | 213 | 216 | 218 | 218 | 217 | 217 | 221 | 213 | 214 | 213 | 204 | 214 | 223 | 222 | 224 | 226 | 220 | 213 |
| Dec. | 213 | 203 | 203 | 206 | 200 | 205 | 209 | 213 | 216 | 216 | 218 | 220 | 222 | 222 | 220 | 222 | 209 | 203 | 206 | 217 | 217 | 217 | 224 | 215 | 213 |
| MEAN | 261 | 249 | 235 | 216 | 209 | 204 | 208 | 213 | 220 | 221 | 221 | 220 | 219 | 218 | 212 | 207 | 203 | 199 | 204 | 222 | 239 | 246 | 260 | 259 | 224 |




Scale = 2 min./mm
Baseline = 92.8min.

Scale = 20 nT./mm
Baseline = 11145nT

Scale = 10 nT./mm
Baseline = 51623nT

Tromsø

Declination. D = 1° + Tabular quantities expressed in tenths of minutes East.
Hourly mean values (Quiet mean)

Summary 1990

| Mnt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan. | 310 | 305 | 302 | 305 | 304 | 298 | 303 | 303 | 306 | 298 | 279 | 265 | 260 | 259 | 250 | 262 | 258 | 259 | 268 | 283 | 282 | 291 | 300 | 300 | 285 |
| Feb. | 305 | 300 | 310 | 308 | 305 | 306 | 326 | 319 | 310 | 292 | 281 | 261 | 271 | 267 | 277 | 287 | 287 | 281 | 282 | 290 | 295 | 299 | 314 | 316 | 295 |
| Mar. | 304 | 312 | 313 | 325 | 330 | 331 | 354 | 348 | 334 | 310 | 273 | 250 | 259 | 261 | 273 | 276 | 278 | 270 | 274 | 282 | 281 | 279 | 305 | 328 | 297 |
| Apr. | | | | 346 | 356 | 367 | 359 | 363 | 352 | 343 | 302 | 262 | | | | 271 | 281 | 280 | 271 | 262 | 266 | 296 | 296 | 299 | 309 |
| May. | 323 | 340 | 363 | 390 | 397 | 407 | 384 | 355 | 332 | 299 | 259 | 237 | 224 | 242 | 260 | 268 | 262 | 261 | 258 | 262 | 264 | 285 | 299 | 316 | 303 |
| Jun. | 354 | 363 | 378 | 398 | 405 | 415 | 395 | 384 | 347 | 315 | 274 | 252 | 243 | 247 | 247 | 260 | 272 | 271 | 256 | 255 | 250 | 285 | 313 | 344 | 313 |
| Jul. | 352 | 381 | 391 | 399 | 408 | 411 | 413 | 389 | 347 | 302 | 273 | 242 | 228 | 235 | 243 | 254 | 261 | 261 | 269 | 269 | 266 | 283 | 303 | 319 | 312 |
| Aug. | 361 | 374 | 391 | 428 | 426 | 423 | 415 | 391 | 347 | 320 | 282 | 244 | 198 | 201 | 237 | 277 | 280 | 269 | 299 | 304 | 298 | 304 | 329 | 343 | 322 |
| Sep. | 338 | 341 | 350 | 373 | 373 | 385 | 381 | 362 | 336 | 323 | 289 | 275 | 254 | 258 | 274 | 280 | 291 | 295 | 301 | 301 | 305 | 311 | 314 | 332 | 318 |
| Oct. | 338 | 344 | 349 | 360 | 356 | 356 | 362 | 360 | 351 | 333 | 303 | 287 | 283 | 282 | 290 | 292 | 302 | 304 | 309 | 314 | 317 | 314 | 315 | 328 | 322 |
| Nov. | 331 | 329 | 332 | 338 | 342 | 345 | 349 | 351 | 346 | 334 | 316 | 301 | 294 | 295 | 300 | 305 | 308 | 309 | 317 | 319 | 324 | 328 | 331 | 329 | 323 |
| Dec. | 344 | 346 | 345 | 349 | 347 | 349 | 344 | 346 | 345 | 336 | 323 | 311 | 310 | 311 | 309 | 315 | 312 | 312 | 318 | 327 | 332 | 340 | 340 | 339 | 331 |
| MEAN | 332 | 339 | 347 | 359 | 362 | 366 | 365 | 355 | 337 | 317 | 287 | 265 | 256 | 259 | 269 | 278 | 282 | 281 | 285 | 289 | 290 | 301 | 313 | 324 | 311 |

Tromsø

Horisontal intensity. H = 11000 nT + Tabular quantities expressed in nT.
Hourly mean values (Quiet mean)

Summary 1990

| Mnt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan. | 175 | 175 | 172 | 172 | 174 | 177 | 174 | 172 | 169 | 165 | 164 | 163 | 166 | 168 | 172 | 169 | 173 | 180 | 180 | 179 | 184 | 178 | 175 | 174 | 172 |
| Feb. | 165 | 162 | 163 | 172 | 172 | 172 | 176 | 176 | 168 | 160 | 156 | 160 | 157 | 162 | 165 | 166 | 167 | 168 | 172 | 171 | 169 | 167 | 163 | 160 | 166 |
| Mar. | 175 | 172 | 173 | 175 | 176 | 178 | 171 | 168 | 159 | 151 | 150 | 148 | 152 | 160 | 162 | 169 | 171 | 175 | 180 | 175 | 174 | 165 | 169 | 159 | 166 |
| Apr. | | | | 175 | 175 | 172 | 165 | 157 | 148 | 123 | 130 | 133 | | | | 175 | 173 | 172 | 177 | 179 | 171 | 178 | 185 | 177 | 164 |
| May. | 176 | 173 | 175 | 173 | 165 | 162 | 157 | 152 | 143 | 130 | 132 | 134 | 137 | 149 | 154 | 183 | 185 | 190 | 185 | 181 | 183 | 174 | 174 | 172 | 164 |
| Jun. | 175 | 176 | 179 | 170 | 165 | 159 | 153 | 145 | 137 | 128 | 128 | 137 | 151 | 159 | 164 | 178 | 174 | 180 | 189 | 183 | 177 | 160 | 153 | 160 | 161 |
| Jul. | 164 | 168 | 170 | 166 | 165 | 161 | 153 | 145 | 134 | 129 | 130 | 136 | 147 | 159 | 175 | 183 | 185 | 187 | 180 | 182 | 176 | 174 | 178 | 181 | 163 |
| Aug. | 160 | 157 | 159 | 162 | 159 | 152 | 145 | 134 | 128 | 132 | 133 | 133 | 143 | 151 | 155 | 179 | 181 | 182 | 161 | 161 | 162 | 151 | 145 | 146 | 152 |
| Sep. | 162 | 165 | 162 | 167 | 166 | 161 | 150 | 143 | 135 | 130 | 131 | 129 | 132 | 142 | 151 | 161 | 162 | 166 | 161 | 163 | 164 | 162 | 160 | 163 | 153 |
| Oct. | 157 | 156 | 157 | 157 | 158 | 158 | 155 | 152 | 145 | 137 | 134 | 134 | 142 | 148 | 152 | 160 | 161 | 161 | 160 | 161 | 160 | 163 | 164 | 163 | 153 |
| Nov. | 156 | 157 | 158 | 161 | 162 | 160 | 158 | 154 | 149 | 146 | 143 | 144 | 147 | 150 | 153 | 157 | 158 | 162 | 162 | 163 | 162 | 157 | 155 | 156 | 155 |
| Dec. | 151 | 150 | 150 | 155 | 156 | 157 | 157 | 153 | 148 | 146 | 144 | 145 | 147 | 151 | 153 | 156 | 157 | 159 | 160 | 159 | 156 | 152 | 151 | 152 | 152 |
| MEAN | 165 | 164 | 165 | 167 | 166 | 164 | 159 | 154 | 146 | 139 | 139 | 141 | 147 | 154 | 159 | 169 | 170 | 173 | 172 | 171 | 169 | 165 | 164 | 163 | 160 |

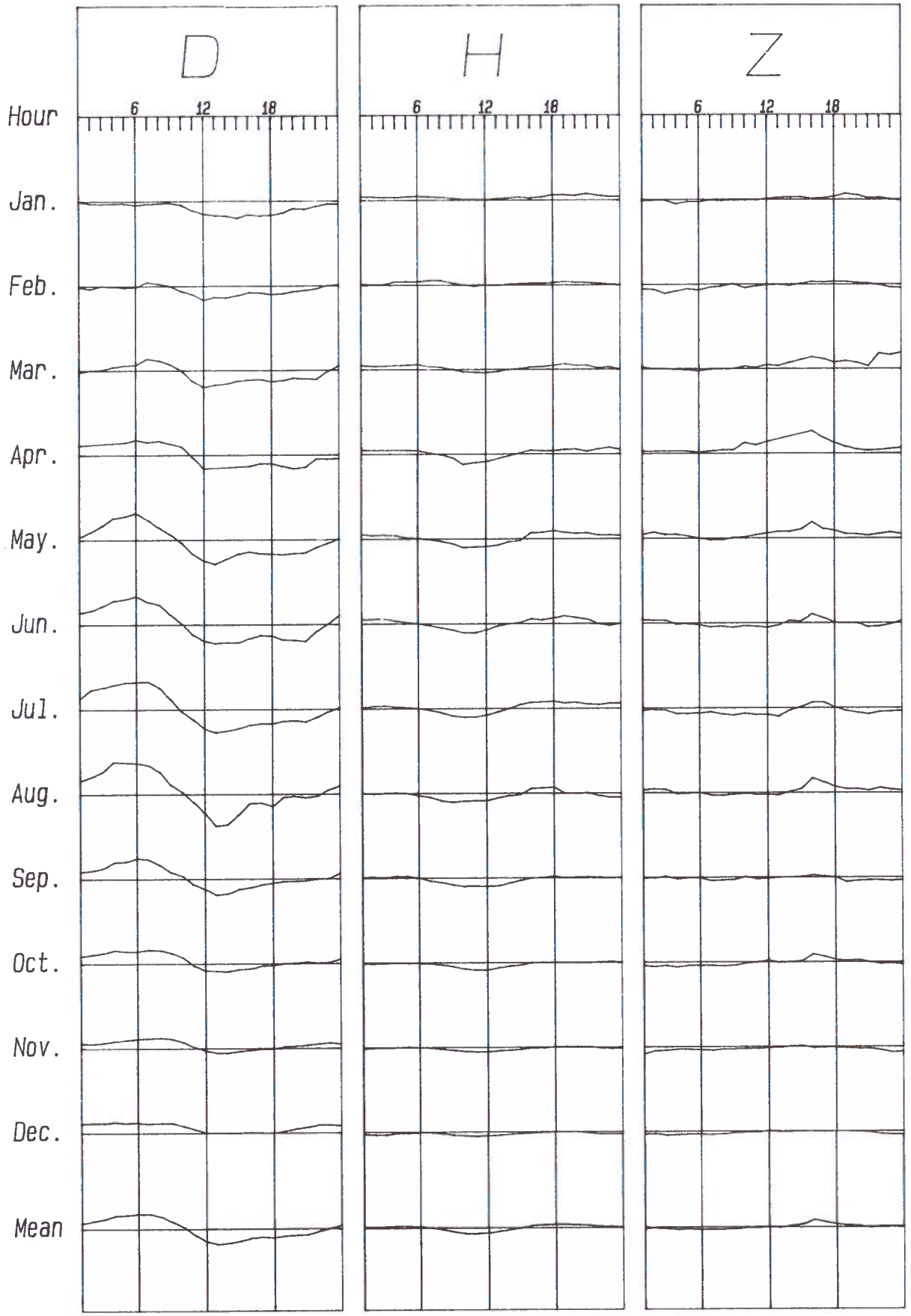
Tromsø

Vertical intensity. Z = 51400 nT + Tabular quantities expressed in nT.
Hourly mean values (Quiet mean)

Summary 1990

| Mnt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan. | 217 | 218 | 218 | 211 | 215 | 215 | 218 | 217 | 218 | 218 | 218 | 220 | 222 | 223 | 223 | 220 | 221 | 224 | 229 | 227 | 221 | 222 | 219 | 217 | 219 |
| Feb. | 210 | 209 | 202 | 206 | 210 | 208 | 213 | 215 | 219 | 212 | 215 | 217 | 218 | 216 | 219 | 223 | 222 | 223 | 223 | 221 | 220 | 217 | 213 | 212 | 215 |
| Mar. | 221 | 218 | 218 | 217 | 216 | 214 | 217 | 218 | 218 | 222 | 220 | 225 | 223 | 229 | 234 | 239 | 236 | 229 | 232 | 229 | 223 | 246 | 243 | 247 | 226 |
| Apr. | | | | 222 | 222 | 220 | 222 | 224 | 224 | 237 | 233 | 239 | | | | 258 | 246 | 237 | 230 | 225 | 223 | 224 | 226 | 228 | 230 |
| May. | 225 | 229 | 225 | 225 | 222 | 218 | 215 | 215 | 219 | 220 | 224 | 227 | 230 | 230 | 234 | 247 | 235 | 232 | 226 | 225 | 223 | 226 | 229 | 226 | 226 |
| Jun. | 224 | 223 | 223 | 216 | 217 | 215 | 211 | 212 | 210 | 213 | 212 | 210 | 214 | 222 | 221 | 234 | 227 | 219 | 218 | 218 | 211 | 212 | 216 | 222 | 217 |
| Jul. | 214 | 215 | 214 | 208 | 208 | 209 | 211 | 207 | 205 | 208 | 206 | 206 | 203 | 214 | 220 | 228 | 228 | 219 | 213 | 210 | 207 | 211 | 212 | 213 | 212 |
| Aug. | 223 | 225 | 224 | 216 | 217 | 218 | 214 | 213 | 215 | 217 | 215 | 215 | 214 | 220 | 225 | 244 | 237 | 229 | 225 | 225 | 222 | 227 | 224 | 222 | 221 |
| Sep. | 217 | 217 | 220 | 215 | 217 | 217 | 212 | 213 | 214 | 219 | 215 | 216 | 218 | 218 | 219 | 222 | 220 | 218 | 210 | 212 | 213 | 213 | 212 | 213 | 215 |
| Oct. | 212 | 210 | 212 | 209 | 212 | 212 | 212 | 211 | 212 | 216 | 218 | 221 | 217 | 218 | 220 | 232 | 228 | 222 | 220 | 222 | 218 | 215 | 216 | 214 | 216 |
| Nov. | 206 | 211 | 212 | 214 | 214 | 213 | 212 | 214 | 214 | 215 | 215 | 216 | 217 | 219 | 220 | 216 | 217 | 217 | 216 | 215 | 215 | 212 | 208 | 209 | 214 |
| Dec. | 213 | 214 | 211 | 212 | 213 | 213 | 212 | 213 | 215 | 216 | 216 | 219 | 217 | 217 | 218 | 218 | 217 | 218 | 218 | 217 | 216 | 213 | 212 | 212 | 215 |
| MEAN | 216 | 217 | 216 | 214 | 215 | 214 | 214 | 214 | 215 | 217 | 217 | 219 | 217 | 220 | 223 | 231 | 227 | 223 | 221 | 220 | 217 | 219 | 219 | 219 | 218 |

Tromsø 1990 (Quiet mean) Hourly mean values.




Scale = 2 min./mm
Baseline = 91.2min.

Scale = 20 nT./mm
Baseline = 11160nT

Scale = 10 nT./mm
Baseline = 51618nT

K-Indices for three-hour interval
Tromsø 1990
Range 2000 nT. for K = 9

| Day | January | Sum | February | Sum | March | Sum | April | Sum |
|---|---|---|---|---|---|---|---|---|
| 1 | 3 3 4 3 2 3 6 4 | 28 | 2 3 3 2 4 7 5 4 | 30 | 5 4 3 3 4 4 6 6 | 35 | 4 2 1 0 2 1 5 3 | 18 |
| 2 | 5 2 0 1 2 3 4 6 | 23 | 6 5 4 3 3 5 6 5 | 37 | 4 3 3 3 3 3 5 4 | 28 | 2 1 2 2 4 3 4 2 | 20 |
| 3 | 6 4 3 1 2 3 3 2 | 24 | 4 2 1 2 3 3 3 5 | 23 | 3 3 3 2 3 3 6 5 | 28 | 2 1 1 5 5 3 4 3 | 24 |
| 4 | 3 3 1 1 2 2 2 5 | 19 | 5 4 2 1 3 5 6 6 | 32 | 0 1 0 2 1 1 3 4 | 12 | 5 2 2 2 4 2 4 1 | 22 |
| 5 | 5 2 3 2 1 4 4 5 | 26 | 6 6 5 4 3 3 4 4 | 35 | 4 4 1 1 1 1 2 5 | 19 | 2 0 1 3 4 3 3 2 | 18 |
| 6 | 5 2 2 1 1 1 2 4 | 18 | 3 4 3 1 0 3 2 1 | 17 | 6 5 3 2 4 5 4 2 | 31 | 3 1 1 2 3 2 1 4 | 17 |
| 7 | 4 2 2 0 0 1 2 2 | 13 | 2 1 3 3 4 7 5 5 | 30 | 2 3 1 3 3 3 3 2 | 20 | 3 1 1 2 3 3 3 4 | 20 |
| 8 | 2 1 0 0 3 3 5 3 | 17 | 4 4 2 1 1 0 0 0 | 12 | 4 2 1 2 3 3 2 3 | 20 | 5 2 1 2 3 3 3 4 | 23 |
| 9 | 6 3 2 2 2 2 1 5 | 23 | 0 1 2 0 2 3 0 1 | 9 | 2 1 1 2 2 2 1 2 | 13 | 3 1 3 5 4 3 6 5 | 30 |
| 10 | 4 2 3 3 4 4 4 5 | 29 | 3 1 1 1 4 4 2 3 | 19 | 2 1 2 2 3 3 3 2 | 18 | 6 6 4 6 6 7 5 6 | 46 |
| 11 | 5 3 3 3 3 3 6 5 | 31 | 2 3 3 1 3 3 4 3 | 22 | 4 4 1 2 3 3 4 3 | 24 | 7 5 5 5 4 5 6 3 | 40 |
| 12 | 5 4 3 3 3 2 5 3 | 28 | 5 3 1 2 0 0 0 0 | 11 | 4 4 2 2 3 5 6 6 | 32 | 6 8 7 5 5 5 7 5 | 48 |
| 13 | 4 2 1 2 1 3 2 3 | 18 | 1 0 0 0 0 2 2 6 | 11 | 4 3 2 3 3 5 5 6 | 31 | 4 5 5 5 4 5 5 6 | 39 |
| 14 | 2 1 0 1 1 2 1 3 | 11 | 6 6 5 3 2 2 1 1 | 26 | 6 4 2 3 4 3 3 4 | 29 | 5 6 4 5 5 7 5 4 | 41 |
| 15 | 3 2 1 1 2 3 3 0 | 15 | 2 1 2 2 4 5 6 6 | 28 | 4 4 1 1 3 3 5 5 | 26 | 6 5 3 2 4 5 5 3 | 33 |
| 16 | 0 1 0 0 0 3 6 5 | 15 | 6 6 5 3 5 5 6 6 | 42 | 5 2 1 1 2 1 3 5 | 20 | 5 4 2 3 3 2 5 4 | 28 |
| 17 | 4 2 1 0 1 3 2 4 | 17 | 6 5 4 4 3 5 6 5 | 38 | 4 0 0 0 0 0 0 0 | 4 | 5 3 3 6 4 5 5 6 | 37 |
| 18 | 3 1 0 0 1 2 3 4 | 14 | 5 4 4 3 4 4 4 5 | 33 | 1 1 1 3 5 4 6 6 | 27 | 5 5 2 3 3 2 3 5 | 28 |
| 19 | 1 0 0 0 0 0 0 2 | 3 | 6 3 2 4 5 5 6 7 | 38 | 6 3 2 1 2 2 1 5 | 22 | 3 2 1 1 3 3 6 4 | 23 |
| 20 | 3 1 1 0 2 6 5 4 | 22 | 5 5 4 3 4 6 6 5 | 38 | 4 3 2 4 5 5 5 7 | 35 | 4 3 3 3 3 3 5 5 | 29 |
| 21 | 4 2 3 2 3 4 4 4 | 26 | 5 3 1 2 3 3 4 4 | 25 | 7 6 6 4 5 5 6 5 | 44 | 6 6 2 2 2 1 2 2 | 23 |
| 22 | 5 5 3 2 1 3 5 5 | 29 | 4 5 3 2 4 3 7 6 | 34 | 4 5 4 4 5 5 6 5 | 38 | 2 3 2 3 5 4 3 6 | 28 |
| 23 | 5 4 4 2 3 3 5 5 | 31 | 5 4 4 5 5 6 5 6 | 40 | 4 5 4 5 4 7 6 5 | 40 | 6 5 5 5 5 5 5 5 | 41 |
| 24 | 5 4 4 3 2 5 5 6 | 34 | 5 4 4 3 4 5 5 6 | 36 | 5 4 3 3 4 3 6 6 | 34 | 4 3 5 5 5 3 4 5 | 34 |
| 25 | 5 4 3 3 3 3 3 3 | 27 | 5 6 5 4 4 5 6 5 | 40 | 6 4 2 4 4 6 5 6 | 37 | 4 5 3 4 3 3 3 5 | 30 |
| 26 | 4 2 2 2 3 4 4 2 | 23 | 5 4 3 4 5 2 6 5 | 34 | 5 4 5 4 5 5 5 5 | 38 | 5 5 3 2 2 2 1 3 | 23 |
| 27 | 2 3 1 0 0 1 2 0 | 9 | 5 5 6 4 4 3 3 4 | 34 | 5 4 4 3 3 6 6 5 | 36 | 4 6 2 2 5 5 3 5 | 32 |
| 28 | 0 0 0 0 1 1 3 2 | 7 | 5 6 5 3 5 4 6 5 | 39 | 5 5 4 3 4 3 5 4 | 33 | 5 4 3 3 5 3 5 4 | 32 |
| 29 | 5 3 4 2 2 3 4 5 | 28 | | | 4 5 2 3 4 6 5 4 | 33 | 5 4 5 4 4 5 6 4 | 37 |
| 30 | 5 5 3 1 4 5 5 5 | 33 | | | 5 5 7 6 4 4 3 1 | 35 | 5 4 2 3 3 3 3 5 | 28 |
| 31 | 5 4 3 2 3 4 5 3 | 29 | | | 2 2 1 2 3 1 1 4 | 16 | | |

K-Indices for three-hour interval
Tromsø 1990
Range 2000 nT. for K = 9

| Day | May | Sum | June | Sum | July | Sum | August | Sum |
|---|---|---|---|---|---|---|---|---|
| 1 | 3 3 1 3 3 3 3 2 | 21 | 3 3 2 3 2 3 5 3 | 24 | 2 1 0 1 2 1 3 5 | 15 | 2 2 4 2 6 5 6 5 | 32 |
| 2 | 1 2 2 3 4 2 3 4 | 21 | 3 2 2 2 2 2 1 2 | 16 | 5 5 1 1 3 2 1 1 | 19 | 4 4 2 1 2 0 1 4 | 18 |
| 3 | 2 3 2 3 5 2 3 6 | 26 | 2 1 1 1 3 1 2 2 | 13 | 2 3 3 1 2 1 2 2 | 16 | 4 1 2 4 4 2 4 5 | 26 |
| 4 | 6 3 2 3 3 2 4 4 | 27 | 2 2 2 2 2 2 1 3 | 16 | 3 0 1 2 2 3 4 3 | 18 | 5 2 1 1 2 1 3 2 | 17 |
| 5 | 4 1 2 3 2 2 3 1 | 18 | 2 1 1 2 2 3 3 3 | 17 | 4 3 2 4 4 4 4 2 | 27 | 1 1 1 2 3 3 2 5 | 18 |
| 6 | 1 1 1 2 2 1 1 3 | 12 | 5 5 2 3 4 4 3 4 | 30 | 2 1 1 1 2 4 4 2 | 17 | 5 1 1 3 2 4 5 4 | 25 |
| 7 | 1 1 1 1 3 4 0 2 | 13 | 5 6 3 3 3 3 5 4 | 32 | 3 2 2 1 2 1 2 4 | 17 | 4 2 1 2 3 3 3 4 | 22 |
| 8 | 3 2 1 2 3 3 1 6 | 21 | 5 4 3 4 3 3 3 6 | 31 | 2 2 3 3 4 3 3 5 | 25 | 4 3 2 1 3 2 2 3 | 20 |
| 9 | 5 3 3 4 4 5 5 5 | 34 | 5 5 4 5 5 5 3 4 | 36 | 4 3 1 0 2 1 0 2 | 13 | 4 4 1 2 2 3 3 1 | 20 |
| 10 | 5 4 5 5 4 3 5 3 | 34 | 6 5 2 4 3 3 4 5 | 32 | 1 3 2 4 3 2 1 1 | 17 | 0 1 1 2 1 2 3 4 | 14 |
| 11 | 6 6 5 4 4 4 4 4 | 37 | 4 5 3 3 5 3 3 5 | 31 | 2 1 1 1 3 2 3 3 | 16 | 5 2 1 2 3 2 2 4 | 21 |
| 12 | 5 5 2 1 1 1 0 1 | 16 | 5 4 4 5 6 6 6 7 | 43 | 2 3 3 3 2 2 2 5 | 22 | 3 5 2 2 1 1 2 4 | 20 |
| 13 | 2 1 1 1 2 5 4 4 | 20 | 8 7 4 3 5 3 5 4 | 39 | 6 6 3 2 2 3 5 4 | 31 | 3 3 3 3 4 3 4 4 | 27 |
| 14 | 3 1 1 1 1 2 2 2 | 13 | 7 7 3 5 6 6 5 4 | 43 | 4 1 1 3 3 3 5 4 | 24 | 4 3 2 4 3 3 5 5 | 29 |
| 15 | 3 1 1 2 2 1 1 0 | 11 | 3 4 2 2 3 3 4 5 | 26 | 4 4 2 2 3 2 3 2 | 22 | 4 3 2 5 5 6 4 5 | 34 |
| 16 | 0 0 1 1 1 1 0 0 | 4 | 5 2 2 1 2 1 3 1 | 17 | 3 2 1 2 2 1 1 1 | 13 | 5 4 4 3 5 5 4 5 | 35 |
| 17 | 1 1 1 2 2 1 3 2 | 13 | 0 1 1 1 0 0 2 1 | 6 | 0 2 2 0 2 2 2 4 | 14 | 5 5 4 2 2 4 5 3 | 30 |
| 18 | 3 1 3 4 6 5 5 6 | 33 | 0 1 2 3 4 3 3 5 | 21 | 4 2 1 1 2 4 4 2 | 20 | 5 5 3 2 4 3 3 4 | 29 |
| 19 | 4 6 2 3 5 4 3 5 | 32 | 4 6 2 2 3 1 2 0 | 20 | 2 3 2 4 5 3 4 3 | 26 | 6 6 3 3 4 3 3 5 | 33 |
| 20 | 5 5 2 4 3 5 6 4 | 34 | 1 1 0 1 1 0 1 1 | 6 | 4 3 3 4 4 3 4 4 | 29 | 5 6 4 4 3 5 5 3 | 35 |
| 21 | 5 4 1 4 5 5 5 5 | 34 | 0 1 1 1 2 2 3 3 | 13 | 4 1 1 2 3 2 4 2 | 19 | 4 1 3 4 5 5 6 6 | 34 |
| 22 | 4 4 4 5 5 5 5 4 | 36 | 3 3 1 1 2 2 2 3 | 17 | 2 2 2 1 3 3 1 3 | 17 | 7 6 5 5 4 4 5 5 | 41 |
| 23 | 3 3 3 4 3 4 3 3 | 26 | 4 0 1 2 2 3 2 2 | 16 | 2 1 1 2 1 2 3 3 | 15 | 4 6 4 5 5 4 6 4 | 38 |
| 24 | 2 1 1 2 2 2 3 3 | 16 | 1 2 1 2 3 3 4 3 | 19 | 1 2 2 2 2 1 2 1 | 13 | 5 6 4 4 4 3 3 1 | 30 |
| 25 | 5 5 3 5 5 5 4 4 | 36 | 2 1 2 2 2 2 3 3 | 17 | 1 1 1 1 2 1 1 0 | 8 | 3 1 2 2 3 1 4 4 | 20 |
| 26 | 4 4 2 3 5 4 6 6 | 34 | 3 2 1 3 2 3 3 4 | 21 | 0 0 1 0 1 3 3 4 | 12 | 3 3 4 7 7 7 4 4 | 39 |
| 27 | 5 6 5 4 4 5 4 4 | 37 | 4 1 1 3 3 2 2 4 | 20 | 3 2 2 3 3 2 4 3 | 22 | 4 3 3 3 4 1 1 1 | 20 |
| 28 | 4 2 2 2 3 3 4 3 | 23 | 4 3 2 3 2 2 2 1 | 19 | 3 3 5 4 6 6 8 6 | 41 | 1 1 2 2 2 2 1 1 | 12 |
| 29 | 4 2 2 3 3 3 3 5 | 25 | 0 3 2 2 2 2 4 2 | 17 | 7 8 5 5 6 5 4 4 | 44 | 0 2 1 3 1 2 6 4 | 19 |
| 30 | 5 5 3 5 4 4 6 4 | 36 | 2 0 1 2 2 2 1 4 | 14 | 1 3 4 3 2 2 2 5 | 22 | 4 4 2 3 4 5 3 4 | 29 |
| 31 | 4 4 2 3 3 3 4 3 | 26 | | | 5 2 2 2 2 0 0 2 | 15 | 6 4 3 3 3 2 2 2 | 25 |

K-Indices for three-hour interval
Tromsø 1990
Range 2000 nT. for K = 9

| Day | September | Sum | October | Sum | November | Sum | December | Sum |
|---|---|---|---|---|---|---|---|---|
| 1 | 4 3 1 6 5 4 3 2 | 28 | 0 2 1 0 1 0 0 0 | 4 | 5 2 3 2 2 2 4 5 | 25 | 3 3 1 0 1 2 1 0 | 11 |
| 2 | | | 0 0 1 1 2 2 3 1 | 10 | 4 3 3 1 1 3 3 5 | 23 | 0 0 0 0 1 3 2 3 | 9 |
| 3 | 0 2 2 0 0 0 | | 2 1 1 1 1 1 3 5 | 15 | 3 2 1 1 2 2 3 3 | 17 | 2 0 0 0 0 3 3 5 | 13 |
| 4 | 0 0 1 2 2 4 3 5 | 17 | 3 2 1 2 3 3 6 4 | 24 | 3 1 0 1 0 1 1 0 | 7 | 5 6 2 2 3 3 4 5 | 30 |
| 5 | 4 5 2 3 3 3 2 4 | 26 | 3 3 2 2 4 2 2 4 | 22 | 0 0 0 0 0 0 0 2 | 2 | 4 1 1 3 3 4 4 3 | 23 |
| 6 | 5 1 2 3 2 3 4 3 | 23 | 3 1 3 3 3 2 3 4 | 22 | 0 0 0 0 0 0 0 2 | 2 | 2 2 2 1 2 2 2 3 | 16 |
| 7 | 3 4 2 4 4 5 3 3 | 28 | 3 1 1 1 3 2 4 5 | 20 | 0 0 0 0 1 3 2 4 | 10 | 3 3 2 0 0 1 0 1 | 10 |
| 8 | 3 3 1 2 1 3 5 6 | 24 | 4 0 0 1 2 2 0 1 | 10 | 3 0 2 1 1 3 4 4 | 18 | 0 0 1 1 3 3 3 4 | 15 |
| 9 | 5 2 1 3 2 3 5 4 | 25 | 1 1 0 0 2 3 4 6 | 17 | 4 4 2 1 1 4 4 4 | 24 | 2 1 0 0 3 2 3 2 | 13 |
| 10 | 5 2 2 0 0 1 5 5 | 20 | 6 6 4 4 3 5 4 3 | 35 | 5 4 2 2 4 4 5 5 | 31 | 0 0 0 0 0 0 2 0 | 2 |
| 11 | 4 3 2 5 4 5 5 6 | 34 | 7 4 5 4 4 5 6 6 | 41 | 5 3 3 2 3 1 2 3 | 22 | 0 0 0 0 0 1 1 0 | 2 |
| 12 | 4 2 3 3 4 5 5 | | 5 5 5 3 4 3 6 5 | 36 | 3 1 0 1 1 1 1 2 | 10 | 0 0 0 0 0 4 4 5 | 13 |
| 13 | 6 4 1 3 4 4 3 5 | 30 | 4 4 3 3 3 3 6 5 | 31 | 3 1 1 0 0 1 1 1 | 8 | 5 4 3 3 1 1 2 4 | 23 |
| 14 | 5 5 2 3 4 3 5 5 | 32 | 5 4 3 2 3 4 5 6 | 32 | 1 0 0 0 0 0 0 0 | 1 | 4 3 1 1 1 3 1 1 | 15 |
| 15 | 5 6 4 4 4 4 5 4 | 36 | 6 3 3 3 4 5 7 5 | 36 | 0 0 0 0 0 0 2 2 | 4 | 1 2 2 2 0 2 3 3 | 15 |
| 16 | 5 4 3 4 5 4 3 4 | 32 | 4 3 3 2 3 2 5 6 | 28 | 1 2 3 3 4 4 4 5 | 26 | 3 2 1 1 2 3 3 2 | 17 |
| 17 | 5 4 2 2 2 2 5 6 | 28 | 4 2 2 1 0 0 1 2 | 12 | 3 3 1 3 4 5 4 4 | 27 | 1 3 0 0 0 3 3 2 | 12 |
| 18 | 2 2 2 4 4 5 5 5 | 29 | 1 0 1 1 3 3 4 3 | 16 | 5 3 2 2 4 4 4 6 | 30 | 3 0 0 0 1 2 0 0 | 6 |
| 19 | 6 4 3 2 2 4 5 5 | 31 | 4 5 2 3 2 1 4 4 | 25 | 5 4 2 2 0 3 2 5 | 23 | 0 0 0 0 0 0 0 0 | 0 |
| 20 | 5 2 1 2 2 3 5 6 | 26 | 2 2 1 3 4 5 6 5 | 28 | 2 1 2 1 0 0 1 3 | 10 | 0 1 0 2 3 5 5 4 | 20 |
| 21 | 4 3 2 3 3 3 5 5 | 28 | 3 3 3 2 2 2 3 3 | 21 | 3 4 1 1 2 2 3 3 | 19 | 1 0 0 0 0 1 2 2 | 6 |
| 22 | 5 4 4 2 4 5 6 5 | 35 | 4 4 2 1 3 2 1 1 | 18 | 1 0 0 0 0 0 3 0 | 4 | 0 0 1 0 0 0 0 0 | 1 |
| 23 | 5 4 3 2 3 4 2 2 | 25 | 2 1 0 1 1 2 4 6 | 17 | 0 0 0 0 1 3 3 4 | 11 | 0 0 1 1 0 1 0 5 | 8 |
| 24 | 3 2 3 3 3 5 4 3 | 26 | 6 6 3 3 4 4 5 3 | 34 | 3 1 0 0 0 0 0 1 | 5 | 2 2 2 2 4 4 5 5 | 26 |
| 25 | 4 4 2 3 1 2 6 5 | 27 | 5 3 2 1 2 0 2 4 | 19 | 0 0 0 0 0 0 4 3 | 7 | 3 4 3 2 2 3 4 3 | 24 |
| 26 | 3 2 2 2 3 3 6 3 | 24 | 3 0 0 3 2 3 5 4 | 20 | 4 3 1 0 3 3 0 4 | 18 | 3 1 0 0 0 0 0 0 | 4 |
| 27 | 4 3 2 2 2 1 3 3 | 20 | 2 3 1 1 2 3 3 4 | 19 | 5 5 3 2 3 7 6 3 | 34 | 2 3 1 1 2 1 0 3 | 13 |
| 28 | 4 3 1 2 2 0 2 4 | 18 | 4 1 2 2 0 0 0 0 | 9 | 4 5 4 3 1 3 6 3 | 29 | 2 1 1 0 0 0 2 1 | 7 |
| 29 | 5 2 0 1 1 0 3 4 | 16 | 0 1 0 1 1 4 5 4 | 16 | 2 3 1 0 0 0 2 3 | 11 | 1 0 0 0 0 3 2 1 | 7 |
| 30 | 4 0 0 0 0 1 3 2 | 10 | 6 5 2 2 2 2 3 5 | 27 | 3 2 0 1 3 3 3 4 | 19 | 3 2 2 2 0 0 1 0 | 10 |
| 31 | | | 4 4 4 3 4 6 6 4 | 35 | | | 0 0 0 0 4 4 5 4 | 17 |

# Sudden Commencements

## Tromsø 1990

### January

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 05 | 1609: | ssc | B | + | + | - |
| 08 | 1451: | ssc* | A | +* | -* | - |

### February

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 13 | 1715: | ssc | A | + | - | - |
| 19 | 1857: | ssc | B | - | - | + |

### March

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 04 | 1903: | ssc | A | + | - | - |
| 12 | 1503: | ssc* | A | +* | -* | - |
| 14 | 0951: | ssc* | A | +* | +* | + |

### April

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 09 | 0842: | ssc* | A | +* | +* | +* |
| 26 | 2142: | ssc | B | - | + | - |

### May

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 25 | 0004: | ssc* | B | - | +* | + |
| 30 | 1808: | ssc | B | - | + | + |

### June

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 10 | 2139: | ssc | B | - | + | + |
| 13 | 1415: | ssc* | A | -* | -* | -* |
| 18 | 2100: | ssc | B | + | + | - |
| 21 | 2004: | ssc* | A | -* | -* | +* |
| 25 | 1927: | ssc* | B | +* | +* | - |
| 29 | 0343: | ssc* | A | + | -* | - |

### July

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 10 | 0445: | ssc* | A | + | -* | +* |
| 10 | 1118: | ssc* | A | -* | -* | +* |
| 12 | 2339: | ssc* | A | +* | + | - |
| 14 | 1900: | ssc | A | - | - | + |
| 28 | 0331: | ssc* | A | +* | -* | - |

### August

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 01 | 0742: | ssc* | A | -* | -* | +* |
| 09 | 2320: | ssc | B | - | + | + |
| 11 | 2031: | ssc* | A | - | +* | - |
| 16 | 2120: | ssc* | A | - | +* | + |
| 26 | 0542: | ssc* | A | +* | -* | -* |

### September

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 10 | 2029: | ssc* | A | - | +* | -* |
| 20 | 2012: | ssc | B | - | - | + |
| 23 | 1945: | ssc | B | - | + | + |

### October

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 09 | 1806: | ssc | A | - | - | + |
| 13 | 1954: | ssc | A | - | - | + |
| 19 | 2024: | ssc* | A | - | -* | + |
| 20 | 1859: | ssc* | A | - | -* | + |
| 21 | 2156: | ssc* | A | +* | - | - |
| 23 | 2000: | ssc* | A | - | +* | + |
| 26 | 1136: | ssc* | A | +* | -* | - |

### November

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|
| 01 | 2051: | ssc* | A | +* | +* | -* |

### December

| Day | Time | | | D | H | Z |
|---|---|---|---|---|---|---|

# Sudden Impulses

## Tromsø 1990

| January | | | | | February | | | | | March | | | | | April | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | Time | | D | H | Z | | | | | Day | Time | | D | H | Z | Day | Time | | D | H | Z |
| 31 | 2206: | si | A | - | - | + | | | | 08 | 2056: | si | A | - | - | - | 01 | 1942: | si | B | + | + | - |

| May | | | | | | June | | | | | | July | | | | | | August | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | Time | | D | H | Z | Day | Time | | D | H | Z | Day | Time | | D | H | Z | Day | Time | | D | H | Z |
| 06 | 2118: | si | A | - | - | + | | | | | | 07 | 2154: | si | A | - | - | - | 10 | 2346: | si | B | - | + | + |
| | | | | | | | | | | | | 11 | 1957: | si | A | - | + | + | 29 | 1121: | si | A | - | + | + |

| September | | | | | October | | | | | November | | | | | December | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Day | Time | | D | H | Z | Day | Time | | D | H | Z | Day | Time | | D | H | Z | Day | Time | | D | H | Z |
| | | | | | | | | | | | | 02 | 2118: | si | B | + | + | - | 23 | 2204: | si | B | - | - | + |
| | | | | | | | | | | | | 04 | 1839: | si | A | + | + | + | | | | | | | |

*Tromsprodukt A/S*