Atmospheric
Measurement
Techniques

*Supplement of*

# A hybrid method for reconstructing the historical evolution of aerosol optical depth from sunshine duration measurements

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**Table S1**. Computed monthly burning thresholds for all stations

| Station name | Burning threshold for each month | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | J | F | M | A | M | J | J | A | S | O | N | D |
| Munich University | 242 | 174 | 155 | 157 | 194 | 189 | 203 | 184 | 138 | 127 | 208 | 208 |
| Ispra | 543 | 370 | 310 | 298 | 459 | 550 | 514 | 498 | 334 | 269 | 515 | 548 |
| Montsec | 617 | 429 | 399 | 436 | 441 | 420 | 446 | 305 | 384 | 421 | 801 | 672 |
| Valladolid | | | 281 | 527 | 518 | 409 | 376 | 457 | 351 | 513 | 455 | |
| Zaragoza | 295 | 235 | | | | 290 | 259 | 260 | 315 | 251 | 254 | 554 |
| Barcelona | 96 | 57 | 386 | 333 | 320 | 345 | 312 | 269 | 392 | 330 | 87 | 126 |
| Palma de Mallorca | | | | | | 342 | 235 | 290 | | | | |
| Burjassot | 276 | 151 | 163 | 202 | 143 | 190 | 173 | 163 | 134 | 153 | 232 | 312 |
| Caceres | 486 | 466 | 380 | 350 | 275 | 251 | 263 | 265 | 403 | 438 | 510 | 552 |
| Badajoz | 686 | 339 | 413 | 248 | 231 | 191 | 227 | 237 | 293 | 348 | 405 | 638 |
| Murcia | 317 | 244 | 402 | 127 | 173 | 159 | 148 | 178 | 249 | 302 | 377 | 345 |
| Granada | 469 | 456 | 491 | 338 | 223 | 237 | 180 | 189 | 360 | 403 | 428 | 425 |
| El Arenosillo | 391 | 395 | 417 | 390 | 316 | 310 | 297 | 226 | 343 | 425 | 368 | 388 |
| Malaga | 526 | 408 | 406 | 352 | 322 | 280 | 283 | 289 | 311 | 355 | 450 | 526 |
| Santa Cruz Tenerife | 301 | 398 | 296 | 344 | 196 | 158 | 142 | 151 | 155 | 151 | 178 | 462 |
| Izana | 461 | 443 | 463 | 408 | 431 | 256 | 93 | 83 | 230 | 469 | 423 | 453 |