Method statement: Calibration Weather Set

EPW.tools, Utes Analytics LLC. Weather files for calibrating a building model to utility bills (M&V).

Site: Denver Airport, latitude 39.8561, longitude -104.6737. Years: 2022, 2023, 2024. Order sample, statement drawn 2026-11-22 18:26 UTC.

How each year was made

Each year is an actual (not typical) year at the site: the hourly reports of the station named below, moved to the ground height of the site, with every missing or failed hour filled from reanalysis that was first shifted to agree with the station's own hours. Each file was then finished and checked the same way as every EPW.tools single-year file (methodology: epw.tools/methodology).
Gap filling: NASA MERRA-2 reanalysis (POWER) shifted to the station.
Satellite sun: used for 2022, 2023, 2024.

Year by year

2022: Denver International Airport (72565), 1 km from the site, 100 % of hours from the station. Sun: NREL NSRDB (satellite).
Checks: file-set check passed; provenance record matches the file.
2023: Denver International Airport (72565), 1 km from the site, 100 % of hours from the station. Sun: NREL NSRDB (satellite).
Checks: file-set check passed; provenance record matches the file.
2024: Denver International Airport (72565), 1 km from the site, 100 % of hours from the station. Sun: NREL NSRDB (satellite).
Checks: file-set check passed; provenance record matches the file.

File fingerprints (SHA-256 of each file as downloaded)

Confirm a file with: sha256sum <file> (Linux, macOS) or certutil -hashfile <file> SHA256 (Windows). The same list is in SHA256SUMS.txt in the set.

```
037fb7a28760403ca4257482448e966f020c898665d4890ba8432570e59ddda2  Denver_Airport_2022.epw
fdfbc50d66e9dfbc2cfd6d228757c7e50c66ac829e0d2ec6a18596d90d4e9918  Denver_Airport_2022.ddy
ad42749a94777b6ff5b7e8dd7731f5a5cdcd22f0209907eeee2dd1f41e218243  Denver_Airport_2022.stat
b5b8abc2252482ef3ec608dc151a19f9dbe5939c3e53c01bc3ad5c71358b1283  Denver_Airport_2022.bin
1739a59e4f34441aa01aa5a9e706e69fcbf9cfe0d27430617a76ff3bd7874977  Denver_Airport_2022.csv
03f5d78ae2aab2562889a9b73fd0e821b32a28d2a3b4b6caa33b1b26b8f7094c  Denver_Airport_2023.epw
fe346baa3a0a044a4d123c473490ed8164b9e4424bc9a2d4d37ec7a874637360  Denver_Airport_2023.ddy
97b6422a81e599c8e6b53074cbed8ec7947c15980d7d0a653cedabc3ed790846  Denver_Airport_2023.stat
6b261e7b542dd4108f2e8e92680714689d281d7ef643049b3716400b70def51b  Denver_Airport_2023.bin
caffb14546244bdde37e07c0be32c9c245387f691eed2fdecd59fe926d06ae6e  Denver_Airport_2023.csv
df594add0ade3fbd79a259e2656a9351b4ec5defa01f77b747dde43522ca79bf  Denver_Airport_2024.epw
abb1ee66528c042cdca596e5bfb52be643e9cf468275f231b26030d1f6085934  Denver_Airport_2024.ddy
6cc4294a9283949471300fcebdca2bef39fc1a596123b515687565455a41ce82  Denver_Airport_2024.stat
247fa57e3980aadf070227d0c36ef7388ec1a82e6a7e65fb9d29bf01d27bc59f  Denver_Airport_2024.bin
912f2a2ff31b136a393a4bd4af5baef3a6fa81e1eba5f4fb8e1618175c0133c0  Denver_Airport_2024.csv
```