Compliance sheet — star-tdb

Everything a supplier qualification, a legal review or an export check usually asks about star-tdb 0.1.1, in one document.

1. Identity

Document	STAR-PKG-STAR-TDB-EN · v2.3 · 2026-11-14
Package	star-tdb
Version	0.1.1
Capability	star.time.tdb
Maturity	Beta (VERIFIED)
Python	>=3.9
Source commit	dc09f61d
Source	https://github.com/Andrea07072000/S.T.A.R.-/tree/main/packages/star_tdb

2. Licence and obligations

Apache License 2.0. You may use, copy, modify and distribute it, also commercially, and you receive a patent licence from the contributors. When you redistribute it: keep the LICENSE file and the copyright notices (and a NOTICE file, if a future version adds one), and state in modified files that you changed them. You may not use the S.T.A.R. name to endorse your product.

3. What it needs at run time

Nothing beyond the Python standard library: it works offline.

4. Integrity

SHA-256 fingerprints of the files published on this website. Check a downloaded file with:

```
python -c "import
hashlib,sys;print(hashlib.sha256(open(sys.argv[1],'rb').read()).hexdigest())" star_tdb-0.1.1-
py3-none-any.whl
```

FILE	SHA-256
star_tdb-0.1.1-py3-none-any.whl	e862b5d57ea3ff94e409195e888c6447e0dc7e0 65e85e3af1b9d17a7ca104e85
star_tdb.py	126fafbabc0d9fd6e288042c8abbb282516c5ac 9859485d09a12688d4d642e35
star_tdb-0.1.1-source.zip	6c61f97c5ddf27f29835f88a2a70f36f7b74536 5feeeb307c064a06a8020aed1

5. What it does, and its limits

TDB - TT for a TT Julian date, geocentre. Standard library only.

Topocentric terms (observer position), sub-microsecond accuracy, dates outside 1600-2200.

- `tdb_minus_tt(jd_tt) -> seconds`, USNO Circular 179 (Kaplan 2005) eq. 2.6, 7 terms.
- Accuracy within 10 microseconds of the full Fairhead & Bretagnon series over 1600-2200.
- Outside 1600-2200 raises `ValueError` (no extrapolation beyond stated validity).

6. Export, use and certification

The package is published and freely available. That usually takes software out of export-control lists, but not every use of it: read the page on space activities and export control before using it in a controlled programme. It is not certified or qualified for flight; the evidence describes what was tested and how.

7. Citation and bill of materials

```
@software{cavazzini_star_tdb_0_1_1,
  author  = {Cavazzini, Andrea},
  title   = {{star-tdb}: TDB - TT with the USNO Circular 179 series, verified against ERFA
```

```
  full series within 10 microseconds},
    version = {0.1.1},
    year    = {2026},
    url     = {https://andrea07072000.github.io/S.T.A.R.-/software/star_tdb/},
    note    = {Apache-2.0. Source: https://github.com/Andrea07072000/S.T.A.R.-, commit dc09f61d}
  }
```

CITATION.cff · BibTeX · SBOM CycloneDX 1.5 · SBOM SPDX 2.3

8. Warranty and liability

Provided "as is", without warranties or conditions of any kind (Apache License 2.0, sections 7 and 8), to the extent the law allows. This never excludes liability that the law does not allow to exclude.

Related: space activities and export control · acceptable use · evidence and limits · licence texts