Compliance sheet — star-timecode

Everything a supplier qualification, a legal review or an export check usually asks about star-timecode 0.1.0, in one document.

1. Identity

Document	STAR-PKG-STAR-TIMECODE-EN · v2.3 · 2026-11-14
Package	star-timecode
Version	0.1.0
Capability	star.time.ccsds-ascii-timecode
Maturity	Released & Verified (RELEASED)
Python	>=3.9
Source commit	dc09f61d
Source	https://github.com/Andrea07072000/S.T.A.R.-/tree/main/packages/star_timecode

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_timecode-
0.1.0-py3-none-any.whl
```

FILE	SHA-256
star_timecode-0.1.0-py3-none-any.whl	53ce07840dfd001c33f88d2c708da68791 4a6f10813d023a0673d34a993ff8da
star_timecode.py	f19c8b3847601f8c18582d864cfdf47af2 55186e70e0ebd52533146350271c50
star_timecode-0.1.0-source.zip	179237676e3e820e68dc2fd696a611c372 1ec2ecc81015543ade13dd4f4869f5

5. What it does, and its limits

Strict reader and writer of the CCSDS 301.0-B-4 ASCII time codes A (calendar) and B (day of year), with the fraction kept as its digits; fields equal to CPython datetime and numpy.datetime64 on 600 instants and to astropy on the 331 between 1900 and 2100; refuses all 40 malformed or out-of-range texts of the corpus, of which the ISO parsers of those libraries accept 10 to 14.

Syntax and calendar only. Second 60 is accepted at 23:59 of any date: whether a leap second really occurred there is a question for a leap-second table (see `star_timescales` in this repository), not for this module. No time zones or offsets (the codes are UTC), no truncated forms (date only, no seconds), no conversion to seconds, Julian dates or other time scales, no years before 0001 or after 9999. The limit of 12 fraction digits is this module's, not the standard's.

- `parse(text)` accepts code A `YYYY-MM-DDThh:mm:ss[.d...][Z]` and code B `YYYY-DDDThh:mm:ss[.d...][Z]` and returns (year, month, day, hour, minute, second, fraction). The fraction is returned as its string of digits (up to 12): nothing passes through a float, and a code read and written again is the same text.
- `format_a` and `format_b` write the two codes from the same fields; `day_of_year` and `month_day` convert between the two date forms with the Gregorian leap-year rule, years 0001 to 9999.
- Measured on 600 instants written in both codes: calendar fields, microseconds and day of year equal to CPython `datetime` and `numpy.datetime64` on all 600 and to astropy on the 331 between 1900 and 2100. Of 40 malformed or out-of-range texts, all 40 are refused.
- Every function returns its result or raises `ValueError`: wrong shape (widths, separators, case, spaces, signs, offsets, non-ASCII digits), a date or time that does not exist, second 60 anywhere but 23:59, arguments of the wrong type.

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_timecode_0_1_0,
  author  = {Cavazzini, Andrea},
  title   = {{star-timecode}: CCSDS ASCII time codes A and B, strict},
  version = {0.1.0},
  year    = {2026},
  url     = {https://andrea07072000.github.io/S.T.A.R.-/software/star_timecode/},
  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.

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