

Ayanamsa Handling

- **Skyfield:** Does **not include Ayanamsa tables**. You have to manually subtract an approximate value.
- **Swiss Ephemeris:** Implements **all major Ayanamsa types** (Lahiri, Raman, Krishnamurti, etc.) accurately over centuries.

Impact: Even a small error (0.5°–1°) can shift the **Nakshatra, Tithi, or Lagna**, leading to an **incorrect Vedic chart**.

Nakshatra & Tithi Calculations

- Nakshatra = Moon's sidereal longitude / 13°20'
- Tithi = (Moon – Sun) angular difference / 12°
- Skyfield provides Moon & Sun positions **tropically**, so without precise sidereal correction, Nakshatra/Tithi can be **off by one full day**.
- Swiss Ephemeris handles **sidereal conversion and planetary motion adjustments** automatically.

House / Lagna Accuracy

- Lagna requires **local sidereal time, latitude, and Ayanamsa**.
- Skyfield gives sidereal time but doesn't calculate **Ascendant / house cusps** directly.
- Swiss Ephemeris has tested functions (swe_houses()) for **Lagna & 12 houses**, used professionally for decades.

Impact: Manual Lagna calculations with Skyfield are prone to **errors in horizon intersections or obliquity corrections**.

Historical / Retrograde Accuracy

- Skyfield: Planet positions are precise astronomically, but applying **Vedic conventions retroactively** (historical Ayanamsa) is tricky.

- Swiss Ephemeris: Supports **thousands of years of historical data** with accurate precession & Ayanamsa tables.
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6 Calendar & Time Zone Adjustments

- Skyfield: Gives UTC or local time conversion, but **does not handle Vedic day changes** (sunrise-based day change).
- Swiss Ephemeris + Panchang logic: Handles **sunrise, lunar months, tithis** properly.