

Charts WG Report to UTC #184

July 18, 2025

Liang Hai, UTC Charts Working Group

Meetings since the last report: May 2, May 16, May 23, July 18.

Participants:

- Asmus Freytag
- Jan Kučera
- Ken Whistler
- Liang Hai (vice-chair)
- Michel Suignard (chair)
- Richard Ishida

Table of contents:

1. [Infrastructure improvements](#)
2. [Public feedback](#)
3. [Glyph errata process](#)
4. [Version 17.0 beta recap](#)
5. [Version 17.0 plan](#)
6. [Version 18.0 plan](#)

1. Infrastructure improvements

As part of the 17.0 beta preparation, Liang developed tooling to do pixel-based diffing between chart PDFs (as page-by-page PNGs). This improves the reliability of the reproduction process.

Chart index pages, both the [standard one](#) and the [French one](#), are now source controlled. Their maintainer Richard Ishida has joined the WG.



2. Public feedback

The Charts WG received a late feedback that **the dot in U+FB30 HEBREW LETTER ALEF WITH MAPIQ** should be above the baseline and not below. The current glyph dates from Unicode 3.0. We have proposed a glyph erratum notice below and will update the charts for 17.0.

- **Action item for Michelle Perham, UTC:** Post the glyph erratum notice proposed in Section 2 of document L2/25-188, for Unicode Version 17.0.
- **Action item for Michel Suignard, CHARTS:** Correct the representative glyph of U+FB30 so the dot is above the baseline, based on Section 2 of document L2/25-188, for Unicode Version 17.0.

Proposed glyph erratum notice:

In the published code charts for Version 3.0 through 16.0, the representative glyph for U+FB30 is incorrect. The dot should be placed above the baseline. The incorrect and correct representative glyphs are shown in the images below. The representative glyph will be updated in a future version of the standard. See **184-A???**.

Incorrect	
Correct	 (as shown in Unicode 2.0)

Original feedback from Mark David:

In chart for FBxx the glyph shown for U+FB30 is wrong. The diacritic component of this precomposed character (equivalent to U+05BC

HEBREW_POINT_DAGESH_OR_MAPIQ) is a dot always intended to be placed somewhere in the middle of its base character above the baseline. However, in the glyph for this Unicode 16.0 chart, it is placed below the baseline and horizontally centered, such that it looks exactly like the diacritic U+05B4 HEBREW_POINT_HIRIQ, which is wrong. Here's an image of how it looks in Unicode 16.0 chart with URL <https://www.unicode.org/charts/PDF/UFB00.pdf>. Notice the dot is below the baseline (which coincides with the bottom of the alef base character).

FB30 א HEBREW LETTER ALEF WITH MAPIQ
≡ 05D0 א 05BC ׀

Here's how it looks in a typical font, Noto Sans, Regular weight, as rendered in FontBook. Notice the dot is above the baseline.



3. Glyph errata process

The Charts WG notes to the UTC that it should formally own all glyph errata.

Many glyph issues can be resolved as technical. Where it's unclear what the correct glyph should be, the Charts WG will seek input from other WGs such as the Script Encoding WG and CJK & Unihan WG.

4. Version 17.0 beta recap

For the first time, Jan and Liang successfully reproduced the charts from the repo, where Michel maintains the source files. Extensive notes were taken during the attempt, and will be documented in the repo.

Liang deployed the charts to the website, in coordination with Gregg.

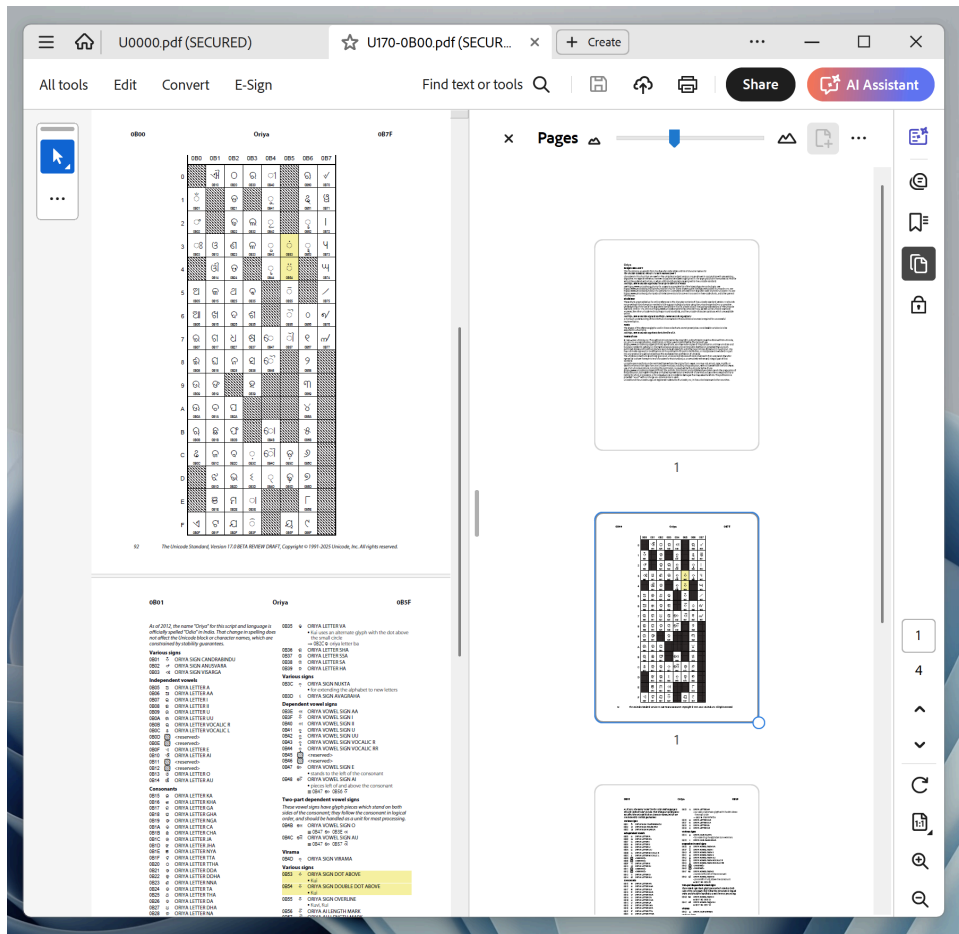
Michel is processing beta feedback regarding glyph updates for new repertoire, hieroglyphs, and Unihan. See [L2/25-186](#) for details about Unihan glyph corrections.

5. Version 17.0 plan

Based on our close examination of the charts during the 17.0 beta reproduction process, we plan to implement the following page format changes for 17.0:

- Each page will have its content horizontally centered and therefore have symmetrical left and right margins. The footer’s format will be stable between odd and even pages.
 - Currently, as optimized for bookbinding, the left and right margins are asymmetrical in order to leave a “gutter” between the left and right pages, and the footer has also been formatted differently on left and right pages.
 - Such practices are no longer relevant and cause unnecessary shifting of the content between odd and even pages.
- The PDF logical page numbers (also known as “/PageLabels”) will be corrected to match the printed page numbers visible in the footers.
 - Since at least [Version 5.1](#), the logical page numbers start from 1 on the second page, causing an off-by-one error for all the pages except the cover page. It’s been confirmed that this is not intentional.

The current off-centered content (asymmetrical horizontal margins) and mismatching logical page numbers are both visible in this screenshot:



6. Version 18.0 plan

Michel plans to migrate to new chart fonts for certain scripts:

- Latin, Cyrillic, Greek: Times New Roman, licensed from Microsoft
- Armenian: [Noto Serif Armenian](#), OFL