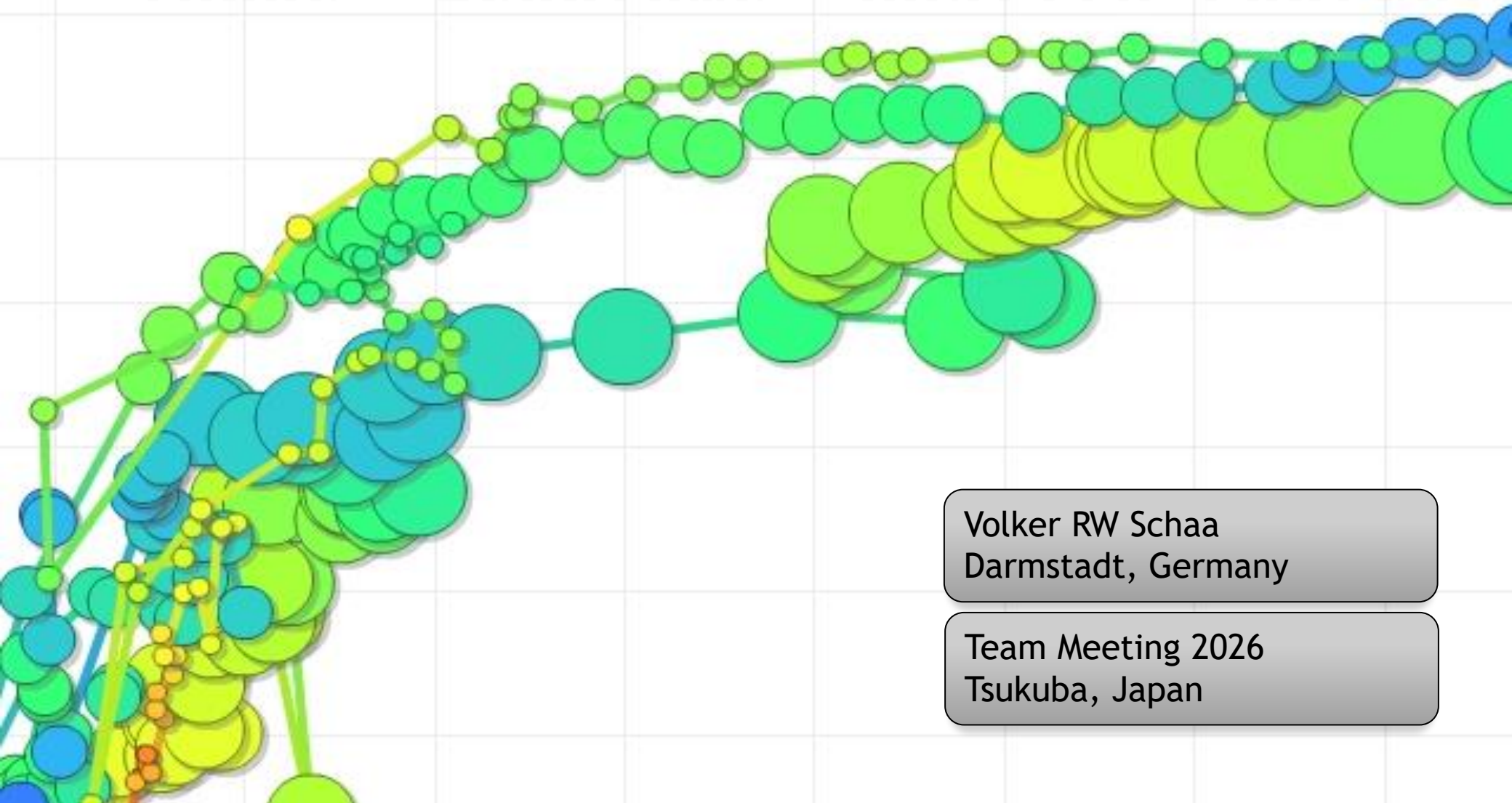
* Trends in Paper Submission: Types, Problems, Quality Control



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Team Meeting 2026
Tsukuba, Japan

Overview

Over the years within JACoW each conference and their authors saw a shift in preferred platforms, file types, and accuracy of submissions.

This talk will investigate and make comment on these evolving trends in

- accuracy of submissions, and
- changes in file type for conferences.

Overview

What kind of changes took place will be shown based on data of the last 22 years [2004—2026] (where available) for

- accuracy of submissions, and
- changes in file type for conference series.

Data shown for 2020 and 2021 are all from virtual conferences with editors around the world without the luxury of having recently attended a Team Meeting or one of the bigger conferences as trainees. Therefore a tendency to more ‘common’ error descriptions (and codes) can be observed. Nevertheless problem areas are still identifiable.

* Changes

Changes in

- accuracy of submissions
- Better and Worse

H:\JACoW\error\error-codes-20220912.txt 12 September 2022 11:08

FC Files related Codes
FP Font Problems
MP Miscellaneous/Minor Problems
TC Title/Table/Text formatting Codes
UT Use of Template

Codes referring to Files
FC00 General Problems with files
FC01 PS/EPS/PDF/source or supporting file missing; file wrongly named
FC02 Problem with pictures (too big, color conversion in PDF fails, lines/colors disappearing, numbers not readable, internal problems)
FC03 Bib(La)TeX: wrong reference type, bib field or bib field content, missing bib field
FC04 Multiple or Unusable Files
FC05 Bad EPS/PS/PDF: Scale to fit; Colour image printed B/W; PostScript/EPS doesn't distill
FC06 LaTeX error: not compilable, package missing, multiply defined labels, or other info
FC10 full page image, no text

Codes referring to Font Problems
FP00 General Problems with Fonts
FP01 Font Problems (wrong or missing font, Type3/bitmap font as main text, too many fonts>50)
FP02 Font Problems (missing character, unknown glyph, unknown encoding: PDF doesn't contain readable text for search/export)

Codes referring to Miscellaneous Minor Problems
MP00 Miscellaneous Problems
MP01 Status set to RED to enable re-upload
MP02 Spelling Corrections
MP03 Too many pages, blank pages
MP04 Comments to the Author/Editor in Chief

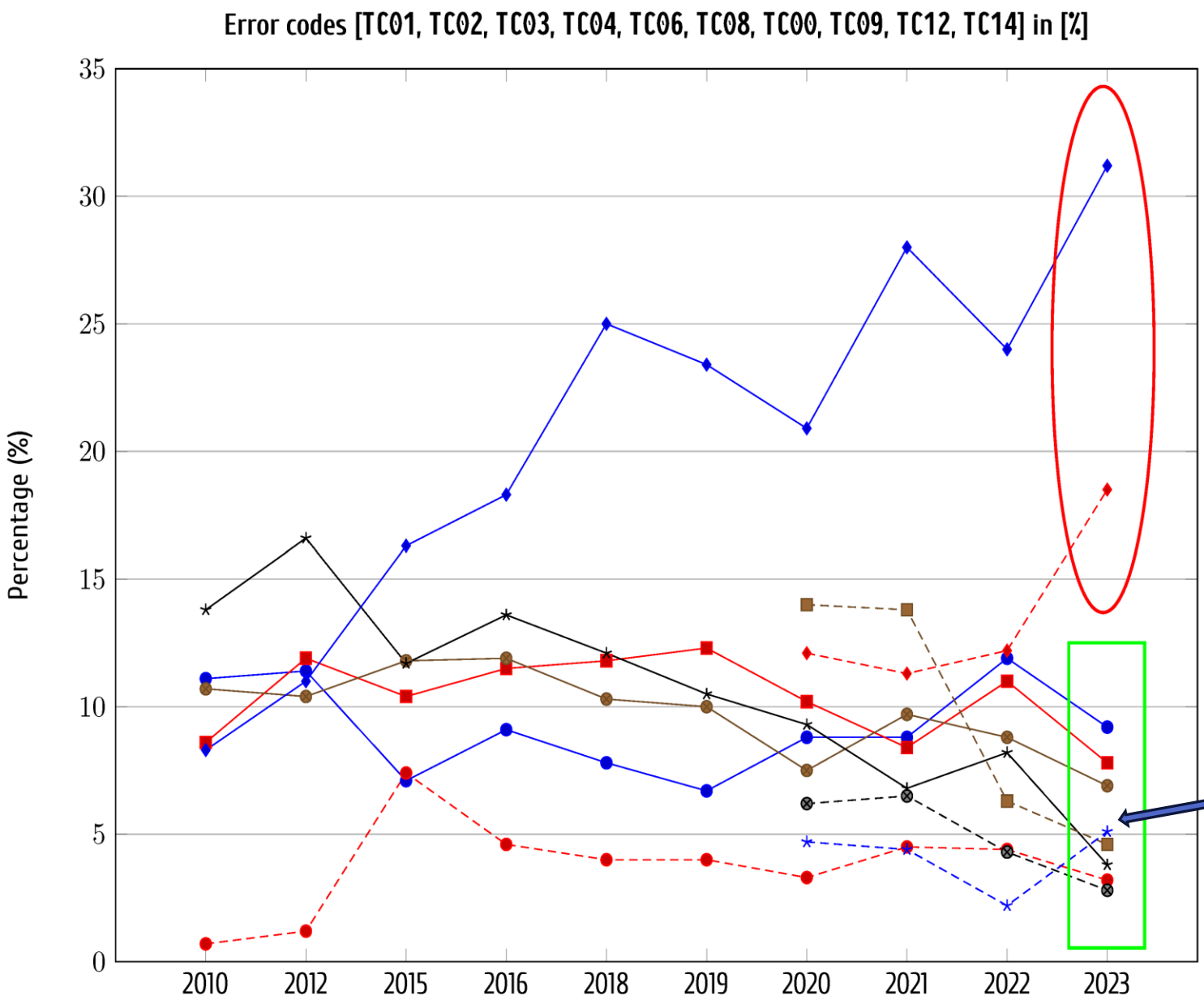
Codes referring to Title, Text, Table, Figure Formatting, Equations, References, Graphics
TC00 General Problems related to formatting
TC01 Incorrect Title, Authors, Affiliation formatting (size, full UPPER/lowercase, not in required lowercase [e.g. MHz], city/country missing)
TC02 Text formatting incorrect (paragraphs, section/sub-section headings, indentation, column/intercolumn width, wrong text flow, number/unit split over lines
TC03 Table formatting incorrect (not centered, outside margins, caption below table, wrongly labeled, not in Initial Caps, single/multiple line caption not centred/justified
TC04 Figure formatting incorrect (outside margins, single/multiple line caption not centred/justified/placed above, Caption wrongly labeled [abbreviated, colon missing, wrong font size, bold/italic])
TC05 Footnote formatting incorrect (outside margins, no line above, not at bottom/first column, missing
TC06 Reference or Reference formatting incorrect (missing, multiply defined, wrong order, indentation, hyperlink, inconsistent, wrong, incomplete)
TC07 Figure/Table/Equation/Reference numbers not in sequence
TC08 Figure/Table/Reference not referenced in text or missing
TC09 Equation/Eq., Figure/Fig., Table wrongly used in text (lower case, abbreviated, period missing)
TC10 Graphics problem (too slow displaying, too small, resolution too low/high, text not readable)
TC11 Equation formatting incorrect [outside margins, Eq. number outside, not Eq. (x)]
TC12 Badly formatted units [italic, spacing, µ italicized, KeV]
TC14 Reference formatting: missing info added, DOI/URL/site name added or corrected

Codes referring to Use of Template
UT00 General problems with template usage
UT01 Template not used or parameter change; Bounding Box wrong; Incorrect column and/or intercolumn widths; old template used
UT02 A4 on US or US on A4 to produce PostScript/PDF

Accuracy of submissions

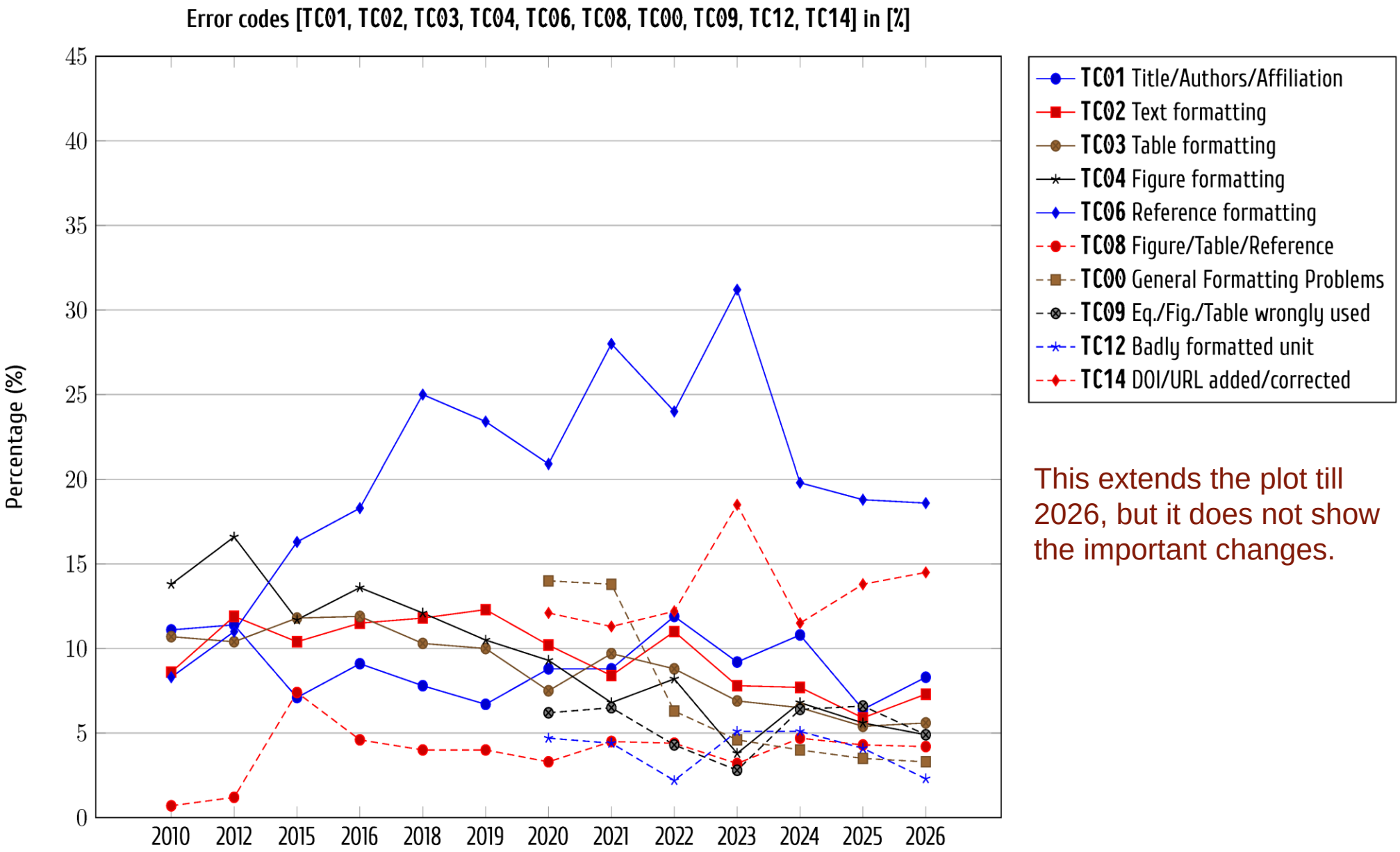
- JACoW maintains a list of Error Codes which is updated when the need arises. The original came from SPMS and is now also in Indico.
- On the left the “latest” version from 2022-09-12. The last code introduced was FC03 for BibLaTeX/Biber/BibTeX

* Accuracy of submissions



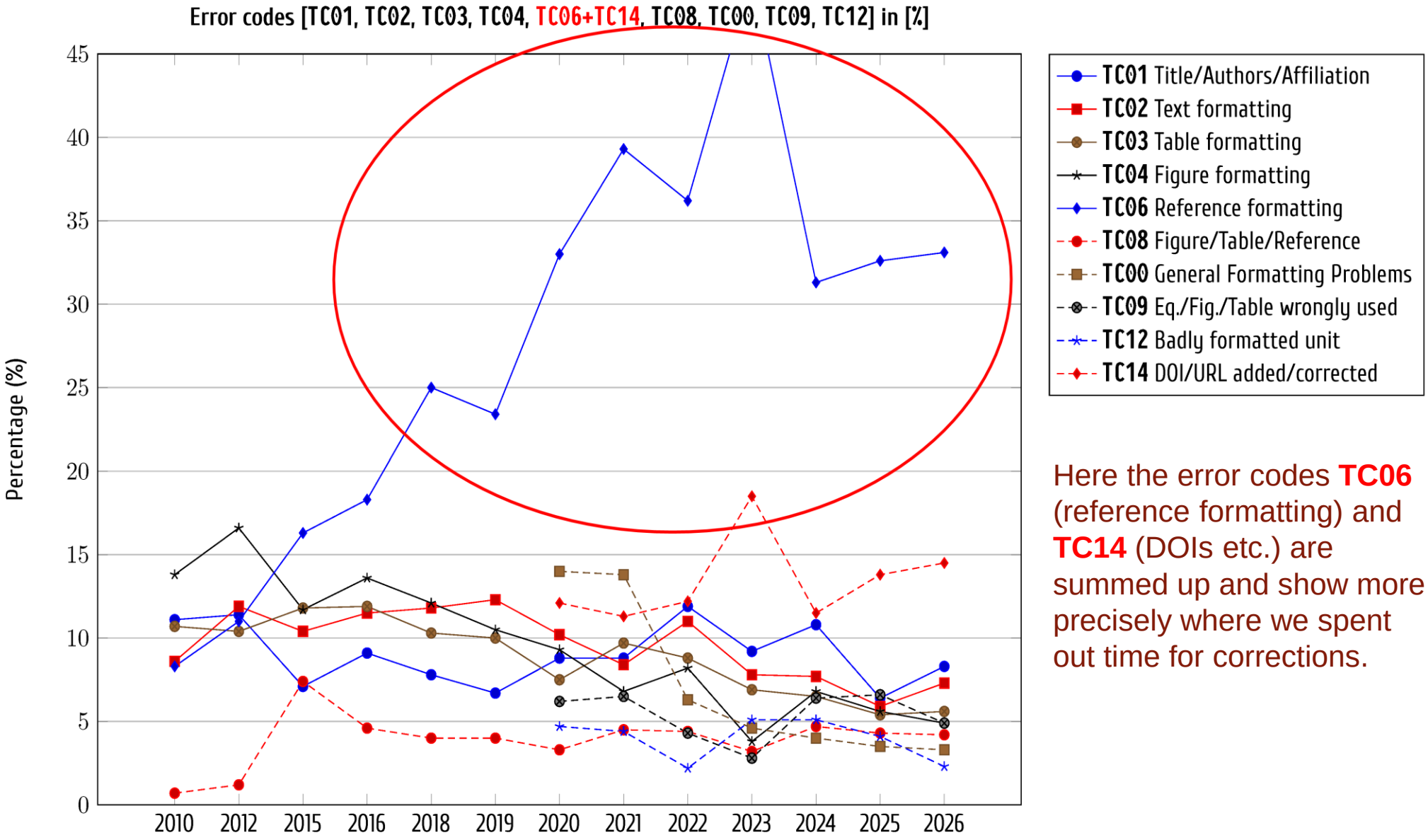
This is the last plot where only SPMS conferences were shown. DOIs, references and their formatting were already checked and changed the overall distribution.

* Accuracy of submissions



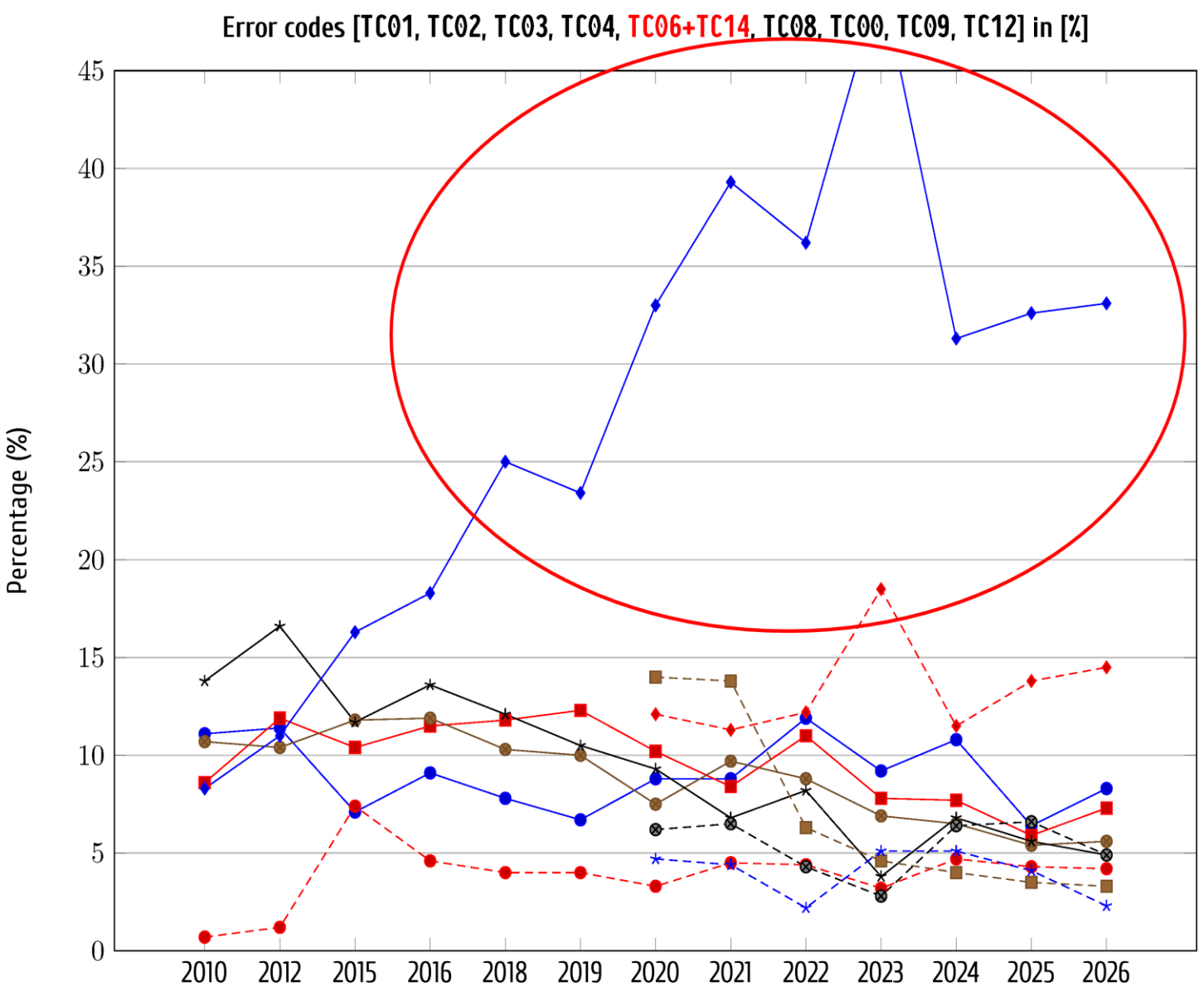
This extends the plot till 2026, but it does not show the important changes.

* Accuracy of submissions



Here the error codes **TC06** (reference formatting) and **TC14** (DOIs etc.) are summed up and show more precisely where we spent out time for corrections.

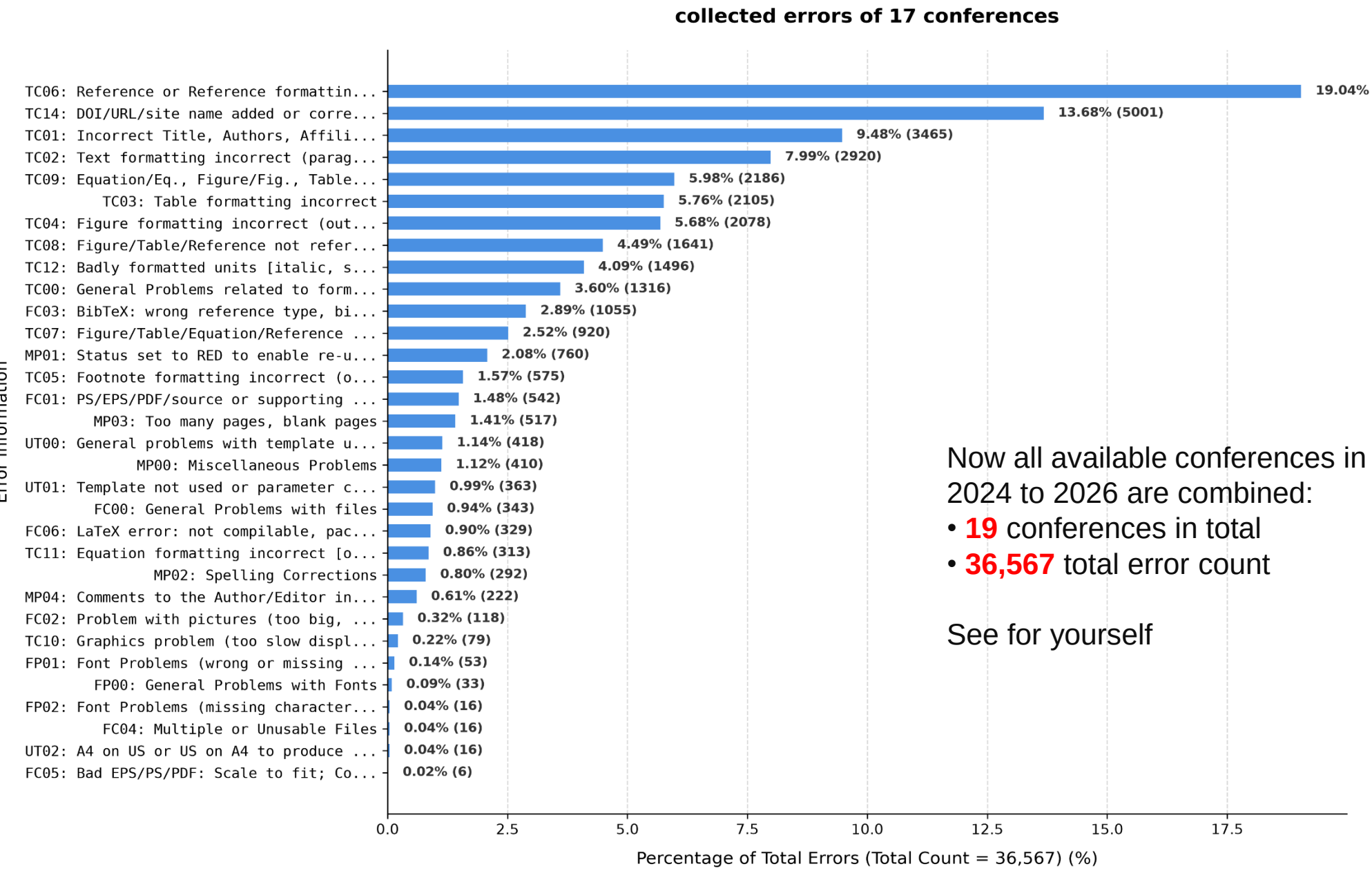
* Accuracy of submissions



But in the end these plots do not show what's important and what not.

Indico and Stefano with the help of AI and still a lot of manual fiddling shows the difference.

* Accuracy of submissions



Now all available conferences in 2024 to 2026 are combined:

- **19** conferences in total
- **36,567** total error count

See for yourself

Accuracy of submissions

- Better: some errors which had often been seen between 2004—2019 are nearly gone or in sum below 1 %, e.g. Font problems [FPxx], Graphics problems [TC10, FC02], Bad PDF/PS/EPS, Tearing Boxes [FC04, FC05, FC10]
- As we are now checking References in more detail, these errors are mentioned most often: Reference formatting [TC06], DOI problem [TC14]
- With Indico the number of corrections in Author and Affiliations seem to have increased. [TC01] now third most error but had been ~8 % before
- Code TC12 (Badly formatted units) shows up more often as e.g. spacing or linebreak between value and unit is checked.
- Then there are a number of problems found depending on source format:

Accuracy of submissions

- Then there are a number of problems found depending on source format:
  - MSWord: Wrong text flow after double wide figures and tables, indented captions, misaligned references
  - pdfLaTeX: Manual formatting or use of ‘oldstyle’ BibTeX without fitting style information (IEEEtran style ≠ JACoW style requirements ⇒ BibLaTeX & Biber)
  - LuaLaTeX: missing BoldMath symbols due to use of wrong commands for font selection (\mathbf only for text not symbols ⇒ \symb/\symbi/…)
    ⇒ log checking necessary (`texlogsieve`, etc.)

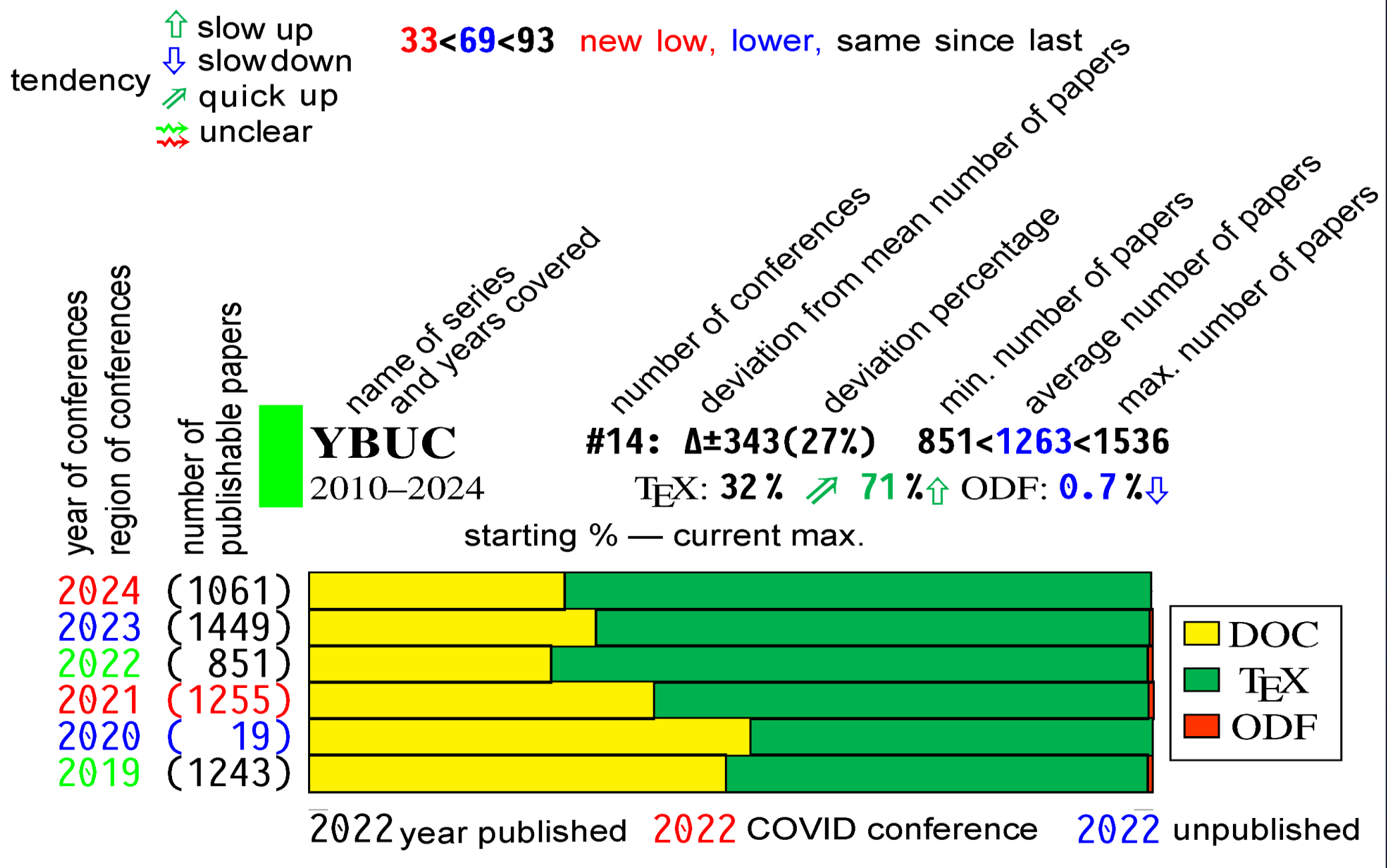
Accuracy of submissions (cont.)

* And still the good old formattings errors
  * Uppercase units in Title and Section headings
  * Acronyms missing their CamelCase
  * Figure and Table formatting, caption formatting
  * Figures, Tables, References not in sequence or not references in text
* The presumed decline of errors in Text, Table, and Figure formatting is only due to the strong shift to Reference and DOI type errors.

And now for something completely different…

20xx Americas

*Changes



Year's color according to region

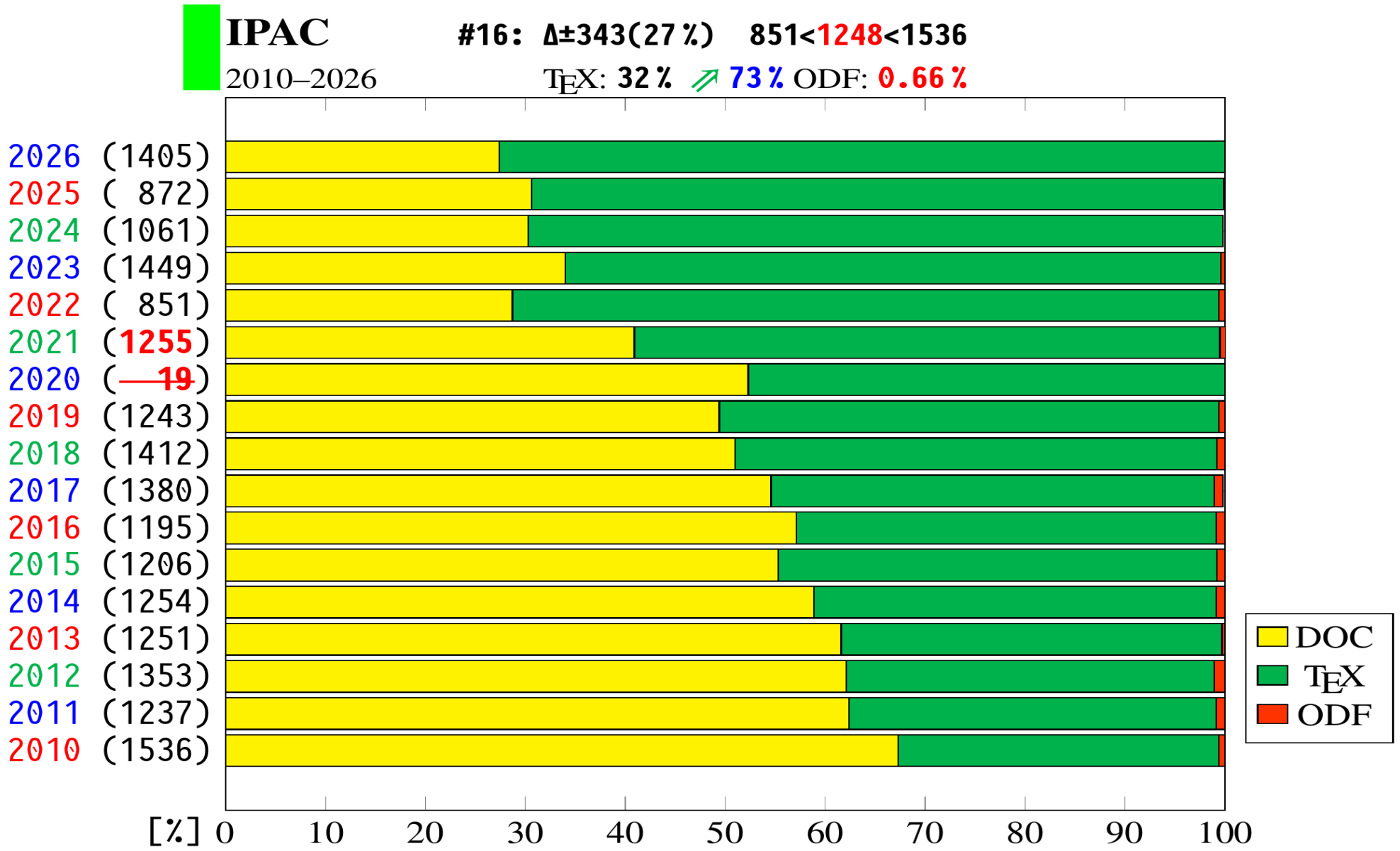
*Changes

20xx Asia/Pacific

20xx EMEA

20xx Americas

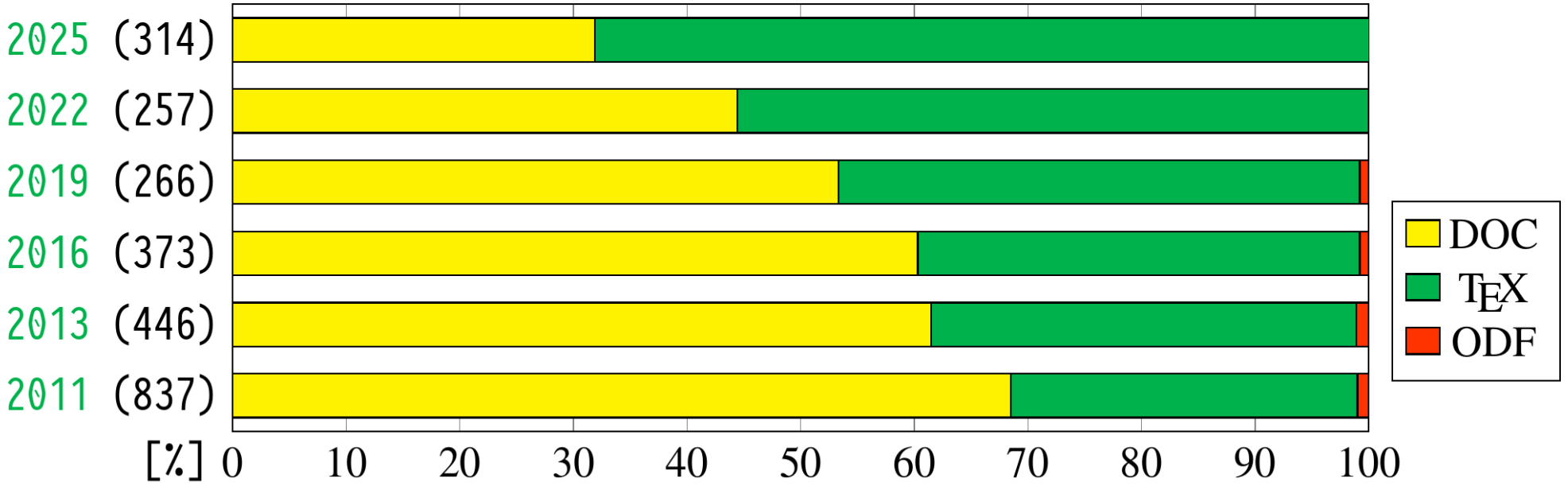
*Changes in file type in IPAC



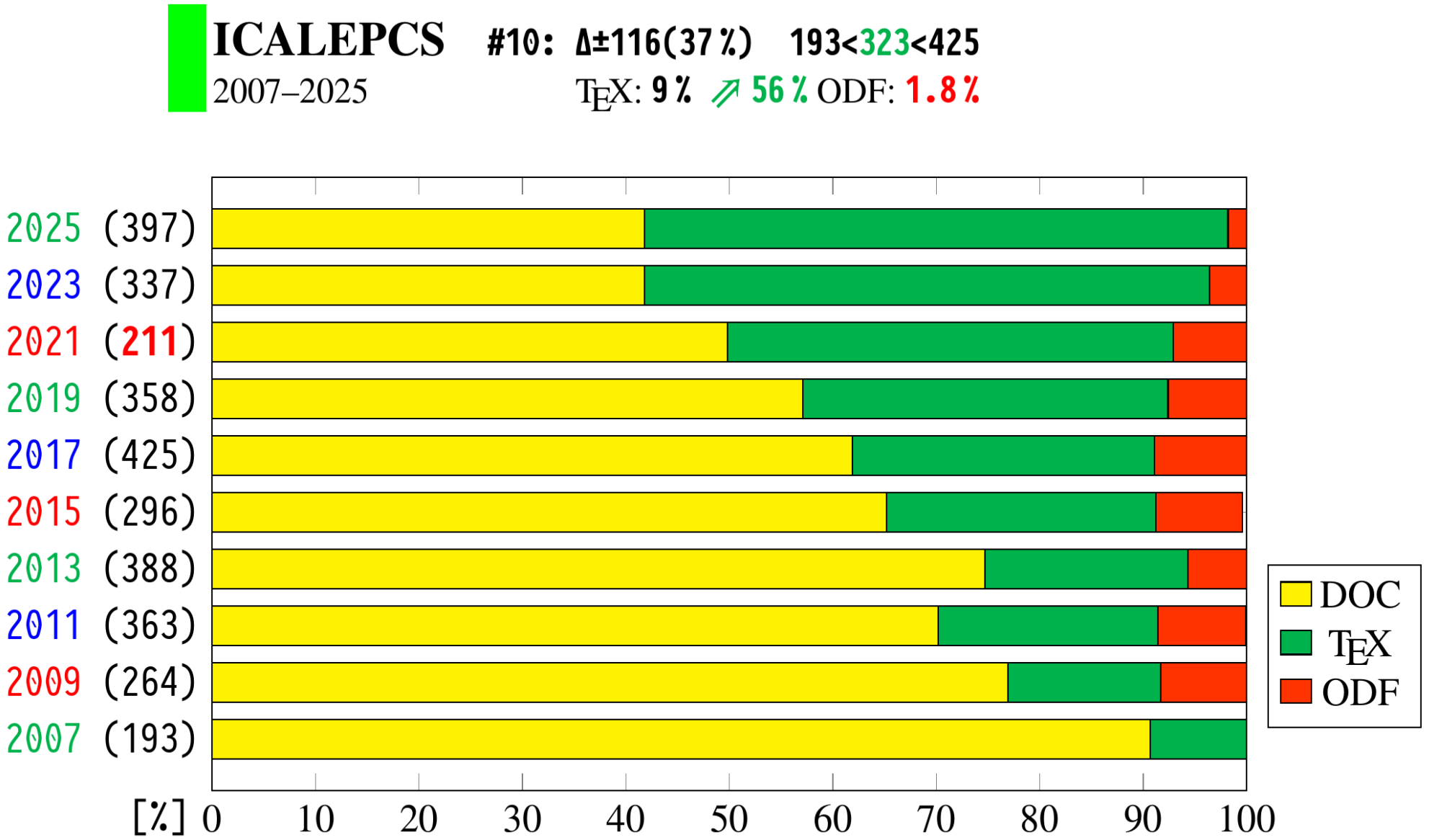
*Changes in file type for NAPAC

NAPAC
2011–2025

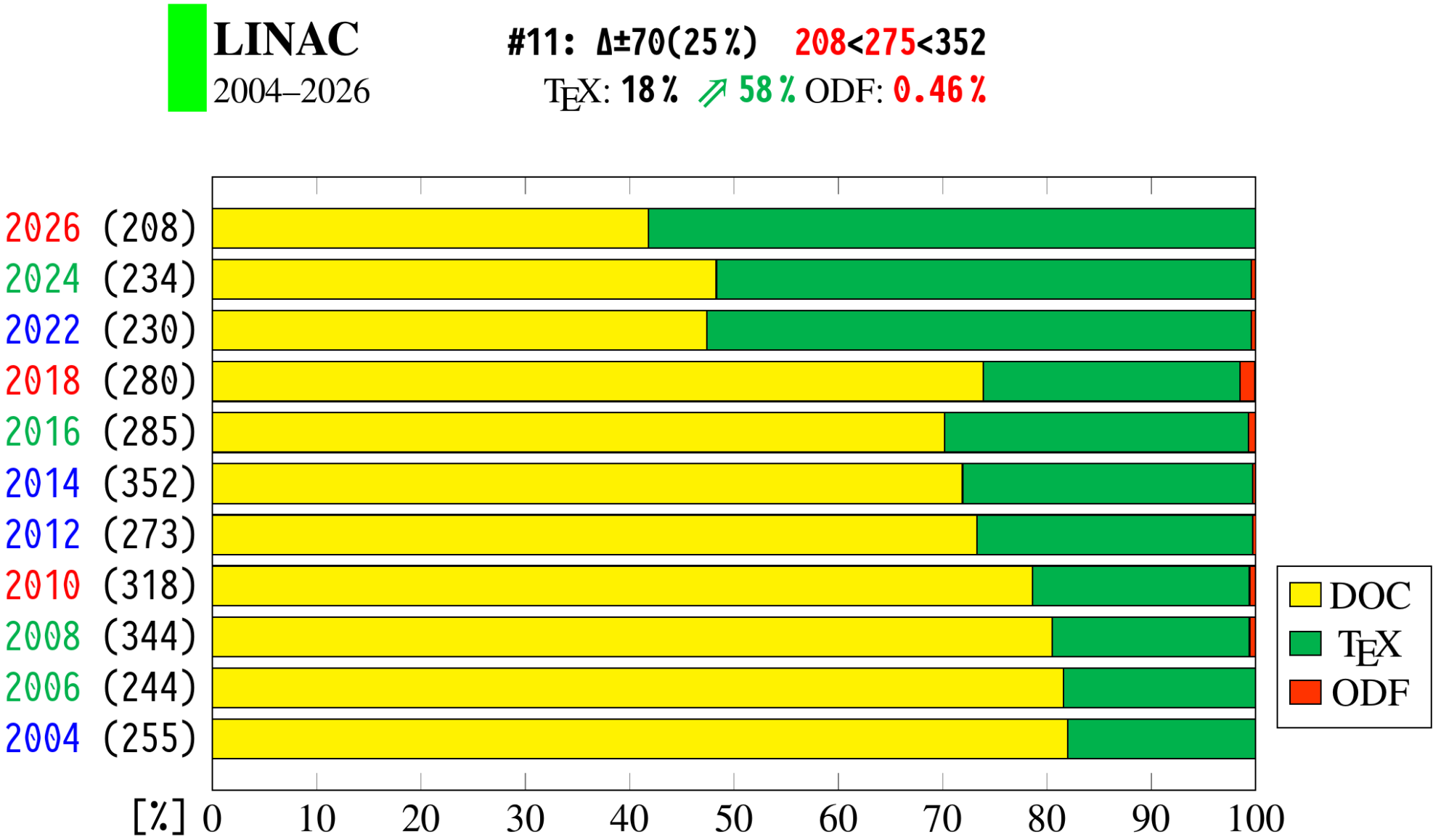
#6: Δ±290(53%) 257<416<837
TEX: 31% ⇗ 68% ODF: 0.7%



* Changes in file type for ICALEPCS



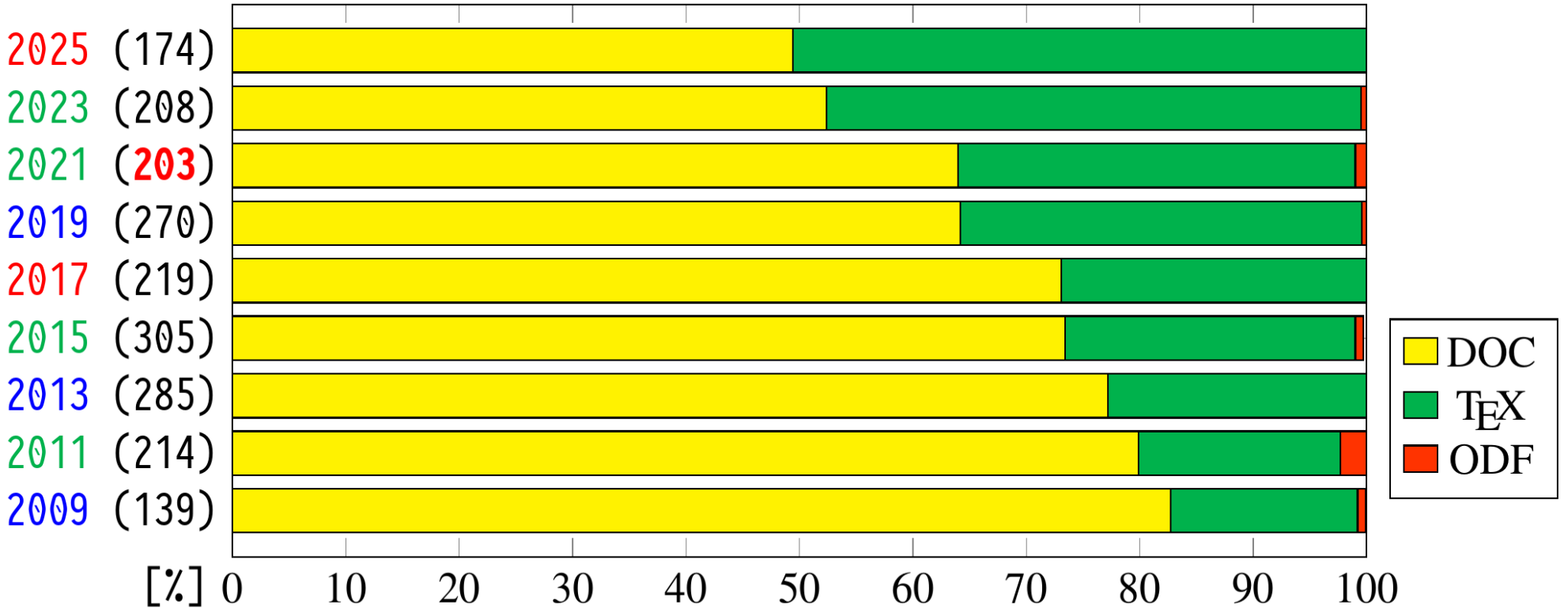
*Changes in file type for LINAC



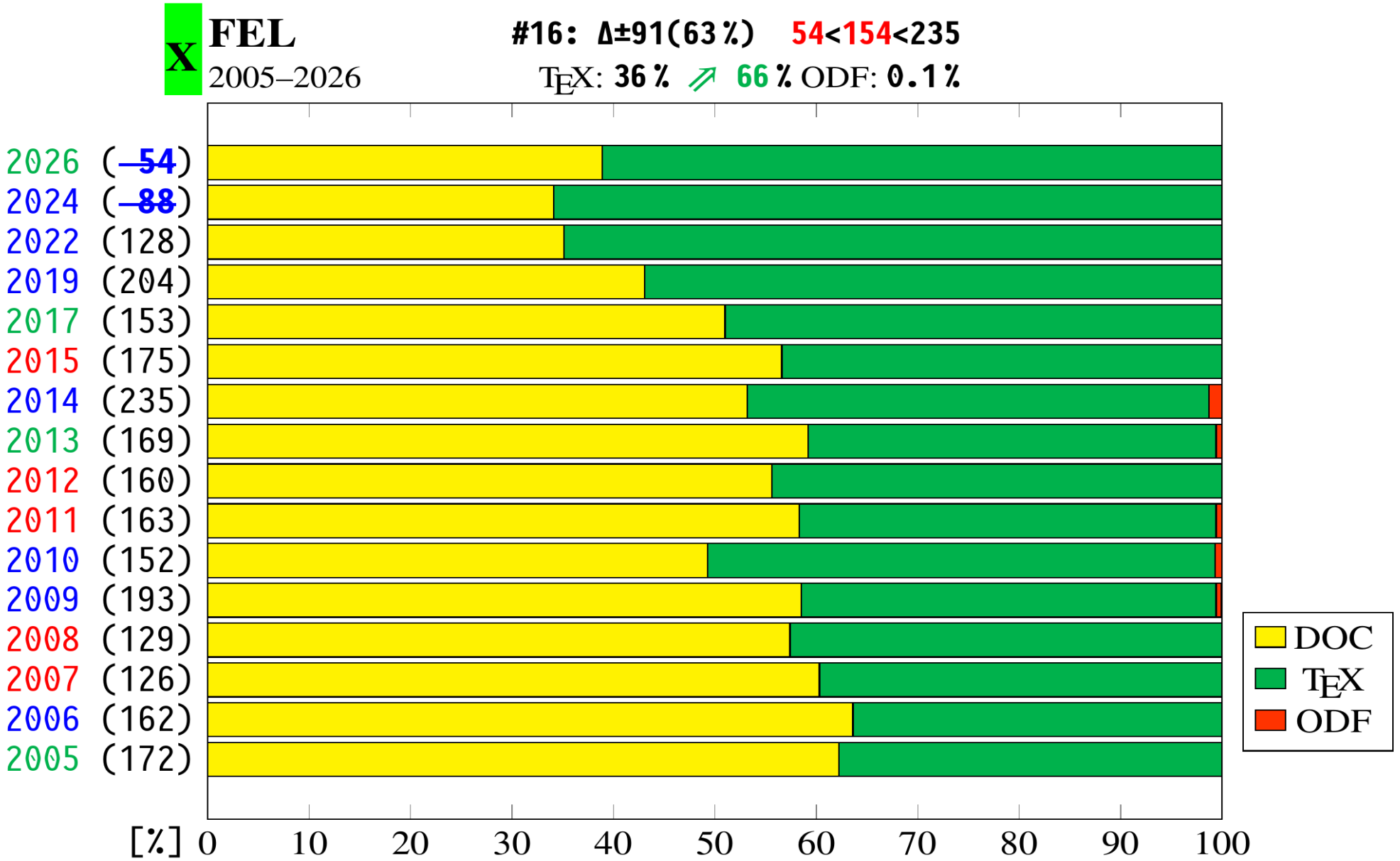
*Changes in file type for SRF

SRF
2009–2025

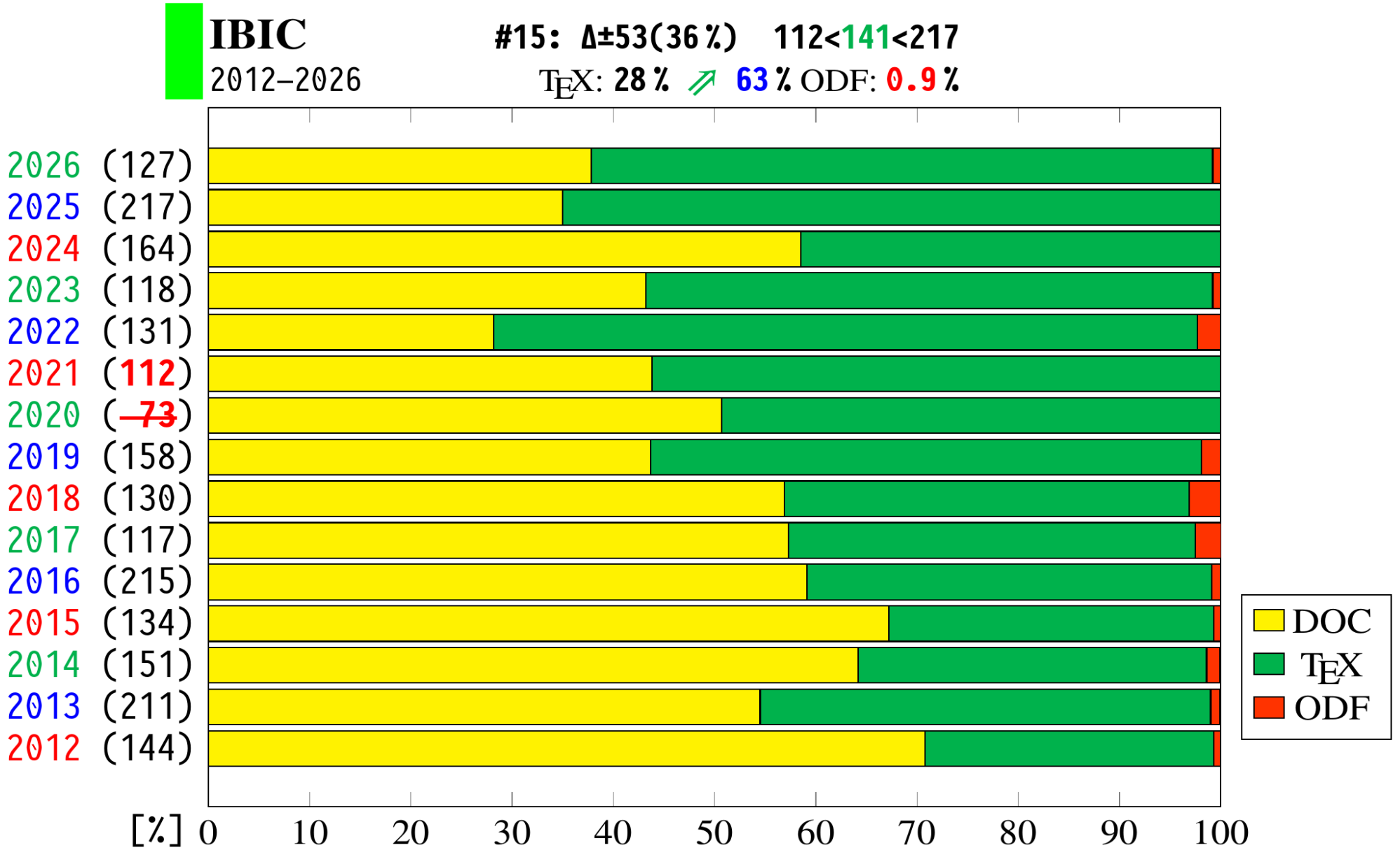
#9: Δ±83(37%) 139<224<305
TEX: 16% ⇗ 51% ODF: 0.3%



*Changes in file type for FEL



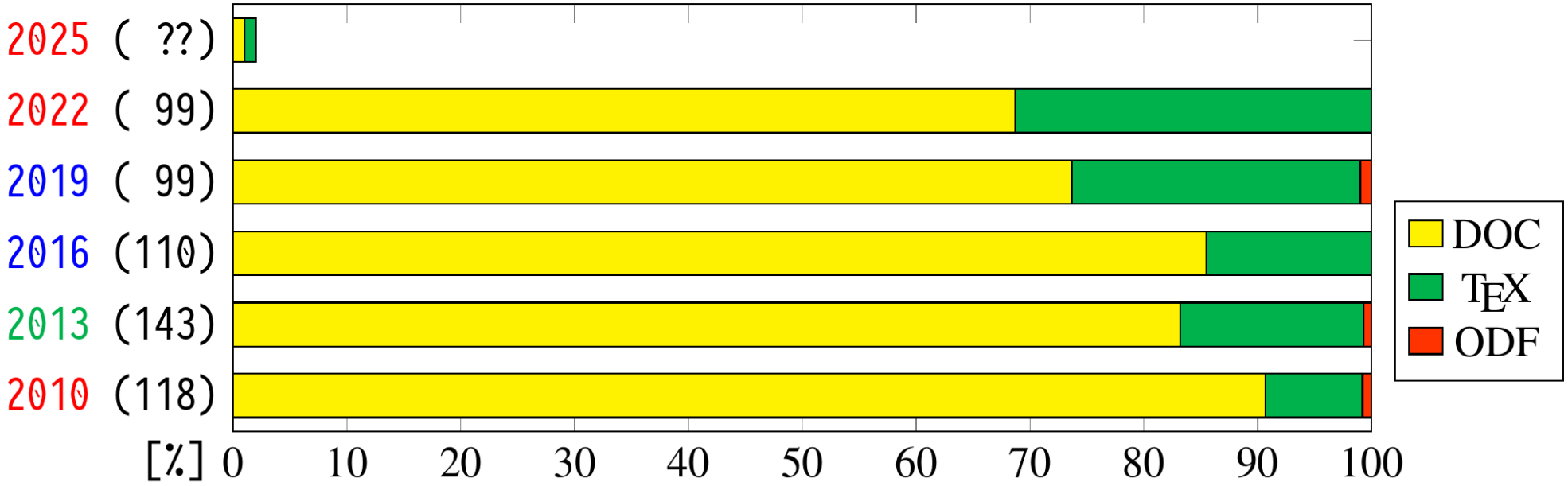
*Changes in file type for IBIC



* Changes in file type for Cyclotrons

X **Cyclotrons**
2010–2022

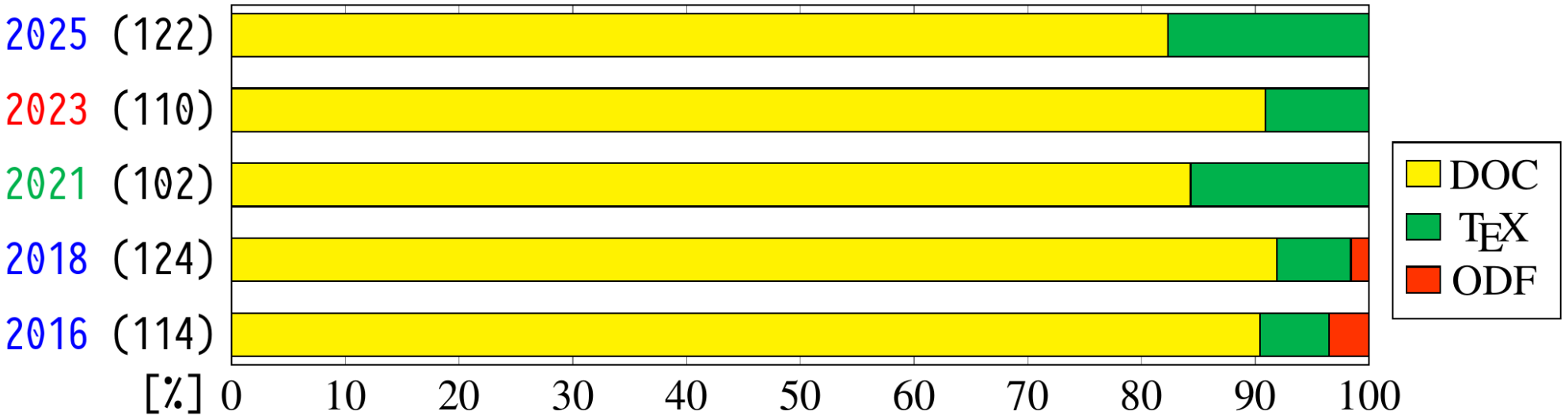
#5: Δ±22(19%) 99<114<143
TEX: 9 % ⇝ 30 % ODF: 0.6 %



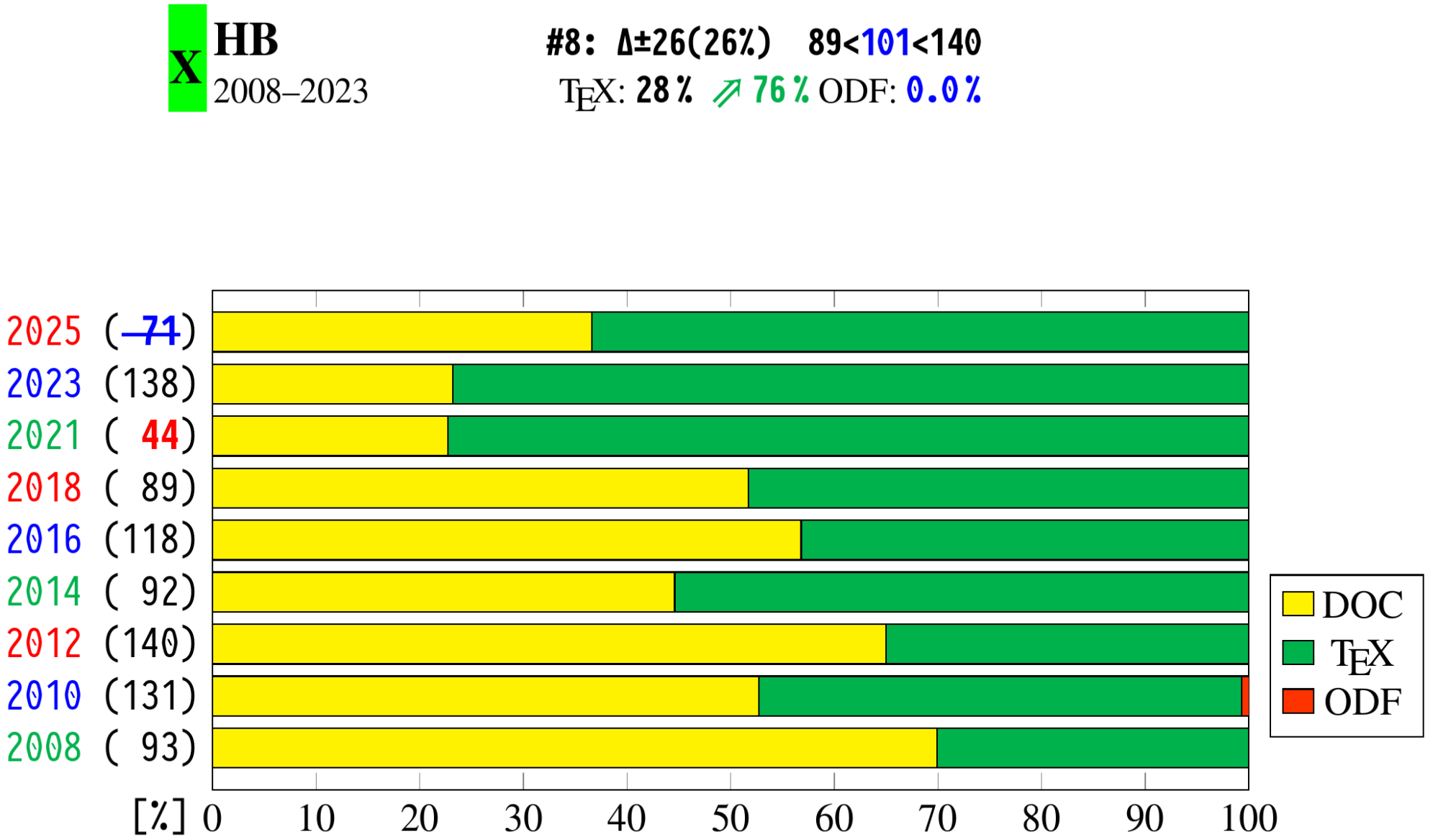
*Changes in file type for MEDSI

MEDSI
2016–2025

#5: Δ±11(10%) 102<114<124
TEX: **6%** ⇝ **18%** ODF: **1%**



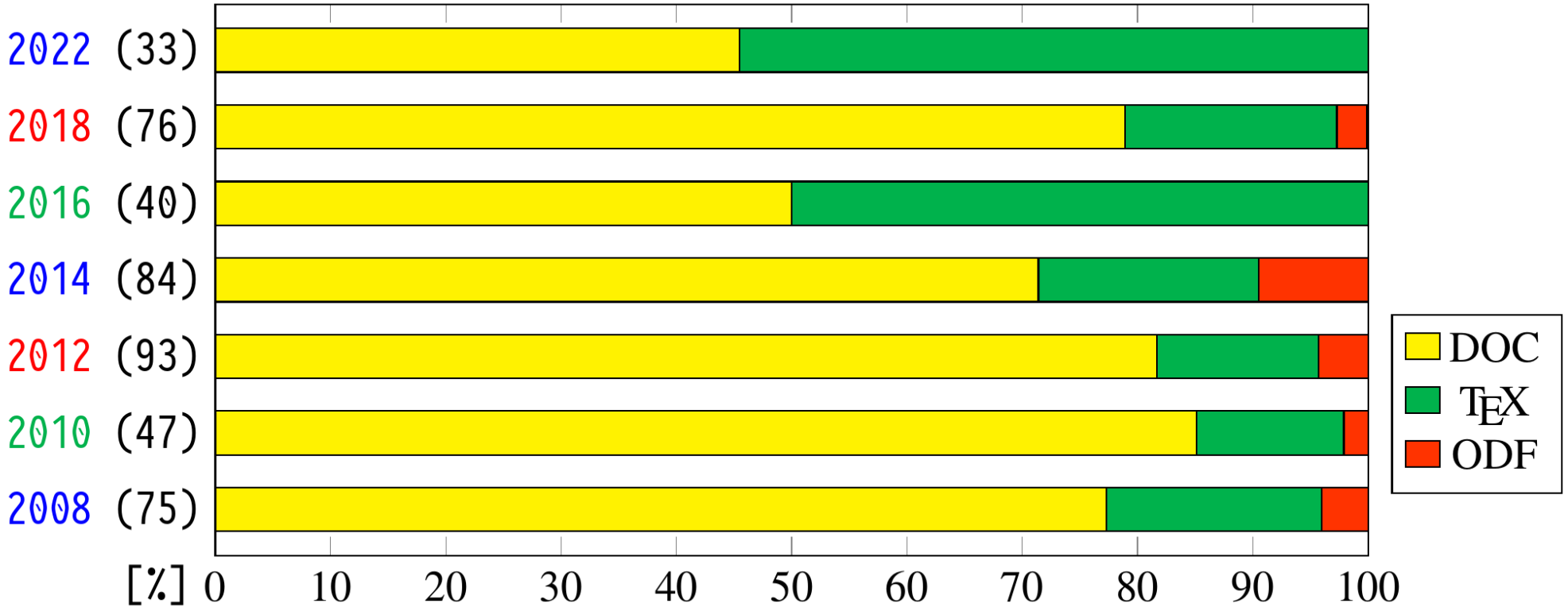
*Changes in file type for HB



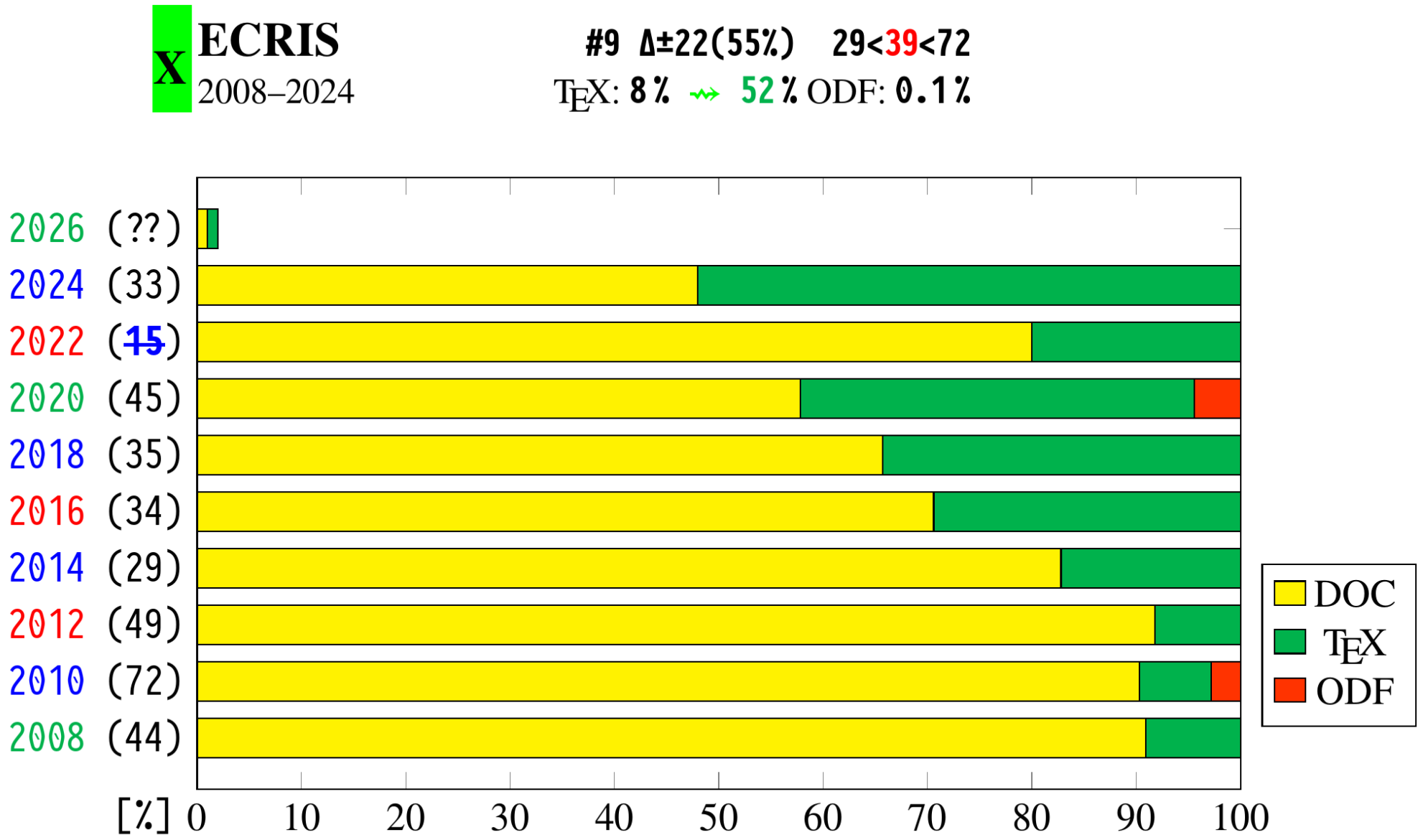
* Changes in file type for PCaPAC

PCaPAC
2008–2022

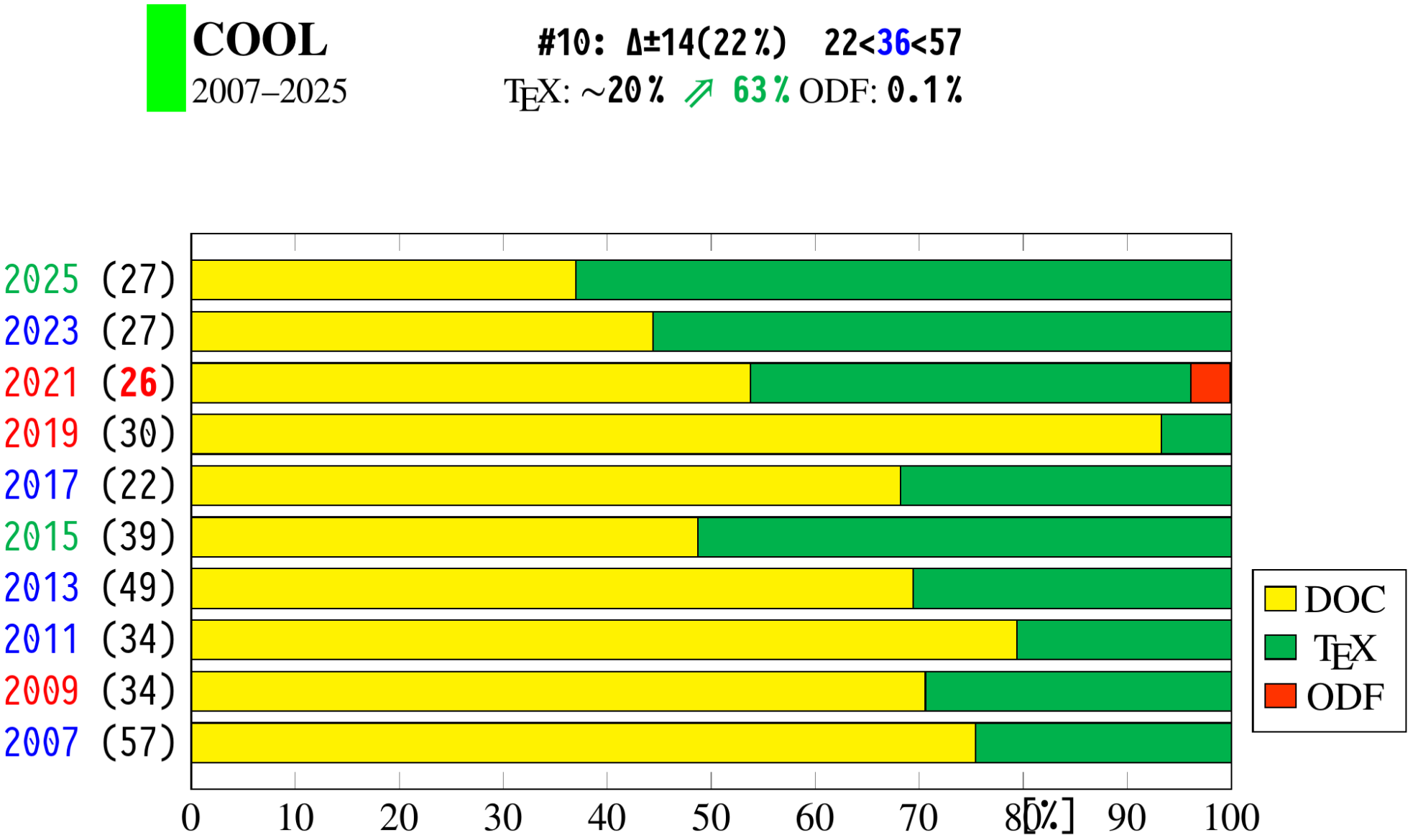
#7: Δ±30(43%) 33<64<93
TEX: 16% ⇗ 55% ODF: 3.2%



*Changes in file type for ECRIS



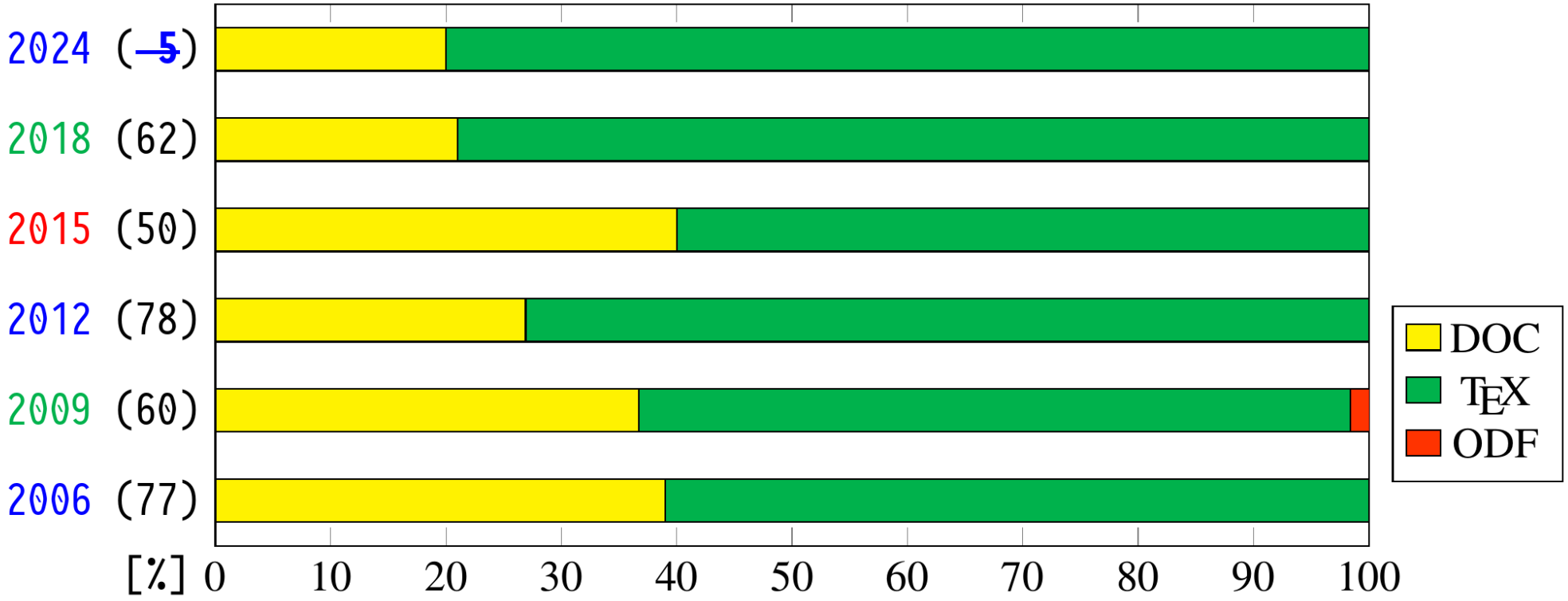
*Changes in file type for COOL

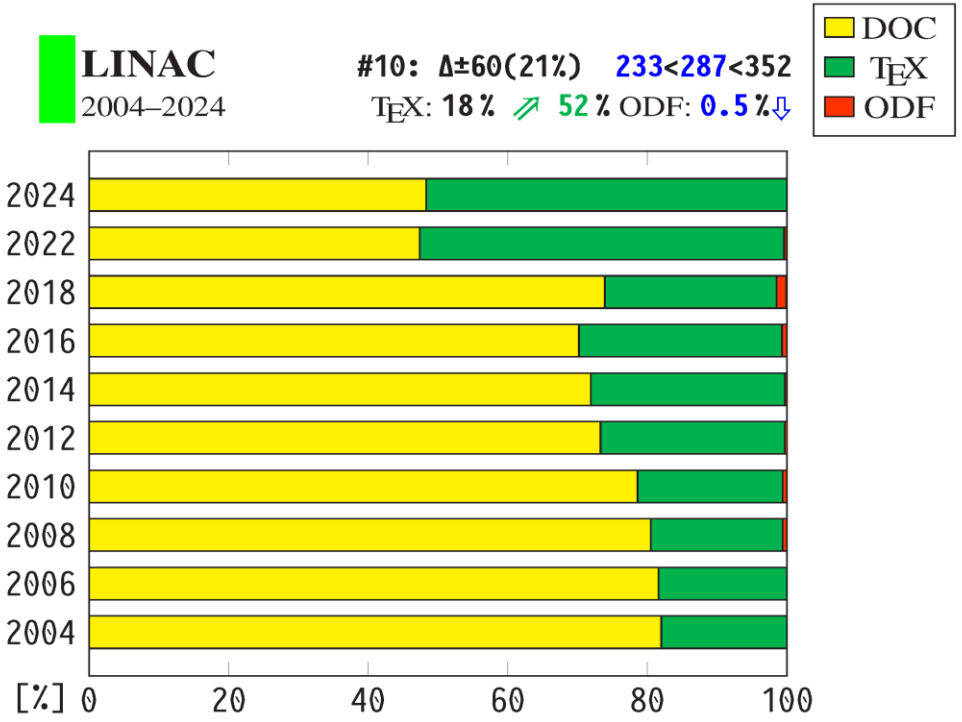


*Changes in file type for ICAP

X ICAP
2006–2024

#5: Δ±18(47%) 50<65<78
TEX: 61% ⇝ 79% ODF: 0.3%





Year	#pap	#pages	#E	p/P	p/E	Location
2004	255	862	5	3.38	172	*Lübeck, Germany*
2006	244	834	6	3.42	139	*Knoxville, TN, USA*
2008	344	1128	7	3.28	161	*Victoria, BC, Canada*
2010	318	1052	8	3.31	132	*Tsukuba, Japan*
2012	273	1073	6	3.93	153	*Haifa, Israel*
2014	352	1218	7	3.46	174	*Geneva, Switzerland*
2016	285	1046	6	3.67	131	*East Lansing, MI, USA*
2018	280	999	8	3.51	125	*Beijing, China*
2022	230	888	7	3.80	127	*Liverpool, UK*
2024	234	858	8	3.67	107	*Chicago, IL, USA*

#E 95 % editors
p/P pages per paper
p/E pages per editor

*More Info about papers & editors



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* Questions?