



Argus news

Peter-Paul de Wolf User Group SDC Tools meeting 29 February 2024

Brief overview

- SDC software to apply Statistical Disclosure Control
- Developments started in the 90s of 20th century
 - Within Statistics Netherlands
 - In European context, with (partial) funding by Eurostat in several projects:



Brief overview

- 4th framework project SDC (1996-1998)
- 5th framework project CASC (2000-2003)
- Cenex SDC (2006)
- ESSnet SDC (2008-2009)
- ESSnet SDC harmonization (2011)
- 7th framework project DwB (2011-2015)
- FPA on SDC (CoE) (2015-2018)
- STACE, WP CoE on SDC (2020-2024)



Brief overview sdcTools software

https://github.com/sdctools

- General purpose software
 - μ-ARGUS, sdcMicro

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τ-ARGUS, sdcTable sdcTable
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- Method specific software (all •)
 - sdcSpatial, ptable, cellKey
- Wrappers
 - rtauargus, SAS2Argus





- μ-ARGUS
 - No new release since last year's UG meeting
 - So latest release is still 5.1.7 build 3



- τ-ARGUS
 - Official release 4.2.4 build 2
 - Windows 32 bit based, Java GUI (Open Source, Zulu)
 - Keep status when making tabular input additive
 - Save and read recode files, including tree-based hierarchical variables
 - Apply recode from batch-file
 - Some GUI improvements



- τ-ARGUS
 - Tested by testers from earlier UGSDC meetings (e.g., Vito Klopčič)
 - Some regression bugs found
 - New build (build 2) with fixes of found bugs





- Note that STACE project ends August 2024
- Still want to improve/maintain/develop
 - Possibly at lower speed (lack resources)

- Will work on topics mentioned on priority list for remainder of the project
 - As far as resources are available



- τ-ARGUS general
 - Use newer Java version (currently still Java 8)
 - Keep Open Source Java (closed source is no longer free to supply with software)
 - Port to 64-bit compilation
 - Version without CTA?
 - Bug fixing (issues at UserSupport with label "Bug")



- τ-ARGUS next release
 - Some GUI improvements
 - Hypercube parameter for "Large size" made consistent with "Manual"
 - Improved speed reading apriori file
 - Code cleaning
 - ...



- τ-ARGUS priority list
 - New list based on consultation of Expert Group SDC (PT, GR, SK, SI, DE, SE, IT, BE, FI, Eurostat)
 - "Top 3" by average priority, 1-5 = high-low
 - Improve error messages (1.3)
 - Update manual (2.2)
 - Frozen cell solution (2.2)
 - Protection of 0 and 1 in frequency tables (2.7)
 - Speeding up Reading apriori files (2.7)
 - Zero cells eligible for suppression in frequency tables (2.7)
 - Additivity when using weights (2.7)



Future developments, full priority list

Item	Comment	Average
Error messages	As far as possible, continuous	1,3
Update manuals	Initially port manuals to quarto-book (on-line) format. No progress yet on updating to latest versions.	2,2
Frozen cells	Testing on real life instances, needs to be added to interface	2,2
Correct protection of zeros and ones (#194) E.g.: $15 = 10 + 3 + x + x$ for freq tables means $x = 1$	Not easiliy included in optimization formulation of cell suppression	2,7
Reading apriori file into tau-argus can take very long time	Takes much more time compared to version 3.5	2,7
Zero cells eligible for suppression in count tables	Not started	2,7
Using weights in tau-argus (#153)	Additivity lost (number of decimals increases when multiplying by weights with decimals	2,7
Tau-argus as a service	Under development, but limited to sec. cell supp. Work by Eurostat, not part of this grant	2,8
Add information loss measures	CKM magnitude tables	2,9
Safety ranges secondary suppressions	Needs methodology	2,9
Detect inconsistent statuses tabular input	Restrict to "easy" inconsistencies, like e.g., unsafe = safe + empty	3,0
Possibility to specify TEMP directory	Easier to run multiple instances on same PC/VM and to delete intermediate files	3,0
Possibility to specify working directory	To keep all files in the same working directory, or use relative paths	3,0
Lower protection limit 1 (i.s.o. 0) in count tables	Can be imposed by apriori file as workaround?	3,1
List explanatory variables is not scrollable	Problem if many expl. variables. Then not all accessable in SpecifyTable dialog	3,2
Linux build of tau-argus	Need Linux support (developers have no real experience with Linux)	3,4
Possibility to specify delimiter in <writetable> (#116)</writetable>	SBS and csv format, add option?	3,4
Use unweighted frequency rule in weighted tables (#98)		3,7
64 bit tau-argus without CTA	CTA not easy to compile to 64 bit, not possible to call as 32 bit	3,7
Use of standard hierarchies	Should test if item 4 solves this	3,7
Automatic implementation of waivers (#244)	Implementation of waivers in safety-rules	3,9
Controlled rounding parameters (#201)	Check manual and implemented order	3,9
Save holding info in intermediate file format (#122)	Check implementation (freq are set to 0?)	4,0



Future developments, full priority list

Additional feature request developers	Comment
Possibility to specify TEMP directory	Easier to run multiple instances on same PC/VM and to delete intermediate files
Possibility to specify working directory	To keep all files in the same working directory

