

tdf-sdk: Release / Update Notes

This document lists changes between successive releases of the tdf-sdk. Oldest versions are at the bottom of the file.

Prerelease: tdf-sdk 2.21.0 (DLL v2.21.0.0, 2022-05-12)

- Tdf:
 - Added support for pressure compensation with `tims_open_v2`
 - Replace `tims_extract_centroided_spectrum_for_frame` with a `_v2` that uses a peakfinder with improved resolution settings
 - Added `tims_extract_centroided_spectrum_for_frame_ext` that allows to customize the peakfinder resolution
 - Added `tims_extract_chromatograms`
- Tsf:
 - Deprected `tsf_read_*_spectrum`, replaced with `tsf_read_*_spectrum_v2` returning `int32_t` instead of `uint32_t`, -1 for error
- Improved `tims_index_to_mz` performance
- Updated the python wrappers for the new API
- Modernized the C++ example project
- Supported tdf version 3.x and 2.x
- Supported tsf version 3.x

Release: tdf-sdk 2.8.7.1 (DLL v2.8.801.56, 2020-12-17)

- Official release of tdf-sdk, functionality as in prerelease 2.8.7
- Supported tdf version 3.5 to 2.0

Prerelease: tdf-sdk 2.8.7 (DLL v2.8.107.*, 2020-02-20)

- Added two new functions to extract “pseudo”-spectra from frames
 - `tims_extract_line_spectrum_for_frame`: extract a centroided spectrum from a frame
 - `tims_extract_profile_for_frame`: extract a “pseudo” profile from a frame

Prerelease: tdf-sdk 2.7.0 (DLL v2.7.103.49, 2020-01-09)

- Added two new functions to convert from 1/K0 values to CCS values
 - `tims_oneoverk0_to_ccs_for_mz`: Converts the 1/K0 value to CCS (in Angstrom²) using the Mason-Shamp equation
 - `tims_ccs_to_oneoverk0_for_mz`: Converts the CCS (in Angstrom²) to 1/K0 using the Mason-Shamp equation

Prerelease: tdf-sdk 2.4.4 (DLL v2.4.500.18, 2019-04-17)

- Added two new functions and a callback definition to extract MsMs spectra from PASEF data
 - `tims_read_pasef_msms`: calculates all MsMs spectra for a given list of precursor IDs
 - `tims_read_pasef_msms_for_frame`: calculates all MsMs spectra for a given frame ID
 - `msms_spectrum_funcutor`: callback function that needs to be provided by the user

Prerelease: tdf-sdk 2.4.3 (DLL v2.4.400.6, 2018-12-13)

- Supported tdf version: 3.1, 3.0, 2.0
- Support for compressed tdf. See table GlobalMetadata, property *TimsCompressionType=2*
- Used for release of timsTOF and timsTOF pro acquisition software – otofControl 6.0
- Fixed symbol export of shared library *libtimsdata.so*.

Prerelease: tdf-sdk 2.3.2 (DLL v2.3.300.188, 2018-05-03)

- Supported tdf version: 3.0, 2.0
- Support for compressed tdf. See table GlobalMetadata, property *TimsCompressionType=2*
- Used for release of timsTOF and timsTOF pro acquisition software – otofControl 5.1
- Introduced tdf version 3.0. Database schema identical to tdf version 2.0 schema
- Changed normalization of intensities to a factor 100ms/accu-time
- Support for reading recalibration from calibration.sqlite files

Prerelease: tdf-sdk 2.2.1 (DLL v2.2.202.82, 2017-08-28)

- Supported tdf version: 2.0
- Used for release of timsTOF acquisition software – otofControl 5.0 SR1
- Used for release of timsTOF pro acquisition software – otofControl 5.0 SR2
- Introduced normalization of intensities by a factor ramp-time/accu-time
- API function `tims_read_scans` is replaced by `tims_read_scans_v2`. The function `tims_read_scans` does not required `TimsId` as input but takes the id of the frame instead.

Prerelease: tdf-sdk 1.0.1 (DLL 1.0.201.222, 2016-11-14)

- Supported tdf version: 1.0
- Used for beta versions of timsTOF acquisition software – otofControl