Jump Mass Spec (JMS) Mode: Review of Data Acquisition Software

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Jump MS mode

- Like MS mode, but scanning only a few m/z
- Like “selected ion monitoring” (SIM) in GC-MS

[Diagram showing the process of scanning m/z once, moving to the next m/z, and going to the peak]
Jump MS mode

- Like MS mode, but scanning only a few $m/z$
- Like "selected ion monitoring" (SIM) in GC-MS

Scan $m/z$ once

Go to peak

$m/z$ 30

Move On to Next $m/z$

New Program Buttons
This is in Jose’s laptop, so no real spectrum

Known Issue: this dead time needs to be > 0.06 s * number of m/z’s
E.g. 10 m/z, 0.65 s (v. 4.5.9)

Will be fixed on later versions
General Alternation Mode ("GENALT")

- Alternate TOF, MS, JMS
  - Or any two of them
  - Variable time for each mode
- Implemented as separate mode from old TOF-MS alternate mode
- At present (v. 4.5.9) both modes work
  - In future probably only support GENALT

Plume Mode

- Change between two menus at the push of a key
  - E.g. if you want to do JMS only when crossing a plume in an airplane, or for vertical profiles
  - Do PTOF / MS / JMS the rest of the time
- Ask me if you are interested in using it
Activating Plume Mode

New Parameters for Plume Mode

- Hidden if you don’t want to use it (Worry if you see it)
Eddy2 Mode in Default Menu

When Eddy2 Mode is Active…
Extra Parameters for Eddy2 Mode

**Averaging of TOF and MS Data**
- Time Steps (used for averaging): [Input Field]
- Dead Time for Eddy2 Mode After Chopper: [Input Field]
- Dead Time in MS Mode for Eddy2 Chopper: [Input Field]

**General Acquisition Mode**
- Eddy2 MS MSMS: [Input Field]
- Eddy2 MSX: [Input Field]
- Eddy2 MSMS: [Input Field]
- Eddy2 MSX: [Input Field]

**Saving of TOF and MS Data**
- File Number: [Input Field]
- Data File Name: [Input Field]
- Date: [Input Field]
- Time: [Input Field]
- Data File Extension: [Input Field]

**Markers for TOF Mode**
- Position of TOF Marker (in m): [Input Field]
- Marker Efficiency [in %]: [Input Field]
- Marker Efficiency [in %]: [Input Field]

**Solving of Log Files**
- Data Type: [Input Field]
- Data File: [Input Field]
- Data File Extension: [Input Field]
- Data File Extension: [Input Field]

**Enter Transient Data Directory**
- [Input Field]