

AMS\_Mass\_Spectral\_Comparisons

## AMS/ACSM MS Comparisons Tool 3.5A

**UMR Data Comparison**   **UMR Database**   **HR Data Comparison**   **HR Database**

Select the sample mass spectrum

MS existing in the data base  
 User supplied 1D UMR MS  
 User supplied 2D UMR MS (loaded from the export data base tool)

1) Folder | A\_NP\_Dec\_V\_HR\_S\_DAUREFpeak0: |  
2) Spectra (2D) | UMR Spectra |  
3) m/z | UMRmz |  
4) Spectra Name | SpectraName |  
5) MS wave | Combined00A |  

**Sample Mass Spectrum**

- 58\_RF15\_BelowCloud
- 59\_RF15\_InCloud
- 60\_OA\_TOMay19\_org
- 61\_OA\_P3MAY19\_org
- 62\_TOMay19\_org
- 63\_Pittsburgh\_HOA
- 64\_Pittsburgh\_OOA
- 65\_Zurich\_summer\_2005\_OOA\_I
- 66\_Zurich\_summer\_2005\_OOA\_II
- 67\_Zurich\_summer\_2005\_HOA
- 68\_Zurich\_summer\_2005\_WoodBurning
- 69\_Zurich\_summer\_2005\_Charbroiling
- 70\_Zurich\_summer\_2005\_Cooking
- 71\_Zurich\_winter\_2006\_OOA
- 72\_Zurich\_winter\_2006\_HOA
- 73\_Zurich\_winter\_2006\_WoodBurning
- 74\_Pitts\_HOA
- 75\_Pitts\_OOA1
- 76\_Pitts\_OOA2

**Reference Mass Spectrum**

Point	Reference MS	Cosine score
0	336_Changdao island_2011_SVOOA	0.9844
1	343_Beijing urban area_2010_MOOOA	0.9817
2	340_Beijing urban area_2011_LOOOA	0.9768
3	301_SPC Research Station Po Valley_2008_OOAA	0.9704
4	442_Chamber b-pinene SOA(VOO+OH, RO2+NOx)	0.9682
5	335_Changdao island_2011_HOA	0.9652
6	330_CalNex campaign_2010_SVOOA	0.9642
7	323_FOPE2014 campaign_LVVOA	0.9635
8	309_Paris Summer_2009_LVVOA	0.9627
9	288_CARES campaign_2010_LOOOA	0.9619
10	357_Oakland_summer2017_LOOOA	0.9570
11	300_SPC Research Station Po Valley_2008_OOAA	0.9553
12	315_Xian and Beijing_OOA	0.9547
13	302_SPC Research Station Po Valley_2008_OOAA	0.9543
14	288_SOAR-1_Campaign_2005_LVVOA	0.9510
15	113_ClusterMS_LV-OOA	0.9498
16	349_SOAS campaign_2013_MOOOA	0.9490
17	337_Changdao island_2011_LVVOA	0.9451

**Mass Spectra Info**

\*\*\*\*No selected Comparison Constraints\*\*\*\*

 

336\_Changdao island\_2011\_SVOOA

**Mass Spectra Rescaling Options (all)**

m/z Min | 1 |   m/z Exponent | 1 |  
m/z Max | 200 |   Int Exponent | 1 |

**Plot Type** | Sample And Reference MS |   **Number of Tags** | 7 |

**Comparison Constraints**  

- Database Reference Sample Type(s)
  - Ambient    Non-Ambient
- Perturbation?
  - Perturbed    Non-Perturbed
- Deconvoluted?
  - Deconvoluted    Non-Deconvoluted
- Instrument
  - Air Quality ACSM    ToF-ACSM    Quad-AMS
  - C-ToF-AMS    HR-ToF V-Mode    HR-ToF W-Mode
  - L-ToF V-Mode    L-ToF W-Mode    Multiple    All
- MS Resolution(s)
  - Unit Mass Res. Data    Combination
  - HR to UMR    All
- Vaporizer Type(s)
  - Standard Vaporizer
  - Capture Vaporizer
- Aerosol CO and CO2 contributions
  - m/z 28/m/z 44 = 1 (for UMR)    CO (CHO1) / CO2 (CHOgt1) = 1 (for HRtoUMR)    Ratio ≠ 1 (for both)

<Figure 1. Screenshot of new version of the panel including “Current version check” and “Version website” button>