WWF Smackdown:
Squirrel vs Pika in the electrified cage
(Extreme) Example time trace for PK vs SQ:
Generate Pika species time series

Sulphate species signal [Hz]
PK vs SQ Sulphate
(Summed PK species vs Squirrel summed frags)

In the largest plumes, SQ SO4 was negative...

In fire plumes SQ would appear to significantly underpredict the SO4

“Squirrel Noise” is now all > 0 ... positive artefact??

Least Sq Line Fit Results
13 Aug 2008 21:45:21
Y data: ○ root:SO4_PKhz_sum
X data: root:SO4_SQHz
Coefficient values ± one standard deviation
Intercept = 494.23 ± 11.779
Slope = 0.73693 ± 0.016557
**SQ sulphate fragments**

- Overall 48 is these two: frag_SO3[48], frag_H2SO4[48]
  - 81,-frag_organic[81] 98,-frag_organic[98]
- .5*.93*frag_H2SO4[81], .5*.93*frag_H2SO4[98]
- 48,-frag_organic[48], -frag_nitrate[48], -frag_H2SO4[48]
- 0.5*frag_organic[62], 0.004*frag_nitrate[46]
- All of 62
- All of 46

64 is similar: 64,-frag_organic[64], -frag_H2SO4[64]
- 0.5*frag_organic[50], 0.5*frag_organic[78]
- 14000
- 11000
Pika mass 64 in comparison…

SO₂ exact mass = 63.9619
The difference
The difference
A less extreme example…
… looking at “Ammonium Balance” for CE
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