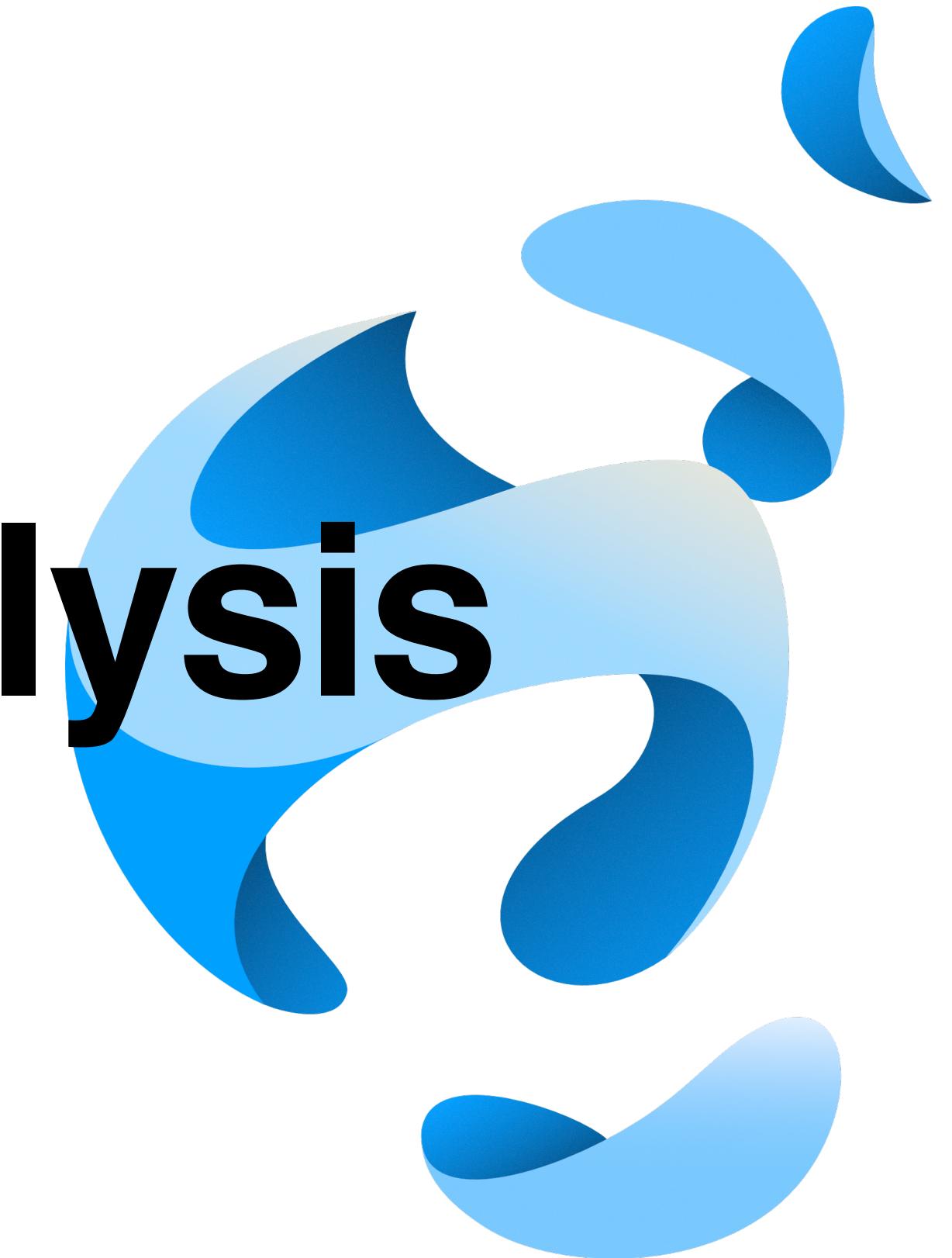


# Audio Descriptor Analysis

sort grains by pitch  
*go to patch*



# FluidBufPitch writes the analysis to a buffer

# FFT frames (time): →

char frame: 0

1

2

3

4

5

6

analysis feature ->

1

**pitch**

pitc

pitch

pitc

# pitch

# pitch

# pitch

1

**pitch  
confidence**

# **pitch confidence**

**pitch  
confidence**

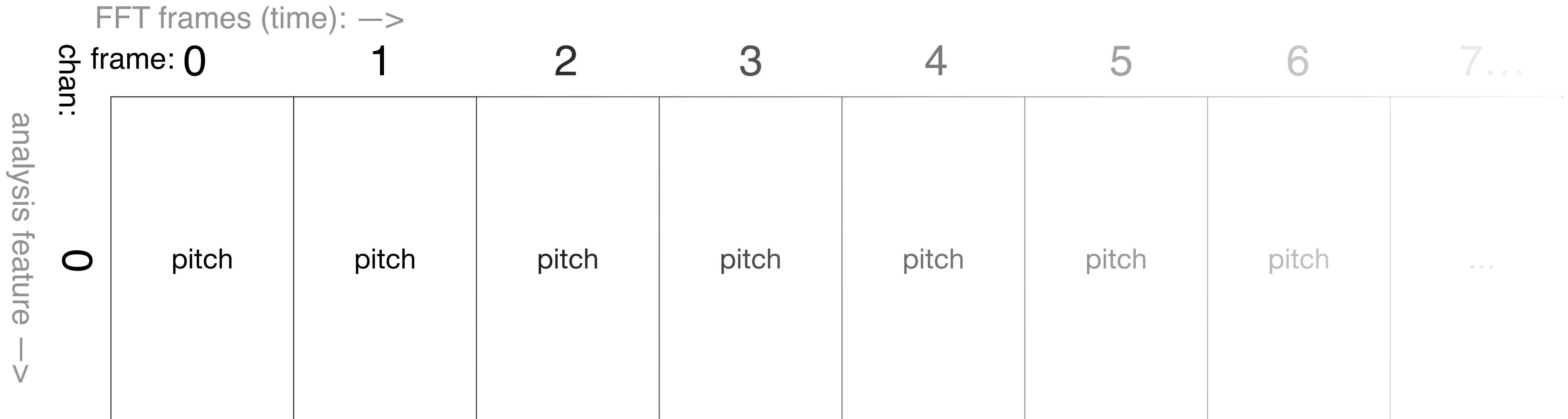
**pitch  
confiden**

**pitch  
confidence**

# pitch confidence

**pitch  
confidence**

# FluidBufPitch writes the analysis to a buffer



# FluidBufStats writes the analysis to *another* buffer

frame:	0	1	2	3	4	5	6
chan:	0						
analysis feature →	mean of chan 0	stand. dev. of chan 0	skewness of chan 0	kurtosis of chan 0	low (min) of chan 0	mid (median) of chan 0	high (max) of chan 0
1	mean of chan 1	stand. dev. of chan 1	skewness of chan 1	kurtosis of chan 1	low (min) of chan 1	mid (median) of chan 1	high (max) of chan 1
:	...	...	...	...	...	...	...

# FluidBufStats writes the analysis to *another* buffer

frame:	0	1	2	3	4	5	6
chan:	0						
analysis feature →	<b>mean</b> of chan 0	<b>stand. dev.</b> of chan 0	<b>skewness</b> of chan 0	<b>kurtosis</b> of chan 0	<b>low (min)</b> of chan 0	<b>mid (median)</b> of chan 0	<b>high (max)</b> of chan 0

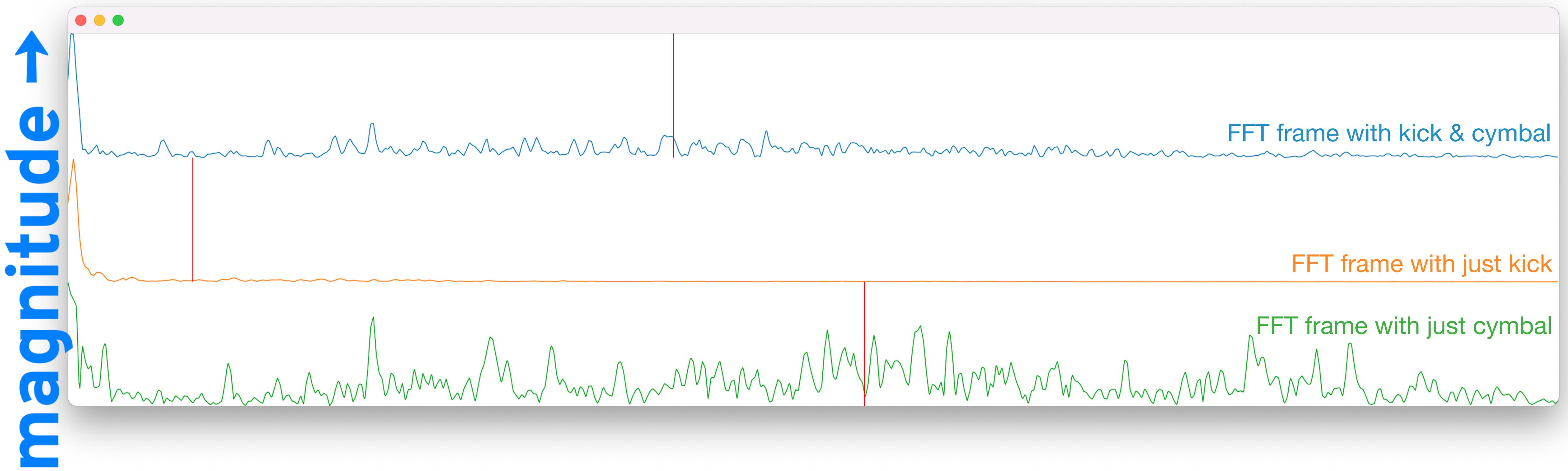
# FluidBufStats writes the analysis to *another* buffer

frame: 0  
chan: 0  
analysis feature →

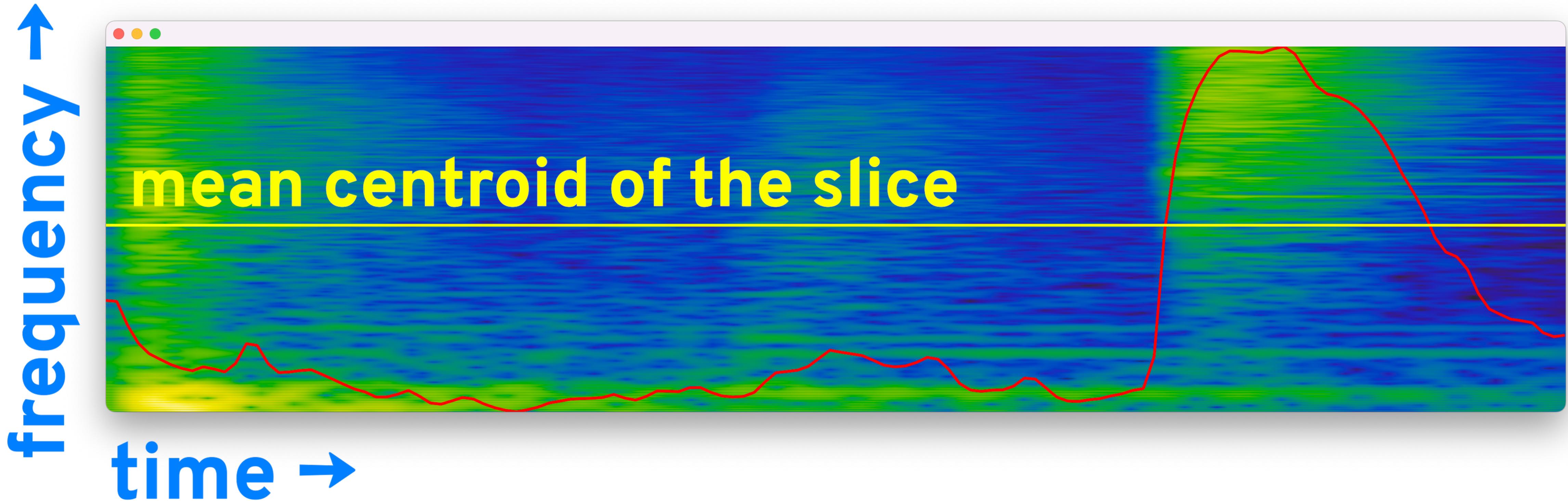
The diagram illustrates the data flow. On the left, there are two labels: 'frame: 0' at the top and 'chan: 0' below it. An arrow points from 'chan: 0' to a small square box. Inside the box, the text 'mean' is centered above the text 'of chan 0'. To the right of the box, another arrow points upwards towards the text 'analysis feature →'.

# Statistics: mean spectral centroid

frequency →



# Statistics: mean spectral centroid



\*color = magnitude

# FluidPlotter (2D space)

plotting drum hits by spectral  
centroid and loudness

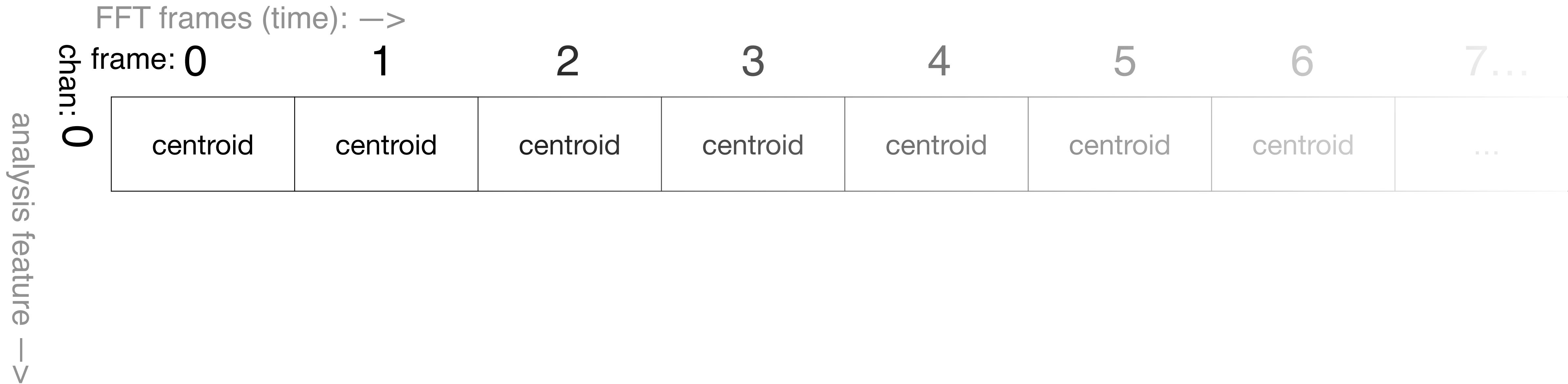
patch it



# **FluidBufSpectralShape** writes the analysis to a buffer

# FFT frames (time): →

# **FluidBufSpectralShape** writes the analysis to a buffer



# FluidBufLoudness writes the analysis to a buffer

# FFT frames (time): →

char frame: 0

1

2

3

△

4

1

analysis feature →

6

## loudness

# loudnes

# loudnes

# loudne

# loudne

loudne

# loudness

10

1

# true peak

# true pea

# true pea

true pe

true pe

true pe

true peak

1

# FluidBufLoudness writes the analysis to a buffer



# FluidBufStats writes the analysis to *another* buffer

frame:	0	1	2	3	4	5	6
chan:	0						
analysis feature →	mean of chan 0	stand. dev. of chan 0	skewness of chan 0	kurtosis of chan 0	low (min) of chan 0	mid (median) of chan 0	high (max) of chan 0
1	mean of chan 1	stand. dev. of chan 1	skewness of chan 1	kurtosis of chan 1	low (min) of chan 1	mid (median) of chan 1	high (max) of chan 1
:	...	...	...	...	...	...	...

# FluidBufStats writes the analysis to *another* buffer

frame:	0	1	2	3	4	5	6
chan:	0						
analysis feature →	<b>mean</b> of chan 0	<b>stand. dev.</b> of chan 0	<b>skewness</b> of chan 0	<b>kurtosis</b> of chan 0	<b>low (min)</b> of chan 0	<b>mid (median)</b> of chan 0	<b>high (max)</b> of chan 0

# FluidBufStats writes the analysis to *another* buffer

frame: 0  
chan: 0  
analysis feature →

The diagram illustrates the data flow. On the left, 'frame: 0' and 'chan: 0' are listed vertically. An arrow points from 'chan: 0' to a rectangular box. Inside the box, the text 'mean of chan 0' is displayed. A second arrow points from the bottom of the box to the right, labeled 'analysis feature →'.