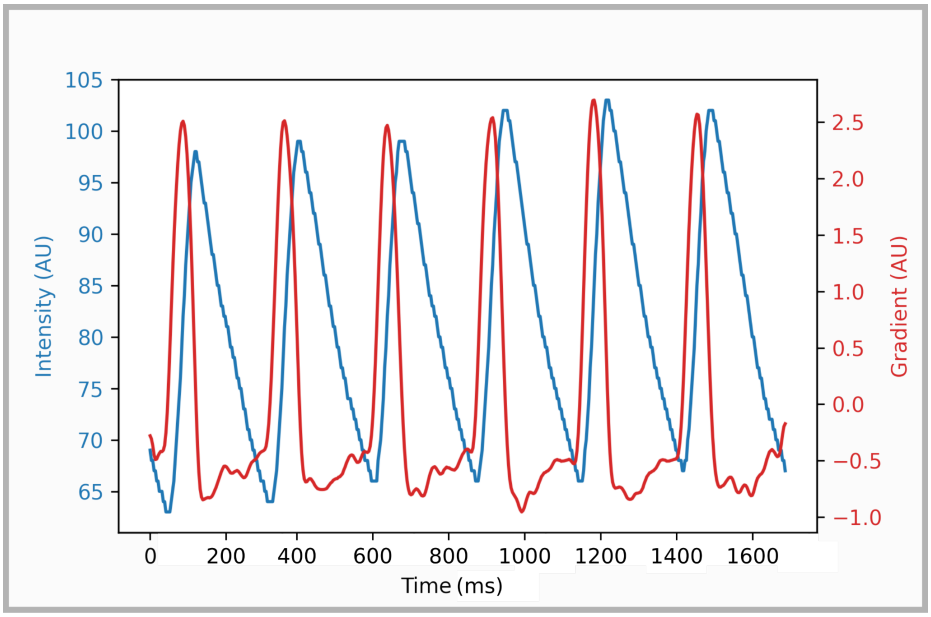
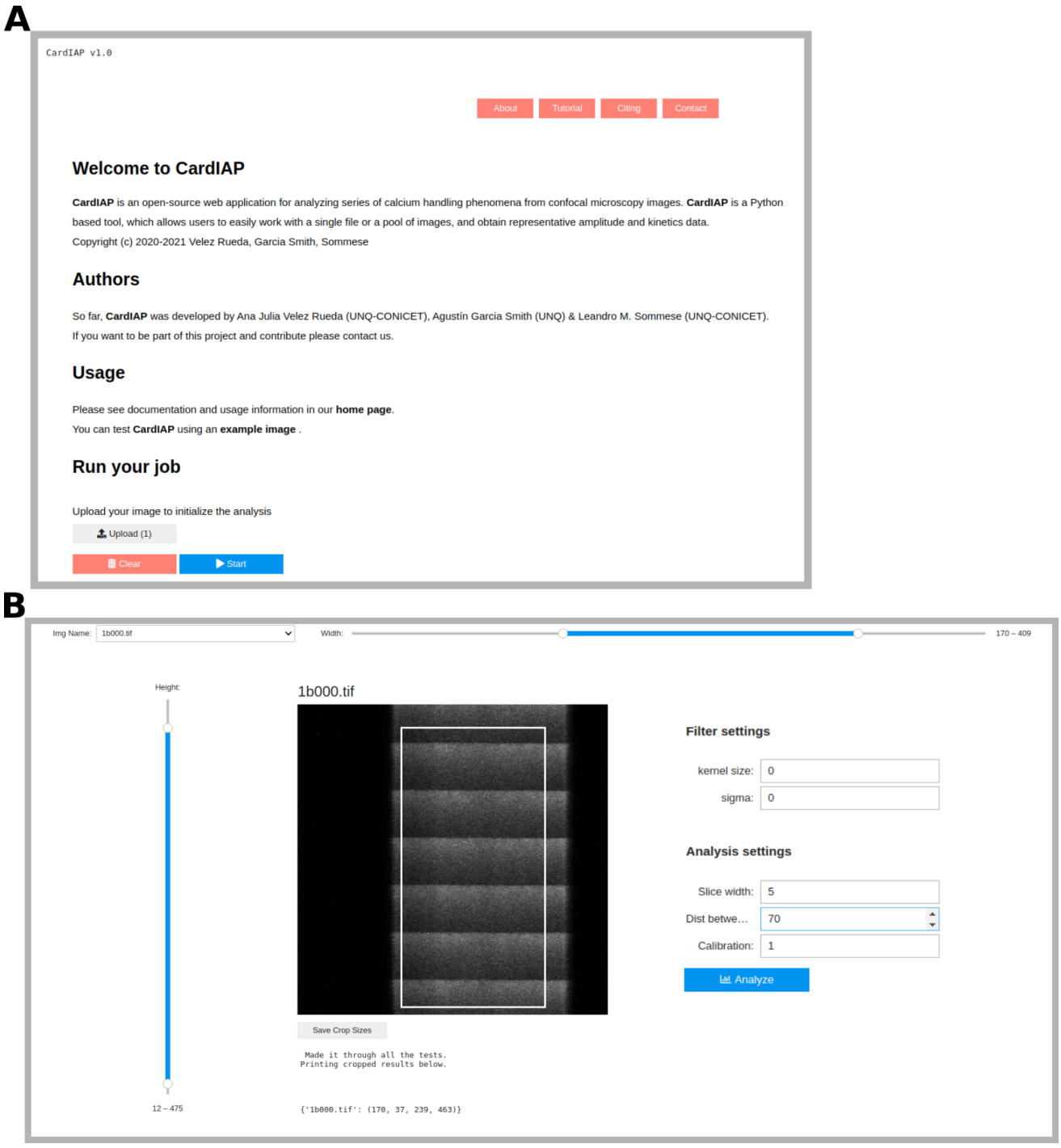
frontiers

Supplementary Material



Supplementary Figure 1. Intensity data gradient. The maximum values of the gradient (red line) accompany the data of the corresponding calcium transients (blue line) and precede the contraction.



Supplementary Figure 2. **A.** CardIAP home page. **B.** Once the user starts uploading the image, Panel B is displayed to allow cropping of the image. After saving the size of ROI, you can set the smoothing and analysis parameters.

A

Cell 1b000.tif

Complete Cell | Slices General Data | Slices Detail

Complete Cell area: (170, 37, 239, 463)

Peaks table

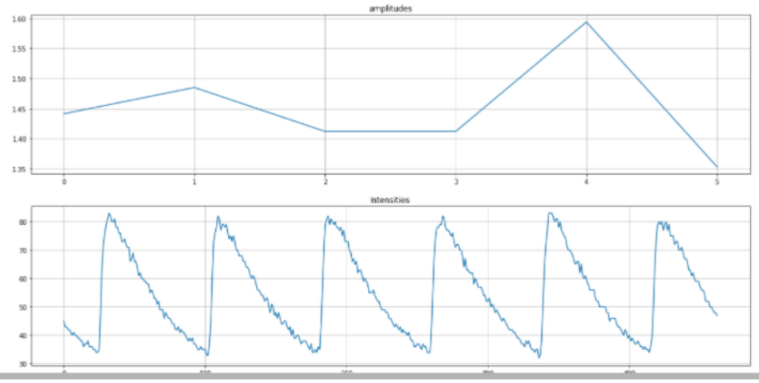
	amplitudes	max_peaks_positions	max_peaks_intensities	times_to_peaks	times_to_half_peaks	tau_s
0	1.441176	32	83.0	8.0	3.0	73.771066
1	1.484848	109	82.0	7.0	3.0	75.895377
2	1.411765	187	82.0	8.0	5.0	75.863771
3	1.411765	268	82.0	9.0	3.0	74.927729
4	1.593750	344	83.0	8.0	4.0	74.488029
5	1.352941	421	80.0	7.0	4.0	73.022027

Download Peaks Table

	min_peaks_positions	min_peaks_intensities
0	24	34.0
1	102	33.0
2	179	34.0
3	259	34.0
4	336	32.0
5	414	34.0
6	462	47.0

Download Peaks Minimumns Table

Peaks plot



B

Complete Cell | Slices General Data | Slices Detail

Slices Detail

Plot slice: 0

Show details

Slice table

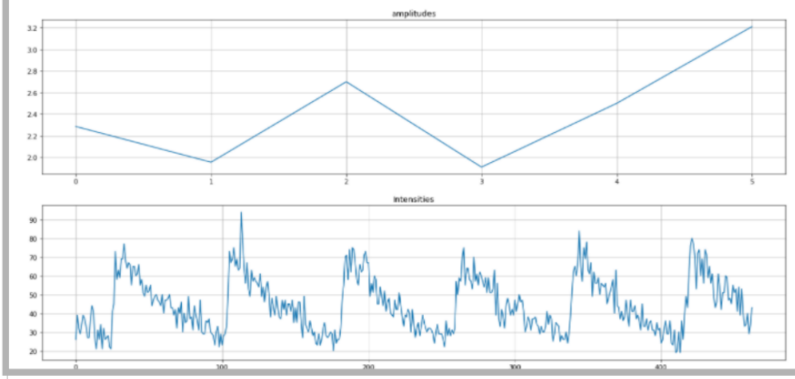
	amplitudes	max_peaks_positions	max_peaks_intensities	times_to_peaks	times_to_half_peaks	tau_s
0	2.285714	32	69.0	8.0	2.0	77.237581
1	1.954545	109	65.0	11.0	6.0	67.262055
2	2.700000	187	74.0	11.0	6.0	65.417496
3	1.909091	268	64.0	16.0	8.0	84.802317
4	2.500000	344	84.0	8.0	4.0	65.699722
5	3.210526	421	80.0	8.0	6.0	63.952588

Download Slice Table

	min_peaks_positions	min_peaks_intensities
0	24	21.0
1	98	22.0
2	176	20.0
3	252	22.0
4	336	24.0
5	413	19.0
6	460	29.0

Download Slice Minimumns Table

Slice plot



C

Global Discordance Results

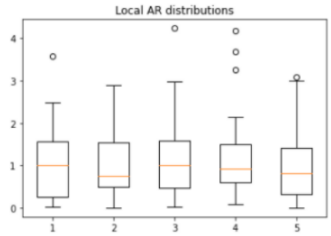
	DI	Global AR
0	0.822509	0.213714
1	0.735872	0.219520
2	0.934060	0.337881
3	0.880781	0.502753
4	0.850013	0.582923

Download Discordance Results

Local AR Results

	0	1	2	3	4
0	0.107108	0.685523	1.773854	0.956481	0.839860
1	0.618796	0.251203	1.759412	0.709895	0.362378
2	1.055535	2.300603	0.960906	0.082587	0.404566
3	0.259084	0.400865	0.493696	0.167555	0.367603
4	2.106379	1.103226	0.017929	0.615672	0.348258
...	...	...	...	...	...
42	0.902742	1.351394	0.238313	0.174619	1.480306
43	0.205886	0.876610	1.502846	0.940655	0.008769
44	0.306444	0.534664	0.988239	0.267795	1.839629
45	1.418107	0.440042	1.219705	0.704780	0.425172
46	1.813664	0.954438	2.988892	4.167897	1.012490

47 rows × 5 columns



Download Local AR Results

Supplementary Figure 3. **A.** This panel shows the first rows of the results of the complete cell analysis. Below each table is a link to download the results. A graph of average intensity and peak amplitude is displayed above the image to help the user visualize the intensity data. **B.** If you click on the parent label, you can view the results of the different images and the sections of each image.**C.** Downloadable table of global and local alternans ratios and discordance indices. The distribution of the local alternans ratio is presented in boxplots.