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Computational Medicine, Dept. of Medical Sciences
Signals & Systems, Dept. of Electrical Engineering
Uppsala University, March 2020
------ COMBO-MF Initiated ✓
Select mode for COMBO-MF:
1. Intra-Plate Analysis
2. Inter-Plate Analysis
---- Intra-Plate Analysis ---
Video Collection path: F:\CUSP9A\Mendeley\1-4\9095
COMBO-Pick Specification: F:\CUSP9A\Mendeley\1-4\M059K 190429 9095.xlsx
Enter hours after drug addition for the 1st recorded time point/frame:
0
Select mode for Intra-Plate Analysis:
1. Run a particular prototype
2. Merge results from several prototypes
1
Prototype path: F:\CUSP9A\Mendeley\1-4\prototypes\s1.mat
Backup does not exist and will be created...
Mode for COMBO-MF: Analysis...
Image Quality Control will be performed...
Enter the number of time points before treatment addition:
1
Detection threshold for matched filter will be calculated...
Enter the number of independent repeats for the cross validation:
2
Enter the number of leaving-out folds for the cross validation:
Backup initiated...
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Backup completed...

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No discrepancy found in the number of frames...
Blank wells not included in the video collection folder ...
Folder creation with the 1 untreated time point started....
1) 1 untreated frame of well 1 B10 1 2019y04m25d 18h00m copied...
2) 1 untreated frame of well 1 B11 1 2019y04m25d 18h00m copied...
3) 1 untreated frame of well 1 B12 1 2019y04m25d 18h00m copied...
4) 1 untreated frame of well 1 B13 1 2019y04m25d 18h00m copied...
5) 1 untreated frame of well 1_B14_1_2019y04m25d_18h00m copied...
6) 1 untreated frame of well 1 B15 1 2019y04m25d 18h00m copied...
7) 1 untreated frame of well 1 B16 1 2019y04m25d 18h00m copied...
8) 1 untreated frame of well 1 B17 1 2019y04m25d 18h00m copied...
9) 1 untreated frame of well 1_B18_1_2019y04m25d_18h00m copied...
10) 1 untreated frame of well 1 B19 1 2019y04m25d 18h00m copied...
11) 1 untreated frame of well 1 B20 1 2019y04m25d 18h00m copied...
12) 1 untreated frame of well 1 B21 1 2019y04m25d 18h00m copied...
13) 1 untreated frame of well 1 B22 1 2019y04m25d 18h00m copied...
14) 1 untreated frame of well 1 B23 1 2019y04m25d 18h00m copied...
15) 1 untreated frame of well 1 B2 1 2019y04m25d 18h00m copied...
16) 1 untreated frame of well 1 B3 1 2019y04m25d 18h00m copied...
17) 1 untreated frame of well 1 B4 1 2019y04m25d 18h00m copied...
18) 1 untreated frame of well 1 B5 1 2019y04m25d 18h00m copied...
19) 1 untreated frame of well 1 B6 1 2019y04m25d 18h00m copied...
20) 1 untreated frame of well 1_B7_1_2019y04m25d_18h00m copied...
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21) 1 untreated frame of well 1 B8 1 2019y04m25d 18h00m copied... 22) 1 untreated frame of well 1 B9 1 2019y04m25d 18h00m copied... 23) 1 untreated frame of well 1 C10 1 2019y04m25d 18h00m copied... 24) 1 untreated frame of well 1 C11 1 2019y04m25d 18h00m copied... 25) 1 untreated frame of well 1 C12 1 2019y04m25d 18h00m copied... 26) 1 untreated frame of well 1\_C13\_1\_2019y04m25d\_18h00m copied... 27) 1 untreated frame of well 1 C14 1 2019y04m25d 18h00m copied... 28) 1 untreated frame of well 1\_C15\_1\_2019y04m25d 18h00m copied... 29) 1 untreated frame of well 1 C16 1 2019y04m25d 18h00m copied... 30) 1 untreated frame of well  $1_C17_1_2019y04m25d_18h00m$  copied... 31) 1 untreated frame of well 1 C18 1 2019y04m25d 18h00m copied... 32) 1 untreated frame of well 1 C19 1 2019y04m25d 18h00m copied... 33) 1 untreated frame of well 1 C20 1 2019y04m25d 18h00m copied... 34) 1 untreated frame of well 1\_C21\_1\_2019y04m25d\_18h00m copied... 35) 1 untreated frame of well 1\_C22\_1\_2019y04m25d\_18h00m copied... 36) 1 untreated frame of well 1\_C23\_1\_2019y04m25d\_18h00m copied... 37) 1 untreated frame of well 1 C2 1 2019y04m25d 18h00m copied... 38) 1 untreated frame of well 1\_C3\_1\_2019y04m25d\_18h00m copied... 39) 1 untreated frame of well 1\_C4\_1\_2019y04m25d\_18h00m copied... 40) 1 untreated frame of well 1 C5 1 2019y04m25d 18h00m copied... 41) 1 untreated frame of well 1 C6 1 2019y04m25d 18h00m copied... 42) 1 untreated frame of well 1 C7 1 2019y04m25d 18h00m copied... 43) 1 untreated frame of well 1 C8 1 2019y04m25d 18h00m copied... 44) 1 untreated frame of well 1\_C9\_1\_2019y04m25d\_18h00m copied... 45) 1 untreated frame of well 1 D10 1 2019y04m25d 18h00m copied...

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46) 1 untreated frame of well 1 D11 1 2019y04m25d 18h00m copied...
47) 1 untreated frame of well 1 D12 1 2019y04m25d 18h00m copied...
48) 1 untreated frame of well 1 D13_1_2019y04m25d_18h00m copied...
49) 1 untreated frame of well 1 D14 1 2019y04m25d 18h00m copied...
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51) 1 untreated frame of well 1_D16_1_2019y04m25d_18h00m copied...
52) 1 untreated frame of well 1 D17 1 2019y04m25d 18h00m copied...
53) 1 untreated frame of well 1 D18 1 2019y04m25d 18h00m copied...
54) 1 untreated frame of well 1 D19 1 2019y04m25d 18h00m copied...
55) 1 untreated frame of well 1_D20_1_2019y04m25d_18h00m copied...
56) 1 untreated frame of well 1 D21 1 2019y04m25d 18h00m copied...
57) 1 untreated frame of well 1 D22 1 2019y04m25d 18h00m copied...
58) 1 untreated frame of well 1 D23 1 2019y04m25d 18h00m copied...
59) 1 untreated frame of well 1_D2_1_2019y04m25d_18h00m copied...
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61) 1 untreated frame of well 1 D4 1 2019y04m25d 18h00m copied...
62) 1 untreated frame of well 1 D5 1 2019y04m25d 18h00m copied...
63) 1 untreated frame of well 1 D6 1 2019y04m25d 18h00m copied...
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67) 1 untreated frame of well 1 E10 1 2019y04m25d 18h00m copied...
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69) 1 untreated frame of well 1 E12_1_2019y04m25d_18h00m copied...
70) 1 untreated frame of well 1 E13_1_2019y04m25d_18h00m copied...
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71) 1 untreated frame of well 1 E14 1 2019y04m25d 18h00m copied... 72) 1 untreated frame of well 1 E15 1 2019y04m25d 18h00m copied... 73) 1 untreated frame of well 1 E16\_1\_2019y04m25d\_18h00m copied... 74) 1 untreated frame of well 1 E17 1 2019y04m25d 18h00m copied... 75) 1 untreated frame of well 1 E18 1 2019y04m25d 18h00m copied... 76) 1 untreated frame of well 1\_E19\_1\_2019y04m25d\_18h00m copied... 77) 1 untreated frame of well 1 E20 1 2019y04m25d 18h00m copied... 78) 1 untreated frame of well 1 E21 1 2019y04m25d 18h00m copied... 79) 1 untreated frame of well 1 E22 1 2019y04m25d 18h00m copied... 80) 1 untreated frame of well 1\_E23\_1\_2019y04m25d\_18h00m copied... 81) 1 untreated frame of well 1 E2 1 2019y04m25d 18h00m copied... 82) 1 untreated frame of well 1 E3 1 2019y04m25d 18h00m copied... 83) 1 untreated frame of well 1 E4 1 2019y04m25d 18h00m copied... 84) 1 untreated frame of well 1\_E5\_1\_2019y04m25d\_18h00m copied... 85) 1 untreated frame of well 1\_E6\_1\_2019y04m25d\_18h00m copied... 86) 1 untreated frame of well 1 E7 1 2019y04m25d 18h00m copied... 87) 1 untreated frame of well 1 E8 1 2019y04m25d 18h00m copied... 88) 1 untreated frame of well 1 E9 1 2019y04m25d 18h00m copied... 89) 1 untreated frame of well 1\_F10\_1\_2019y04m25d\_18h00m copied... 90) 1 untreated frame of well 1 F11 1 2019y04m25d 18h00m copied... 91) 1 untreated frame of well 1 F12 1 2019y04m25d 18h00m copied... 92) 1 untreated frame of well 1 F13 1 2019y04m25d 18h00m copied... 93) 1 untreated frame of well 1 F14 1 2019y04m25d 18h00m copied... 94) 1 untreated frame of well 1\_F15\_1\_2019y04m25d\_18h00m copied... 95) 1 untreated frame of well 1\_F16\_1\_2019y04m25d\_18h00m copied...

96) 1 untreated frame of well 1 F17 1 2019y04m25d 18h00m copied... 97) 1 untreated frame of well 1 F18 1 2019y04m25d 18h00m copied... 98) 1 untreated frame of well 1\_F19\_1\_2019y04m25d\_18h00m copied... 99) 1 untreated frame of well 1 F20 1 2019y04m25d 18h00m copied... 100) 1 untreated frame of well 1 F21 1 2019y04m25d 18h00m copied... 101) 1 untreated frame of well 1\_F22\_1\_2019y04m25d\_18h00m copied... 102) 1 untreated frame of well 1 F23 1 2019y04m25d 18h00m copied... 103) 1 untreated frame of well 1 F2 1 2019y04m25d 18h00m copied... 104) 1 untreated frame of well 1 F3 1 2019y04m25d 18h00m copied... 105) 1 untreated frame of well 1 F4 1 2019y04m25d 18h00m copied... 106) 1 untreated frame of well 1 F5 1 2019y04m25d 18h00m copied... 107) 1 untreated frame of well 1 F6 1 2019y04m25d 18h00m copied... 108) 1 untreated frame of well 1 F7 1 2019y04m25d 18h00m copied... 109) 1 untreated frame of well 1 F8 1 2019y04m25d 18h00m copied... 110) 1 untreated frame of well 1 F9 1 2019y04m25d 18h00m copied... 111) 1 untreated frame of well 1 G10 1 2019y04m25d 18h00m copied... 112) 1 untreated frame of well 1 G11 1 2019y04m25d 18h00m copied... 113) 1 untreated frame of well 1 G12 1 2019y04m25d 18h00m copied... 114) 1 untreated frame of well 1\_G13\_1\_2019y04m25d\_18h00m copied... 115) 1 untreated frame of well 1 G14 1 2019y04m25d 18h00m copied... 116) 1 untreated frame of well 1 G15 1 2019y04m25d 18h00m copied... 117) 1 untreated frame of well 1 G16 1 2019y04m25d 18h00m copied... 118) 1 untreated frame of well 1 G17 1 2019y04m25d 18h00m copied... 119) 1 untreated frame of well 1\_G18\_1\_2019y04m25d\_18h00m copied... 120) 1 untreated frame of well 1\_G19\_1\_2019y04m25d\_18h00m copied...

121) 1 untreated frame of well 1 G20 1 2019y04m25d 18h00m copied... 122) 1 untreated frame of well 1 G21 1 2019y04m25d 18h00m copied... 123) 1 untreated frame of well 1\_G22\_1\_2019y04m25d\_18h00m copied... 124) 1 untreated frame of well 1 G23 1 2019y04m25d 18h00m copied... 125) 1 untreated frame of well 1 G2 1 2019y04m25d 18h00m copied... 126) 1 untreated frame of well 1\_G3\_1\_2019y04m25d\_18h00m copied... 127) 1 untreated frame of well 1 G4 1 2019y04m25d 18h00m copied... 128) 1 untreated frame of well 1 G5 1 2019y04m25d 18h00m copied... 129) 1 untreated frame of well 1 G6 1 2019y04m25d 18h00m copied... 130) 1 untreated frame of well 1 G7 1 2019y04m25d 18h00m copied... 131) 1 untreated frame of well 1 G8 1 2019y04m25d 18h00m copied... 132) 1 untreated frame of well 1 G9 1 2019y04m25d 18h00m copied... 133) 1 untreated frame of well 1 H10 1 2019y04m25d 18h00m copied... 134) 1 untreated frame of well 1\_H11\_1\_2019y04m25d\_18h00m copied... 135) 1 untreated frame of well 1\_H12\_1\_2019y04m25d\_18h00m copied... 136) 1 untreated frame of well 1 H13 1 2019y04m25d 18h00m copied... 137) 1 untreated frame of well 1 H14 1 2019y04m25d 18h00m copied... 138) 1 untreated frame of well 1 H15 1 2019y04m25d 18h00m copied... 139) 1 untreated frame of well 1 H16 1 2019y04m25d 18h00m copied... 140) 1 untreated frame of well 1 H17 1 2019y04m25d 18h00m copied... 141) 1 untreated frame of well 1 H18 1 2019y04m25d 18h00m copied... 142) 1 untreated frame of well 1 H19 1 2019y04m25d 18h00m copied... 143) 1 untreated frame of well 1 H20 1 2019y04m25d 18h00m copied... 144) 1 untreated frame of well 1 H21 1 2019y04m25d 18h00m copied... 145) 1 untreated frame of well 1\_H22\_1\_2019y04m25d\_18h00m copied...

146) 1 untreated frame of well 1 H23 1 2019y04m25d 18h00m copied... 147) 1 untreated frame of well 1 H2 1 2019y04m25d 18h00m copied... 148) 1 untreated frame of well 1 H3 1 2019y04m25d 18h00m copied... 149) 1 untreated frame of well 1 H4 1 2019y04m25d 18h00m copied... 150) 1 untreated frame of well 1 H5 1 2019y04m25d 18h00m copied... 151) 1 untreated frame of well 1\_H6\_1\_2019y04m25d\_18h00m copied... 152) 1 untreated frame of well 1 H7 1 2019y04m25d 18h00m copied... 153) 1 untreated frame of well 1 H8 1 2019y04m25d 18h00m copied... 154) 1 untreated frame of well 1 H9 1 2019y04m25d 18h00m copied... 155) 1 untreated frame of well 1 I10 1 2019y04m25d 18h00m copied... 156) 1 untreated frame of well 1 I11 1 2019y04m25d 18h00m copied... 157) 1 untreated frame of well 1 I12 1 2019y04m25d 18h00m copied... 158) 1 untreated frame of well 1 I13 1 2019y04m25d 18h00m copied... 159) 1 untreated frame of well 1\_I14\_1\_2019y04m25d\_18h00m copied... 160) 1 untreated frame of well 1\_I15\_1\_2019y04m25d\_18h00m copied... 161) 1 untreated frame of well 1 I16 1 2019y04m25d 18h00m copied... 162) 1 untreated frame of well 1 I17 1 2019y04m25d 18h00m copied... 163) 1 untreated frame of well 1 I18 1 2019y04m25d 18h00m copied... 164) 1 untreated frame of well 1\_I19\_1\_2019y04m25d\_18h00m copied... 165) 1 untreated frame of well 1 I20 1 2019y04m25d 18h00m copied... 166) 1 untreated frame of well 1 I21 1 2019y04m25d 18h00m copied... 167) 1 untreated frame of well 1 I22 1 2019y04m25d 18h00m copied... 168) 1 untreated frame of well 1 I23 1 2019y04m25d 18h00m copied... 169) 1 untreated frame of well 1 I2 1 2019y04m25d 18h00m copied... 170) 1 untreated frame of well 1 13 1 2019y04m25d 18h00m copied...

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171) 1 untreated frame of well 1 I4 1 2019y04m25d 18h00m copied...
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176) 1 untreated frame of well 1_I9_1_2019y04m25d_18h00m copied...
177) 1 untreated frame of well 1 J10 1 2019y04m25d 18h00m copied...
178) 1 untreated frame of well 1 J11 1 2019y04m25d 18h00m copied...
179) 1 untreated frame of well 1 J12 1 2019y04m25d 18h00m copied...
180) 1 untreated frame of well 1_J13_1_2019y04m25d_18h00m copied...
181) 1 untreated frame of well 1 J14 1 2019y04m25d 18h00m copied...
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183) 1 untreated frame of well 1 J16 1 2019y04m25d 18h00m copied...
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227) 1 untreated frame of well 1 L16 1 2019y04m25d 18h00m copied...
228) 1 untreated frame of well 1 L17 1 2019y04m25d 18h00m copied...
229) 1 untreated frame of well 1 L18 1 2019y04m25d 18h00m copied...
230) 1 untreated frame of well 1_L19_1_2019y04m25d_18h00m copied...
231) 1 untreated frame of well 1 L20 1 2019y04m25d 18h00m copied...
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233) 1 untreated frame of well 1 L22 1 2019y04m25d 18h00m copied...
234) 1 untreated frame of well 1_L23_1_2019y04m25d_18h00m copied...
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274) 1 untreated frame of well 1 N19 1 2019y04m25d 18h00m copied...
275) 1 untreated frame of well 1 N20 1 2019y04m25d 18h00m copied...
276) 1 untreated frame of well 1 N21 1 2019y04m25d 18h00m copied...
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286) 1 untreated frame of well 1 N9 1 2019y04m25d 18h00m copied...
287) 1 untreated frame of well 1 010 1 2019y04m25d 18h00m copied...
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293) 1 untreated frame of well 1 016 1 2019y04m25d 18h00m copied...
294) 1 untreated frame of well 1_017_1_2019y04m25d_18h00m copied...
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296) 1 untreated frame of well 1 019 1 2019y04m25d 18h00m copied...
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300) 1 untreated frame of well 1 023 1 2019y04m25d 18h00m copied...
301) 1 untreated frame of well 1 O2 1 2019y04m25d 18h00m copied...
302) 1 untreated frame of well 1 03 1 2019y04m25d 18h00m copied...
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304) 1 untreated frame of well 1 05 1 2019y04m25d 18h00m copied...
305) 1 untreated frame of well 1 06 1 2019y04m25d 18h00m copied...
306) 1 untreated frame of well 1 07 1 2019y04m25d 18h00m copied...
307) 1 untreated frame of well 1 08 1 2019y04m25d 18h00m copied...
308) 1 untreated frame of well 1 09 1 2019y04m25d 18h00m copied...
Folder creation with the 1 untreated time point completed....
Imaged-based assay quality control started...
Starting parallel pool (parpool) using the 'local' profile ...
Connected to the parallel pool (number of workers: 4).
Extraction of hierarchical histograms started...
Parallel mapreduce execution on the parallel pool:
********
      MAPREDUCE PROGRESS
********
     0% Reduce
               0%
Map
    1% Reduce 0%
Map
Map
    2% Reduce 0%
    3% Reduce 0%
Map
Map 4% Reduce 0%
Map 5% Reduce 0%
Map
    6% Reduce
               0%
    7% Reduce 0%
Map
```

Map	8%	Reduce	0%
Map	9%	Reduce	0%
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Map	14%	Reduce	0%
Map	<b>15</b> %	Reduce	0%
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Map	43%		0%
Map	44%		0%
Map	45%	Reduce	0%
Map	46%	Reduce	0%
Map	<b>47</b> %	Reduce	0%
Map	48%		0%
Map	49%		0%
Map	50%		0%
Map	51%	Reduce	0%
Map	<b>52</b> %	Reduce	0%
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Map	<b>54</b> %		0%
Map	55%		0%
Map	56%		0%
Map	<b>57</b> %	Reduce	0%
Lap	J, 0		0 0

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Map 58% Reduce
                0 %
Map 59% Reduce
              0 응
Map 60% Reduce 0%
Map 61% Reduce 0%
Map 62% Reduce 0%
Map 63% Reduce 0%
Map 64% Reduce 0%
Map 65% Reduce 0%
Map 66% Reduce 0%
Map 67% Reduce 0%
              0%
Map 68% Reduce
Map 69% Reduce 0%
Map 70% Reduce
Map 71% Reduce 0%
Map 72% Reduce
              0%
Map 73% Reduce 0%
Map 74% Reduce
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Map 75% Reduce 0%
Map 76% Reduce
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Map 77% Reduce 0%
Map 78% Reduce
              0%
Map 79% Reduce 0%
Map 80% Reduce
              0%
Map 81% Reduce 0%
Map 82% Reduce 0%
Map 83% Reduce 0%
Map 84% Reduce 0%
Map 85% Reduce
              0%
Map 86% Reduce 0%
Map 87% Reduce
              0%
Map 88% Reduce 0%
Map 89% Reduce
              0%
Map 90% Reduce 0%
Map 91% Reduce
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Map 92% Reduce 0%
Map 93% Reduce
              0%
Map 94% Reduce 0%
Map 95% Reduce 0%
Map 96% Reduce 0%
Map 97% Reduce 0%
Map 98% Reduce 0%
Map 99% Reduce
              0%
Map 100% Reduce
Map 100% Reduce 100%
```

Extraction of hierarchical histograms completed...

```
Time elapsed for processing of wells: 0.00 (hrs) 0.00 (min) 11.60 (sec)
Parallel pool using the 'local' profile is shutting down.
Extraction of cell confluence started...
Starting parallel pool (parpool) using the 'local' profile ...
Connected to the parallel pool (number of workers: 4).
Parallel mapreduce execution on the parallel pool:
*********
     MAPREDUCE PROGRESS
********
Map 0% Reduce 0%
Map 1% Reduce 0%
Map 2% Reduce 0%
Map 3% Reduce 0%
Map 4% Reduce 0%
Map 5% Reduce 0%
Map 6% Reduce 0%
Map 7% Reduce 0%
Map 8% Reduce 0%
Map 9% Reduce 0%
Map 10% Reduce 0%
Map 11% Reduce 0%
Map 12% Reduce 0%
Map 13% Reduce 0%
Map 14% Reduce 0%
Map 15% Reduce 0%
Map 16% Reduce 0%
Map 17% Reduce 0%
Map 18% Reduce 0%
Map 19% Reduce 0%
Map 20% Reduce 0%
Map 21% Reduce 0%
Map 22% Reduce 0%
Map 23% Reduce 0%
Map 24% Reduce 0%
Map 25% Reduce 0%
Map 26% Reduce 0%
Map 27% Reduce 0%
Map 28% Reduce 0%
Map 29% Reduce 0%
Map 30% Reduce 0%
Map 31% Reduce 0%
Map 32% Reduce 0%
```

Map	33%	Reduce	0%
Map	<b>34</b> %	Reduce	0%
Map	35%	Reduce	0%
Map	36%	Reduce	0%
Map	<b>37</b> %	Reduce	0 %
Map	38%	Reduce	0%
Map	<b>39</b> %	Reduce	0 %
Map	40%	Reduce	0 %
Map	<b>41</b> %	Reduce	0%
Map	<b>42</b> %	Reduce	0%
Map	43%	Reduce	0%
Map	44%	Reduce	0%
Map	<b>45</b> %	Reduce	0 %
Map	46%	Reduce	0 %
Map	<b>47</b> %	Reduce	0%
Map	48%	Reduce	0%
Map	49%	Reduce	0%
Map	50%	Reduce	0%
Map	<b>51</b> %	Reduce	0%
Map	<b>52</b> %	Reduce	0%
Map	53%	Reduce	0%
Map	<b>54</b> %	Reduce	0%
Map	55%	Reduce	0%
Map	56%	Reduce	0%
Map	<b>57</b> %	Reduce	0%
Map	<b>58</b> %	Reduce	0%
Map	<b>59</b> %	Reduce	0%
Map	60%	Reduce	0%
Map	61%	Reduce	0%
Map	62%	Reduce	0%
Map	63%	Reduce	0%
Map	<b>64</b> %	Reduce	0%
Map	<b>65</b> %	Reduce	0%
Map	66%	Reduce	0%
Map	<b>67</b> %	Reduce	0%
Map	68%		0%
Map	<b>69</b> %		0%
Map	70%		0%
Map	71%		0%
Map	<b>72</b> %	Reduce	0%
Map	73%	Reduce	0%
Map	<b>74</b> %	Reduce	0%
Map	<b>75</b> %	Reduce	0%
Map	76%	Reduce	0%
Map	77%	Reduce	0%
Map	78%	Reduce	0%
Map	79%	Reduce	0%
Map	80%		0%
Map	81%		0%
Map	82%	Reduce	0%

```
Map 83% Reduce
                0 %
Map 84% Reduce 0%
Map 85% Reduce 0%
Map 86% Reduce 0%
Map 87% Reduce 0%
Map 88% Reduce 0%
Map 89% Reduce 0%
Map 90% Reduce 0%
Map 91% Reduce 0%
Map 92% Reduce 0%
Map 93% Reduce 0%
Map 94% Reduce 0%
Map 95% Reduce 0%
Map 96% Reduce 0%
Map 97% Reduce
               0%
Map 98% Reduce 0%
Map 99% Reduce
               0 %
Map 100% Reduce
Map 100% Reduce 100%
Parallel pool using the 'local' profile is shutting down.
Extraction of cell confluence completed...
Time elapsed for processing of wells: 0.00 (hrs) 0.00 (min) 30.06 (sec)
1 detected outliers before treatment additions...
1) All frames of well 1 L16 removed...
Imaged-based assay quality control completed...
Threshold detection for matched filter started...
----- 2-times Repeated 4-fold Cross Validation for Filter Tuning ✓
----- Repeat 1 of 2, Leaving out fold 1 of 4 ------
Convex interval around initial guess exists...
Interval optimization started...
Interval optimization completed...
```

```
Time elapsed for interval optimization: 0.00 (hrs) 0.00 (min) 46.61 (sec)
----- Repeat 1 of 2, Leaving out fold 2 of 4 -----
Convex interval around initial guess exists...
Interval optimization started...
Interval optimization completed...
Time elapsed for interval optimization: 0.00 (hrs) 1.00 (min) 32.82 (sec)
----- Repeat 1 of 2, Leaving out fold 3 of 4 ------
Convex interval around initial guess exists...
Interval optimization started...
Interval optimization completed...
Time elapsed for interval optimization: 0.00 (hrs) 1.00 (min) 7.22 (sec)
----- Repeat 1 of 2, Leaving out fold 4 of 4 -----
Convex interval around initial guess exists...
Interval optimization started...
Interval optimization completed...
Time elapsed for interval optimization: 0.00 (hrs) 1.00 (min) 20.42 (sec)
----- Repeat 2 of 2, Leaving out fold 1 of 4 -----
Convex interval around initial guess exists...
Interval optimization started...
Interval optimization completed...
Time elapsed for interval optimization: 0.00 (hrs) 1.00 (min) 16.27 (sec)
----- Repeat 2 of 2, Leaving out fold 2 of 4 ------
Left boundary of convex interval around initial guess must be formed ...
Function value at left boundary 1118991.029000: 4.333333
Function value at central point 1381559.330000: 3.666667
```

```
Left boundary of convex interval around initial guess formed...
Interval optimization started...
Interval optimization completed...
Time elapsed for interval optimization: 0.00 (hrs) 1.00 (min) 32.53 (sec)
----- Repeat 2 of 2, Leaving out fold 3 of 4 ------
Convex interval around initial guess exists...
Interval optimization started...
Interval optimization completed...
Time elapsed for interval optimization: 0.00 (hrs) 1.00 (min) 7.53 (sec)
----- Repeat 2 of 2, Leaving out fold 4 of 4 -----
Convex interval around initial guess exists...
Interval optimization started...
Interval optimization completed...
Time elapsed for interval optimization: 0.00 (hrs) 1.00 (min) 6.94 (sec)
Detection threshold from 2-times repeated 4-fold cross validation: 1495671.013851
Threshold detection for matched filter completed...
Median test error: 5
Time elapsed for Matched Filter Tuning: 0.00 (hrs) 10.00 (min) 7.10 (sec)
Starting parallel pool (parpool) using the 'local' profile ...
Connected to the parallel pool (number of workers: 4).
Matched filtering started...
Parallel mapreduce execution on the parallel pool:
*********
```

*		APREDUCE	
****	***	******	******
Map	0%	Reduce	0%
Map	1%	Reduce	0%
Map	2%	Reduce	0%
Map	3%	Reduce	0%
Map	<b>4</b> %	Reduce	0%
Map	<b>5</b> %	Reduce	0%
Map	<b>6</b> %	Reduce	0%
Map	<b>7</b> %	Reduce	0%
Map	88	Reduce	0%
Map	9%	Reduce	0%
Map	10%	Reduce	0%
Map	11%	Reduce	0%
Map	<b>12</b> %	Reduce	0%
Map	13%	Reduce	0%
Map	14%	Reduce	0%
Map	<b>15</b> %	Reduce	0%
Map	16%	Reduce	0%
Map	<b>17</b> %	Reduce	0%
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Map	31%	Reduce	0%
Map	32%	Reduce	0%
Map	33%	Reduce	0%
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Map	37%	Reduce	0%
Map	38%	Reduce	0%
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Map	40%	Reduce	0%
Map	41%	Reduce	0%
Map	<b>42</b> %	Reduce	0%
Map	43%	Reduce	0%
Map	44%	Reduce	0%
Map	<b>45</b> %	Reduce	0%
Map	46%	Reduce	0%
Map	<b>47</b> %	Reduce	0%
- E	-		

Map	48%	Reduce	0%
Map	49%	Reduce	0%
Map	50%	Reduce	0%
Map	51%	Reduce	0%
Map	<b>52</b> %	Reduce	0%
Map	53%	Reduce	0%
Map	<b>54</b> %	Reduce	0%
Map	<b>55</b> %	Reduce	0%
Map	56%	Reduce	0%
Map	<b>57</b> %	Reduce	0%
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Map	67%	Reduce	0%
Map	68%	Reduce	0%
Map	69%	Reduce	0%
Map	70%	Reduce	0%
Map	71%	Reduce	0%
Map	72%	Reduce	0%
Map	73%	Reduce	0%
Map	74%	Reduce	0%
Map	75%	Reduce	0%
Map	76%	Reduce	0%
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Map	78%	Reduce	0%
Map	79%	Reduce	0%
Map	80%	Reduce	0%
Map	81%	Reduce	0%
Map	82%	Reduce	0%
Map	83%		0%
Map	84%		0%
Map	85%	Reduce	0%
Map	86%	Reduce	0%
Map	87%	Reduce	0%
Map	88%	Reduce	0%
Map	89%		0%
Map	90%		0%
Map	91%	Reduce	0%
Map	92%	Reduce	0%
Map	93%	Reduce	0%
Map	94%		0%
Map	95%		0%
Map	96%		0%
Map	<b>97</b> %	Reduce	0%
LLUP	2,0		0 0

>>

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Map 98% Reduce
                0 %
Map 99% Reduce 0%
Map 100% Reduce 0%
Map 100% Reduce 100%
Matched filtering completed...
Time elapsed for MapReduce: 0.00 (hrs) 4.00 (min) 47.78 (sec)
Parallel pool using the 'local' profile is shutting down.
Retrieval of object counts for untreated wells started...
Retrieval of object counts for untreated wells completed...
Retrieval of object counts for treated wells started...
Retrieval of object counts for treated wells completed...
Generation of curves with object counts started...
Generation of curves with object counts completed...
Generation of CSV file with object counts started...
Generation of CSV file with object counts completed...
Time elapsed for COMBO-MF: 0.00 (hrs) 17.00 (min) 26.50 (sec)
----- COMBO-MF Completed ✓
_____
```