-- COMBO-M Initiated ↙

Select mode for COMBO-M:
1. Intra-Plate Analysis
2. Inter-Plate Analysis
1

---- Intra-Plate Analysis ---

Choose feature extraction method:
1. Multi Resolution Histograms
2. Local Binary Patterns
3. Multi Resolution Local Binary Patterns
4. Local Eigenfilters
1

Video Collection folder: F:\CUSP9A\Mendeley\5-8\9094

Backup exists...

COMBO-Pick Specification: F:\CUSP9A\Mendeley\M059K_190429_9094.xlsx

Mode for COMBO-M: Analysis...

Image Quality Control already performed...

Enter hours after drug addition for the 1st recorded time point/frame:
0

Enter probability of false alarm (%) for the NHST:
5

 Blank wells not included in the video collection folder...

------------- AQDTEM (PHHC) Run: 1 of 4 (Parameter Pair: r = 0.250000, b = 0.125000) ↙
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   *
****
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%
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Map 10% Reduce   0%
Map 11% Reduce   0%
Map 12% Reduce   0%
Map 13% Reduce   0%
Map 14% Reduce   0%
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Map 27% Reduce   0%
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Map 36% Reduce   0%
Map 37% Reduce   0%
Map 38% Reduce   0%
Map 39% Reduce   0%

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Map   40% Reduce    0%
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Map  100% Reduce  100%
```

Extraction of hierarchical histograms completed...

Time elapsed for processing of wells: 0.00 (hrs) 2.00 (min) 47.30 (sec)

Parallel pool using the 'local' profile is shutting down.

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 3.0551e+00

Total number of morphologically interesting wells found: 184

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t1 – t22: 184

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 2.9269e+00

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Total number of morphologically interesting wells found: 184

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t2 - t22: 184

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 2.6923e+00

Total number of morphologically interesting wells found: 190

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t3 - t22: 190

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 2.4391e+00

Total number of morphologically interesting wells found: 198

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t4 - t22: 198

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

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```
   False Alarm Threshold: 2.1503e+00


Total number of morphologically interesting wells found: 214

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt


t5 - t22: 214


  Detection of false alarm threshold in process ...

  Detection of false alarm completed ...

   False Alarm Threshold: 2.0102e+00


Total number of morphologically interesting wells found: 217

-------------------------------------------

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt


t6 - t22: 217


  Detection of false alarm threshold in process ...

  Detection of false alarm completed ...

   False Alarm Threshold: 1.9246e+00


Total number of morphologically interesting wells found: 215

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt


t7 - t22: 215
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Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 1.8432e+00

Total number of morphologically interesting wells found: 213

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t8 - t22: 213

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 1.7792e+00

Total number of morphologically interesting wells found: 211

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t9 - t22: 211

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 1.6636e+00

Total number of morphologically interesting wells found: 212

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

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t10 - t22: 212

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.5911e+00

Total number of morphologically interesting wells found: 207

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t11 - t22: 207

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.4867e+00

Total number of morphologically interesting wells found: 203

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t12 - t22: 203

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.3539e+00

Total number of morphologically interesting wells found: 205

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t13 - t22: 205

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.2284e+00

Total number of morphologically interesting wells found: 202

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t14 - t22: 202

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.1178e+00

Total number of morphologically interesting wells found: 196

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t15 - t22: 196

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.0240e+00

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Total number of morphologically interesting wells found: 190

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t16 - t22: 190

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 9.2313e-01

Total number of morphologically interesting wells found: 188

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t17 - t22: 188

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 8.8296e-01

Total number of morphologically interesting wells found: 166

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t18 - t22: 166

 Detection of false alarm threshold in process ...

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Detection of false alarm completed ...

False Alarm Threshold: 7.5869e-01

Total number of morphologically interesting wells found: 161

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t19 - t22: 161

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 6.8734e-01

Total number of morphologically interesting wells found: 147

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t20 - t22: 147

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 4.7020e-01

Total number of morphologically interesting wells found: 149

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t21 - t22: 149

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 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 2.1880e-01

Total number of morphologically interesting wells found: 159

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t22 - t22: 159

------------- AQDTEM (PHHC) Run: 1 of 4 (Parameter Pair: r = 0.2500, b = 0.1250) ↙
Completed -------------

------------- AQDTEM (PHHC) Run: 2 of 4 (Parameter Pair: r = 0.250000, b = 0.500000) ↙
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   *
****
Map   0% Reduce   0%
Map   1% Reduce   0%
Map   2% Reduce   0%
Map   3% Reduce   0%
Map   4% Reduce   0%
Map   5% Reduce   0%
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Efthymia Chantzi

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Efthymia Chantzi

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 Extraction of hierarchical histograms completed...


 Time elapsed for processing of wells: 0.00 (hrs) 3.00 (min) 45.19 (sec)
```

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```
Parallel pool using the 'local' profile is shutting down.

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.4560e+01



Total number of morphologically interesting wells found: 94

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt


t1 - t22: 94

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.3772e+01



Total number of morphologically interesting wells found: 105

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt


t2 - t22: 105

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.2314e+01



Total number of morphologically interesting wells found: 132

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```

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t3 - t22: 132

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.1527e+01

Total number of morphologically interesting wells found: 138

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t4 - t22: 138

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.1020e+01

Total number of morphologically interesting wells found: 134

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t5 - t22: 134

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.0775e+01

Total number of morphologically interesting wells found: 130

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t6 - t22: 130

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.0306e+01

Total number of morphologically interesting wells found: 122

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t7 - t22: 122

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 9.8624e+00

Total number of morphologically interesting wells found: 124

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t8 - t22: 124

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

False Alarm Threshold: 9.4941e+00

Total number of morphologically interesting wells found: 115

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t9 - t22: 115

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 9.1865e+00

Total number of morphologically interesting wells found: 104

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t10 - t22: 104

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 8.2071e+00

Total number of morphologically interesting wells found: 113

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t11 - t22: 113

```
 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 7.4844e+00


Total number of morphologically interesting wells found: 135

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt


t12 - t22: 135

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 6.9378e+00


Total number of morphologically interesting wells found: 130

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt


t13 - t22: 130

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 6.3146e+00


Total number of morphologically interesting wells found: 129

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt
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t14 – t22: 129

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 5.8232e+00

Total number of morphologically interesting wells found: 112

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t15 – t22: 112

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 5.5645e+00

Total number of morphologically interesting wells found: 83

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t16 – t22: 83

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 4.5366e+00

Total number of morphologically interesting wells found: 108

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t17 - t22: 108

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 3.9852e+00

Total number of morphologically interesting wells found: 88

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t18 - t22: 88

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 3.0079e+00

Total number of morphologically interesting wells found: 121

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t19 - t22: 121

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 2.5111e+00

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Total number of morphologically interesting wells found: 76

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t20 - t22: 76

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.9114e+00

Total number of morphologically interesting wells found: 44

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t21 - t22: 44

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.1532e+00

Total number of morphologically interesting wells found: 26

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t22 - t22: 26

------------- AQDTEM (PHHC) Run: 2 of 4 (Parameter Pair: r = 0.2500, b = 0.5000) ↙

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Completed -------------

------------- AQDTEM (PHHC) Run: 3 of 4 (Parameter Pair: r = 0.500000, b = 0.125000) ↙
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   *
****
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%
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Map  95% Reduce    0%
Map  96% Reduce    0%
Map  97% Reduce    0%
Map  98% Reduce    0%
Map  99% Reduce    0%
Map 100% Reduce    0%
Map 100% Reduce 100%
```

Extraction of hierarchical histograms completed...

Time elapsed for processing of wells: 0.00 (hrs) 2.00 (min) 35.11 (sec)

Parallel pool using the 'local' profile is shutting down.

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 1.4395e+00

Total number of morphologically interesting wells found: 230

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t1 - t22: 230

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 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.4146e+00

Total number of morphologically interesting wells found: 230

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t2 - t22: 230

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.3772e+00

Total number of morphologically interesting wells found: 227

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t3 - t22: 227

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.3347e+00

Total number of morphologically interesting wells found: 227

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

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t4 - t22: 227

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.2763e+00

Total number of morphologically interesting wells found: 228

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t5 - t22: 228

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.2420e+00

Total number of morphologically interesting wells found: 225

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t6 - t22: 225

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.2032e+00

Total number of morphologically interesting wells found: 225

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t7 - t22: 225

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.1039e+00

Total number of morphologically interesting wells found: 226

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t8 - t22: 226

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.0600e+00

Total number of morphologically interesting wells found: 220

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t9 - t22: 220

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 9.9499e-01

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Total number of morphologically interesting wells found: 219

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t10 - t22: 219

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 9.2143e-01

Total number of morphologically interesting wells found: 223

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t11 - t22: 223

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 8.3897e-01

Total number of morphologically interesting wells found: 224

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t12 - t22: 224

 Detection of false alarm threshold in process ...

Efthymia Chantzi

Detection of false alarm completed ...

False Alarm Threshold: 7.6858e-01

Total number of morphologically interesting wells found: 225

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t13 - t22: 225

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 7.0787e-01

Total number of morphologically interesting wells found: 225

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t14 - t22: 225

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 6.2130e-01

Total number of morphologically interesting wells found: 224

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t15 - t22: 224

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 5.4236e-01

Total number of morphologically interesting wells found: 225

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t16 - t22: 225

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 4.8544e-01

Total number of morphologically interesting wells found: 223

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t17 - t22: 223

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 3.8630e-01

Total number of morphologically interesting wells found: 225

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t18 - t22: 225

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 3.1990e-01

Total number of morphologically interesting wells found: 226

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t19 - t22: 226

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 2.3744e-01

Total number of morphologically interesting wells found: 230

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t20 - t22: 230

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.4635e-01

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Total number of morphologically interesting wells found: 237

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t21 - t22: 237

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 7.8442e-02

Total number of morphologically interesting wells found: 238

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t22 - t22: 238

-------------- AQDTEM (PHHC) Run: 3 of 4 (Parameter Pair: r = 0.5000, b = 0.1250) ↙
Completed --------------

-------------- AQDTEM (PHHC) Run: 4 of 4 (Parameter Pair: r = 0.500000, b = 0.500000) ↙
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   *
****
Map   0% Reduce   0%
Map   1% Reduce   0%
Map   2% Reduce   0%

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```
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   34% Reduce    0%
Map   35% Reduce    0%
Map   36% Reduce    0%
Map   37% Reduce    0%
Map   38% Reduce    0%
Map   39% Reduce    0%
Map   40% Reduce    0%
Map   41% Reduce    0%
Map   42% Reduce    0%
Map   43% Reduce    0%
Map   44% Reduce    0%
Map   45% Reduce    0%
Map   46% Reduce    0%
Map   47% Reduce    0%
Map   48% Reduce    0%
Map   49% Reduce    0%
Map   50% Reduce    0%
Map   51% Reduce    0%
Map   52% Reduce    0%
```

Efthymia Chantzi

```
Map   53% Reduce    0%
Map   54% Reduce    0%
Map   55% Reduce    0%
Map   56% Reduce    0%
Map   57% Reduce    0%
Map   58% Reduce    0%
Map   59% Reduce    0%
Map   60% Reduce    0%
Map   61% Reduce    0%
Map   62% Reduce    0%
Map   63% Reduce    0%
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Map   67% Reduce    0%
Map   68% Reduce    0%
Map   69% Reduce    0%
Map   70% Reduce    0%
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Map   80% Reduce    0%
Map   81% Reduce    0%
Map   82% Reduce    0%
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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    0%
Map  100% Reduce  100%
```

Efthymia Chantzi

Extraction of hierarchical histograms completed...

 Time elapsed for processing of wells: 0.00 (hrs) 5.00 (min) 33.93 (sec)

Parallel pool using the 'local' profile is shutting down.

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 5.4311e+00

Total number of morphologically interesting wells found: 174

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t1 - t22: 174

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 5.2973e+00

Total number of morphologically interesting wells found: 171

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t2 - t22: 171

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

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False Alarm Threshold: 5.0746e+00

Total number of morphologically interesting wells found: 166

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t3 - t22: 166

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 4.3988e+00

Total number of morphologically interesting wells found: 185

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t4 - t22: 185

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 4.0309e+00

Total number of morphologically interesting wells found: 191

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t5 - t22: 191

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Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 3.8238e+00

Total number of morphologically interesting wells found: 193

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t6 - t22: 193

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 3.6598e+00

Total number of morphologically interesting wells found: 190

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t7 - t22: 190

Detection of false alarm threshold in process ...

Detection of false alarm completed ...

False Alarm Threshold: 3.5012e+00

Total number of morphologically interesting wells found: 191

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

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t8 - t22: 191

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 3.2401e+00

Total number of morphologically interesting wells found: 191

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t9 - t22: 191

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 3.0417e+00

Total number of morphologically interesting wells found: 192

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t10 - t22: 192

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 2.9151e+00

Total number of morphologically interesting wells found: 185

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t11 - t22: 185

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 2.6620e+00

Total number of morphologically interesting wells found: 187

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t12 - t22: 187

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 2.5386e+00

Total number of morphologically interesting wells found: 183

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t13 - t22: 183

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 2.2835e+00

Total number of morphologically interesting wells found: 185

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t14 - t22: 185

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 2.1064e+00

Total number of morphologically interesting wells found: 178

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t15 - t22: 178

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.8029e+00

Total number of morphologically interesting wells found: 187

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t16 - t22: 187

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.6193e+00

Total number of morphologically interesting wells found: 185

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t17 - t22: 185

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.4257e+00

Total number of morphologically interesting wells found: 178

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t18 - t22: 178

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 1.1952e+00

Total number of morphologically interesting wells found: 168

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

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t19 - t22: 168

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 8.1425e-01

Total number of morphologically interesting wells found: 192

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t20 - t22: 192

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 6.2031e-01

Total number of morphologically interesting wells found: 178

Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t21 - t22: 178

 Detection of false alarm threshold in process ...

 Detection of false alarm completed ...

 False Alarm Threshold: 3.2325e-01

Total number of morphologically interesting wells found: 183

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Saving results to directory: F:\CUSP9A\Mendeley\5-8\9094\Morphology\PHHC\txt

t22 - t22: 183

------------- AQDTEM (PHHC) Run: 4 of 4 (Parameter Pair: r = 0.5000, b = 0.5000) ↙
Completed -------------

 |------ Total Time elapsed for the AQDTEM: 0.00 (hrs) 16.00 (min) 33.43 (sec) ------|

------ Optimum Parameter Pair for [t1 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)

------ Optimum Parameter Pair for [t2 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)

------ Optimum Parameter Pair for [t3 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)

------ Optimum Parameter Pair for [t4 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)

------ Optimum Parameter Pair for [t5 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)

------ Optimum Parameter Pair for [t6 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)

------ Optimum Parameter Pair for [t7 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)

------ Optimum Parameter Pair for [t8 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)

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```
------ Optimum Parameter Pair for [t9 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t10 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t11 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t12 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t13 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t14 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t15 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t16 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t17 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t18 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t19 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t20 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------ Optimum Parameter Pair for [t21 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)
```

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```
------ Optimum Parameter Pair for [t22 - t22]: ------
Run 3: (r, b) = (0.5000, 0.1250)


------------------------ Run 1 ------------------------


Retrieval of cell morphology changes for untreated wells started...
Retrieval of cell morphology changes for untreated wells completed...


Retrieval of cell morphology changes for untreated wells started...
Retrieval of cell morphology changes for untreated wells completed...


Generation of comprehensive growth curves started...
Generation of comprehensive growth curves completed...


Generation of CSV file with morphology values started...
Generation of CSV file with morphology values values completed...


------------------------ Run 2 ------------------------


Retrieval of cell morphology changes for untreated wells started...
Retrieval of cell morphology changes for untreated wells completed...


Retrieval of cell morphology changes for untreated wells started...
Retrieval of cell morphology changes for untreated wells completed...


Generation of comprehensive growth curves started...
Generation of comprehensive growth curves completed...


Generation of CSV file with morphology values started...
Generation of CSV file with morphology values values completed...


------------------------ Run 3 ------------------------


Retrieval of cell morphology changes for untreated wells started...
Retrieval of cell morphology changes for untreated wells completed...
```

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Retrieval of cell morphology changes for untreated wells started...
Retrieval of cell morphology changes for untreated wells completed...

Generation of comprehensive growth curves started...
Generation of comprehensive growth curves completed...

Generation of CSV file with morphology values started...
Generation of CSV file with morphology values values completed...

------------------------ Run 4 -------------------------

Retrieval of cell morphology changes for untreated wells started...
Retrieval of cell morphology changes for untreated wells completed...

Retrieval of cell morphology changes for untreated wells started...
Retrieval of cell morphology changes for untreated wells completed...

Generation of comprehensive growth curves started...
Generation of comprehensive growth curves completed...

Generation of CSV file with morphology values started...
Generation of CSV file with morphology values values completed...

-- COMBO-M Completed

>>