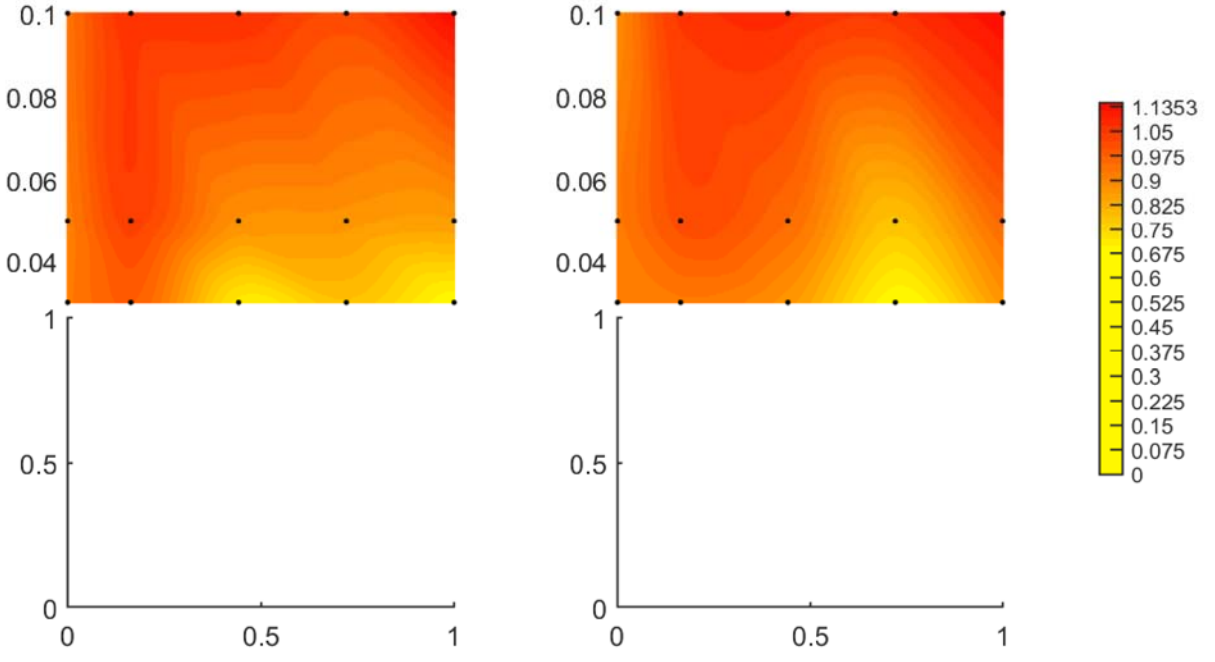
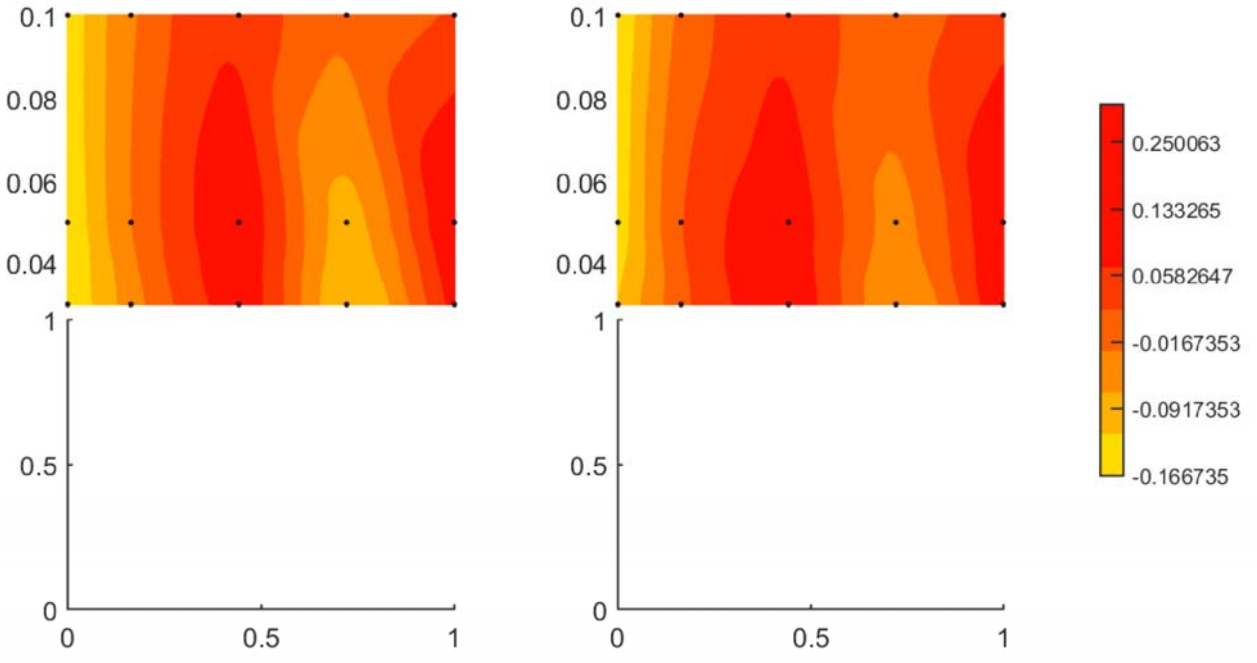
- SPOILER BAFFLES – 333 CONFIGURATION: FLOW RATE 100 L/S

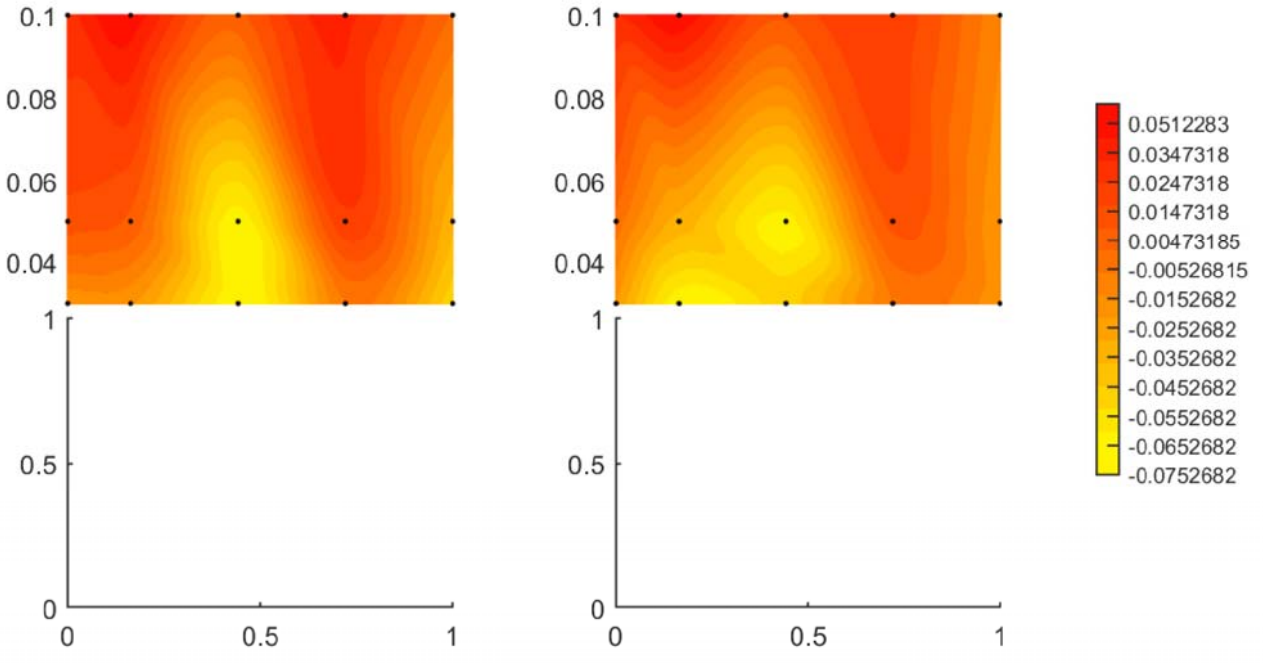
Plots of U, V, W1, W2, RMS U, RMS V, RMS W, TKE



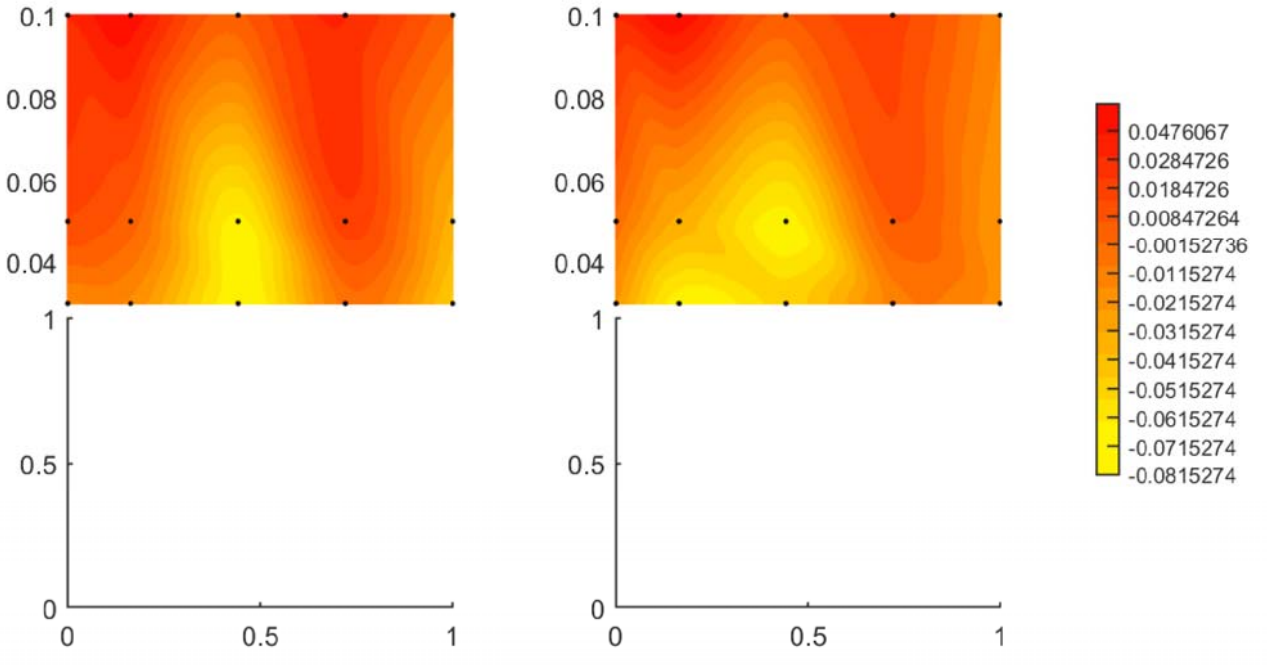
U


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.250063
0.133265
0.0582647
-0.0167353
-0.0917353
-0.166735

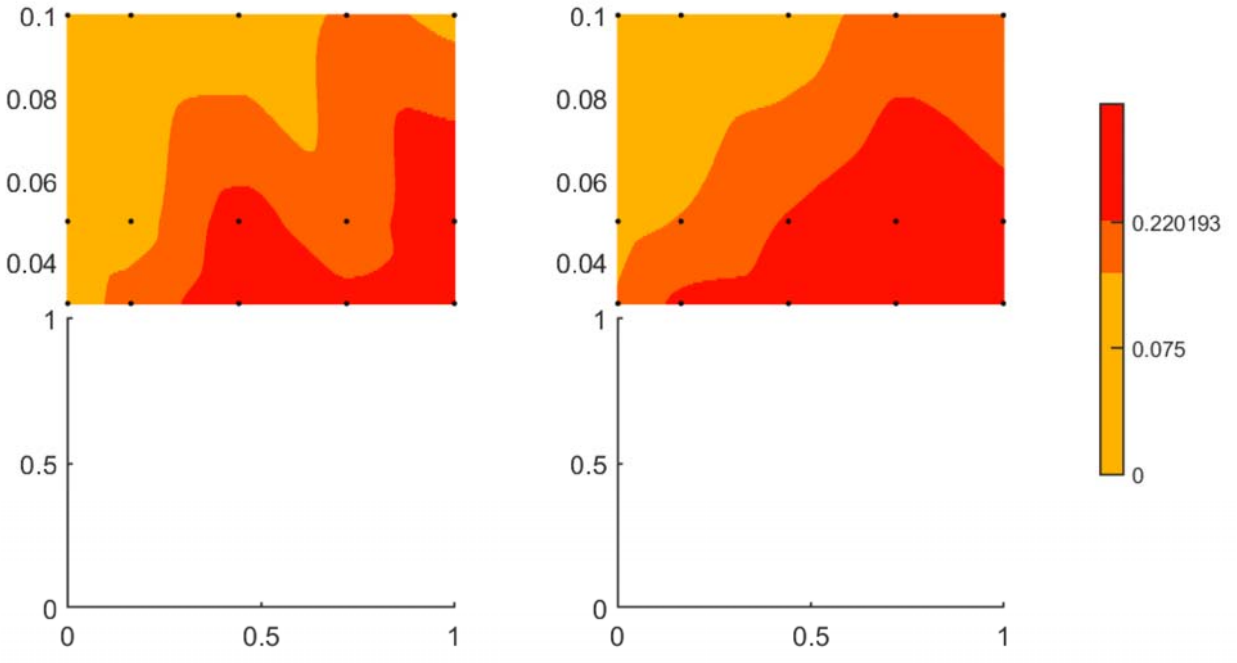
V


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.0512283
0.0347318
0.0247318
0.0147318
0.00473185
-0.00526815
-0.0152682
-0.0252682
-0.0352682
-0.0452682
-0.0552682
-0.0652682
-0.0752682

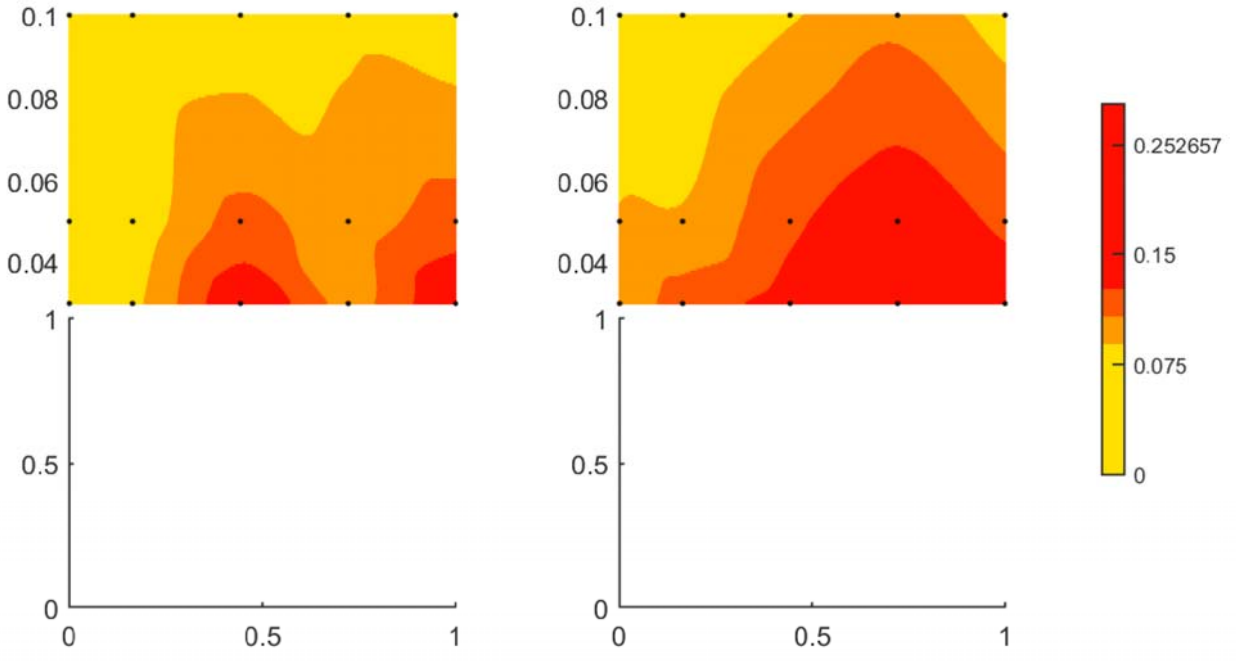
W1


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.0476067
0.0284726
0.0184726
0.00847264
-0.00152736
-0.0115274
-0.0215274
-0.0315274
-0.0415274
-0.0515274
-0.0615274
-0.0715274
-0.0815274

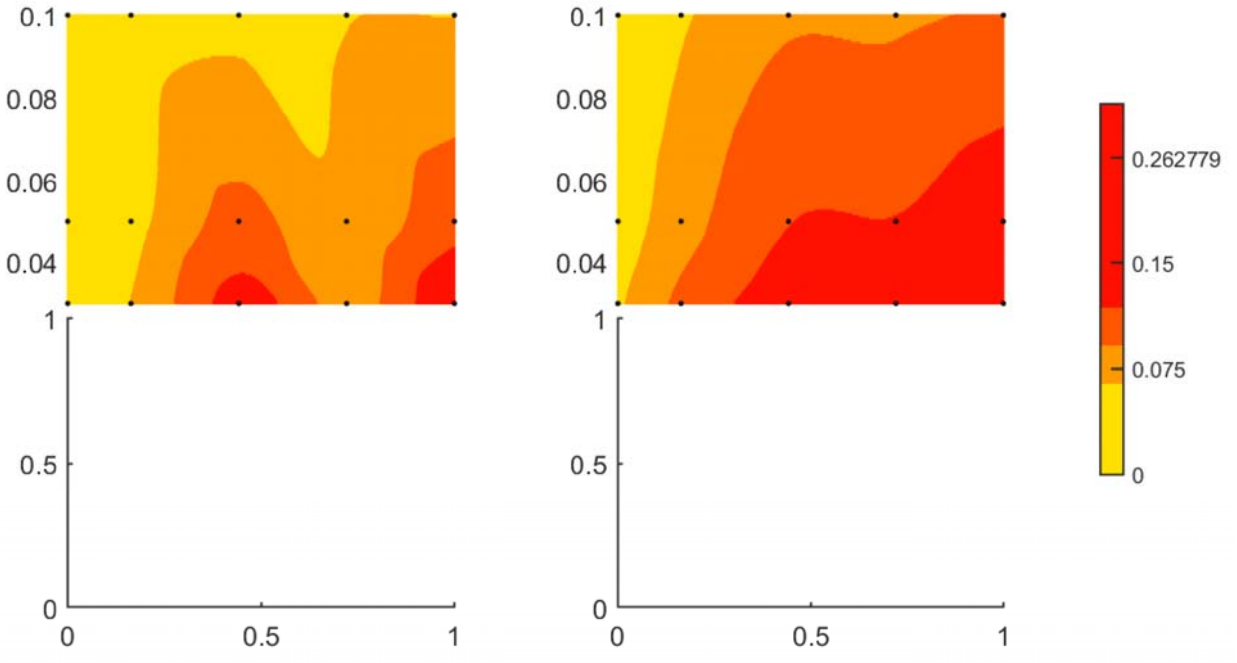
W2



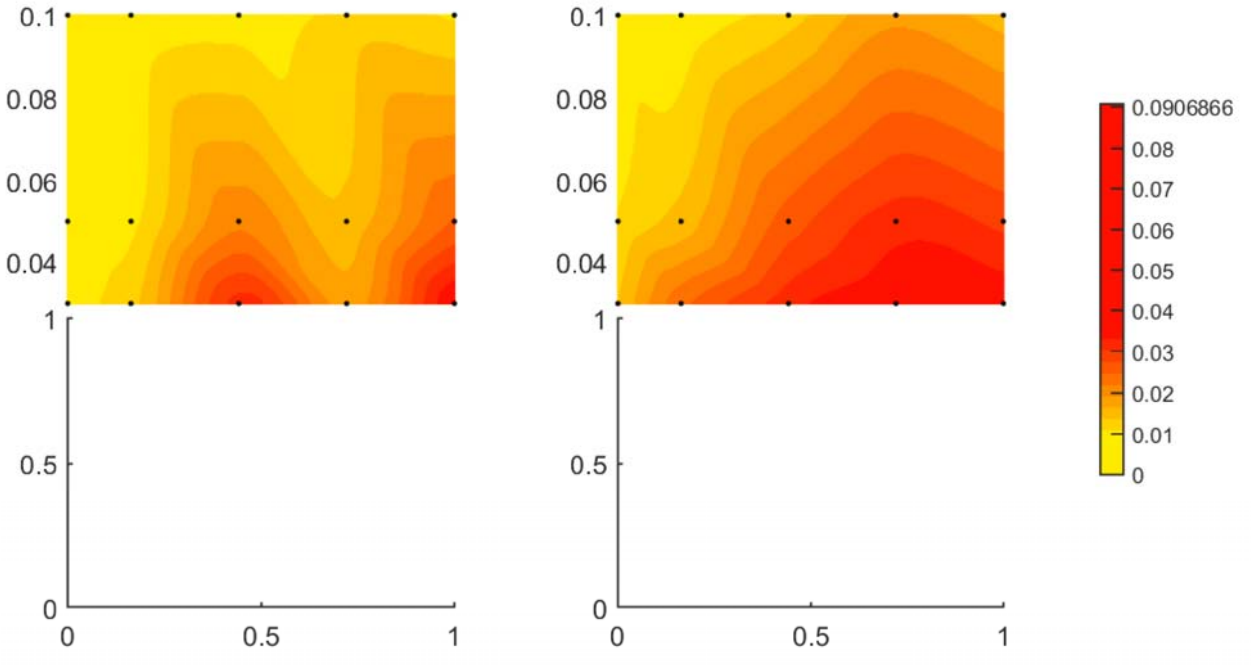
U_{rms}



V_{rms}

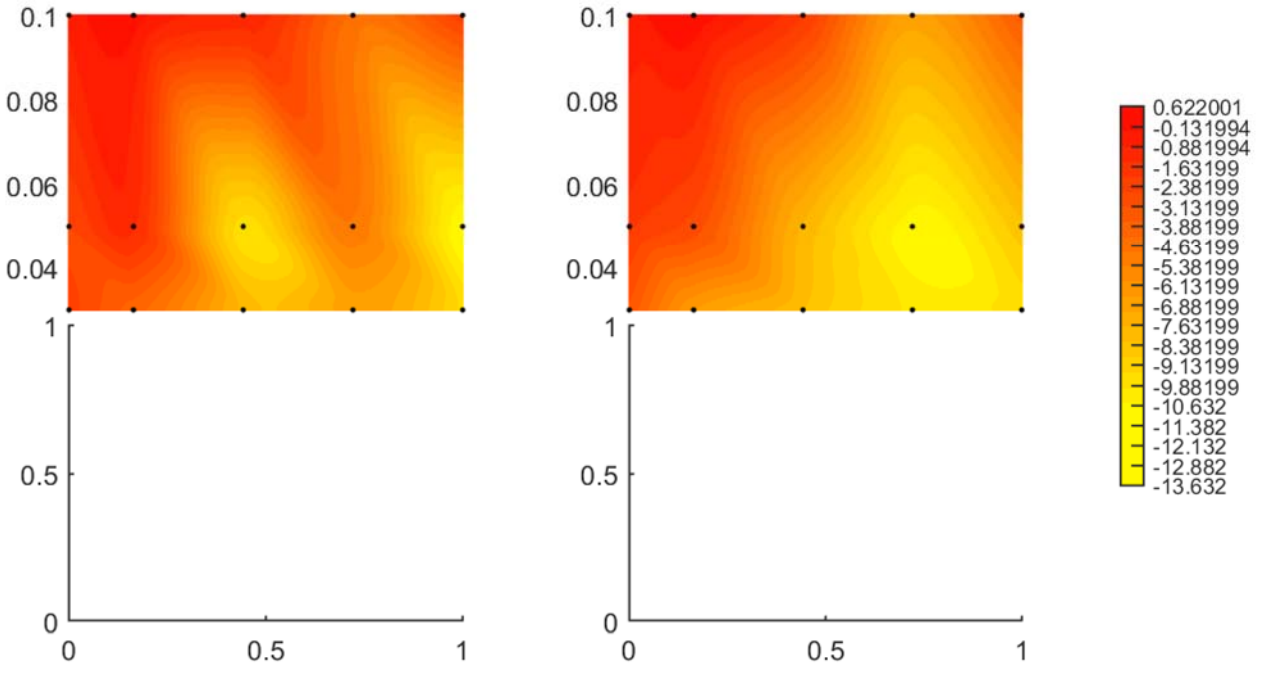


W_{rms}

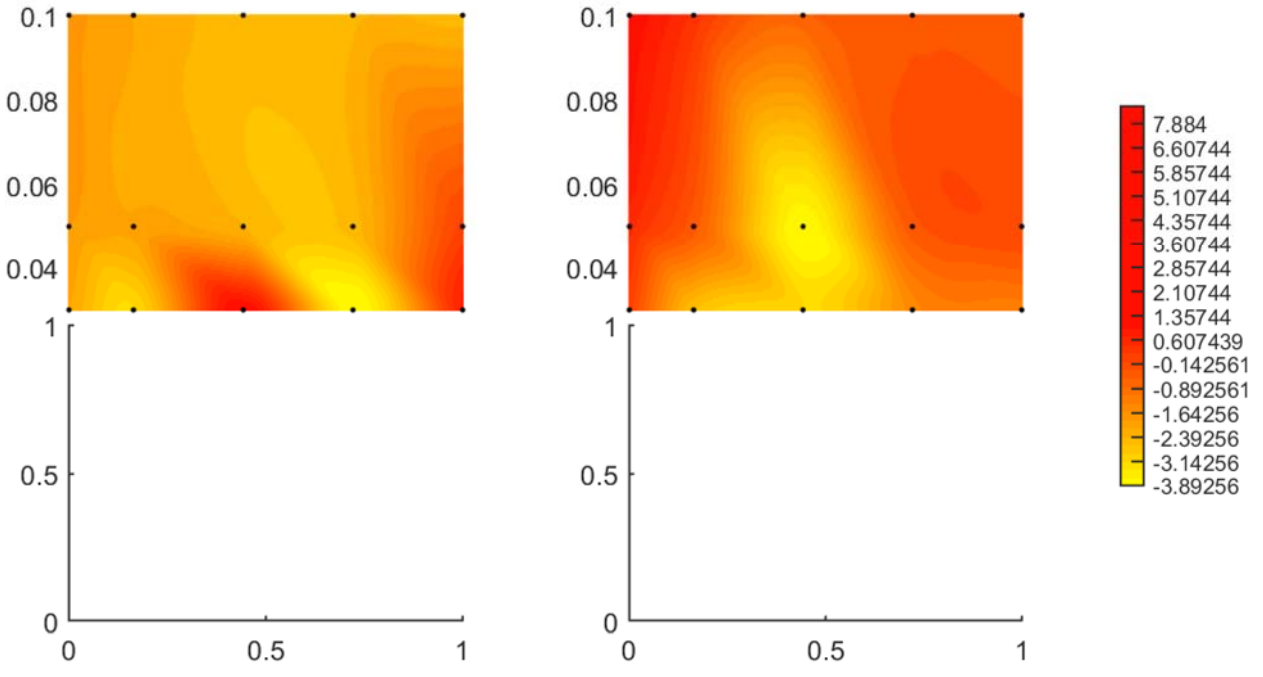

0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.0906866
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0

TKE

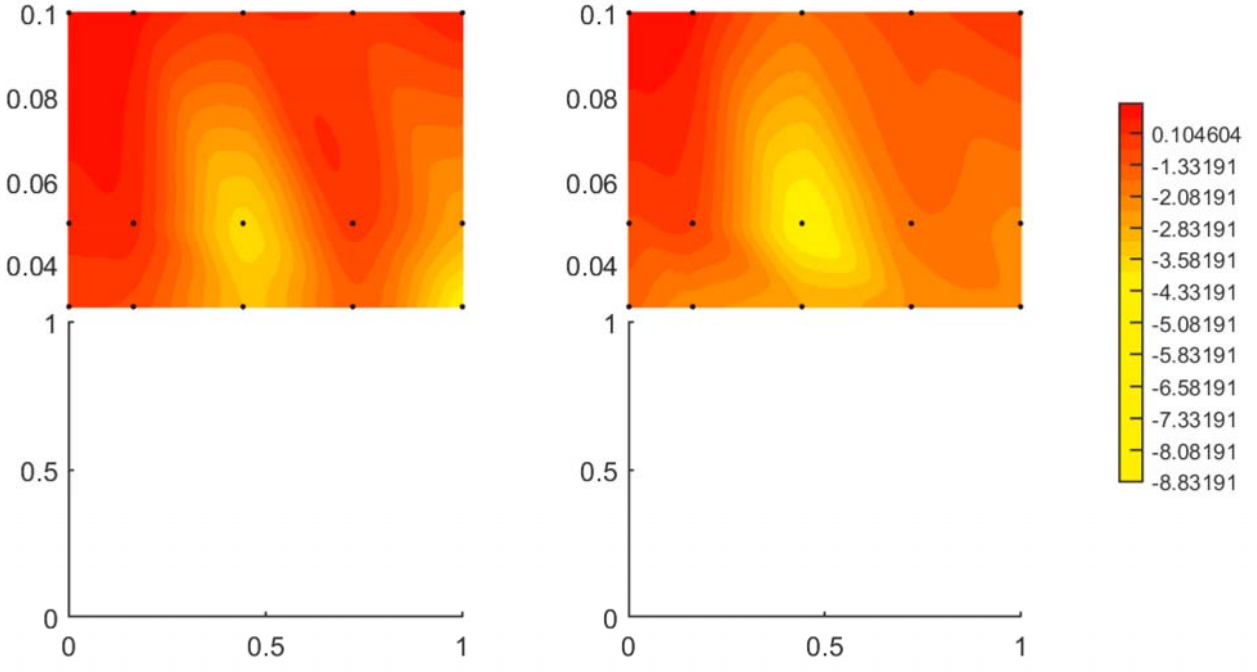
Plot of Reynold Stresses



$$-\rho\overline{u'v'}$$



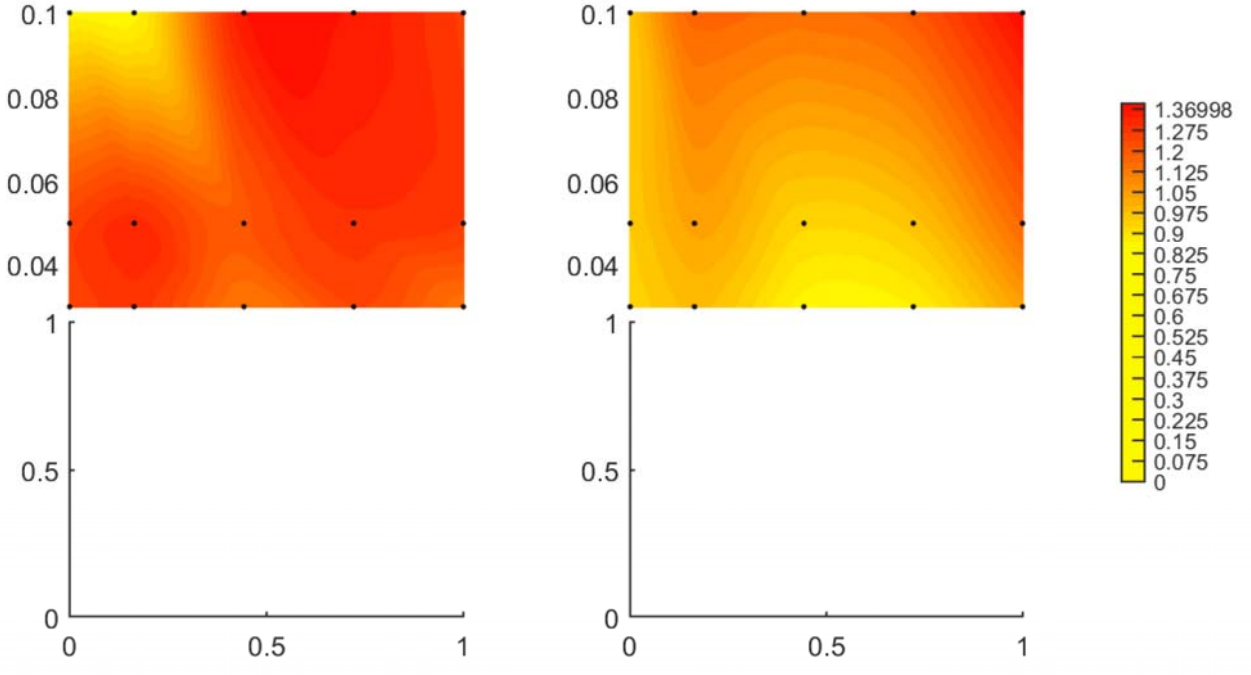
$$-\rho\overline{u'w'}$$



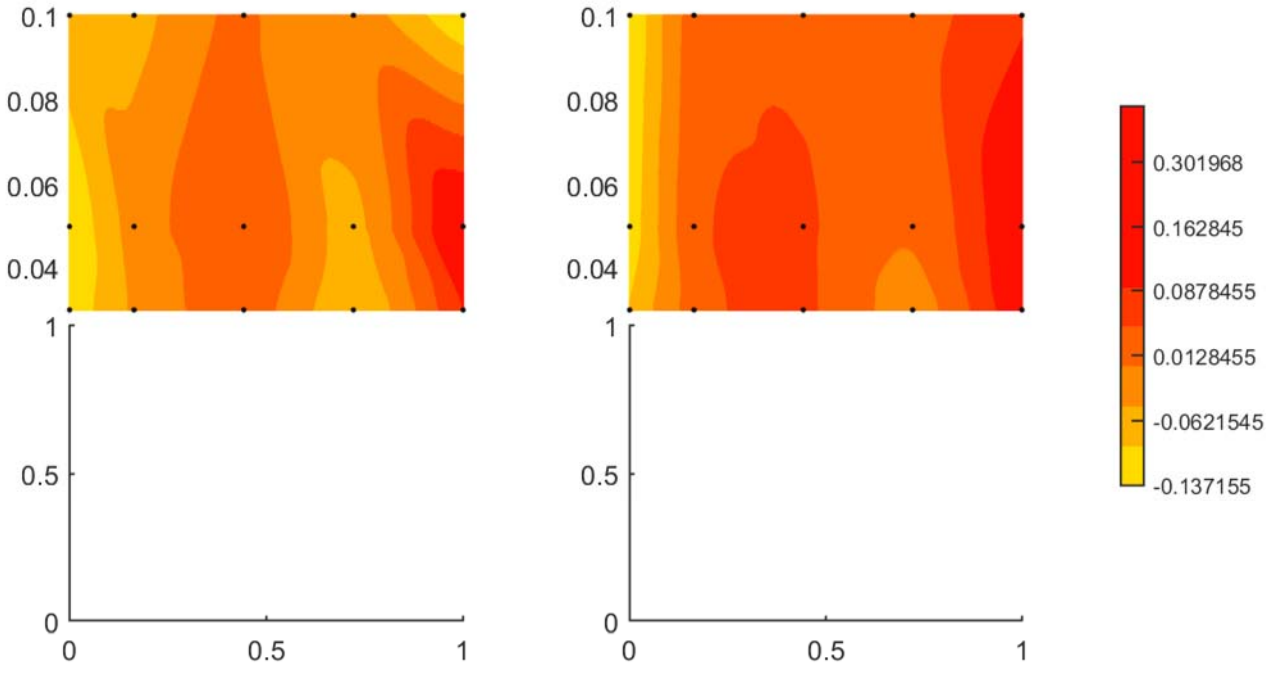
$$-\rho\overline{v'w'}$$

- SPOILER BAFFLES – 333 CONFIGURATION: FLOW RATE 150 L/S

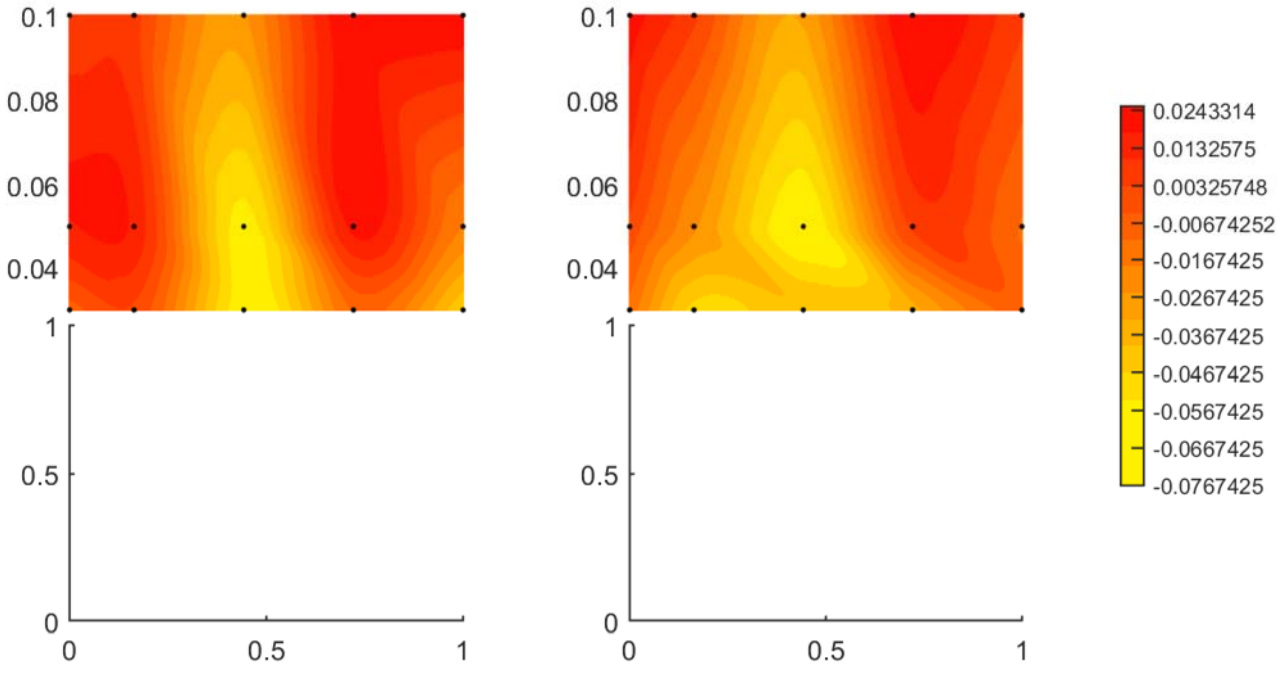
Plots of U, V, W1, W2, RMS U, RMS V, RMS W, TKE



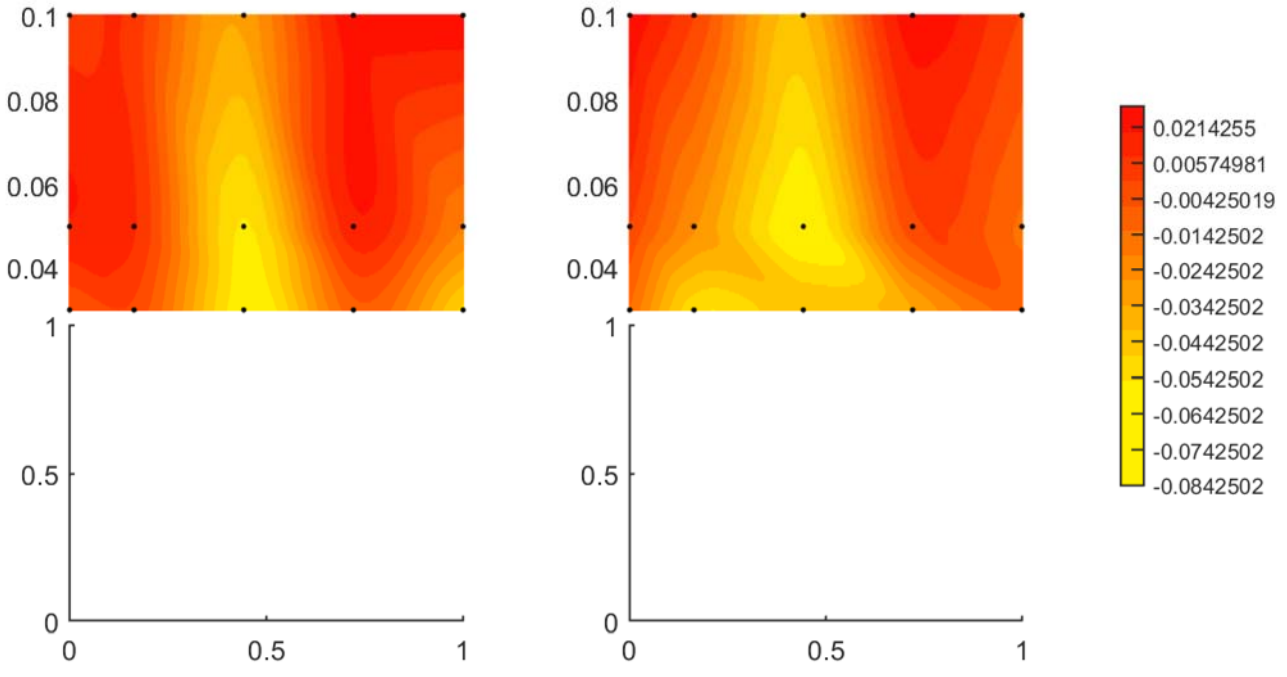
U


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.301968
0.162845
0.0878455
0.0128455
-0.0621545
-0.137155

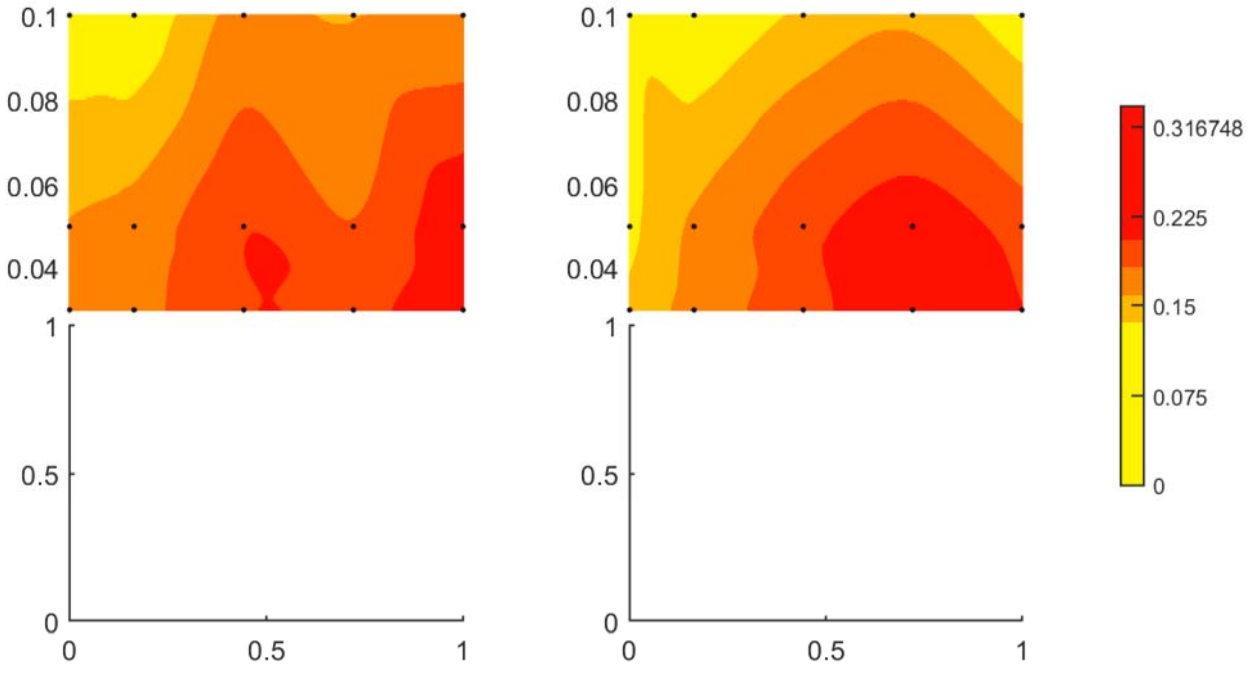
V


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.0243314
0.0132575
0.00325748
-0.00674252
-0.0167425
-0.0267425
-0.0367425
-0.0467425
-0.0567425
-0.0667425
-0.0767425

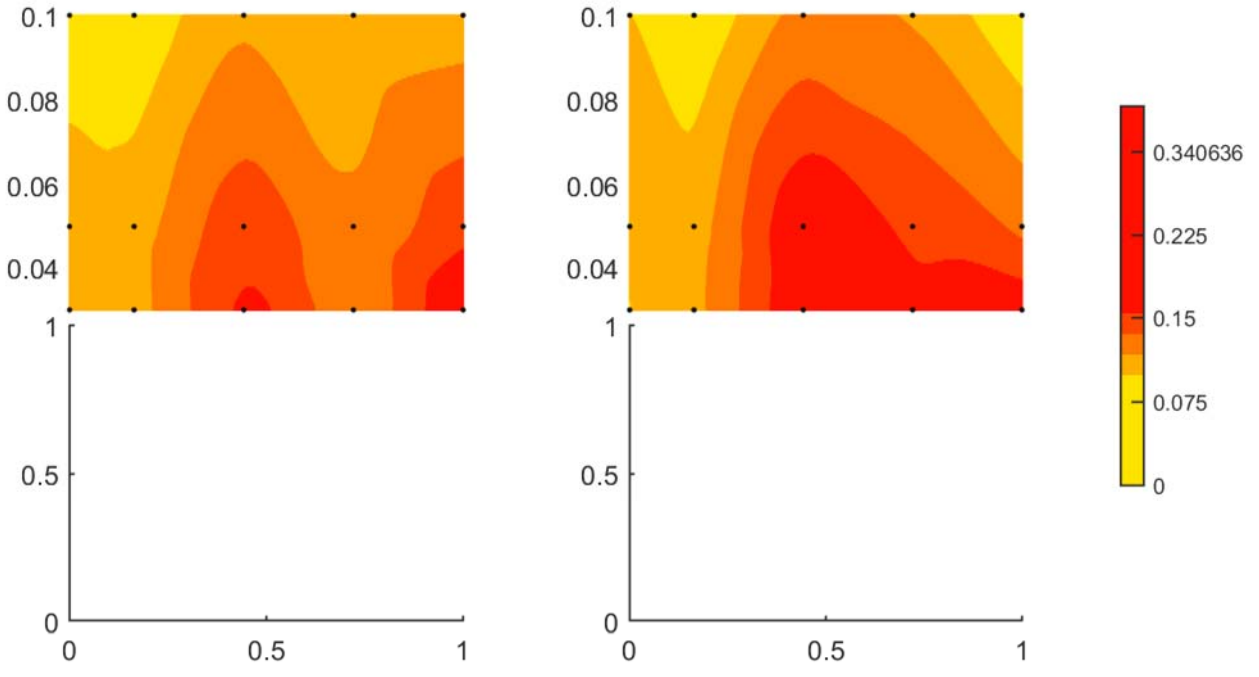
W1


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.0214255
0.00574981
-0.00425019
-0.0142502
-0.0242502
-0.0342502
-0.0442502
-0.0542502
-0.0642502
-0.0742502
-0.0842502

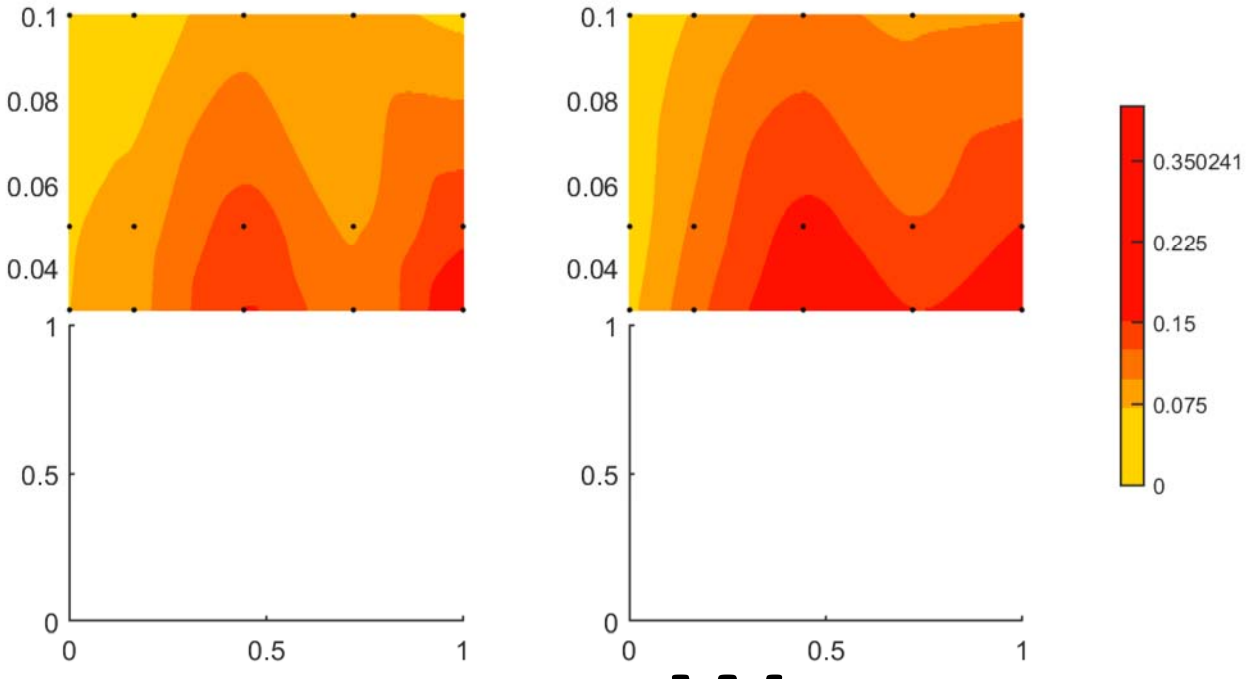
W2



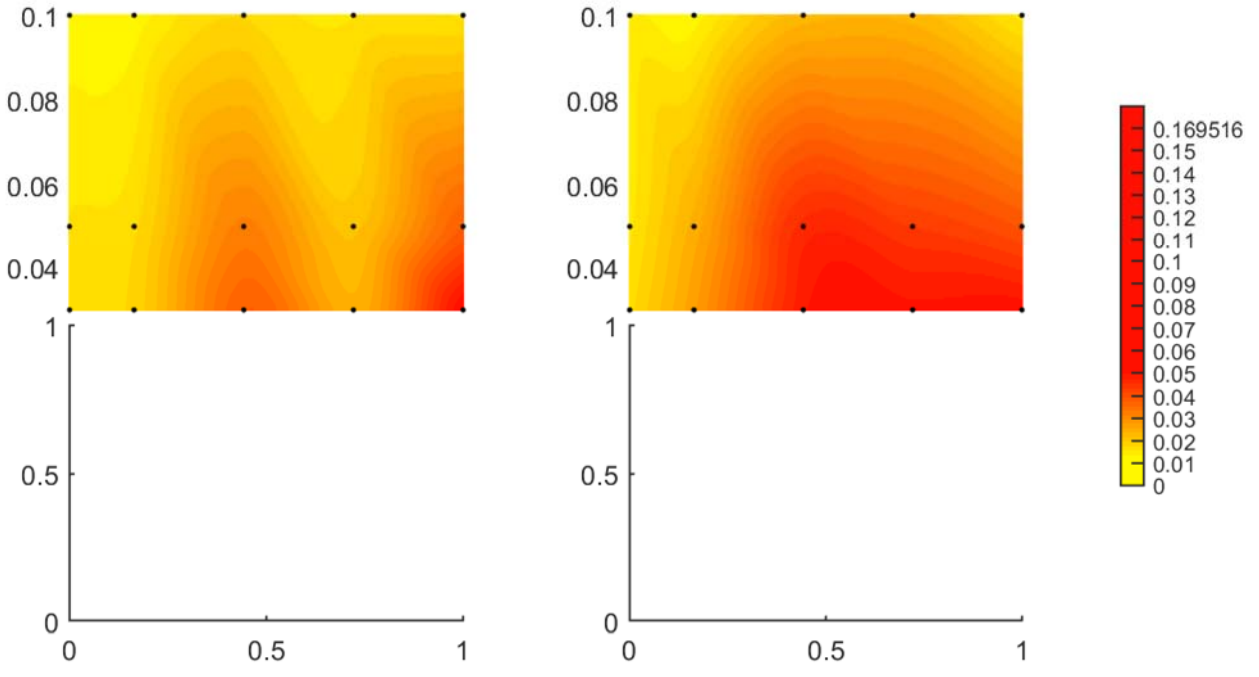
U_{rms}



V_{rms}

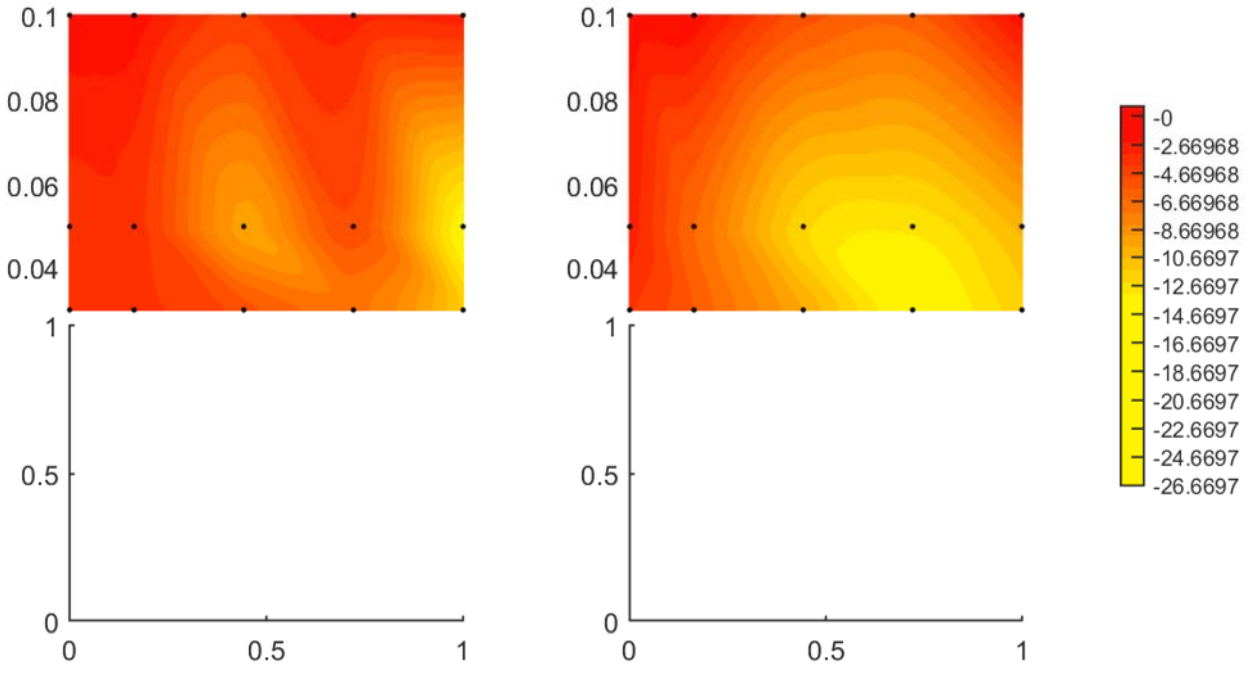


W_{rms}

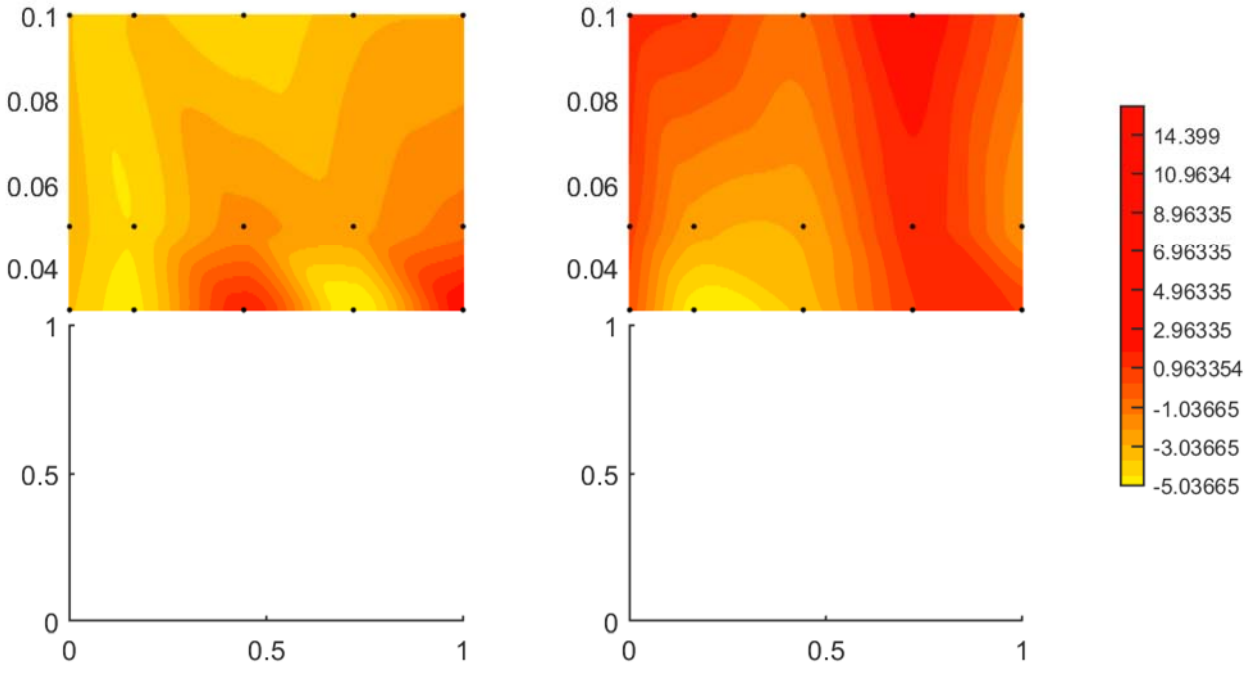

0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.169516
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0

TKE

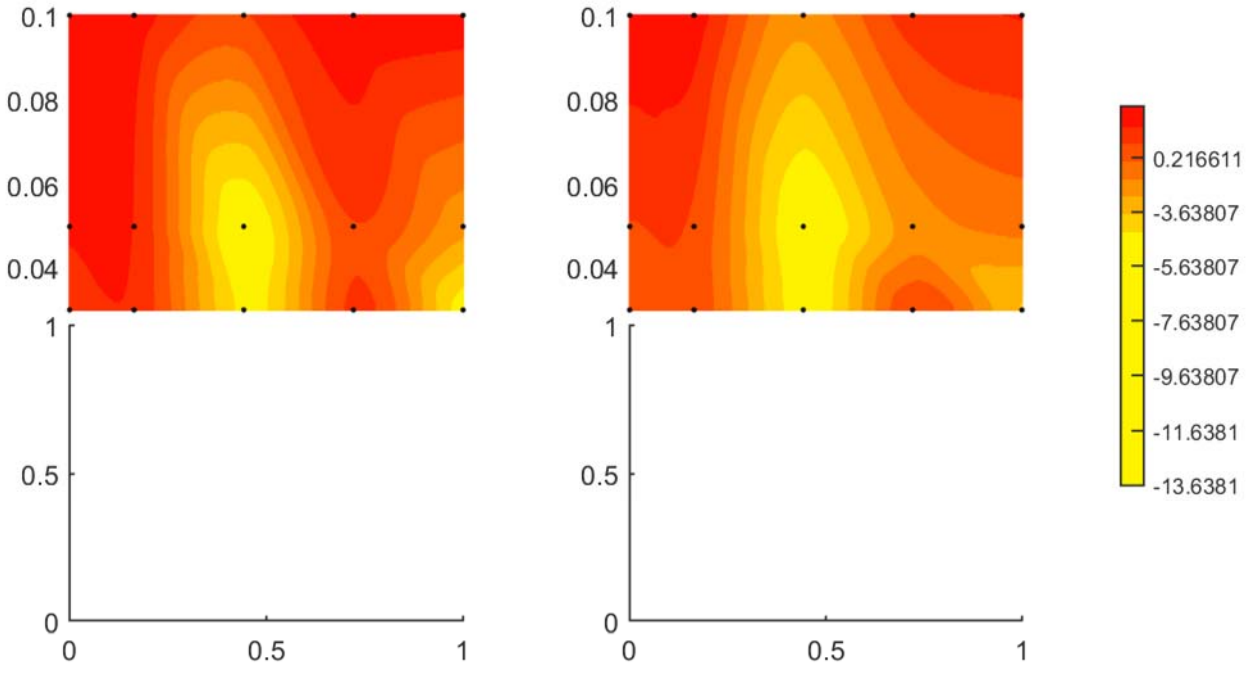
Plot of the Reynolds Stresses



$$-\rho\overline{u'v'}$$



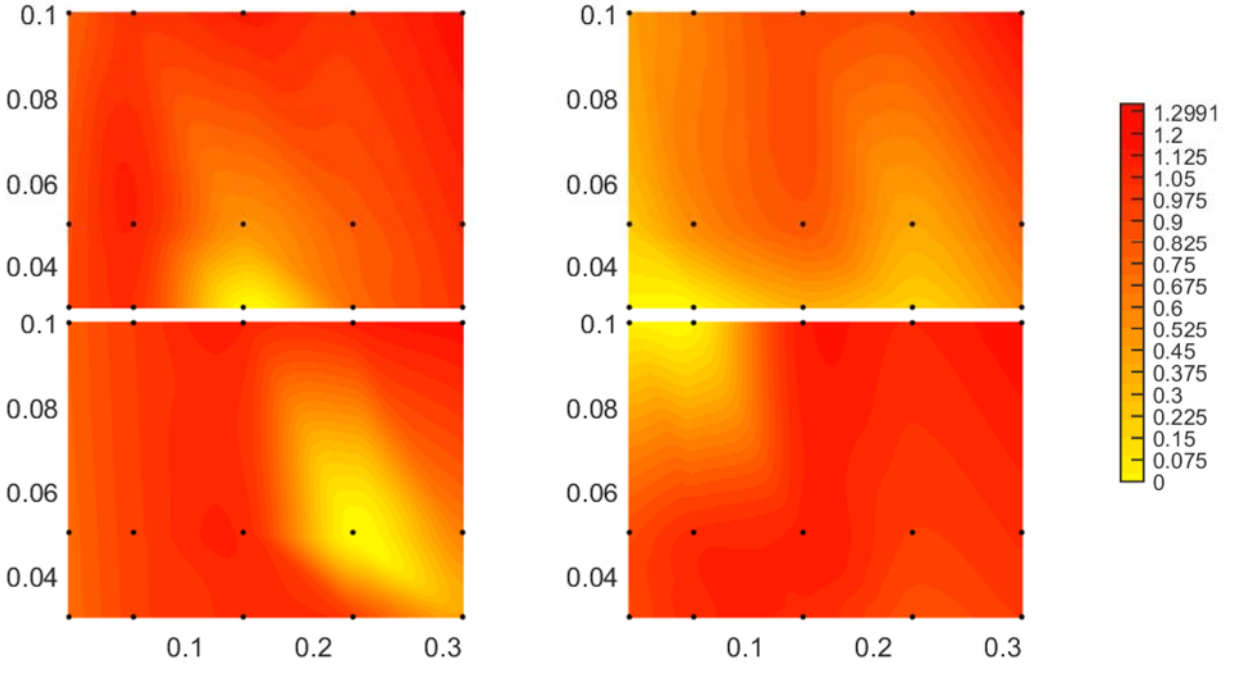
$$-\rho\overline{u'w'}$$



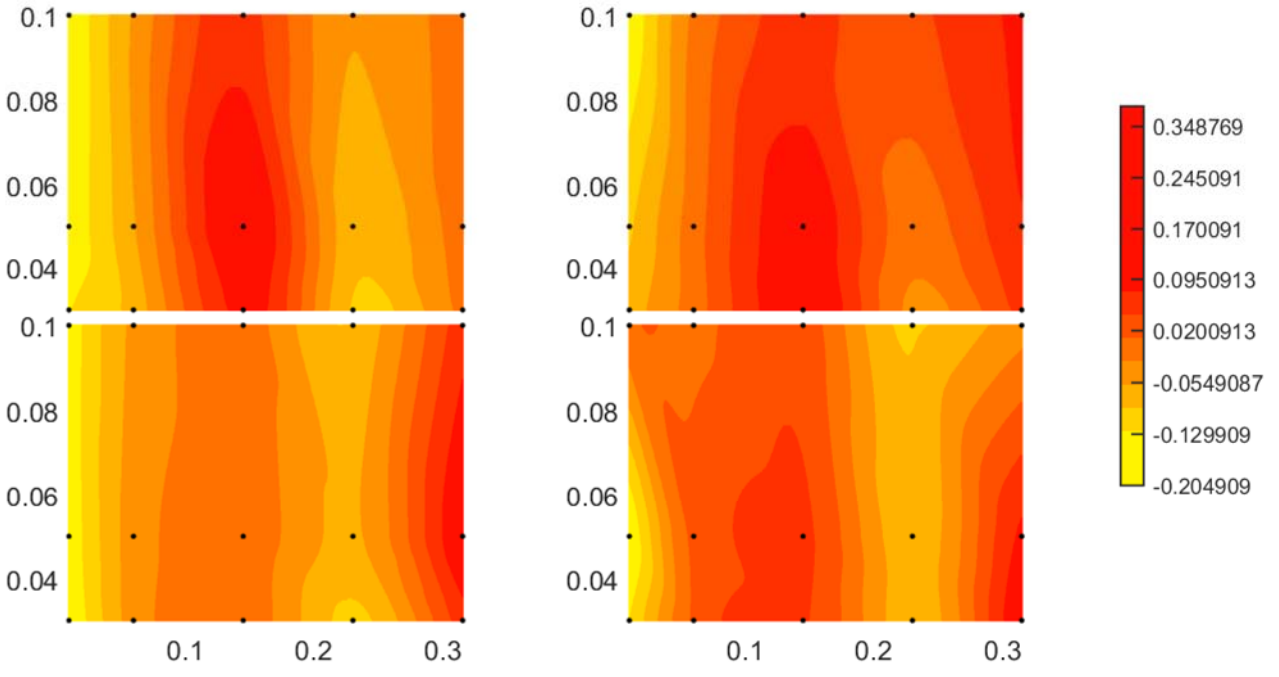
$$-\rho\overline{v'w'}$$

- SPOILER BAFFLES – 212 CONFIGURATION: FLOW RATE 100 L/S

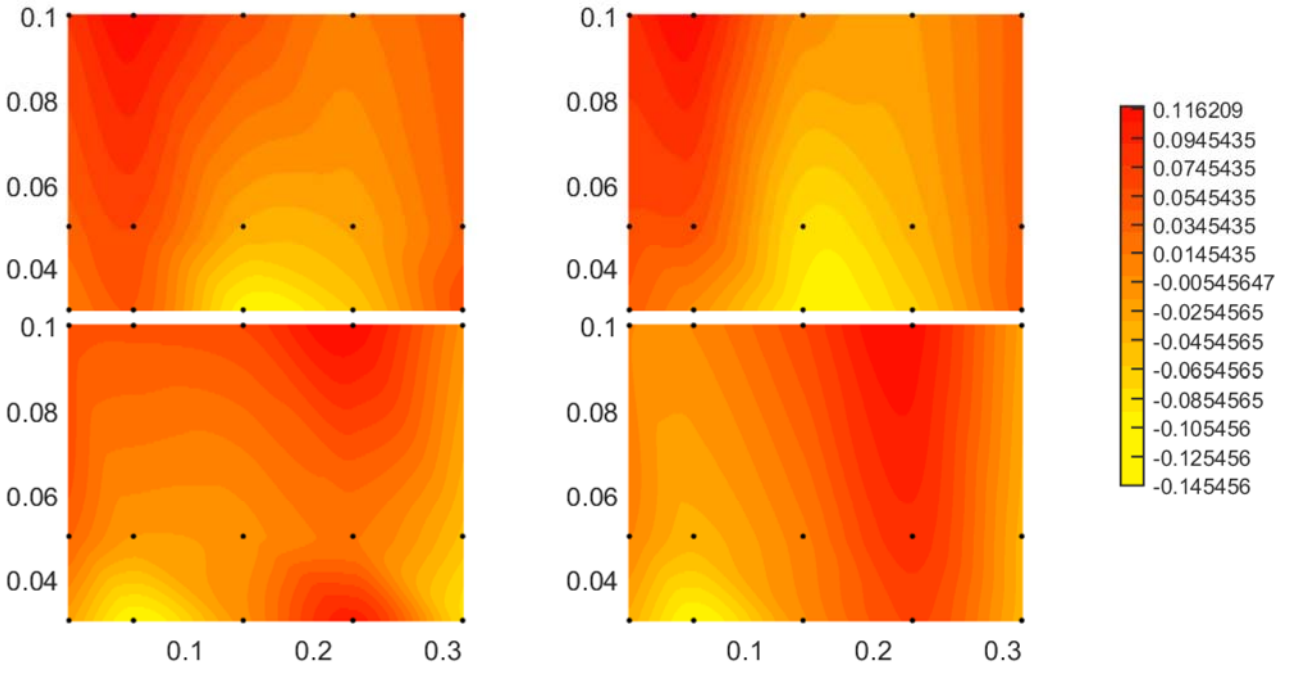
Plots of U, V, W1, W2, RMS U, RMS V, RMS W, TKE



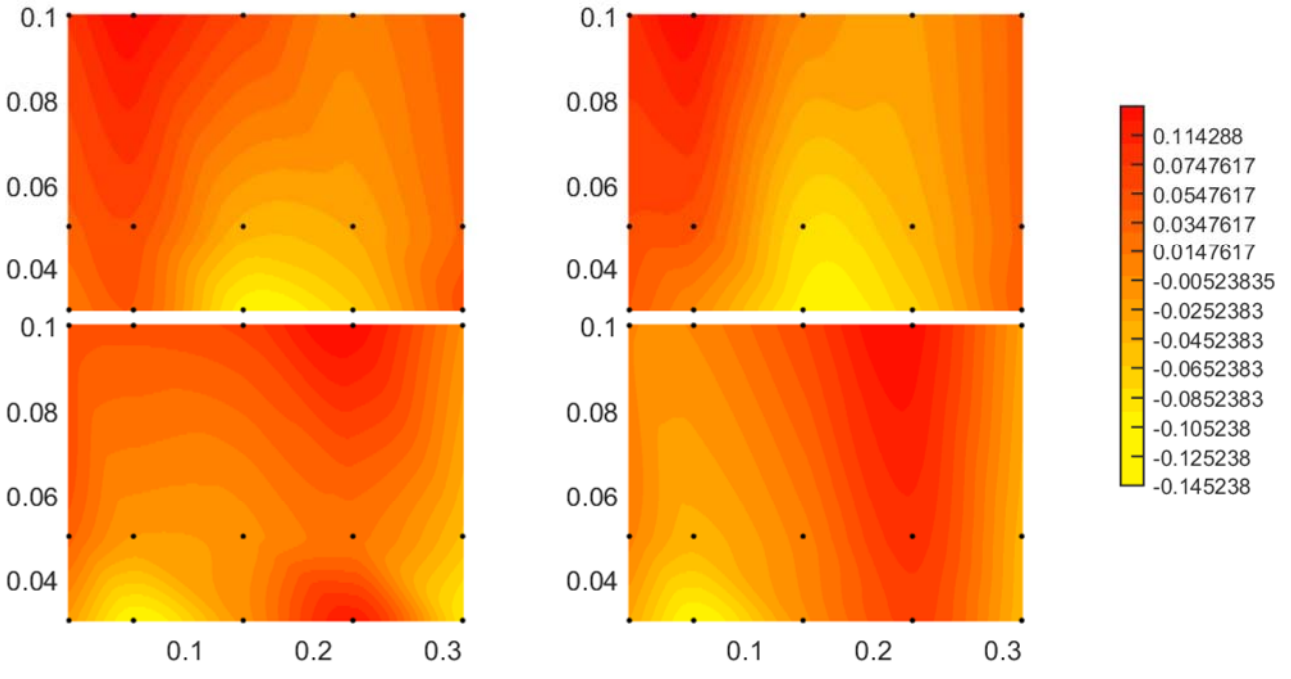
U


0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.348769
0.245091
0.170091
0.0950913
0.0200913
-0.0549087
-0.129909
-0.204909

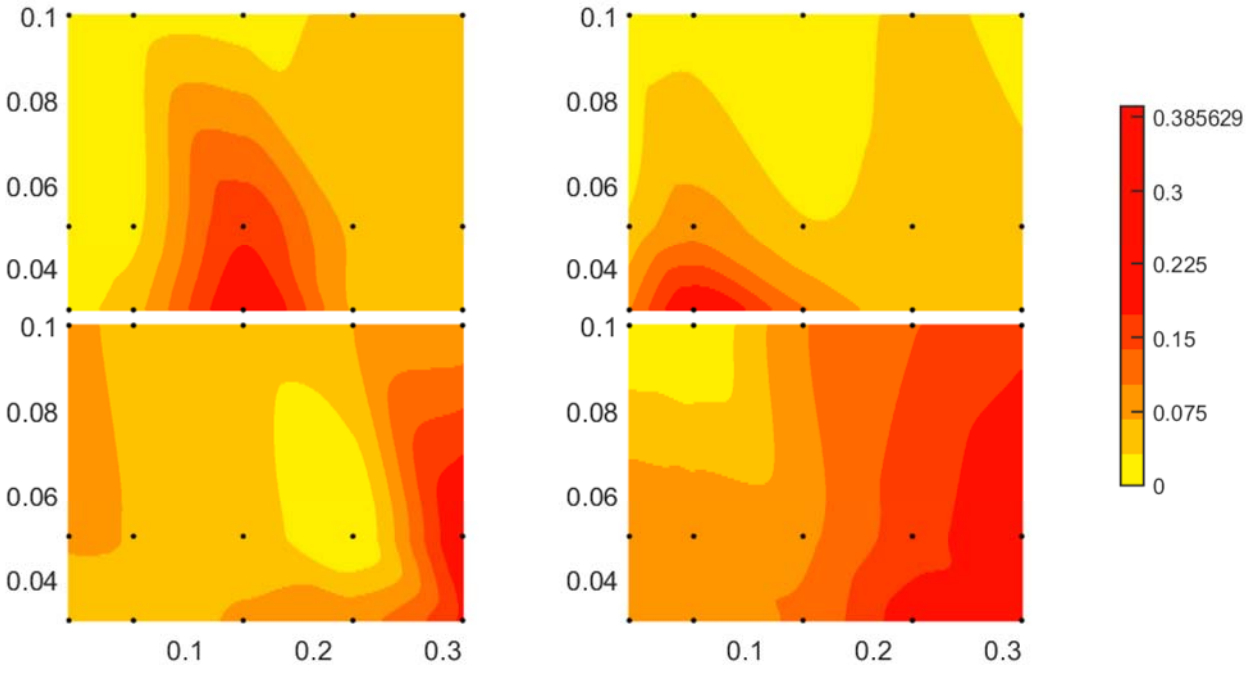
V


0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.116209
0.0945435
0.0745435
0.0545435
0.0345435
0.0145435
-0.00545647
-0.0254565
-0.0454565
-0.0654565
-0.0854565
-0.105456
-0.125456
-0.145456

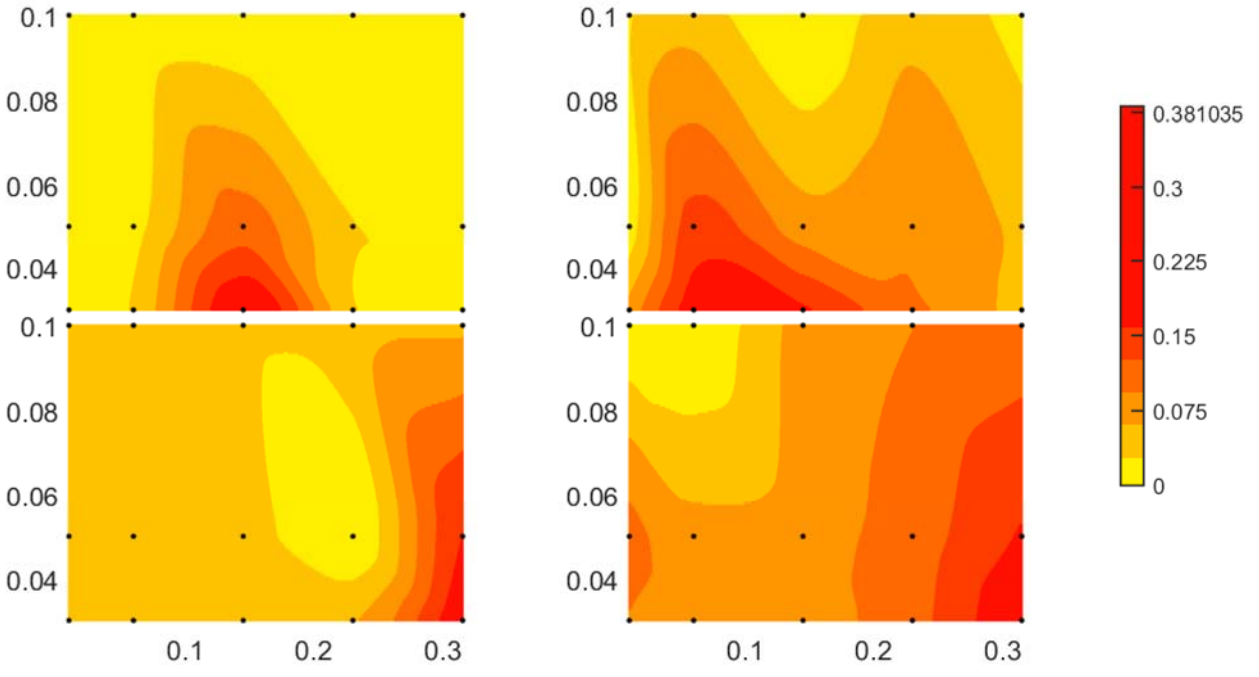
W1


0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.114288
0.0747617
0.0547617
0.0347617
0.0147617
-0.00523835
-0.0252383
-0.0452383
-0.0652383
-0.0852383
-0.105238
-0.125238
-0.145238

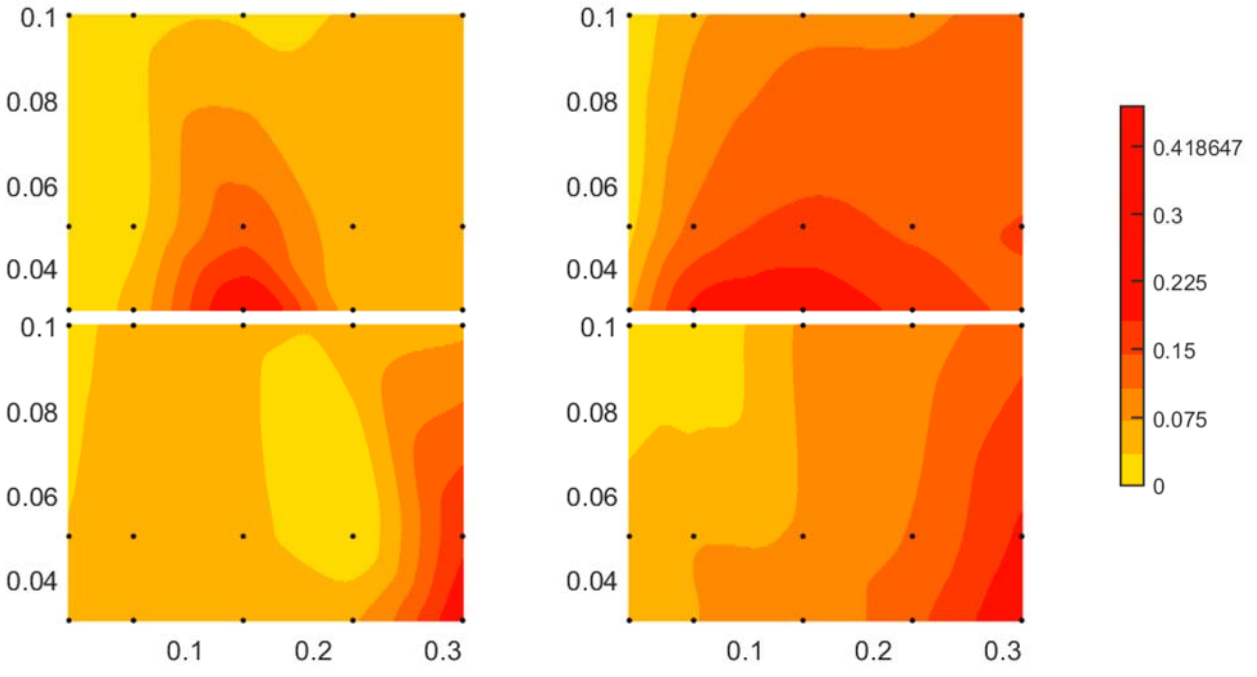
W2


0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.385629
0.3
0.225
0.15
0.075
0

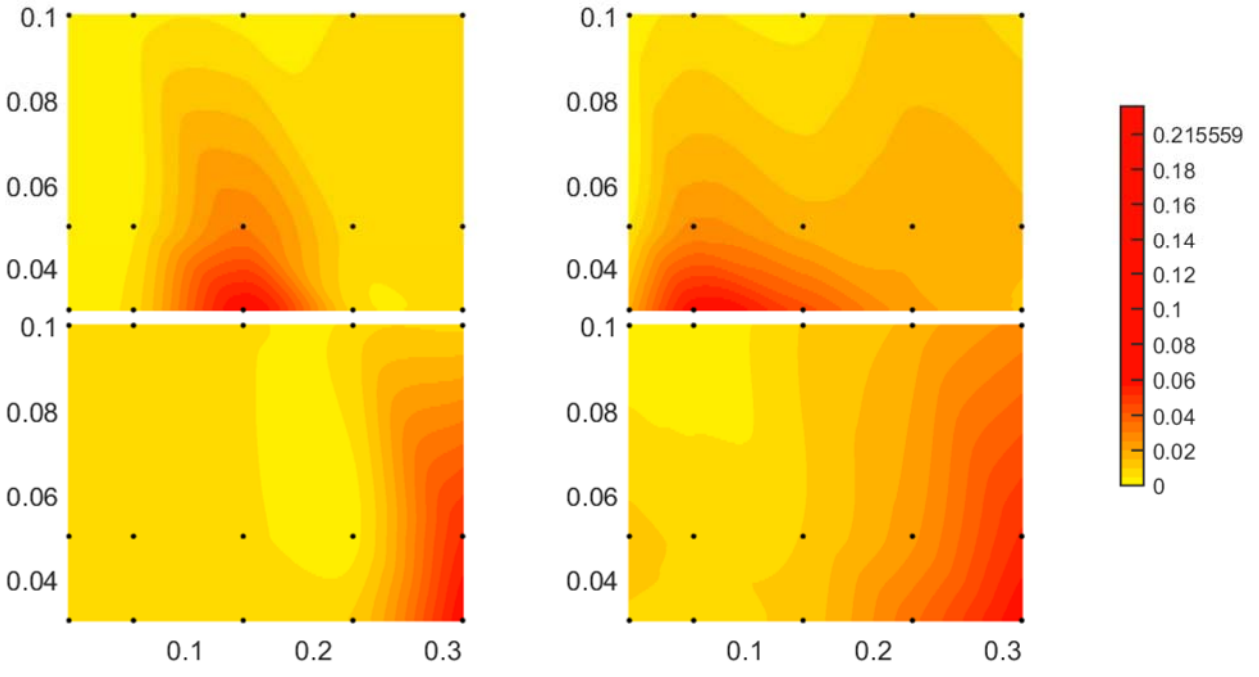
U_{rms}


0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.381035
0.3
0.225
0.15
0.075
0

V_{rms}

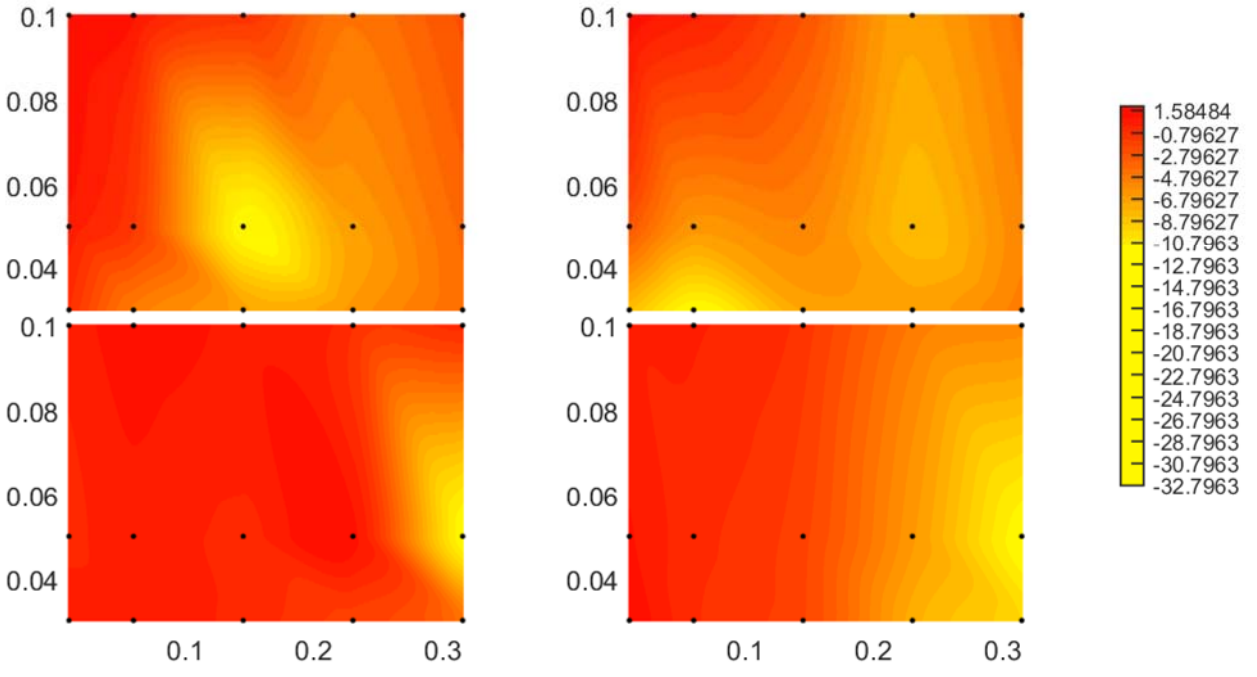

0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.418647
0.3
0.225
0.15
0.075
0

Wrms

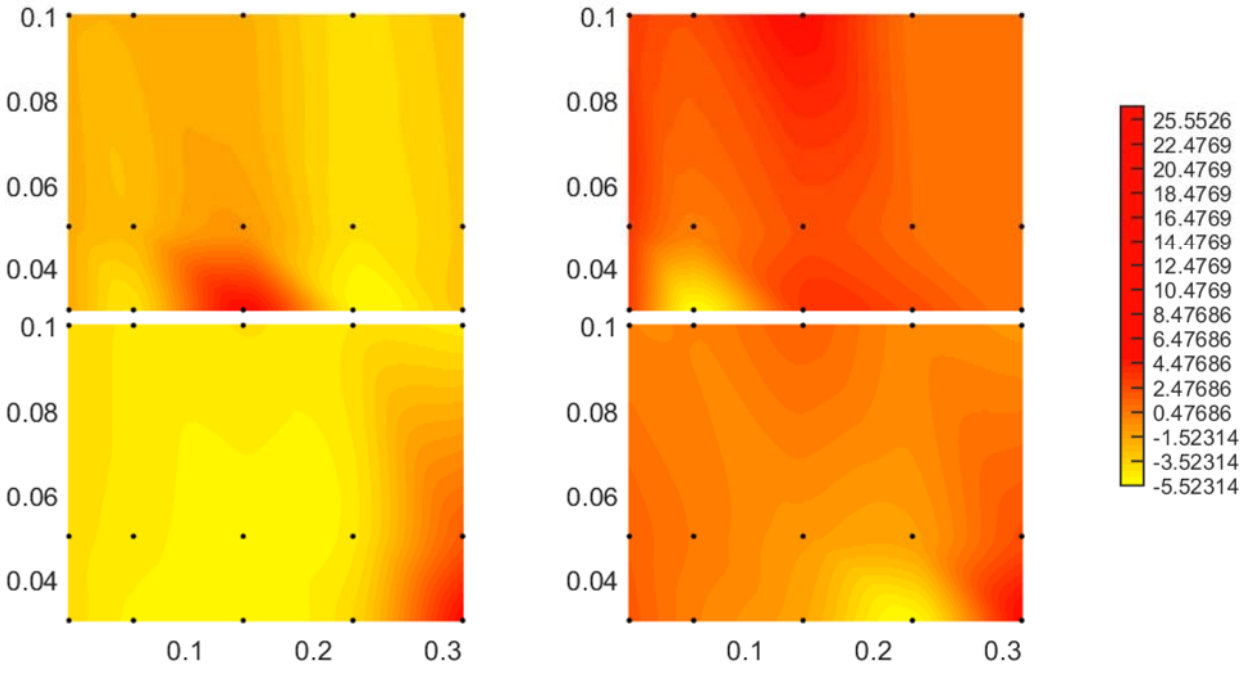

0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.215559
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0

TKE

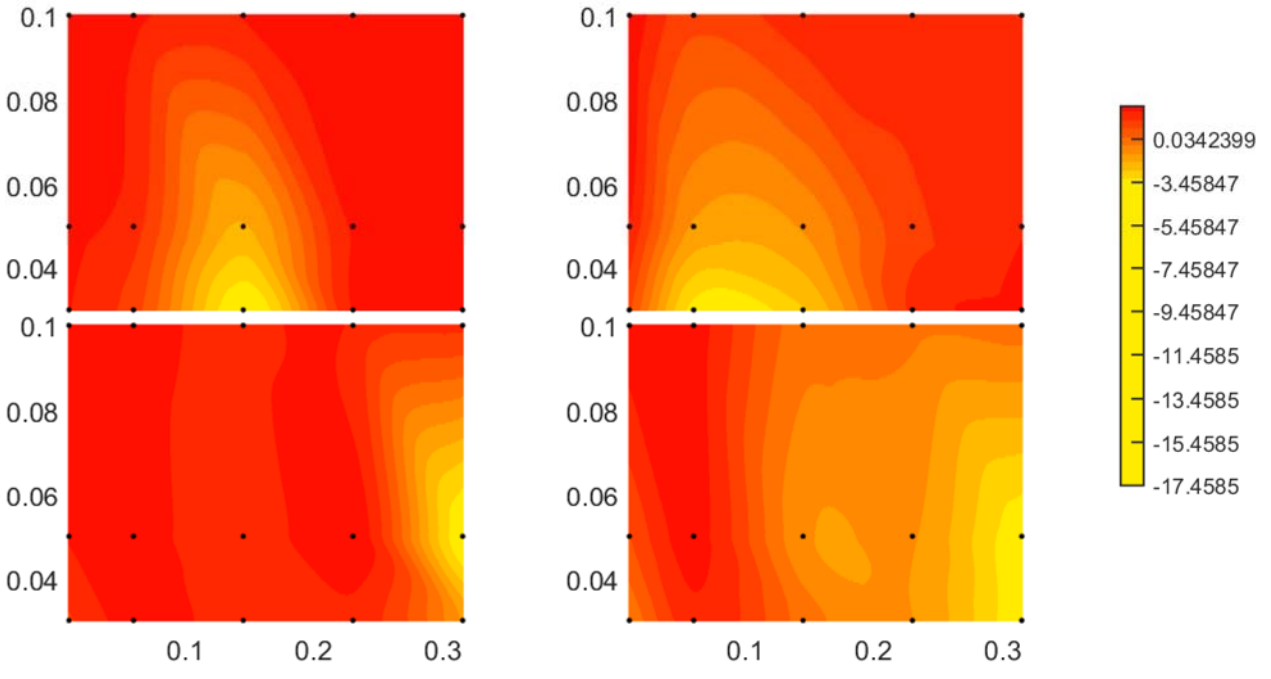
Plot of the Reynolds Stresses



$$-\rho\overline{u'v'}$$



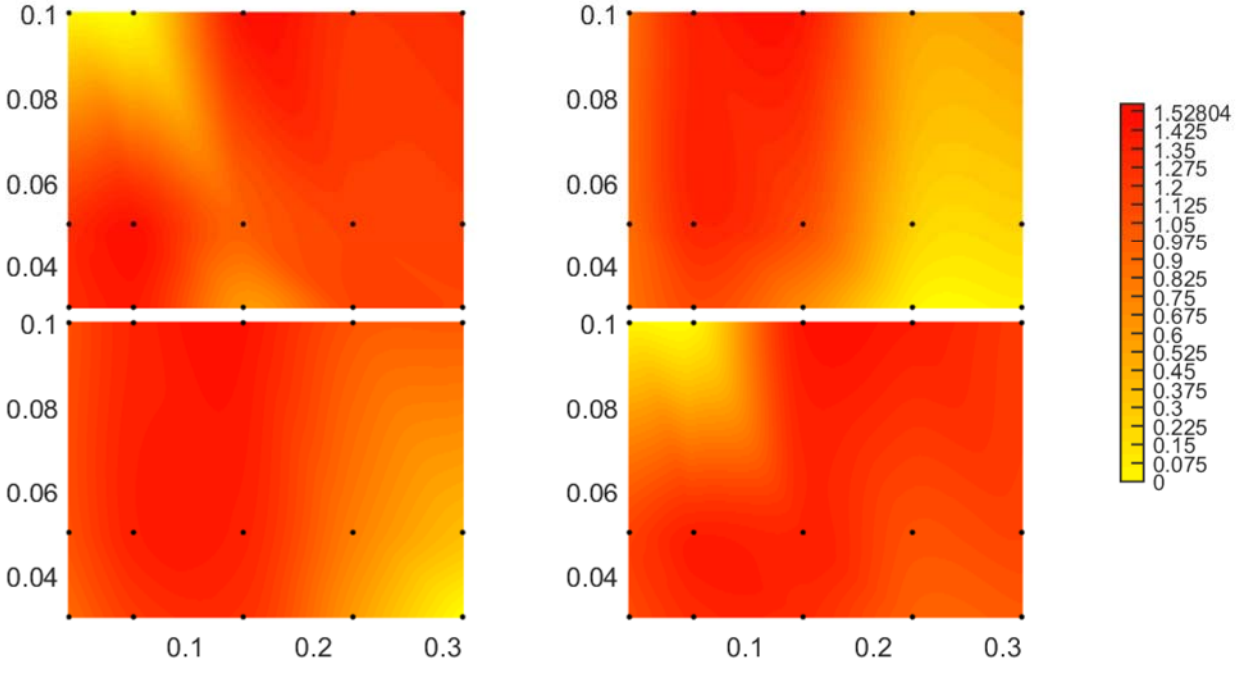
$$-\rho\overline{u'w'}$$



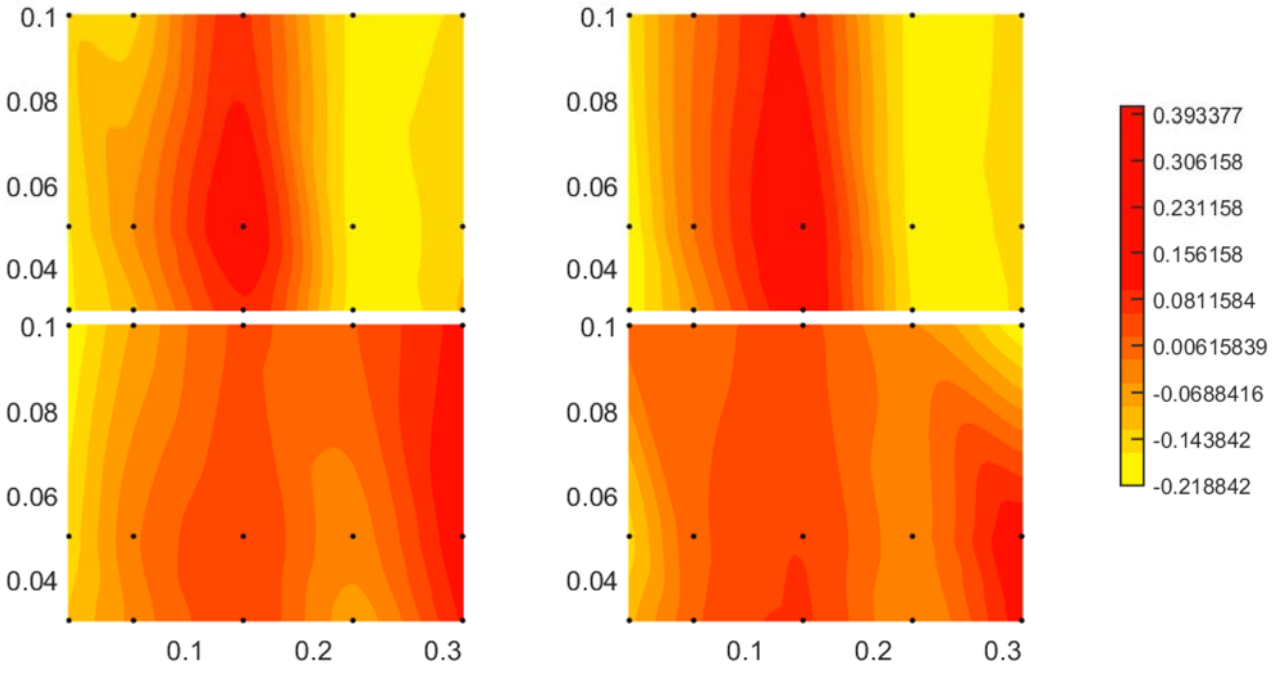
$$-\rho\overline{v'w'}$$

- SPOILER BAFFLES – 212 CONFIGURATION: FLOW RATE 150 L/S

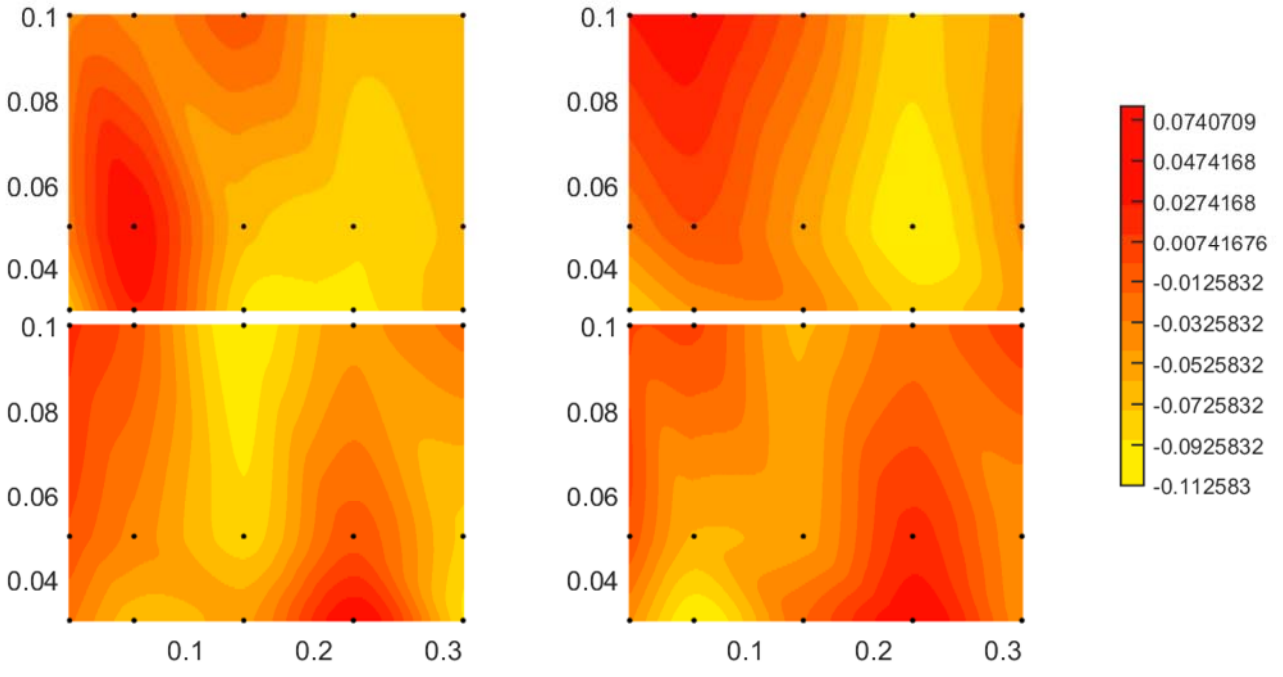
Plots of U, V, W1, W2, RMS U, RMS V, RMS W, TKE



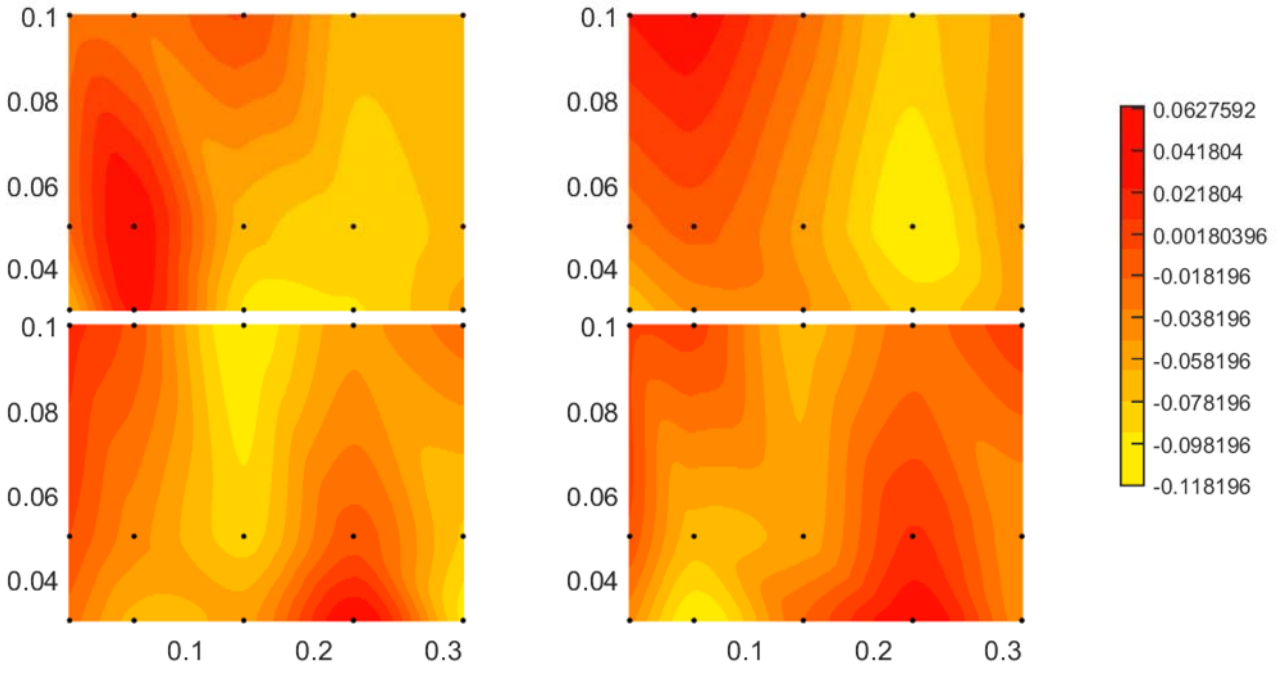
U


0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.393377
0.306158
0.231158
0.156158
0.0811584
0.00615839
-0.0688416
-0.143842
-0.218842

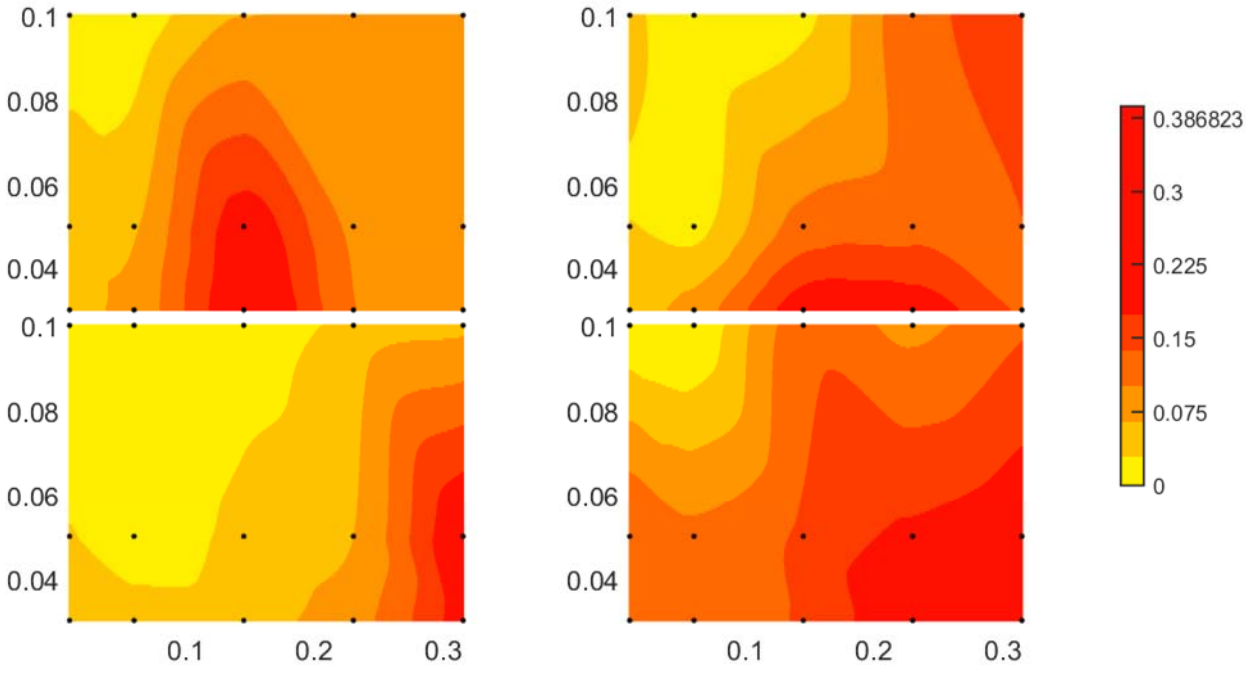
V


0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.0740709
0.0474168
0.0274168
0.00741676
-0.0125832
-0.0325832
-0.0525832
-0.0725832
-0.0925832
-0.112583

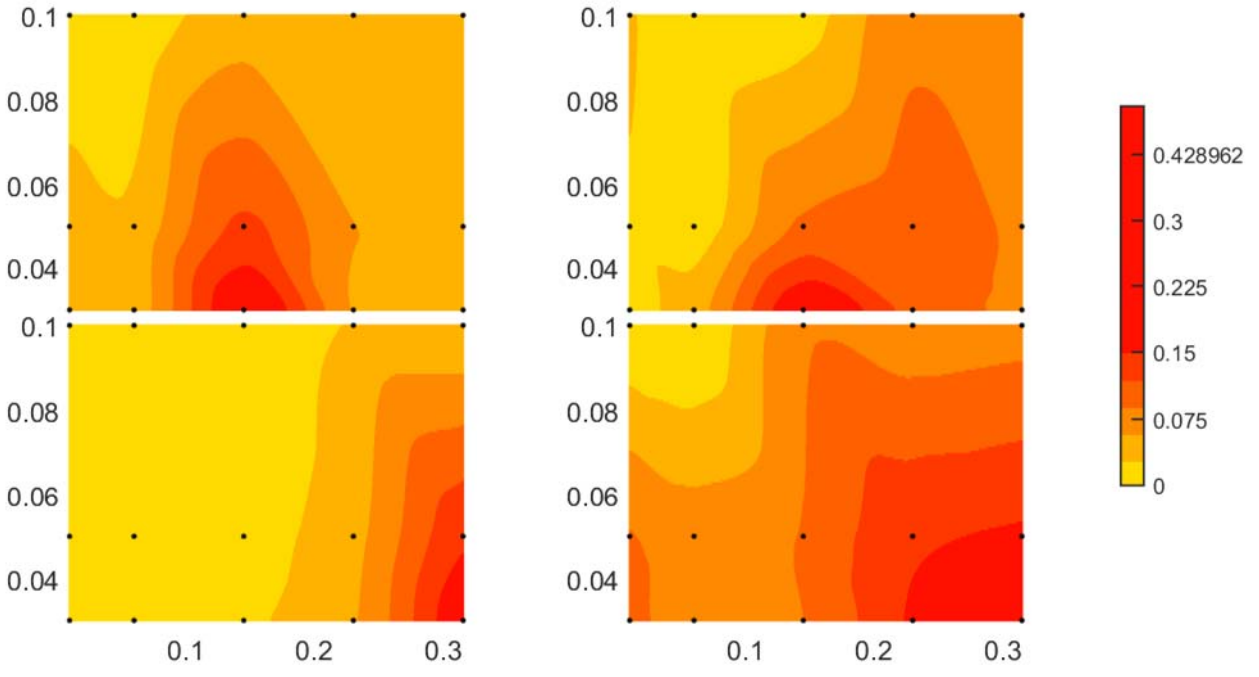
W1


0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.0627592
0.041804
0.021804
0.00180396
-0.018196
-0.038196
-0.058196
-0.078196
-0.098196
-0.118196

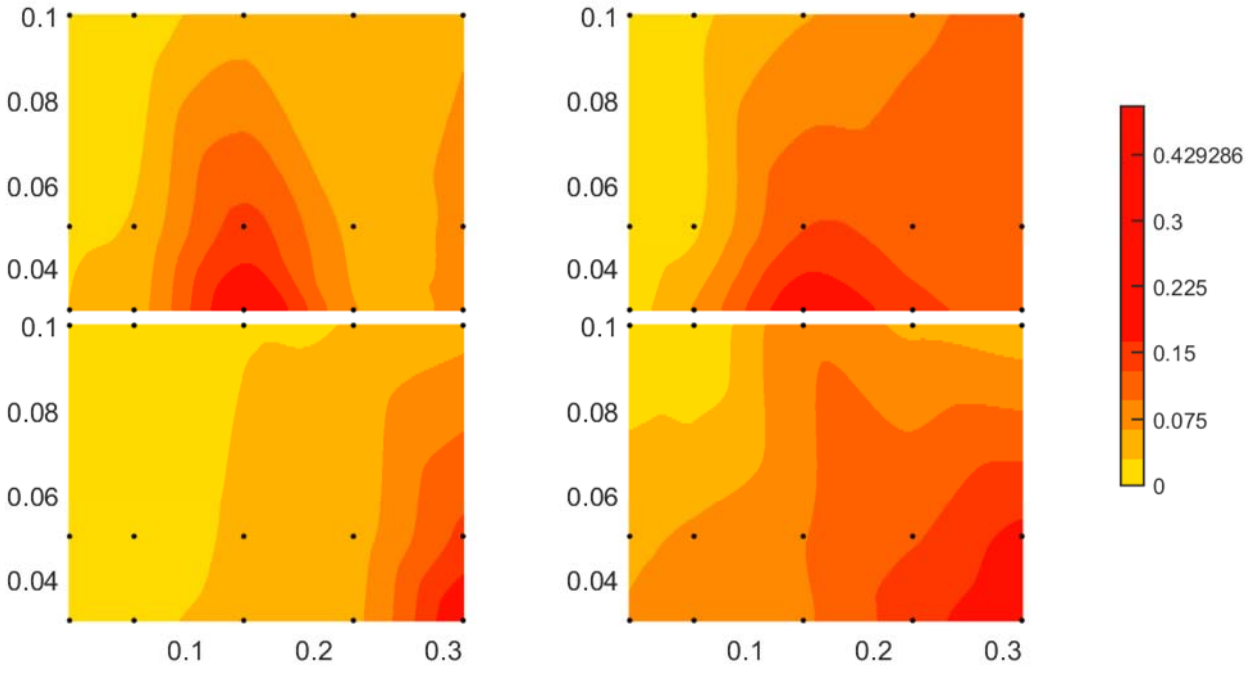
W2


0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.386823
0.3
0.225
0.15
0.075
0

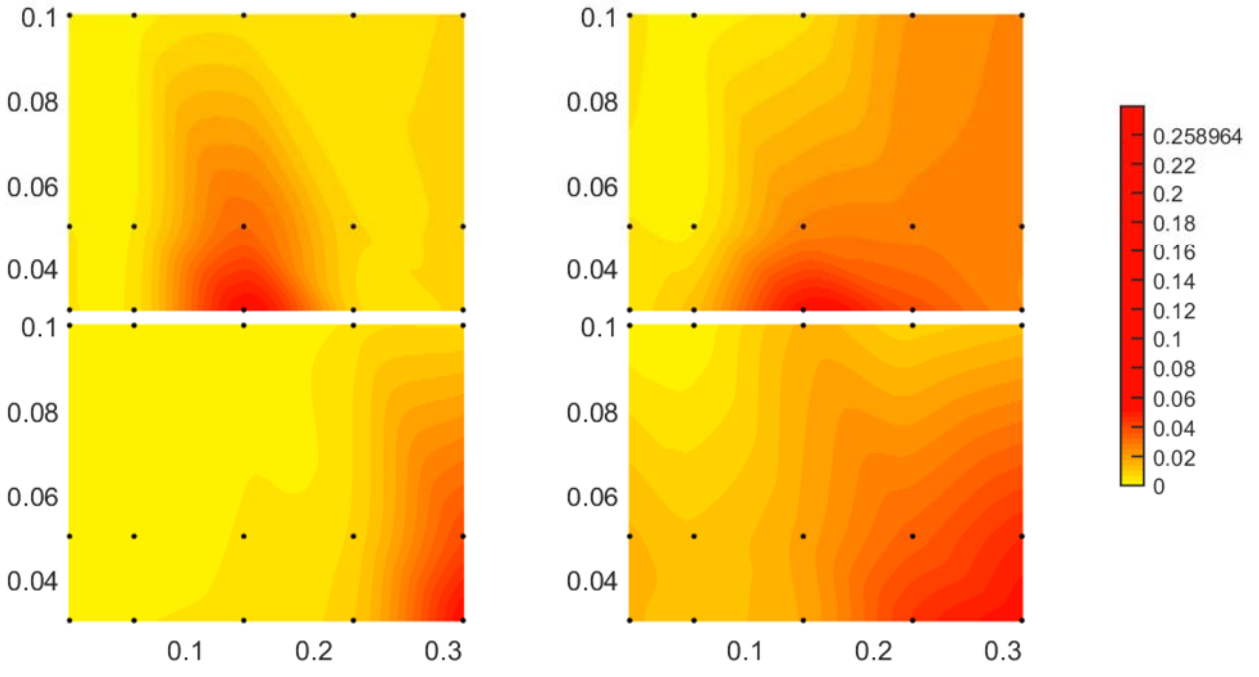
U_{rms}


0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.428962
0.3
0.225
0.15
0.075
0

V_{rms}

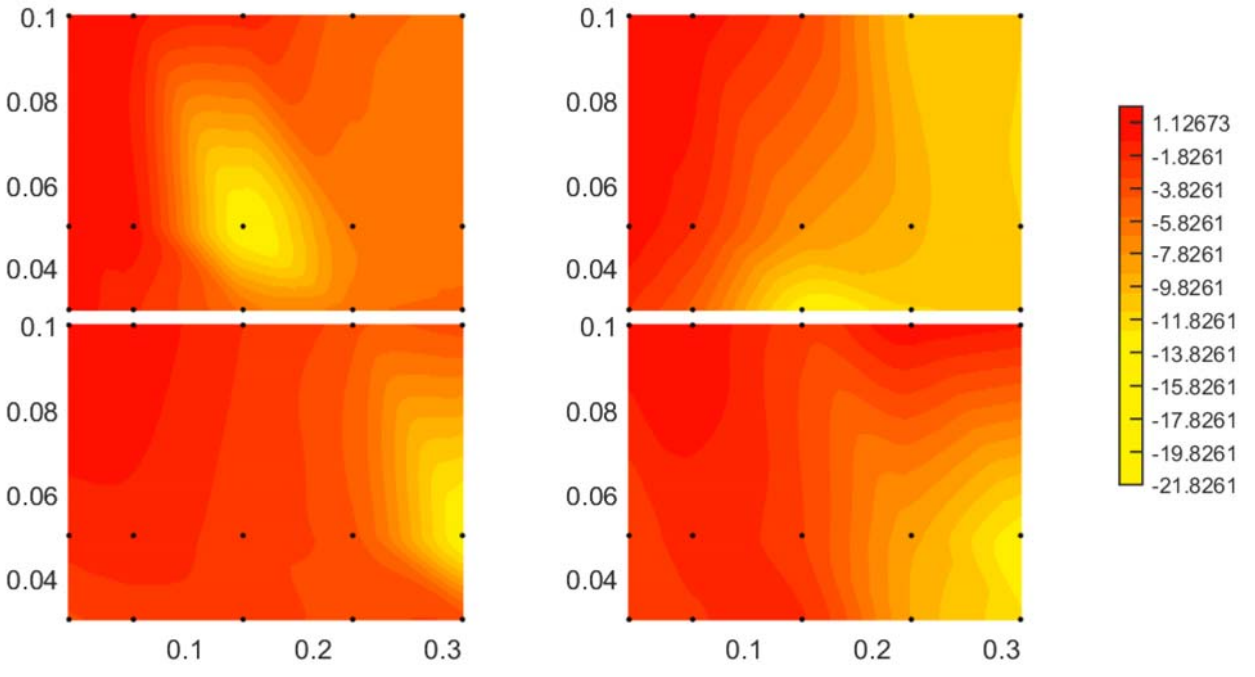

0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.429286
0.3
0.225
0.15
0.075
0

W_{rms}

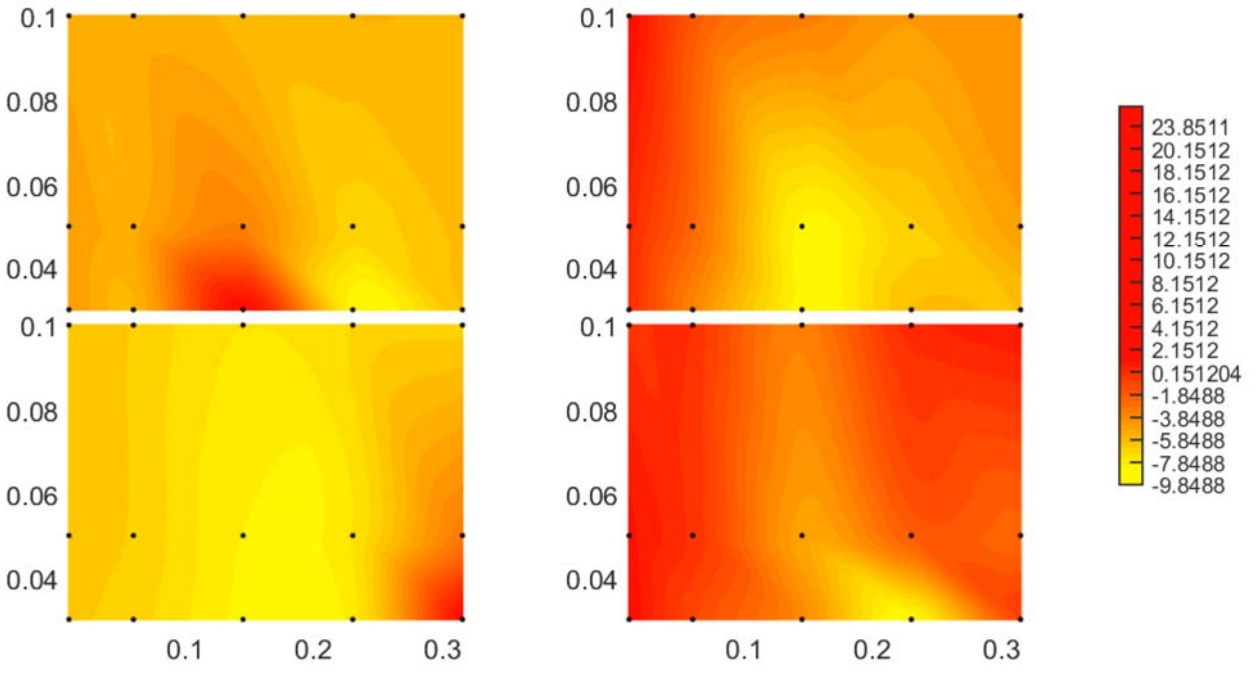

0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.1
0.08
0.06
0.04
0.1
0.08
0.06
0.04
0.1
0.2
0.3
0.258964
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0

TKE

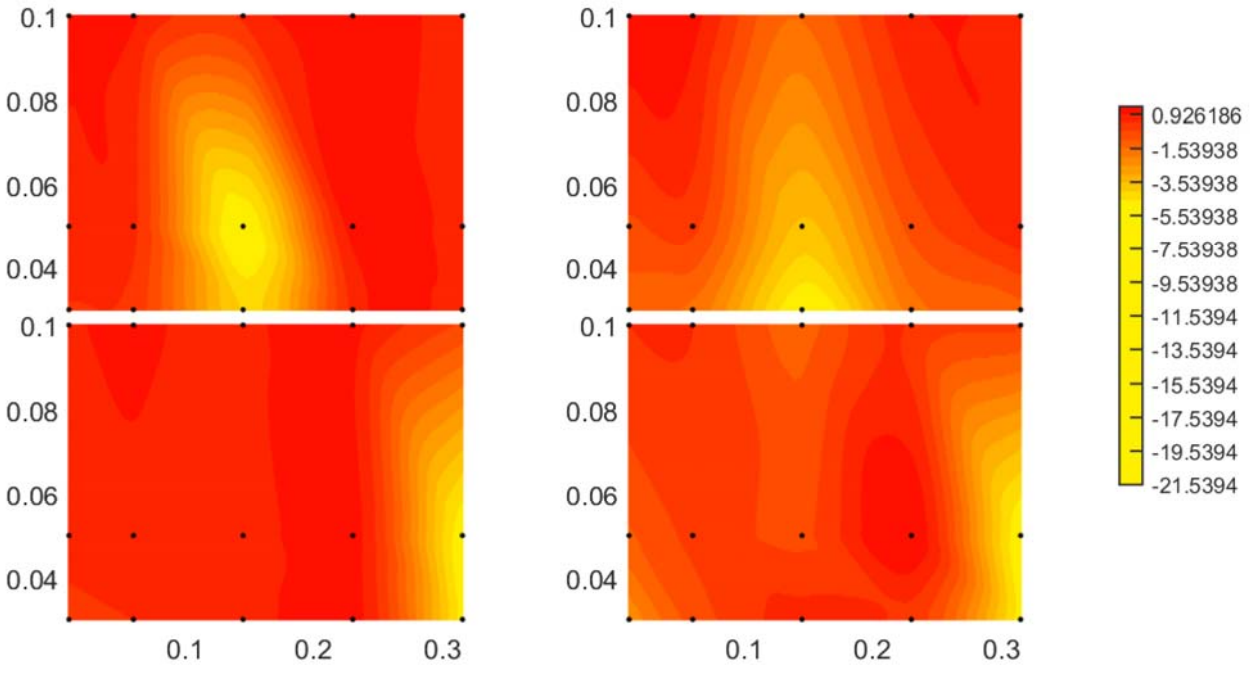
Plot of the Reynolds Stresses



$$-\rho\overline{u'v'}$$



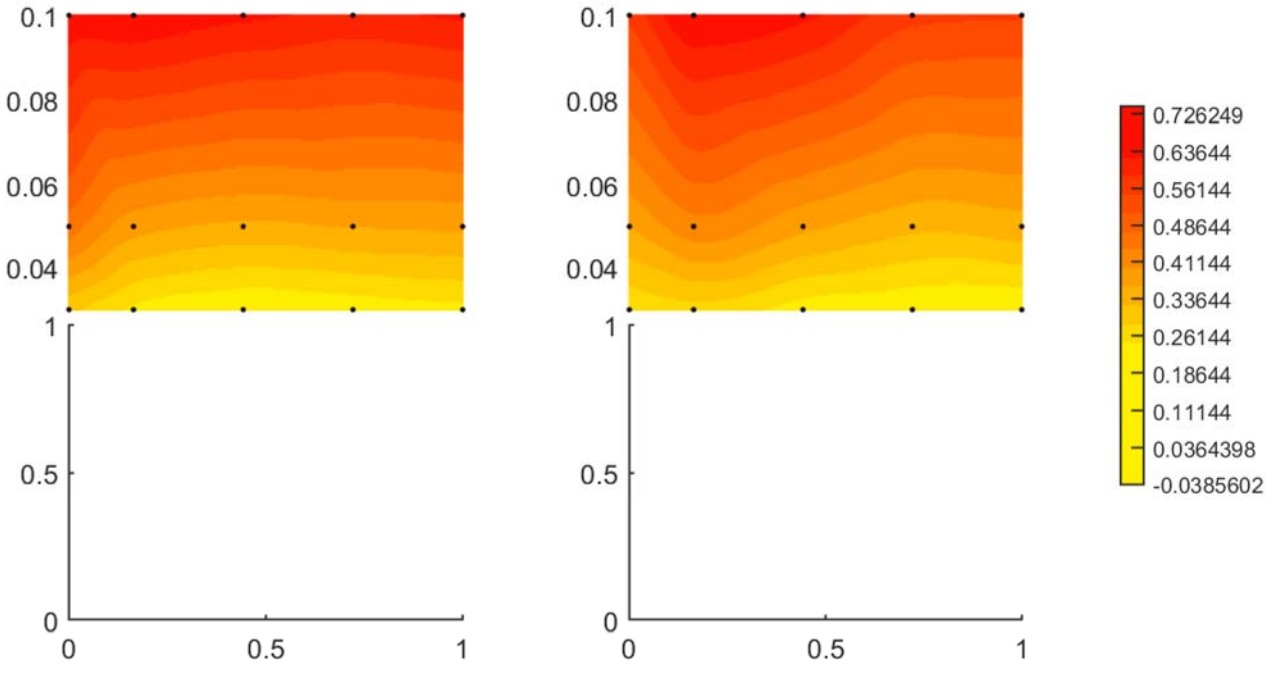
$$-\rho\overline{u'w'}$$



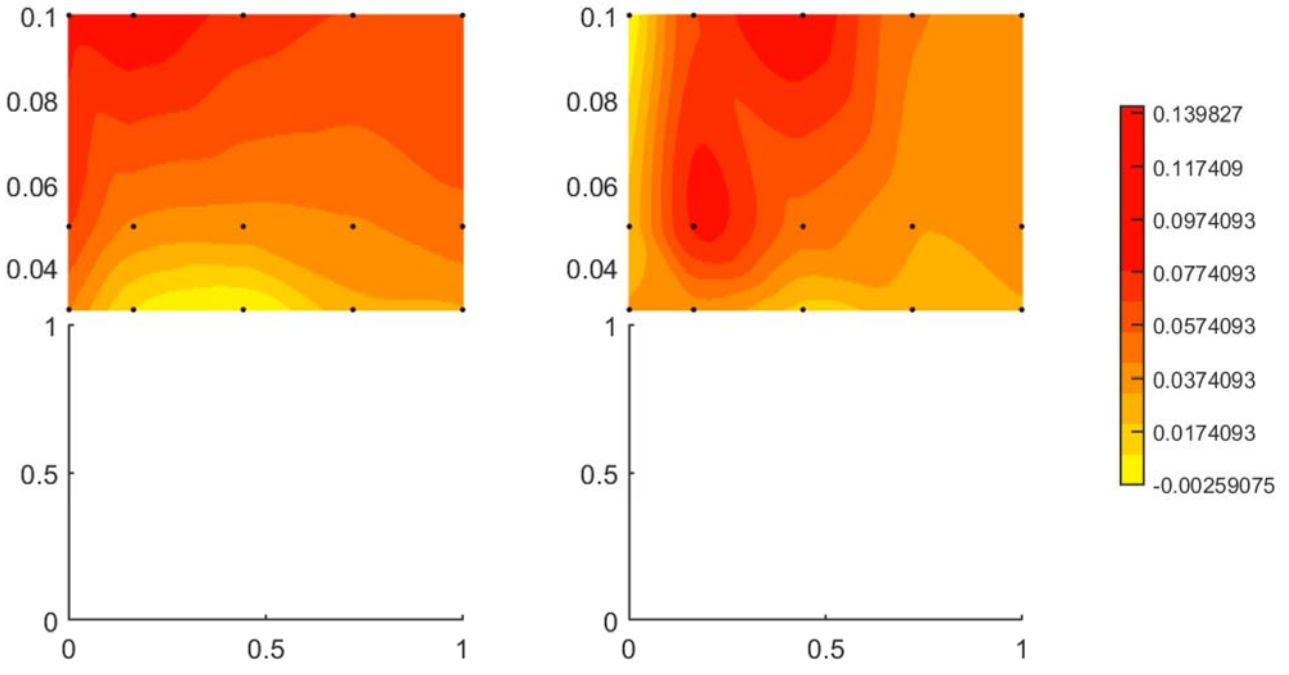
$$-\rho\overline{v'w'}$$

- WEIR BAFFLES : FLOW RATE 100 L/S

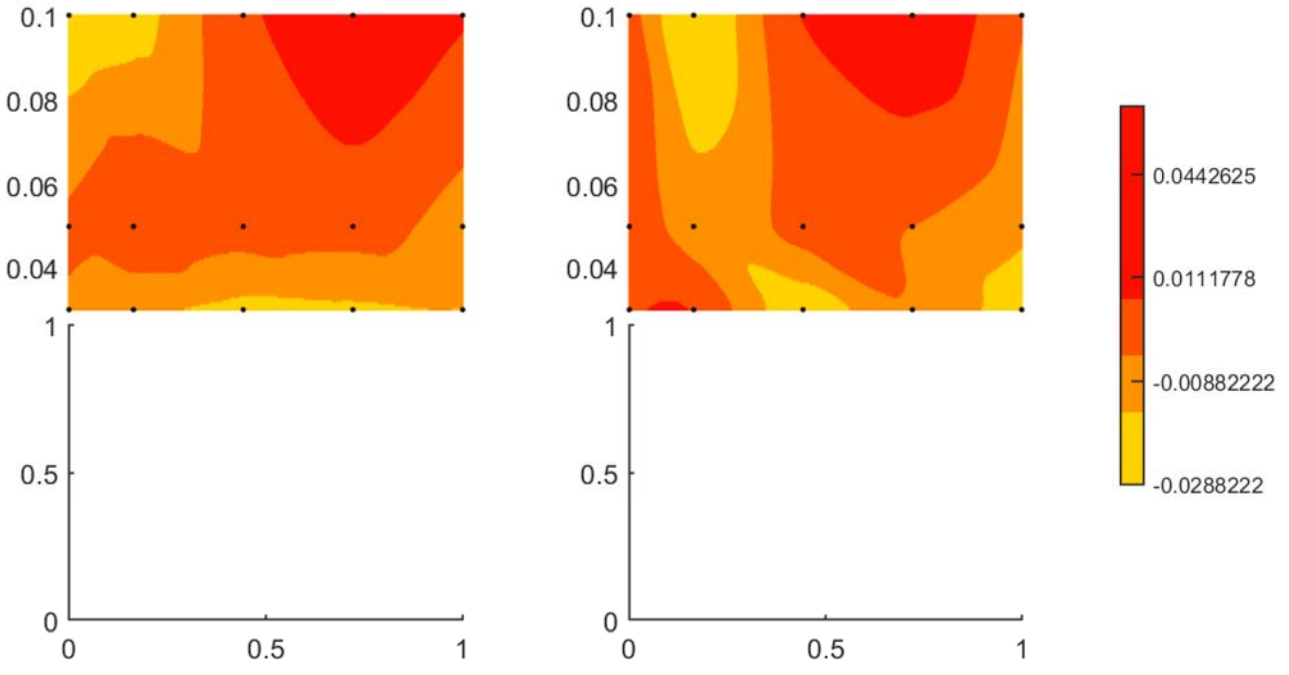
Plots of U, V, W1, W2, RMS U, RMS V, RMS W, TKE


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.726249
0.63644
0.56144
0.48644
0.41144
0.33644
0.26144
0.18644
0.11144
0.0364398
-0.0385602

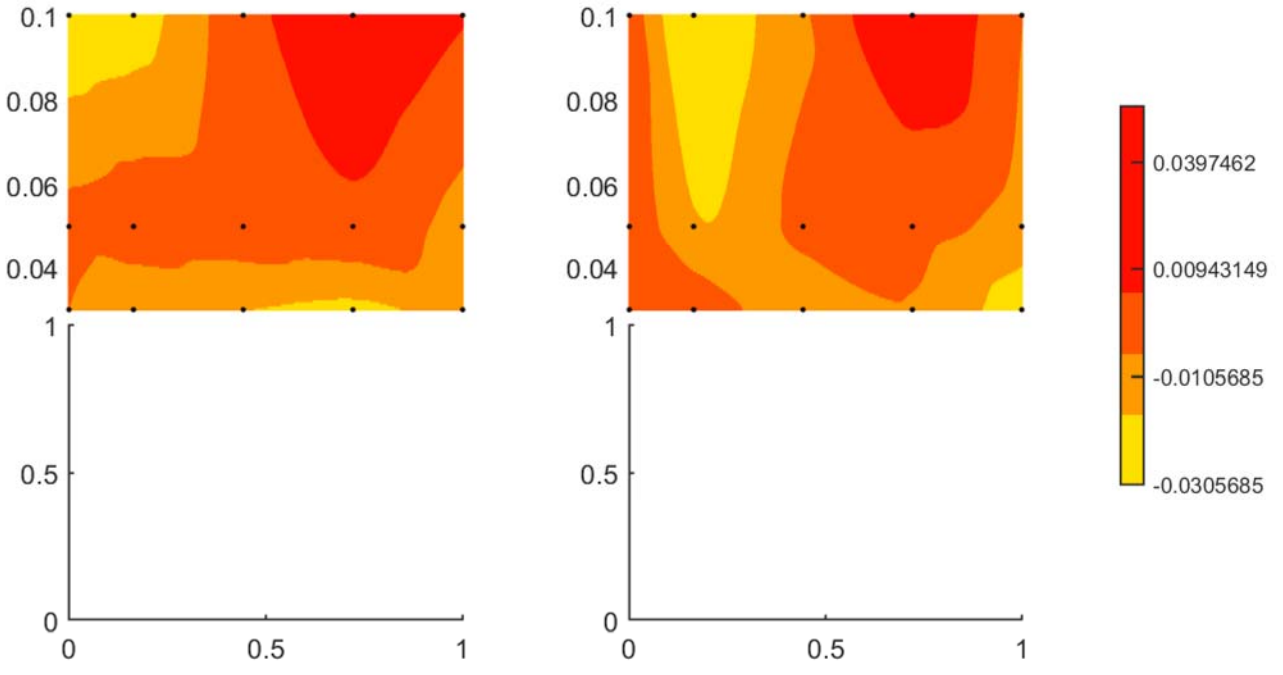
U


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.139827
0.117409
0.0974093
0.0774093
0.0574093
0.0374093
0.0174093
-0.00259075

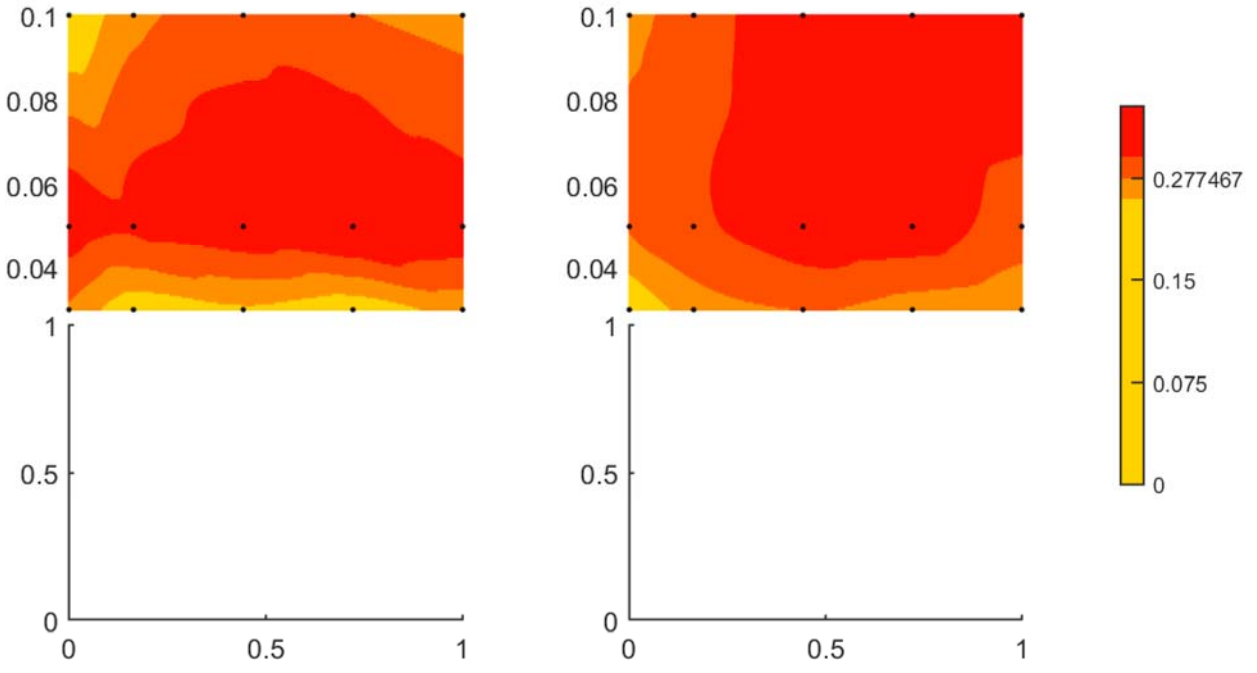
V


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.0442625
0.0111778
-0.00882222
-0.0288222

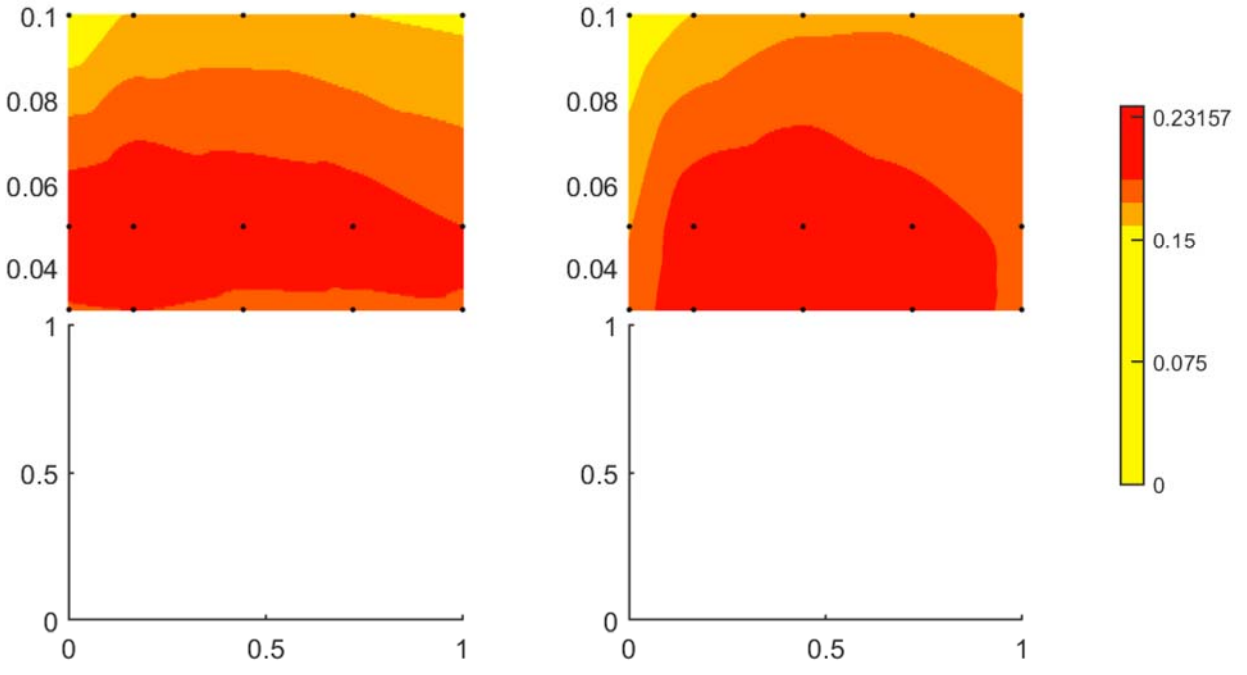
W1


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.0397462
0.00943149
-0.0105685
-0.0305685

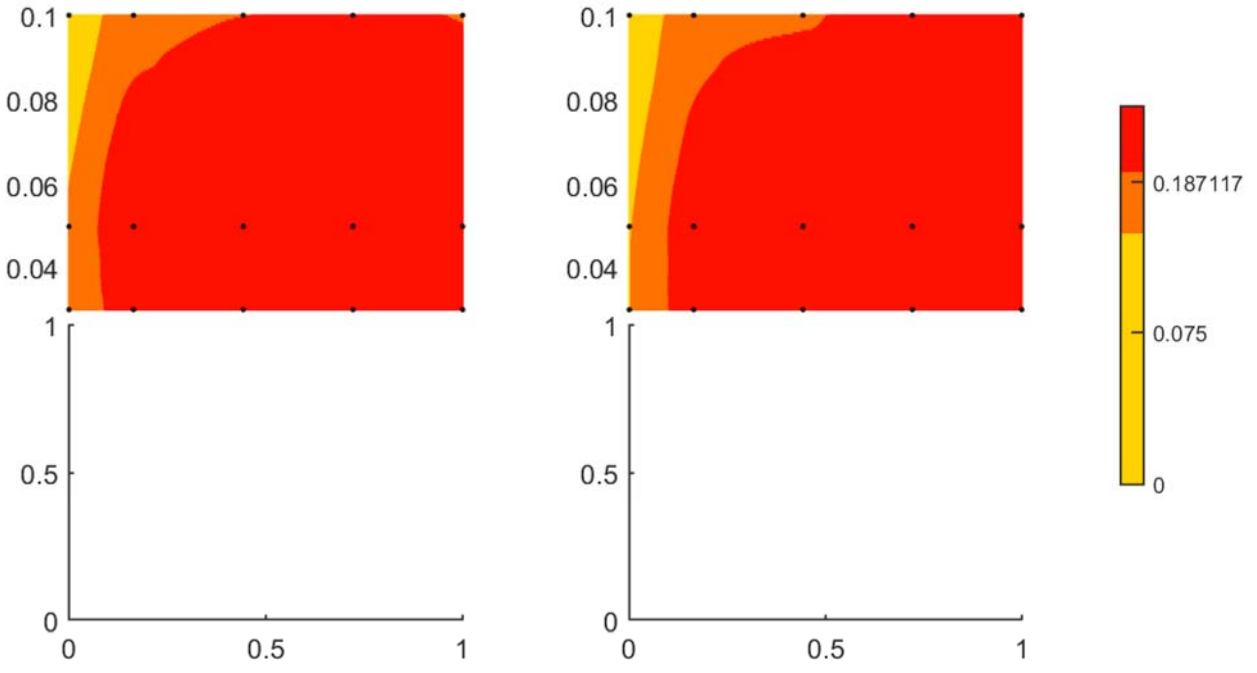
W2



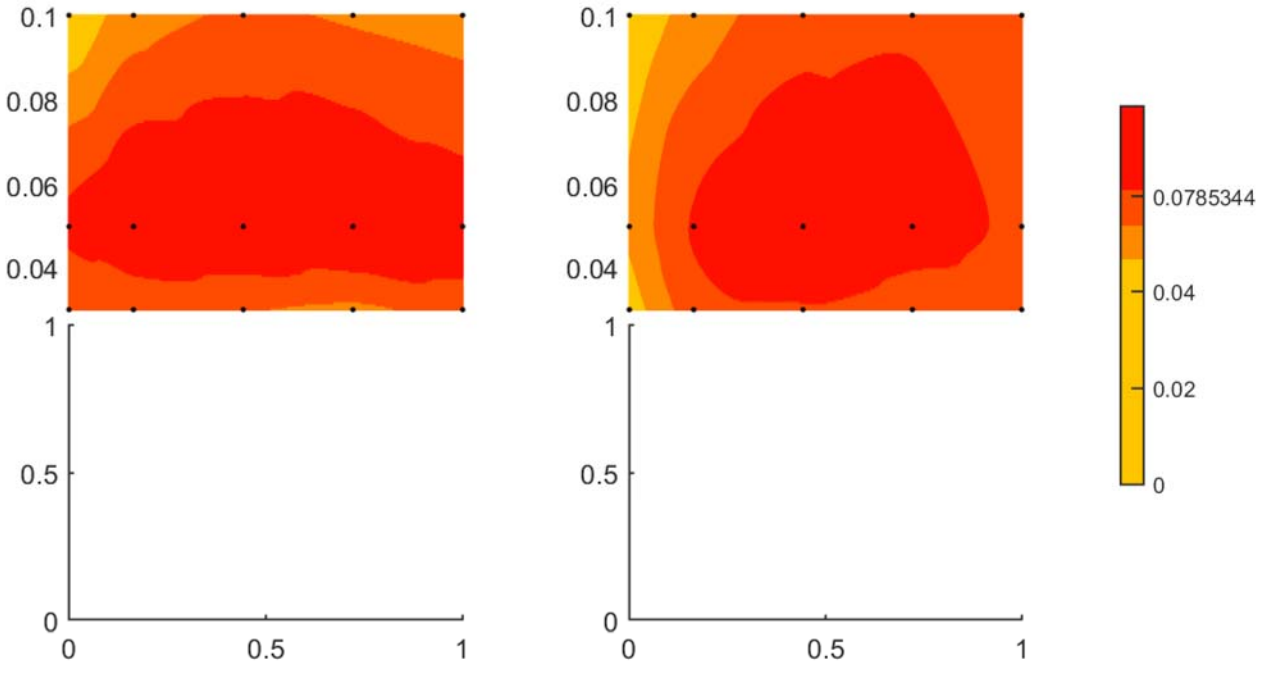
Urms



Vrms

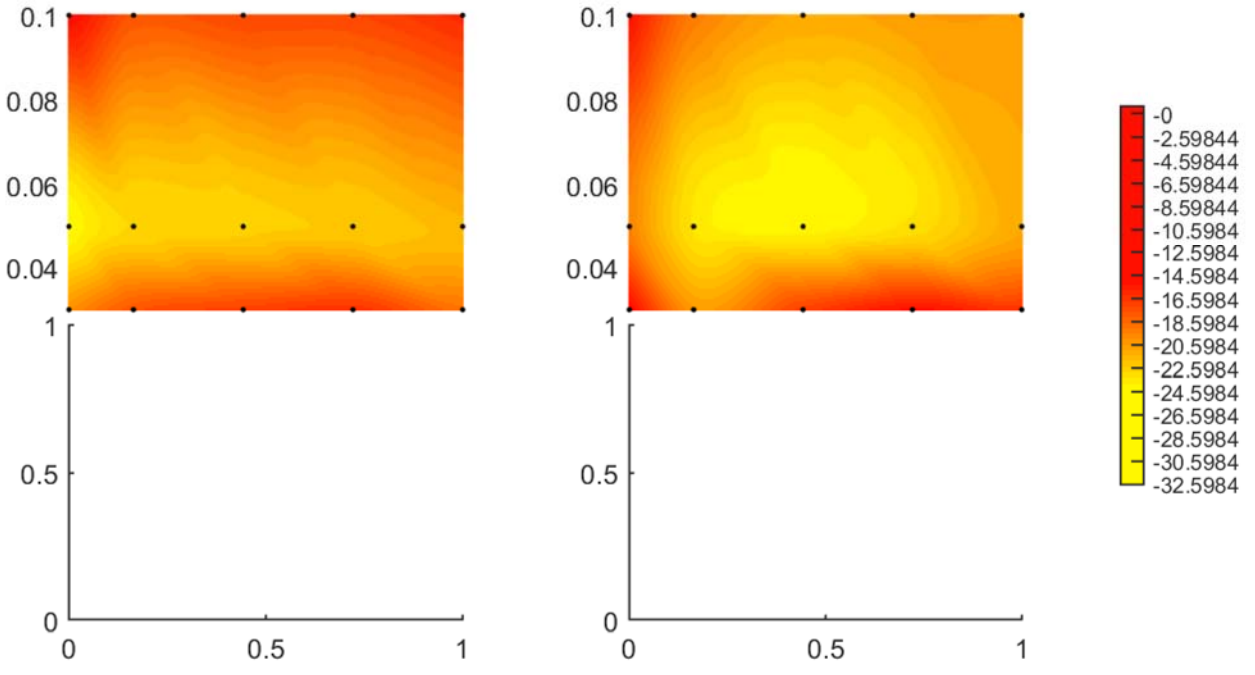


Wrms

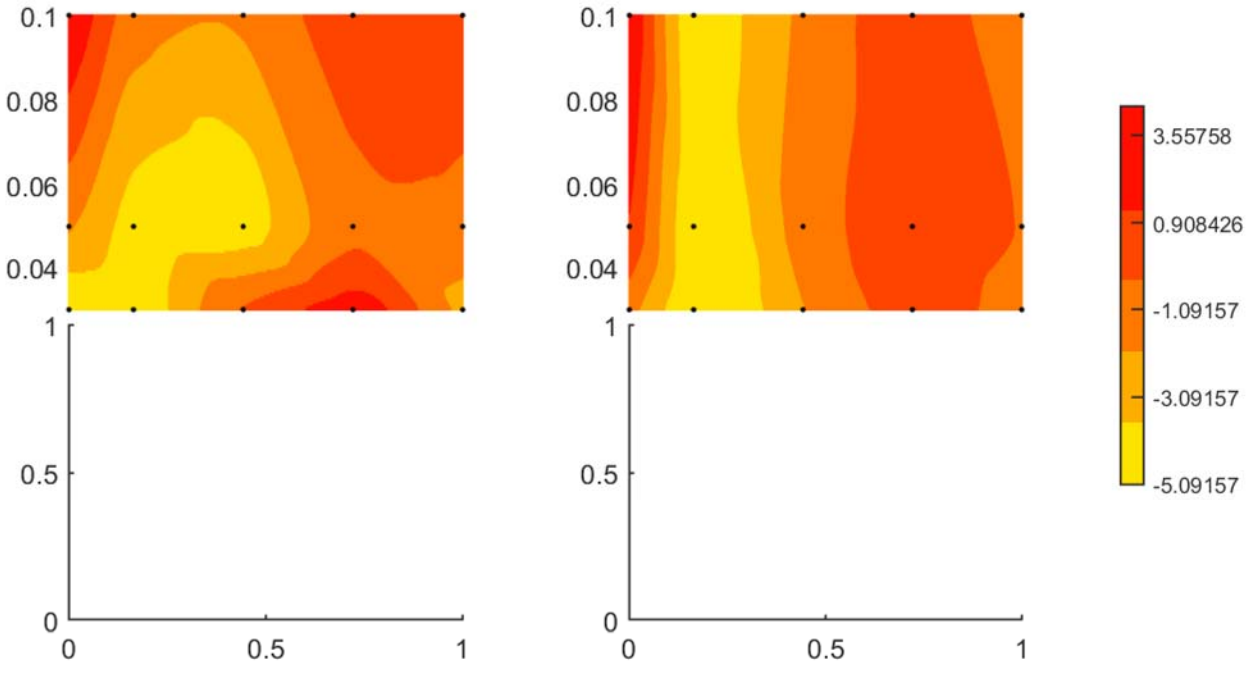


TKE

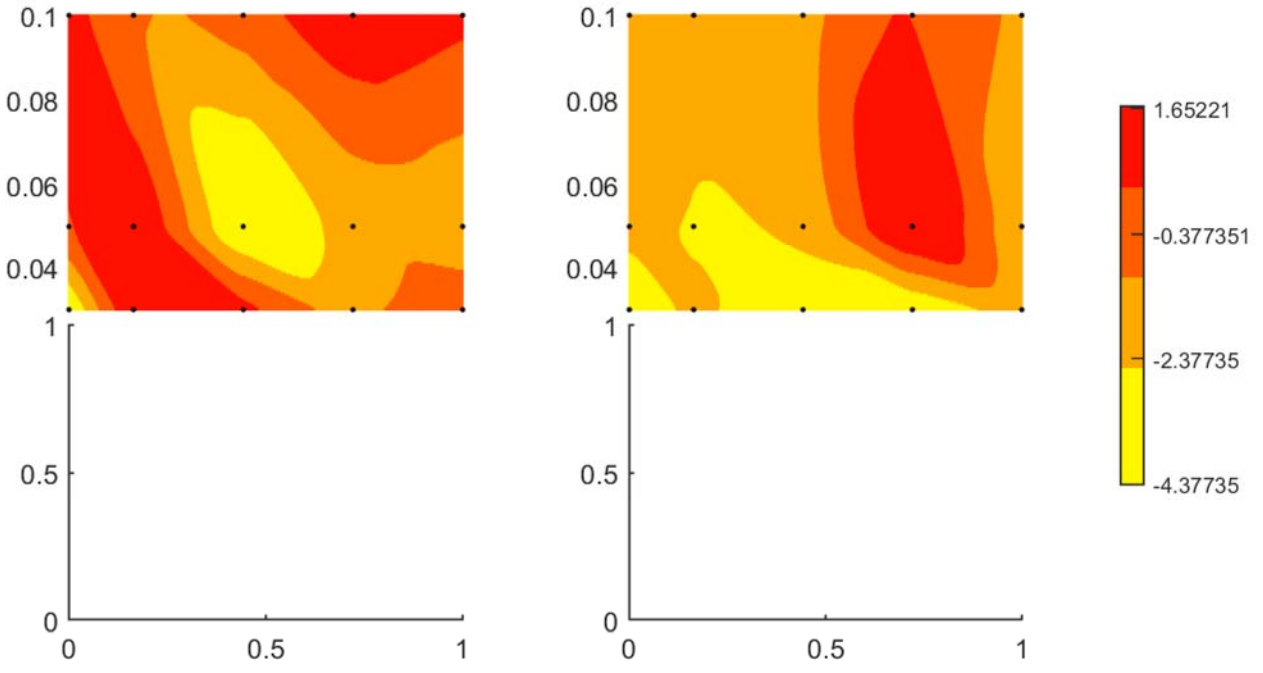
Plot of the Reynolds Stresses



$$-\rho\overline{u'v'}$$



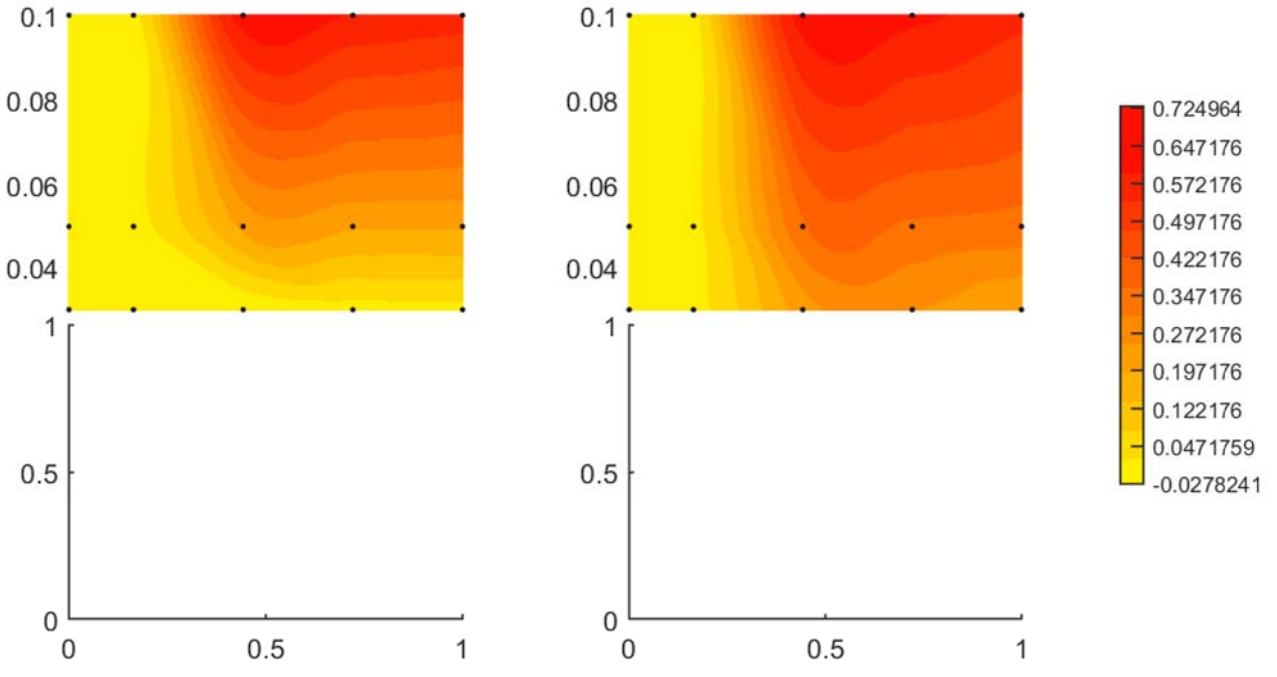
$$-\rho\overline{u'w'}$$



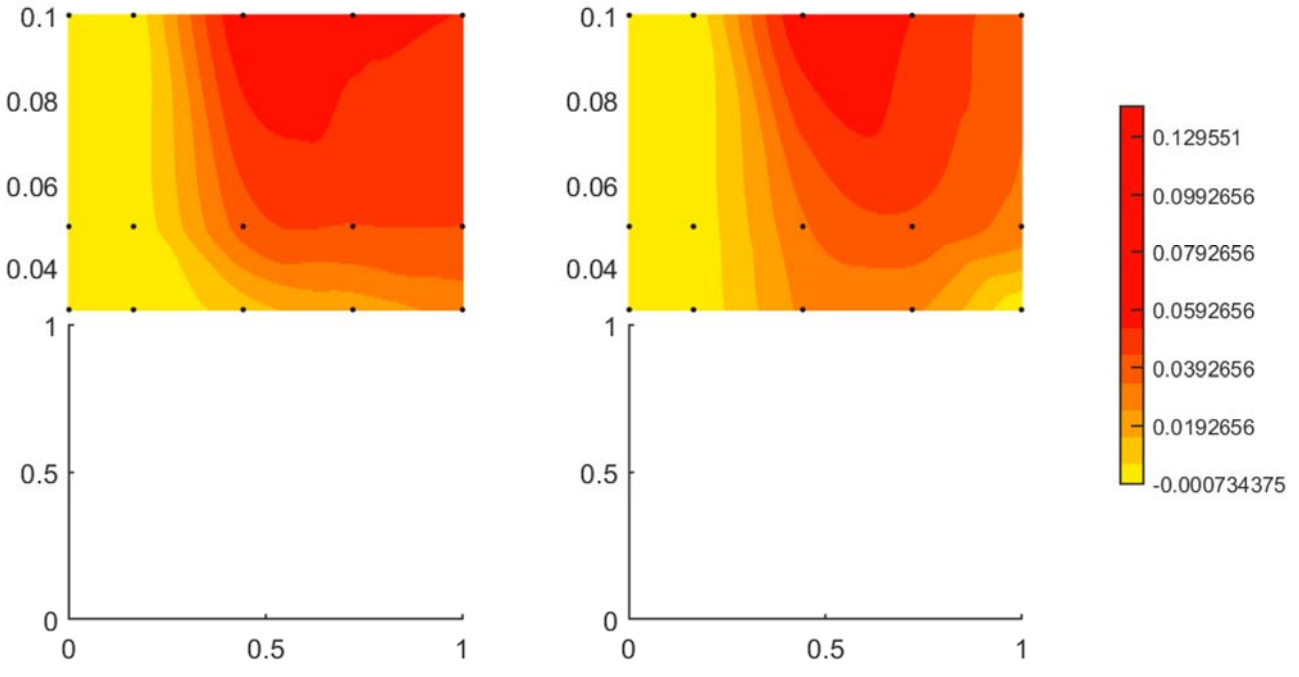
$$-\rho\overline{v'w'}$$

- WEIR BAFFLES : FLOW RATE 150 L/S

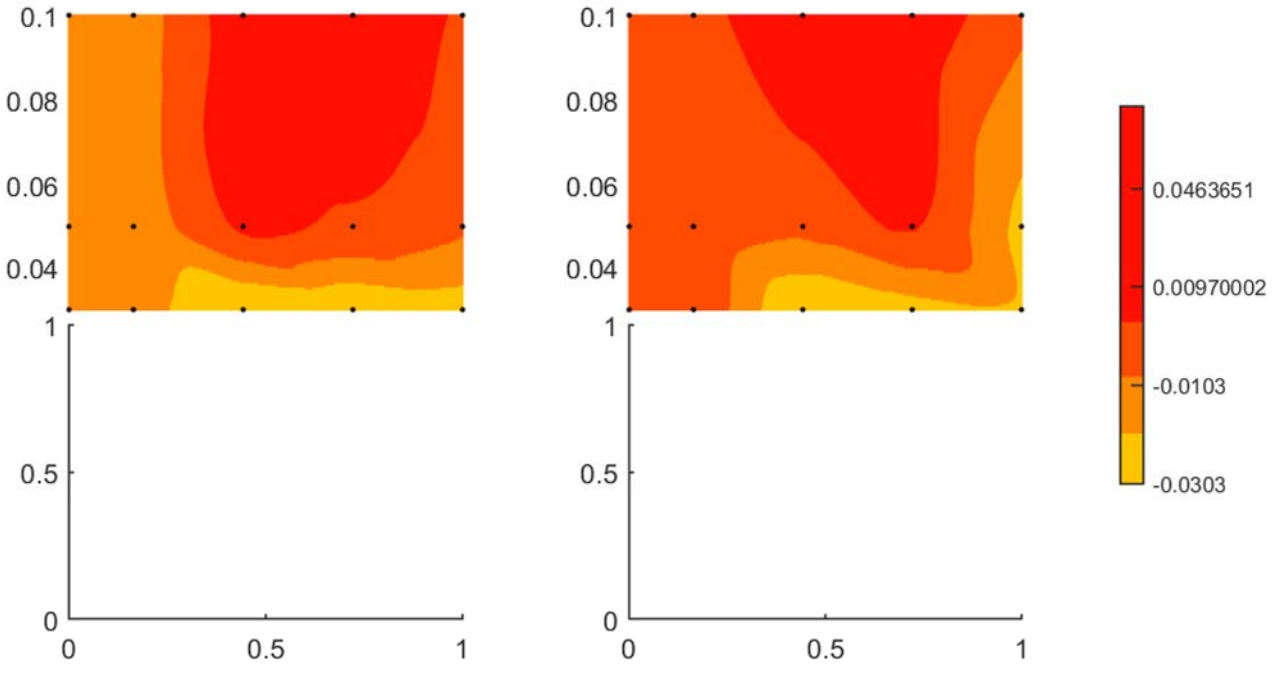
Plots of U, V, W1, W2, RMS U, RMS V, RMS W, TKE


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.724964
0.647176
0.572176
0.497176
0.422176
0.347176
0.272176
0.197176
0.122176
0.0471759
-0.0278241

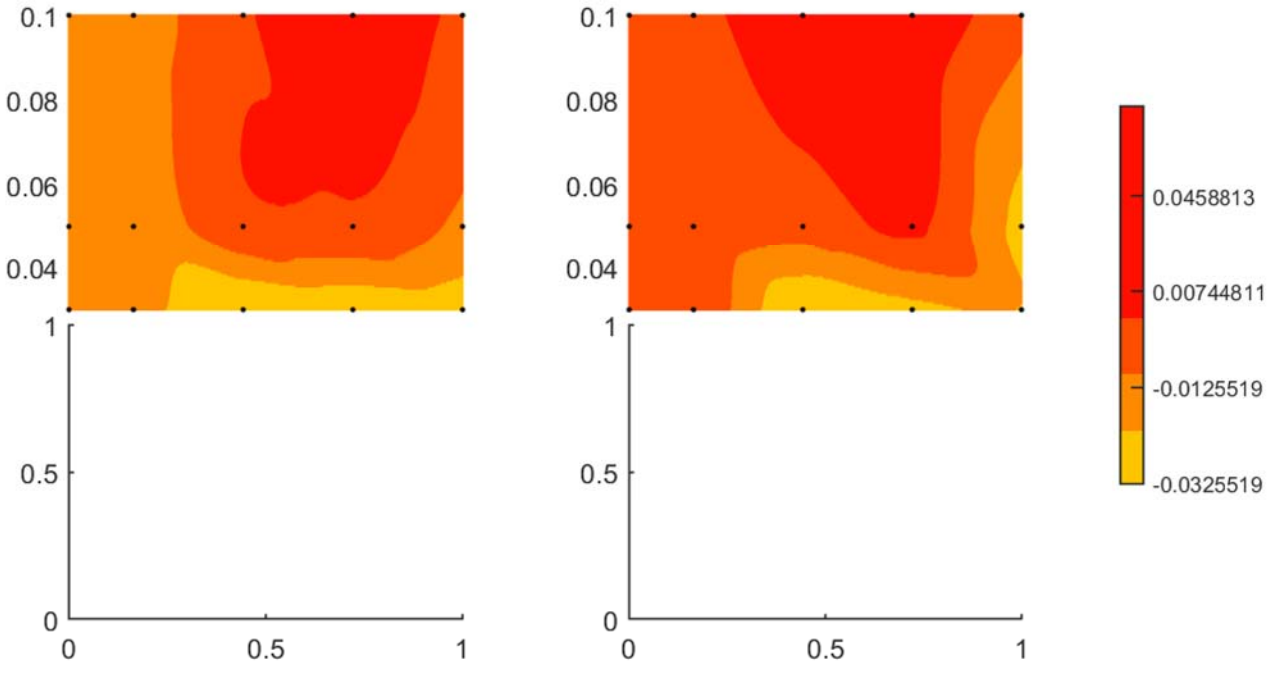
U


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.129551
0.0992656
0.0792656
0.0592656
0.0392656
0.0192656
-0.000734375

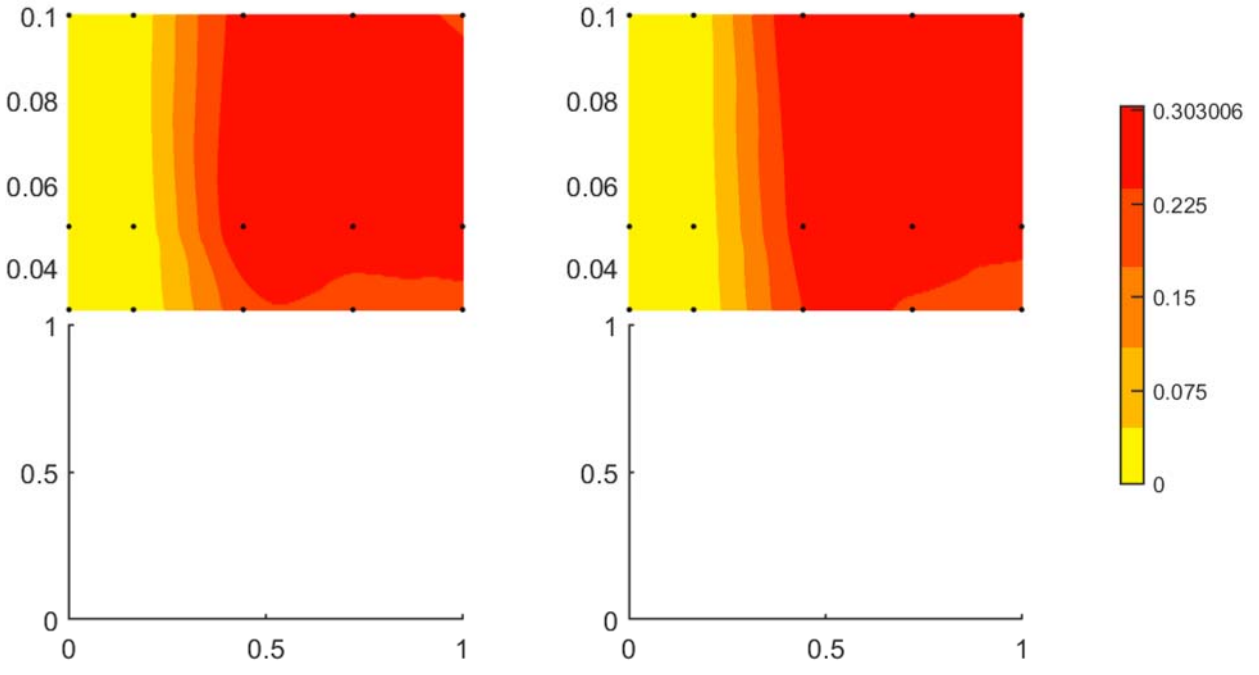
V


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.0463651
0.00970002
-0.0103
-0.0303

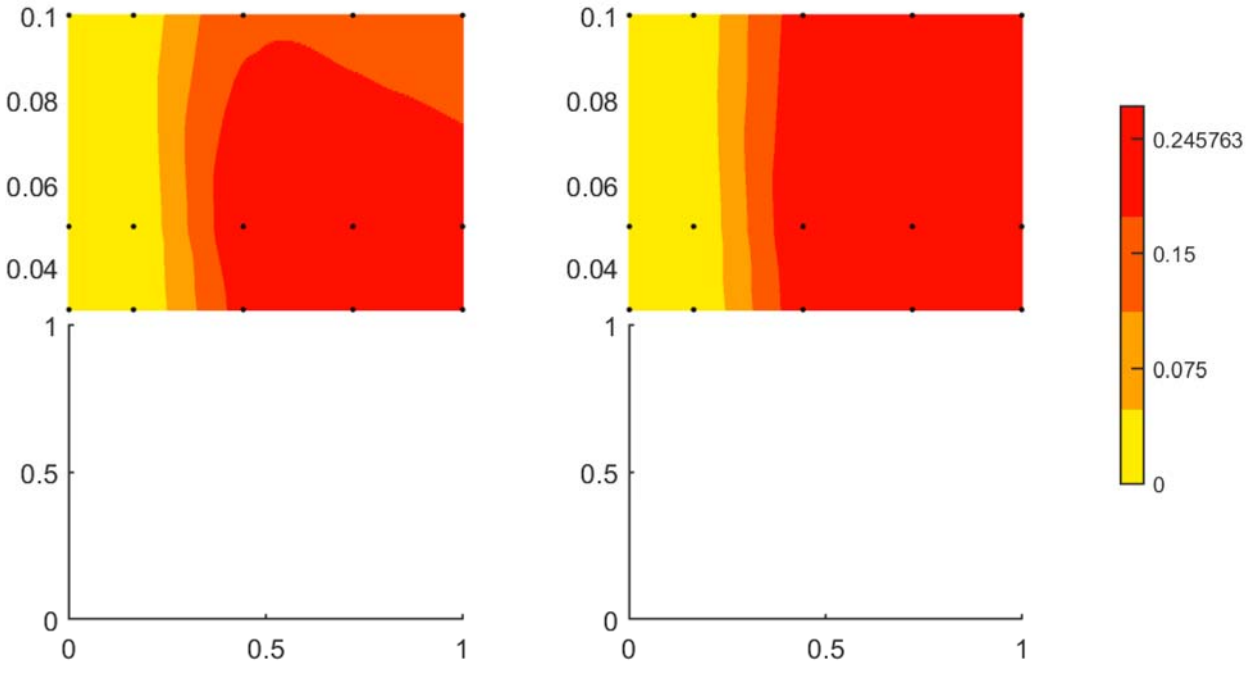
W1


0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.0458813
0.00744811
-0.0125519
-0.0325519

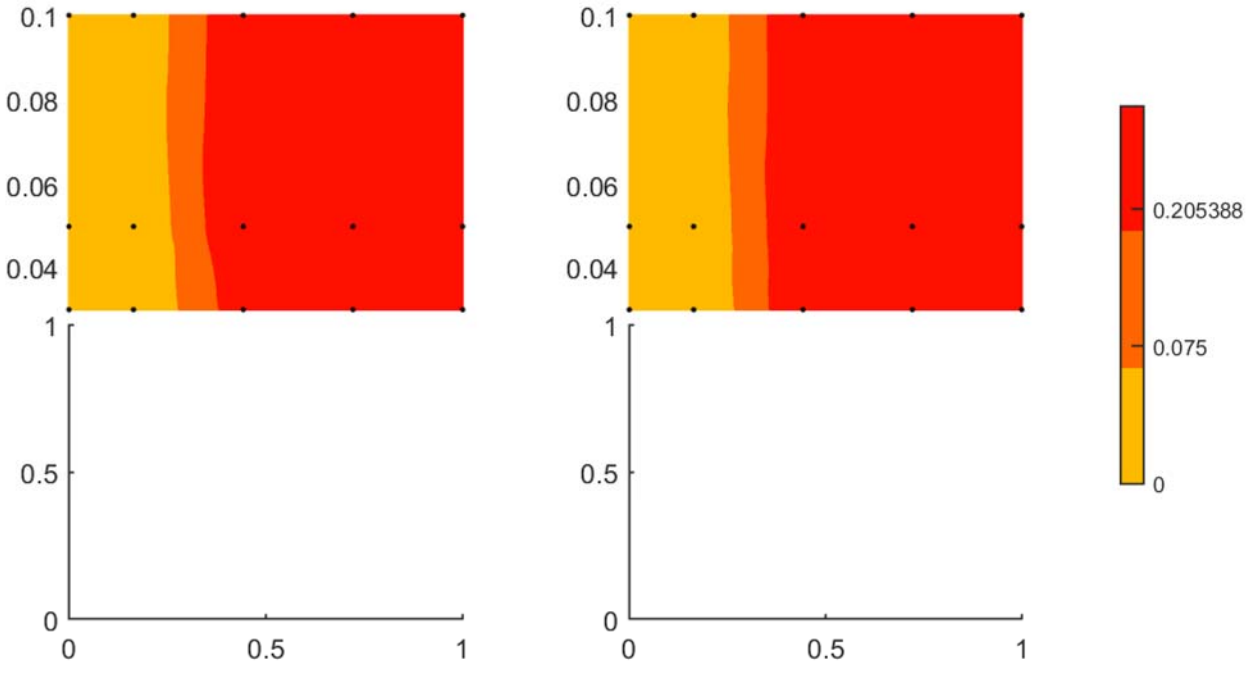
W2



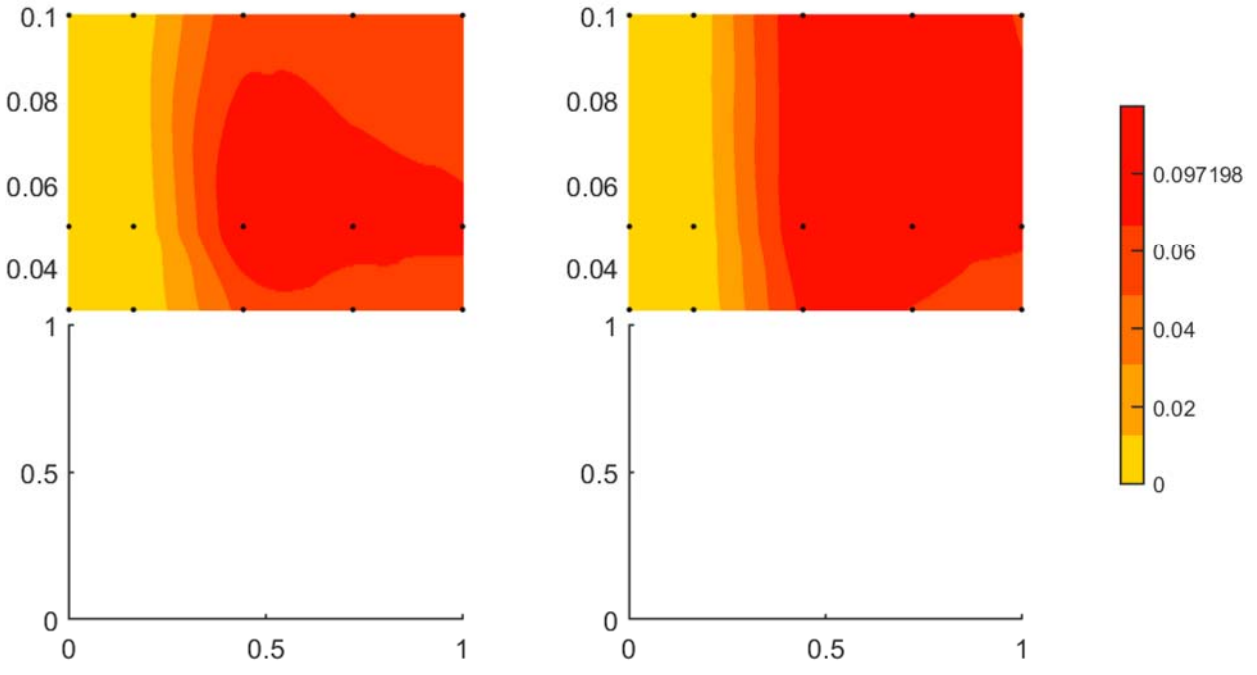
Urms



Vrms

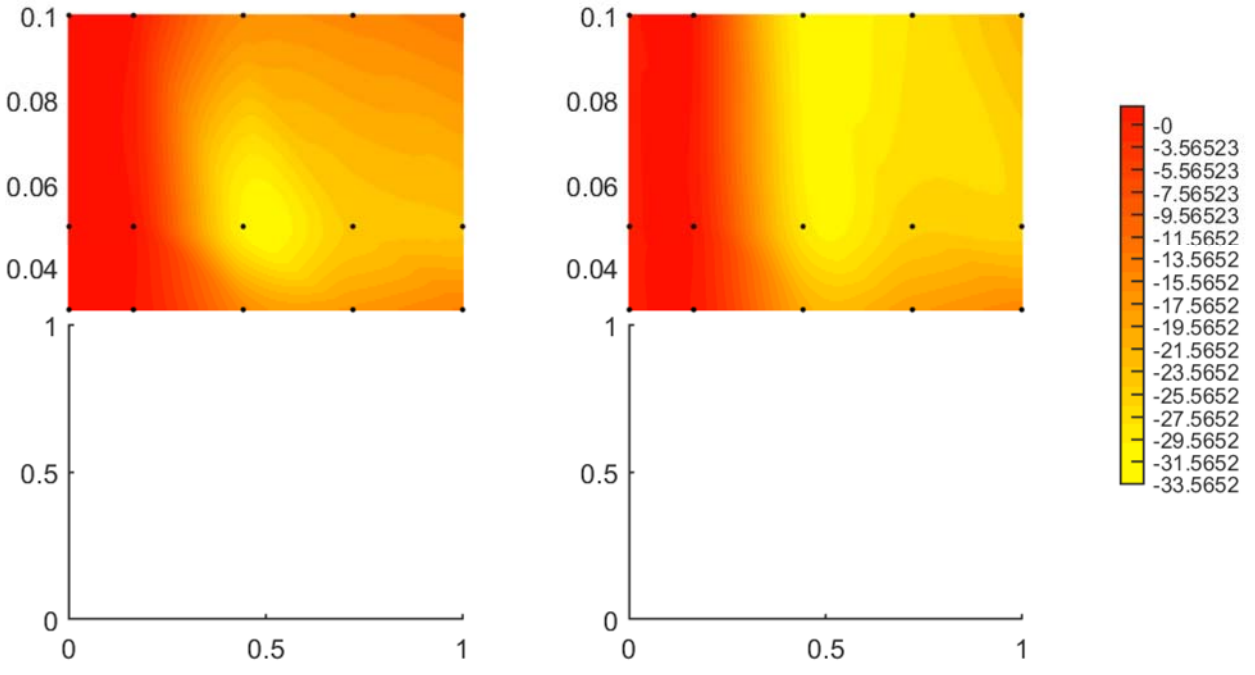


Wrms

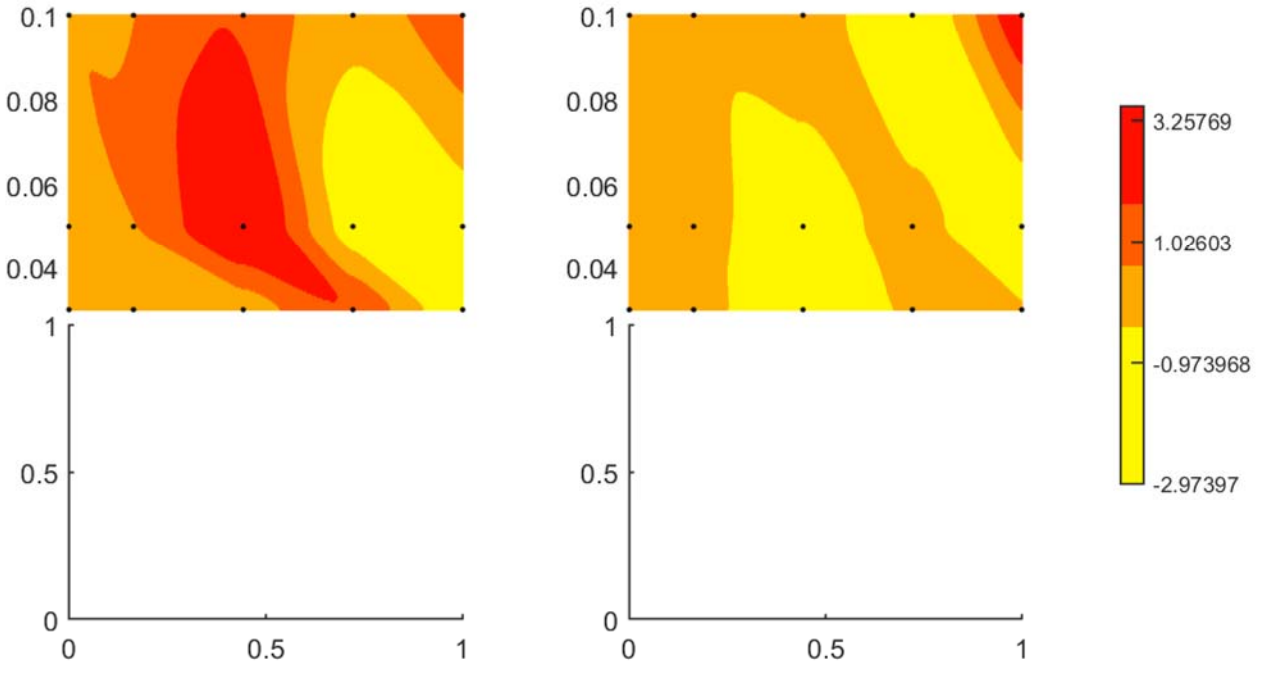

0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.1
0.08
0.06
0.04
1
0.5
0
0
0.5
1
0.097198
0.06
0.04
0.02
0

TKE

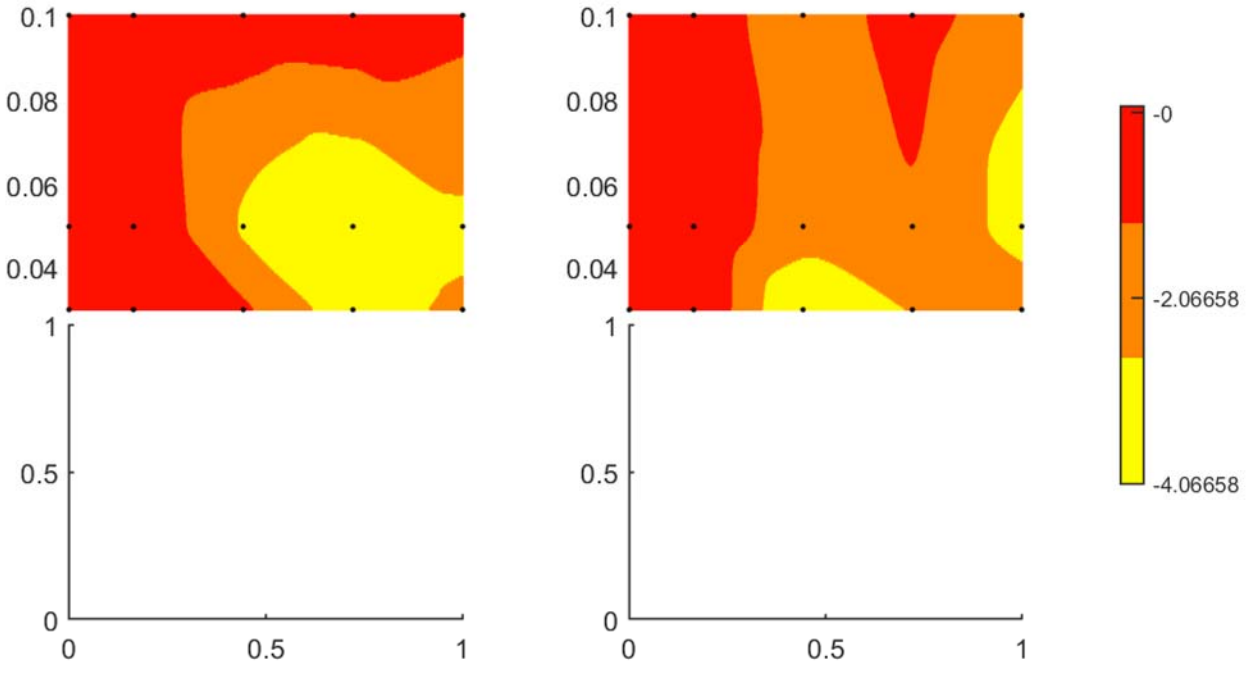
Plot of the Reynolds Stresses



$$-\rho\overline{u'v'}$$



$$-\rho\overline{u'w'}$$



$$-\rho\overline{v'w'}$$