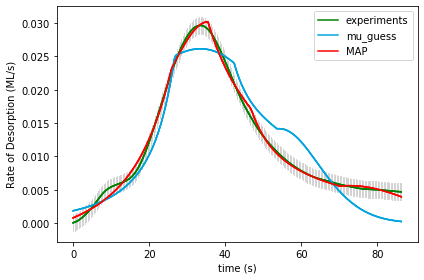
Name of Runfile: 18a\_CPE\_grid 59535 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Uncertainty** |
| Scaling | 1 | .1 | 1.49475745e+00 |  |
| Offset | 0 | .005 | 3.69922267e-03 |  |
| Ea\_1 | 40 | 20 | 1.17403976e+01 |  |
| Log\_A1 | 13 | 2 | 4.12858389e+00 |  |
| gamma\_1 | 0.1 | 0.3 | -1.61526492e+00 |  |
| gamma\_mod1 | 0 | 0.1 | 1.83629589e+00 |  |
| gamma\_mod2 | 0 | 0.1 | -2.83504285e-01 |  |
| gamma\_mod3 | 0 | 0.1 | 2.25140058e-01 |  |
| gamma\_mod4 | 0 | 0.1 | 1.25845442e-02 |  |
| gamma\_mod5 | 0 | 0.1 | -8.90996289e-02 |  |
| gamma\_mod6 | 0 | 0.1 | -1.62914152e-01 |  |
| logP |  |  | 986.4534955279314 |  |



UserInput.model['InputParameterPriorValues'] = [1.0, 0.0, 40.0, 13.0, 0.1,

0.0, 0.0, 0.0, 0.0, 0.0, 0.0]

Final map results from gridsearch: (1.0, 0.0, 20.0, 11.0, -0.3, 0.3, -0.1, 0.1, 0.0, 0.0, -0.1) final logP: -1527.5171602395776

gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3,

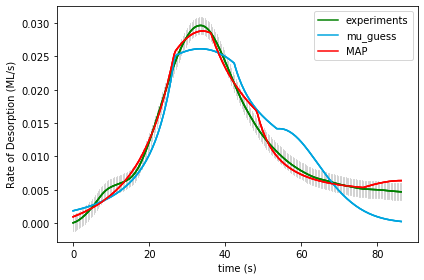
0.1, 0.1, 0.1, 0.1, 0.1, 0.1]

gridSamplingNumOfIntervals=[0,0,3,3,2, 0,1,1,1,1,1]

Final results from doOptimizeNegLogP: [ 1.49475745e+00 3.69922267e-03 1.17403976e+01 4.12858389e+00 -1.61526492e+00 1.83629589e+00 -2.83504285e-01 2.25140058e-01 1.25845442e-02 -8.90996289e-02 -1.62914152e-01] final logP: 986.4534955279314

Name of Runfile: 18a\_BPE\_grid 59535 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Uncertainty** |
| Scaling | 1 | .1 | 1.45876083e+00 |  |
| Offset | 0 | .005 | 2.59911775e-03 |  |
| Ea\_1 | 40 | 20 | 1.73870602e+01 |  |
| Log\_A1 | 13 | 2 | 7.70357254e+00 |  |
| gamma\_1 | 0.1 | 0.3 | -7.16993668e-01 |  |
| gamma\_mod1 | 0 | 0.1 | 7.28877700e-01 |  |
| gamma\_mod2 | 0 | 0.1 | -1.79565463e-01 |  |
| gamma\_mod3 | 0 | 0.1 | 3.15711682e-01 |  |
| gamma\_mod4 | 0 | 0.1 | 1.32376971e-02 |  |
| gamma\_mod5 | 0 | 0.1 | -4.69623174e-02 |  |
| gamma\_mod6 | 0 | 0.1 | -1.18230749e-01 |  |
| logP |  |  | 916.2750683174896 |  |



UserInput.model['InputParameterPriorValues'] = [1.0, 0.0, 40.0, 13.0, 0.1,

0.0, 0.0, 0.0, 0.0, 0.0, 0.0]

Final map results from gridsearch: (1.0, 0.0, 20.0, 11.0, -0.3, 0.3, -0.1, 0.1, 0.0, 0.0, -0.1) final logP: -1527.5828666259995

gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3,

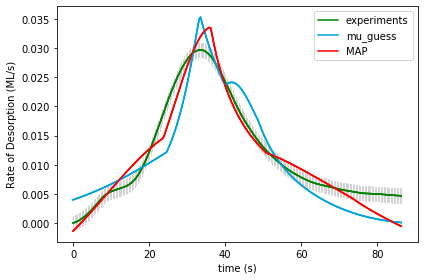
0.1, 0.1, 0.1, 0.1, 0.1, 0.1]

gridSamplingNumOfIntervals=[0,0,3,3,2, 0,1,1,1,1,1]

Final results from doOptimizeNegLogP: [ 1.45876083e+00 2.59911775e-03 1.73870602e+01 7.70357254e+00 -7.16993668e-01 7.28877700e-01 -1.79565463e-01 3.15711682e-01 1.32376971e-02 -4.69623174e-02 -1.18230749e-01] final logP: 916.2750683174896

Name of Runfile: 18a\_CPE\_grid\_opt 243 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Uncertainty** |
| Scaling | 1 | .1 | 2.44625018e+00 |  |
| Offset | 0 | .005 | 1.36001709e-02 |  |
| Ea\_1 | 40 | 20 | 3.20197042e+01 |  |
| Log\_A1 | 13 | 2 | 1.59517881e+01 |  |
| gamma\_1 | 0.1 | 0.3 | -8.29328337e-05 |  |
| gamma\_mod1 | 0 | 0.1 | 2.60325775e-01 |  |
| gamma\_mod2 | 0 | 0.1 | 3.06755641e-03 |  |
| gamma\_mod3 | 0 | 0.1 | -3.24063935e-02 |  |
| gamma\_mod4 | 0 | 0.1 | 6.91923309e-04 |  |
| gamma\_mod5 | 0 | 0.1 | -6.18787480e-02 |  |
| gamma\_mod6 | 0 | 0.1 | -1.37050804e-02 |  |
| logP |  |  | 648.7575340508599 |  |



UserInput.model['InputParameterPriorValues'] = [1.0, 0.0, 40.0, 13.0, 0.1,

0.0, 0.0, 0.0, 0.0, 0.0, 0.0]

Final map results from gridsearch: [ 9.72403839e-01 2.45807149e-04 2.16720262e+01 1.17139968e+01

-2.39634576e-05 2.00249952e-01 6.62735737e-05 -1.06494051e-01

2.17505358e-05 -1.00161392e-01 1.44611048e-04] final logP: -3653.765327218868

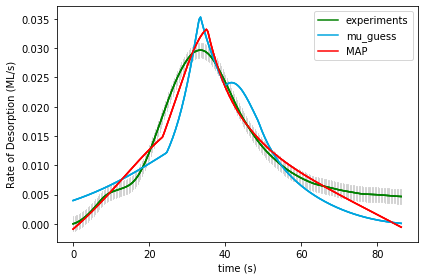
gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1]

gridSamplingNumOfIntervals=[0,0,1,1,0, 1,0,1,0,1,0]

Final results from doOptimizeNegLogP: [ 2.44625018e+00 1.36001709e-02 3.20197042e+01 1.59517881e+01 -8.29328337e-05 2.60325775e-01 3.06755641e-03 -3.24063935e-02 6.91923309e-04 -6.18787480e-02 -1.37050804e-02] final logP: 648.7575340508599

Name of Runfile: 18a\_BPE\_grid\_opt 243 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Uncertainty** |
| Scaling | 1 | .1 | 2.13854431e+00 |  |
| Offset | 0 | .005 | 1.12573598e-02 |  |
| Ea\_1 | 40 | 20 | 2.78693882e+01 |  |
| Log\_A1 | 13 | 2 | 1.39647519e+01 |  |
| gamma\_1 | 0.1 | 0.3 | 1.24711743e-04 |  |
| gamma\_mod1 | 0 | 0.1 | 1.90989577e-01 |  |
| gamma\_mod2 | 0 | 0.1 | 4.32665977e-03 |  |
| gamma\_mod3 | 0 | 0.1 | 1.10964467e-03 |  |
| gamma\_mod4 | 0 | 0.1 | 6.59588727e-04 |  |
| gamma\_mod5 | 0 | 0.1 | -6.20212000e-02 |  |
| gamma\_mod6 | 0 | 0.1 | -1.55467271e-02 |  |
| logP |  |  | 621.9777841531777 |  |



UserInput.model['InputParameterPriorValues'] = [1.0, 0.0, 40.0, 13.0, 0.1,

0.0, 0.0, 0.0, 0.0, 0.0, 0.0]

Final map results from gridsearch: [ 9.72403839e-01 2.45807149e-04 2.16720262e+01 1.17139968e+01

-2.39634576e-05 2.00249952e-01 6.62735737e-05 -1.06494051e-01

2.17505358e-05 -1.00161392e-01 1.44611048e-04] final logP: -3649.737299338728

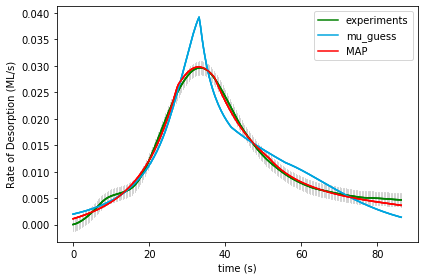
gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1]

gridSamplingNumOfIntervals=[0,0,1,1,0, 1,0,1,0,1,0]

Final results from doOptimizeNegLogP: [ 2.13854431e+00 1.12573598e-02 2.78693882e+01 1.39647519e+01 1.24711743e-04 1.90989577e-01 4.32665977e-03 1.10964467e-03 6.59588727e-04 -6.20212000e-02 -1.55467271e-02] final logP: 621.9777841531777

Name of Runfile: 18a\_CPE\_grid\_mcmc 243 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Uncertainty** |
| Scaling | 1 | .1 | 1.50763009e+00 |  |
| Offset | 0 | .005 | 2.27835260e-03 |  |
| Ea\_1 | 40 | 20 | 2.00355544e+01 |  |
| Log\_A1 | 13 | 2 | 7.23191623e+00 |  |
| gamma\_1 | 0.1 | 0.3 | -3.23071624e-01 |  |
| gamma\_mod1 | 0 | 0.1 | 6.18930963e-01 |  |
| gamma\_mod2 | 0 | 0.1 | 1.76734664e-01 |  |
| gamma\_mod3 | 0 | 0.1 | 6.67196925e-04 |  |
| gamma\_mod4 | 0 | 0.1 | -6.84659213e-02 |  |
| gamma\_mod5 | 0 | 0.1 | -1.03788062e-01 |  |
| gamma\_mod6 | 0 | 0.1 | -1.46864981e-01 |  |
| logP |  |  | 965.6442904046731 |  |



UserInput.model['InputParameterPriorValues'] = [1.0, 0.0, 40.0, 13.0, 0.1,

0.0, 0.0, 0.0, 0.0, 0.0, 0.0]

Final map results from gridsearch: [ 1.09118167e+00 5.06351739e-04 1.82224641e+01 9.09312805e+00 -2.73876168e-01 3.92896709e-01 -5.89138698e-02 1.57091955e-02

5.75251210e-02 -8.98549984e-02 -1.02258301e-01] final logP: [-282.54585778]

gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3,

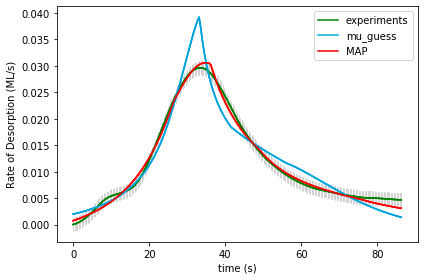
0.1, 0.1, 0.1, 0.1, 0.1, 0.1]

gridSamplingNumOfIntervals=[0,0,1,1,0, 1,0,1,0,1,0]

Final results from doOptimizeNegLogP: [ 1.50763009e+00 2.27835260e-03 2.00355544e+01 7.23191623e+00 -3.23071624e-01 6.18930963e-01 1.76734664e-01 6.67196925e-04 -6.84659213e-02 -1.03788062e-01 -1.46864981e-01] final logP: 965.6442904046731

Name of Runfile: 18a\_BPE\_grid\_mcmc 243 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Uncertainty** |
| Scaling | 1 | .1 | 1.53134984e+00 |  |
| Offset | 0 | .005 | 3.42952645e-03 |  |
| Ea\_1 | 40 | 20 | 1.71220438e+01 |  |
| Log\_A1 | 13 | 2 | 6.58162396e+00 |  |
| gamma\_1 | 0.1 | 0.3 | -1.76188886e-01 |  |
| gamma\_mod1 | 0 | 0.1 | 3.17045025e-01 |  |
| gamma\_mod2 | 0 | 0.1 | 1.47847950e-01 |  |
| gamma\_mod3 | 0 | 0.1 | 3.09337209e-02 |  |
| gamma\_mod4 | 0 | 0.1 | -2.08155010e-02 |  |
| gamma\_mod5 | 0 | 0.1 | -9.84113877e-02 |  |
| gamma\_mod6 | 0 | 0.1 | -1.27753873e-01 |  |
| logP |  |  | 957.0082738121508 |  |



UserInput.model['InputParameterPriorValues'] = [1.0, 0.0, 40.0, 13.0, 0.1,

0.0, 0.0, 0.0, 0.0, 0.0, 0.0]

Final map results from gridsearch: [ 1.09118167e+00 5.06351739e-04 1.82224641e+01 9.09312805e+00 -2.73876168e-01 3.92896709e-01 -5.89138698e-02 1.57091955e-02

5.75251210e-02 -8.98549984e-02 -1.02258301e-01] final logP: [-287.41712814]

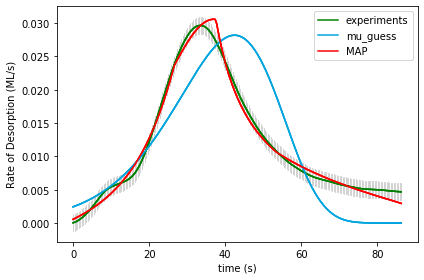
gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3, 0.1, 0.1, 0.1, 0.1, 0.1, 0.1]

gridSamplingNumOfIntervals=[0,0,1,1,0, 1,0,1,0,1,0]

Final results from doOptimizeNegLogP: [ 1.53134984e+00 3.42952645e-03 1.71220438e+01 6.58162396e+00 -1.76188886e-01 3.17045025e-01 1.47847950e-01 3.09337209e-02 -2.08155010e-02 -9.84113877e-02 -1.27753873e-01] final logP: 957.0082738121508

Name of Runfile: 18a\_CPE\_grid\_fine 68921 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Uncertainty** |
| Scaling | 1 | .1 | 1.85416658e+00 |  |
| Offset | 0 | .005 | 5.67598577e-03 |  |
| Ea\_1 | 40 | 20 | 6.17871885e+00 |  |
| Log\_A1 | 13 | 2 | 2.21431103e-05 |  |
| gamma\_1 | 0.1 | 0.3 | 8.89012001e-02 |  |
| gamma\_mod1 | 0 | 0.1 | -1.83530913e-01 |  |
| gamma\_mod2 | 0 | 0.1 | 2.17455020e-01 |  |
| gamma\_mod3 | 0 | 0.1 | 6.68792894e-02 |  |
| gamma\_mod4 | 0 | 0.1 | 1.57941025e-01 |  |
| gamma\_mod5 | 0 | 0.1 | -1.94721482e-01 |  |
| gamma\_mod6 | 0 | 0.1 | -3.25173611e-01 |  |
| logP |  |  | 971.8975155824977 |  |



UserInput.model['InputParameterPriorValues'] = [1.0, 0.0, 40.0, 13.0, 0.1,

0.0, 0.0, 0.0, 0.0, 0.0, 0.0]

Final map results from gridsearch: (1.0, 0.0, 35.0, 21.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0) final logP: -1170.3915981999953

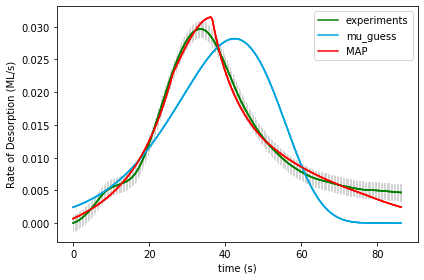
(1.0, 0.0, 35.0, 21.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0) -1170.3915981999953

gridSamplingAbsoluteIntervalSize=[0,0,1.0,0.5,0.05, 0,0,0,0,0,0], gridSamplingNumOfIntervals=[0,0,20,20,20, 0,0,0,0,0,0]

Final results from doOptimizeNegLogP: [ 1.85416658e+00 5.67598577e-03 6.17871885e+00 2.21431103e-05 8.89012001e-02 -1.83530913e-01 2.17455020e-01 6.68792894e-02 1.57941025e-01 -1.94721482e-01 -3.25173611e-01] final logP: 971.8975155824977

Name of Runfile: 18a\_BPE\_grid\_fine 68921 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Uncertainty** |
| Scaling | 1 | .1 | 1.69851682e+00 |  |
| Offset | 0 | .005 | 4.93133295e-03 |  |
| Ea\_1 | 40 | 20 | 7.28963166e+00 |  |
| Log\_A1 | 13 | 2 | 8.08086246e-01 |  |
| gamma\_1 | 0.1 | 0.3 | 1.18469695e-01 |  |
| gamma\_mod1 | 0 | 0.1 | -2.15324040e-01 |  |
| gamma\_mod2 | 0 | 0.1 | 2.72820518e-01 |  |
| gamma\_mod3 | 0 | 0.1 | 5.63523075e-02 |  |
| gamma\_mod4 | 0 | 0.1 | 8.71856126e-02 |  |
| gamma\_mod5 | 0 | 0.1 | -1.81482349e-01 |  |
| gamma\_mod6 | 0 | 0.1 | -2.75081337e-01 |  |
| logP |  |  | 913.0311917579927 |  |



UserInput.model['InputParameterPriorValues'] = [1.0, 0.0, 40.0, 13.0, 0.1,

0.0, 0.0, 0.0, 0.0, 0.0, 0.0]

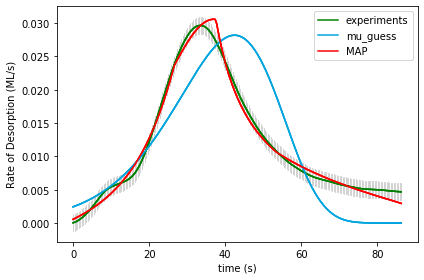
Final map results from gridsearch: (1.0, 0.0, 35.0, 21.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0) final logP: -1171.686471253084

gridSamplingAbsoluteIntervalSize=[0,0,1.0,0.5,0.05, 0,0,0,0,0,0], gridSamplingNumOfIntervals=[0,0,20,20,20, 0,0,0,0,0,0]

Final results from doOptimizeNegLogP: [ 1.69851682e+00 4.93133295e-03 7.28963166e+00 8.08086246e-01 1.18469695e-01 -2.15324040e-01 2.72820518e-01 5.63523075e-02 8.71856126e-02 -1.81482349e-01 -2.75081337e-01] final logP: 913.0311917579927

Name of Runfile: 18a\_CPE\_grid\_fine\_10kJ 68921 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Uncertainty** |
| Scaling | 1 | .1 | 1.85416658e+00 |  |
| Offset | 0 | .005 | 5.67598577e-03 |  |
| Ea\_1 | 40 | 10 | 6.17871885e+00 |  |
| Log\_A1 | 13 | 2 | 2.21431103e-05 |  |
| gamma\_1 | 0.1 | 0.3 | 8.89012001e-02 |  |
| gamma\_mod1 | 0 | 0.1 | -1.83530913e-01 |  |
| gamma\_mod2 | 0 | 0.1 | 2.17455020e-01 |  |
| gamma\_mod3 | 0 | 0.1 | 6.68792894e-02 |  |
| gamma\_mod4 | 0 | 0.1 | 1.57941025e-01 |  |
| gamma\_mod5 | 0 | 0.1 | -1.94721482e-01 |  |
| gamma\_mod6 | 0 | 0.1 | -3.25173611e-01 |  |
| logP |  |  | 971.8975155824977 |  |



UserInput.model['InputParameterPriorValues'] = [1.0, 0.0, 40.0, 13.0, 0.1,

0.0, 0.0, 0.0, 0.0, 0.0, 0.0]

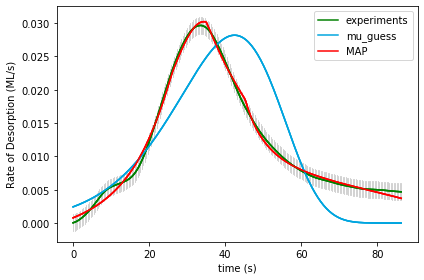
Final map results from gridsearch: (1.0, 0.0, 35.0, 21.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0) final logP: -1170.3915981999953

gridSamplingAbsoluteIntervalSize=[0,0,1.0,0.5,0.05, 0,0,0,0,0,0], gridSamplingNumOfIntervals=[0,0,20,20,20, 0,0,0,0,0,0]

Final results from doOptimizeNegLogP: [ 1.85416658e+00 5.67598577e-03 6.17871885e+00 2.21431103e-05 8.89012001e-02 -1.83530913e-01 2.17455020e-01 6.68792894e-02 1.57941025e-01 -1.94721482e-01 -3.25173611e-01] final logP: 971.8975155824977

Name of Runfile: 18a\_BPE\_grid\_fine\_10kJ 68921 points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Uncertainty** |
| Scaling | 1 | .1 | 1.35641979e+00 |  |
| Offset | 0 | .005 | 2.52401261e-03 |  |
| Ea\_1 | 40 | 10 | 2.40893010e+01 |  |
| Log\_A1 | 13 | 2 | 1.16549297e+01 |  |
| gamma\_1 | 0.1 | 0.3 | 1.15581606e-01 |  |
| gamma\_mod1 | 0 | 0.1 | -4.17989151e-02 |  |
| gamma\_mod2 | 0 | 0.1 | 8.91494001e-02 |  |
| gamma\_mod3 | 0 | 0.1 | 7.90553741e-02 |  |
| gamma\_mod4 | 0 | 0.1 | -3.33485550e-02 |  |
| gamma\_mod5 | 0 | 0.1 | -6.29386295e-02 |  |
| gamma\_mod6 | 0 | 0.1 | -7.86565150e-02 |  |
| logP |  |  | 984.4972206939539 |  |



UserInput.model['InputParameterPriorValues'] = [1.0, 0.0, 40.0, 13.0, 0.1,

0.0, 0.0, 0.0, 0.0, 0.0, 0.0]

Final map results from gridsearch: (1.0, 0.0, 35.0, 21.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0) final logP: -1171.087074072524

gridSamplingAbsoluteIntervalSize=[0,0,1.0,0.5,0.05, 0,0,0,0,0,0], gridSamplingNumOfIntervals=[0,0,20,20,20, 0,0,0,0,0,0]

Final results from doOptimizeNegLogP: [ 1.35641979e+00 2.52401261e-03 2.40893010e+01 1.16549297e+01 1.15581606e-01 -4.17989151e-02 8.91494001e-02 7.90553741e-02 -3.33485550e-02 -6.29386295e-02 -7.86565150e-02] final logP: 984.4972206939539