Name of Runfile: runfile\_Example16a\_CPE\_grid 1361367 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.1 | 0.10 | 1 |
| Offset | 0.0 | 0.005 | 0.0 | 0.005 | 1 |
| Site2Ratio | 0.50 | 0.50/3 | 0.16666666666666669 | 0.50/3 | 3 |
| Ea\_1 | 41.5 | 20 | 21.5 | 20 | 3 |
| Ea\_2 | 41.5 | 20 | 21.5 | 20 | 3 |
| log\_A1 | 13.0 | 2 | 11.0 | 2 | 3 |
| log\_A2 | 13.0 | 2 | 13.0 | 2 | 3 |
| gamma1 | 0.1 | 0.1 | 0.2 | 0.1 | 1 |
| gamma2 | 0.1 | 0.1 | 0.1 | 0.1 | 1 |
| logP |  | N/A | -8738.991106967724 | N/A | N/A |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]  
Final map results from gridsearch: (1.1, 0.0, 0.16666666666666669, 21.5, 21.5, 11.0, 13.0, 0.2, 0.1) final logP: -8738.991106967724

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[1,1,3,3,3,3,3,1,1]

Name of Runfile: runfile\_Example16a\_BPE\_grid 1361367 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.1 | 0.10 | 1 |
| Offset | 0.0 | 0.005 | 0.0 | 0.005 | 1 |
| Site2Ratio | 0.50 | 0.50/3 | 0.16666666666666669 | 0.50/3 | 3 |
| Ea\_1 | 41.5 | 20 | 21.5 | 20 | 3 |
| Ea\_2 | 41.5 | 20 | 21.5 | 20 | 3 |
| log\_A1 | 13.0 | 2 | 11.0 | 2 | 3 |
| log\_A2 | 13.0 | 2 | 13.0 | 2 | 3 |
| gamma1 | 0.1 | 0.1 | 0.2 | 0.1 | 1 |
| gamma2 | 0.1 | 0.1 | 0.1 | 0.1 | 1 |
| logP |  | N/A | -8752.761553714412 | N/A | N/A |



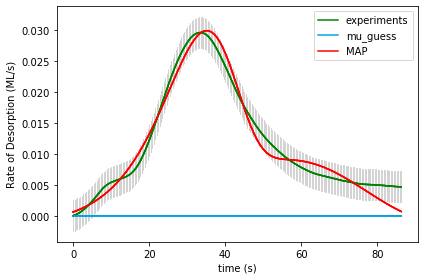
UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: (1.1, 0.0, 0.16666666666666669, 21.5, 21.5, 11.0, 13.0, 0.2, 0.1) final logP: -8752.761553714412

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[1,1,3,3,3,3,3,1,1]

Name of Runfile: runfile\_Example16a\_CPE\_grid\_opt 243 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.17855879e+00 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | 1.56599493e-03 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 4.89378831e-01 | 0.50/3 | 1 |
| Ea\_1 | 41.5 | 20 | 5.01380589e+01 | 20 | 1 |
| Ea\_2 | 41.5 | 20 | 2.47742710e+01 | 20 | 1 |
| log\_A1 | 13.0 | 2 | 3.31859754e+01 | 2 | 1 |
| log\_A2 | 13.0 | 2 | 1.33279804e+01 | 2 | 1 |
| gamma1 | 0.1 | 0.1 | 1.37736928e-02 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 1.18045551e-01 | 0.1 | 0 |
| logP |  | N/A | 831.2464561309017 | N/A | N/A |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: [1.17855879e+00 1.56599493e-03 4.89378831e-01 5.01380589e+01

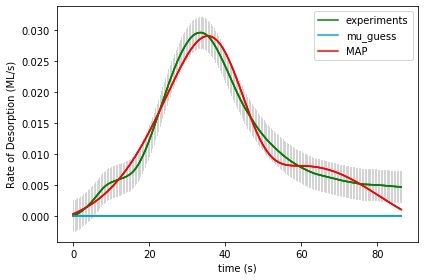
2.47742710e+01 3.31859754e+01 1.33279804e+01 1.37736928e-02

1.18045551e-01] final logP: 831.2464561309017

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,1,1,1,1,1,0,0]

Name of Runfile: runfile\_Example16a\_BPE\_grid\_opt 243 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.23943326e+00 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | 1.95055604e-03 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 5.62199599e-01 | 0.50/3 | 1 |
| Ea\_1 | 41.5 | 20 | 2.60209307e+01 | 20 | 1 |
| Ea\_2 | 41.5 | 20 | 4.47401296e+01 | 20 | 1 |
| log\_A1 | 13.0 | 2 | 1.40086172e+01 | 2 | 1 |
| log\_A2 | 13.0 | 2 | 2.92348678e+01 | 2 | 1 |
| gamma1 | 0.1 | 0.1 | 4.22570091e-02 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 2.22870485e-02 | 0.1 | 0 |
| logP |  | N/A | 779.8462737897203 | N/A | N/A |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: [1.23943326e+00 1.95055604e-03 5.62199599e-01 2.60209307e+01

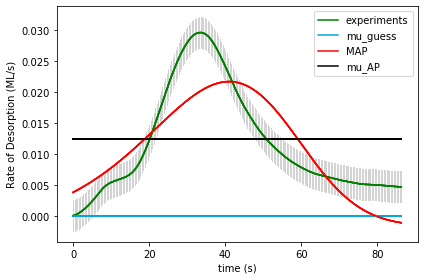
4.47401296e+01 1.40086172e+01 2.92348678e+01 4.22570091e-02

2.22870485e-02] final logP: 779.8462737897203

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,1,1,1,1,1,0,0]

Name of Runfile: 16a\_CPE\_grid\_mcmc 243 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.11903275e+00 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | 1.42841706e-03 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 4.24304405e-01 | 0.50/3 | 1 |
| Ea\_1 | 41.5 | 20 | 2.56838078e+01 | 20 | 1 |
| Ea\_2 | 41.5 | 20 | 2.37503902e+01 | 20 | 1 |
| log\_A1 | 13.0 | 2 | 1.49342760e+01 | 2 | 1 |
| log\_A2 | 13.0 | 2 | 1.30921583e+01 | 2 | 1 |
| gamma1 | 0.1 | 0.1 | 1.25084700e-01 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 1.39916679e-01 | 0.1 | 0 |
| logP |  | N/A | -1561.09178969 | N/A | N/A |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: [1.11903275e+00 1.42841706e-03 4.24304405e-01 2.56838078e+01

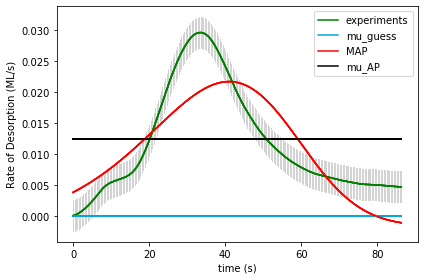
2.37503902e+01 1.49342760e+01 1.30921583e+01 1.25084700e-01

1.39916679e-01] final logP: [-1561.09178969]

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,1,1,1,1,1,0,0]

Name of Runfile: 16a\_BPE\_grid\_mcmc 243 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.11903275e+00 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | 1.42841706e-03 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 4.24304405e-01 | 0.50/3 | 1 |
| Ea\_1 | 41.5 | 20 | 2.56838078e+01 | 20 | 1 |
| Ea\_2 | 41.5 | 20 | 2.37503902e+01 | 20 | 1 |
| log\_A1 | 13.0 | 2 | 1.49342760e+01 | 2 | 1 |
| log\_A2 | 13.0 | 2 | 1.30921583e+01 | 2 | 1 |
| gamma1 | 0.1 | 0.1 | 1.25084700e-01 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 1.39916679e-01 | 0.1 | 0 |
| logP |  | N/A | -1572.50098997 |  |  |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: [1.11903275e+00 1.42841706e-03 4.24304405e-01 2.56838078e+01

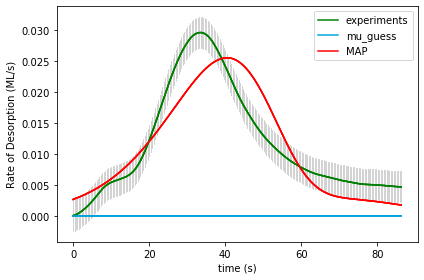
2.37503902e+01 1.49342760e+01 1.30921583e+01 1.25084700e-01

1.39916679e-01] final logP: [-1572.50098997]

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,1,1,1,1,1,0,0]

Name of Runfile: runfile\_Example16a\_CPE\_grid\_fine 1361367 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.0 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | 0.0 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 0.16666666666666669 | 0.50/3 | 3 |
| Ea\_1 | 41.5 | 20 | 35.5 | 20/10 | 10 |
| Ea\_2 | 41.5 | 20 | 23.5 | 20/10 | 10 |
| log\_A1 | 13.0 | 2 | 22.0 | 1 | 10 |
| log\_A2 | 13.0 | 2 | 12.0 | 1 | 10 |
| gamma1 | 0.1 | 0.1 | 0.1 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 0.1 | 0.1 | 0 |
| logP |  | N/A | -249.1898675955598 | N/A | N/A |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: (1.0, 0.0, 0.16666666666666669, 35.5, 23.5, 22.0, 12.0, 0.1, 0.1) final logP: -249.1898675955598

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20/10, 20/10, 1, 1, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,3,10,10,10,10,0,0]

Name of Runfile: runfile\_Example16a\_BPE\_grid\_fine 1361367 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.0 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | 0.0 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 0.16666666666666669 | 0.50/3 | 3 |
| Ea\_1 | 41.5 | 20 | 35.5 | 20/10 | 10 |
| Ea\_2 | 41.5 | 20 | 23.5 | 20/10 | 10 |
| log\_A1 | 13.0 | 2 | 22.0 | 1 | 10 |
| log\_A2 | 13.0 | 2 | 12.0 | 1 | 10 |
| gamma1 | 0.1 | 0.1 | 0.1 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 0.1 | 0.1 | 0 |
| logP |  | N/A | -271.1603143422478 | N/A | N/A |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: (1.0, 0.0, 0.16666666666666669, 35.5, 23.5, 22.0, 12.0, 0.1, 0.1) final logP: -271.1603143422478

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20/10, 20/10, 1, 1, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,3,10,10,10,10,0,0]

Name of Runfile: 17a\_CPE\_grid 1361367 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.1 | 0.10 | 1 |
| Offset | 0.0 | 0.005 | 0.0 | 0.005 | 1 |
| Site2Ratio | 0.50 | 0.50/3 | 0.8333333333333333 | 0.50/3 | 3 |
| Ea\_1 | 41.5 | 20 | 21.5 | 20 | 3 |
| Ea\_2 | 41.5 | 20 | 21.5 | 20 | 3 |
| log\_A1 | 13.0 | 2 | 13.0 | 2 | 3 |
| log\_A2 | 13.0 | 2 | 11.0 | 2 | 3 |
| gamma1 | 0.1 | 0.1 | 0.1 | 0.1 | 1 |
| gamma2 | 0.1 | 0.1 | 0.2 | 0.1 | 1 |
| logP |  | N/A | -9054.061365650756 |  |  |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: (1.1, 0.0, 0.8333333333333333, 21.5, 21.5, 13.0, 11.0, 0.1, 0.2) final logP: -9054.061365650756 Final map results from gridsearch: (1.1, 0.0, 0.8333333333333333, 21.5, 21.5, 13.0, 11.0, 0.1, 0.2) final logP: -9054.061365650756

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[1,1,3,3,3,3,3,1,1]

Name of Runfile: 17a\_BPE\_grid 1361367 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.1 | 0.10 | 1 |
| Offset | 0.0 | 0.005 | 0.0 | 0.005 | 1 |
| Site2Ratio | 0.50 | 0.50/3 | 0.8333333333333333 | 0.50/3 | 3 |
| Ea\_1 | 41.5 | 20 | 21.5 | 20 | 3 |
| Ea\_2 | 41.5 | 20 | 21.5 | 20 | 3 |
| log\_A1 | 13.0 | 2 | 13 | 2 | 3 |
| log\_A2 | 13.0 | 2 | 11 | 2 | 3 |
| gamma1 | 0.1 | 0.1 | 0.1 | 0.1 | 1 |
| gamma2 | 0.1 | 0.1 | 0.2 | 0.1 | 1 |
| logP |  | N/A | -9067.831812397444 |  |  |



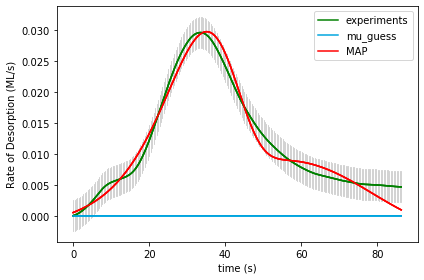
UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: (1.1, 0.0, 0.8333333333333333, 21.5, 21.5, 13.0, 11.0, 0.1, 0.2) final logP: -9067.831812397444

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[1,1,3,3,3,3,3,1,1]

Name of Runfile: 17a\_CPE\_grid\_opt 243 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.31850027e+00 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | 2.39650171e-03 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 5.76140992e-01 | 0.50/3 | 1 |
| Ea\_1 | 41.5 | 20 | 5.48880289e+01 | 20 | 1 |
| Ea\_2 | 41.5 | 20 | 1.94775168e+01 | 20 | 1 |
| log\_A1 | 13.0 | 2 | 3.63448101e+01 | 2 | 1 |
| log\_A2 | 13.0 | 2 | 9.70069391e+00 | 2 | 1 |
| gamma1 | 0.1 | 0.1 | 4.86434241e-01 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 8.92942906e-04 | 0.1 | 0 |
| logP |  | N/A | 834.3528120580175 |  |  |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: [1.31850027e+00 2.39650171e-03 5.76140992e-01 5.48880289e+01

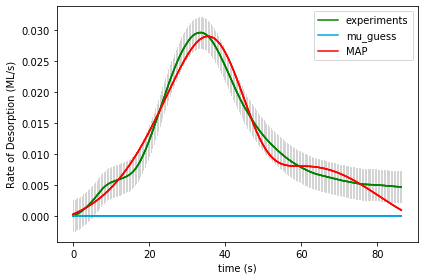
1.94775168e+01 3.63448101e+01 9.70069391e+00 4.86434241e-01

8.92942906e-04] final logP: 834.3528120580175

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,1,1,1,1,1,0,0]

Name of Runfile: 17a\_BPE\_grid\_opt 243 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.24054728e+00 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | 1.97315172e-03 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 5.70160486e-01 | 0.50/3 | 1 |
| Ea\_1 | 41.5 | 20 | 2.68941949e+01 | 20 | 1 |
| Ea\_2 | 41.5 | 20 | 4.42378634e+01 | 20 | 1 |
| log\_A1 | 13.0 | 2 | 1.45793537e+01 | 2 | 1 |
| log\_A2 | 13.0 | 2 | 2.88717211e+01 | 2 | 1 |
| gamma1 | 0.1 | 0.1 | 7.62517142e-02 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 3.18229310e-03 | 0.1 | 0 |
| logP |  | N/A | 779.9344100773503 |  |  |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: [1.24054728e+00 1.97315172e-03 5.70160486e-01 2.68941949e+01

4.42378634e+01 1.45793537e+01 2.88717211e+01 7.62517142e-02

3.18229310e-03] final logP: 779.9344100773503

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,1,1,1,1,1,0,0]

Name of Runfile: 17a\_CPE\_grid\_mcmc 243 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.02795809e+00 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | -1.47194475e-03 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 2.06950152e-01 | 0.50/3 | 1 |
| Ea\_1 | 41.5 | 20 | 3.01093572e+01 | 20 | 1 |
| Ea\_2 | 41.5 | 20 | 4.79243481e+01 | 20 | 1 |
| log\_A1 | 13.0 | 2 | 1.79804764e+01 | 2 | 1 |
| log\_A2 | 13.0 | 2 | 1.24238115e+01 | 2 | 1 |
| gamma1 | 0.1 | 0.1 | 1.37345490e-01 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 1.94422092e-01 | 0.1 | 0 |
| logP |  | N/A | -2177.48537425 |  |  |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: [ 1.02795809e+00 -1.47194475e-03 2.06950152e-01 3.01093572e+01

4.79243481e+01 1.79804764e+01 1.24238115e+01 1.37345490e-01

1.94422092e-01] final logP: [-2177.48537425]

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,1,1,1,1,1,0,0]

Name of Runfile: 17a\_BPE\_grid\_mcmc 243 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.02795809e+00 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | -1.47194475e-03 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 2.06950152e-01 | 0.50/3 | 1 |
| Ea\_1 | 41.5 | 20 | 3.01093572e+01 | 20 | 1 |
| Ea\_2 | 41.5 | 20 | 4.79243481e+01 | 20 | 1 |
| log\_A1 | 13.0 | 2 | 1.79804764e+01 | 2 | 1 |
| log\_A2 | 13.0 | 2 | 1.24238115e+01 | 2 | 1 |
| gamma1 | 0.1 | 0.1 | 1.37345490e-01 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 1.94422092e-01 | 0.1 | 0 |
| logP |  | N/A | -2192.25547096 |  |  |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: [ 1.02795809e+00 -1.47194475e-03 2.06950152e-01 3.01093572e+01

4.79243481e+01 1.79804764e+01 1.24238115e+01 1.37345490e-01

1.94422092e-01] final logP: [-2192.25547096]

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20, 20, 2, 2, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,1,1,1,1,1,0,0]

Name of Runfile: runfile\_Example17a\_CPE\_grid\_fine 1361367 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.0 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | 0.0 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 0.8333333333333333 | 0.50/3 | 3 |
| Ea\_1 | 41.5 | 20 | 23.5 | 20/10 | 10 |
| Ea\_2 | 41.5 | 20 | 35.5 | 20/10 | 10 |
| log\_A1 | 13.0 | 2 | 12.0 | 1 | 10 |
| log\_A2 | 13.0 | 2 | 22.0 | 1 | 10 |
| gamma1 | 0.1 | 0.1 | 0.1 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 0.1 | 0.1 | 0 |
| logP |  | N/A | -203.37919742701536 | N/A | N/A |



UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: (1.0, 0.0, 0.8333333333333333, 23.5, 35.5, 12.0, 22.0, 0.1, 0.1) final logP: -203.37919742701536

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20/10, 20/10, 1, 1, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,3,10,10,10,10,0,0]

Name of Runfile: runfile\_Example17a\_BPE\_grid\_fine 1361367 points

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1.0 | 0.10 | 1.0 | 0.10 | 0 |
| Offset | 0.0 | 0.005 | 0.0 | 0.005 | 0 |
| Site2Ratio | 0.50 | 0.50/3 | 0.8333333333333333 | 0.50/3 | 3 |
| Ea\_1 | 41.5 | 20 | 23.5 | 20/10 | 10 |
| Ea\_2 | 41.5 | 20 | 35.5 | 20/10 | 10 |
| log\_A1 | 13.0 | 2 | 12.0 | 1 | 10 |
| log\_A2 | 13.0 | 2 | 22.0 | 1 | 10 |
| gamma1 | 0.1 | 0.1 | 0.1 | 0.1 | 0 |
| gamma2 | 0.1 | 0.1 | 0.1 | 0.1 | 0 |
| logP |  | N/A | -225.34964417370335 | N/A | N/A |



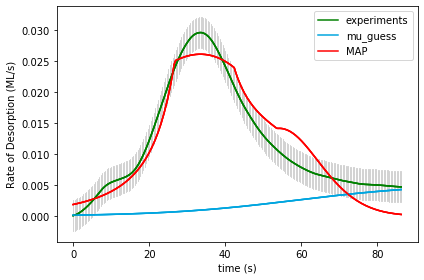
UserInput.model['InputParameterPriorValues'] = [ 1.0, 0.0, 0.50, 41.5, 41.5, 13.0, 13.0, 0.1, 0.1]

Final map results from gridsearch: (1.0, 0.0, 0.8333333333333333, 23.5, 35.5, 12.0, 22.0, 0.1, 0.1) final logP: -225.34964417370335

gridSamplingAbsoluteIntervalSize=[ 0.10, 0.005, 0.50/3, 20/10, 20/10, 1, 1, 0.1, 0.1], gridSamplingNumOfIntervals=[0,0,3,10,10,10,10,0,0]

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1 | .1 | 1.0 | .1 | 0 |
| Offset | 0 | .005 | 0.0 | .005 | 0 |
| Ea\_1 | 40 | 20 | 20.0 | 20 | 3 |
| Log\_A1 | 13 | 2 | 11.0 | 2 | 3 |
| gamma\_1 | 0.1 | 0.3 | -0.3 | 0.3 | 2 |
| gamma\_mod1 | 0 | 0.1 | 0.3 | 0.1 | 0 |
| gamma\_mod2 | 0 | 0.1 | -0.1 | 0.1 | 1 |
| gamma\_mod3 | 0 | 0.1 | 0.1 | 0.1 | 1 |
| gamma\_mod4 | 0 | 0.1 | 0.0 | 0.1 | 1 |
| gamma\_mod5 | 0 | 0.1 | 0.0 | 0.1 | 1 |
| gamma\_mod6 | 0 | 0.1 | -0.1 | 0.1 | 1 |
| logP |  |  | 225.86698292894255 |  |  |



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: 225.86698292894255

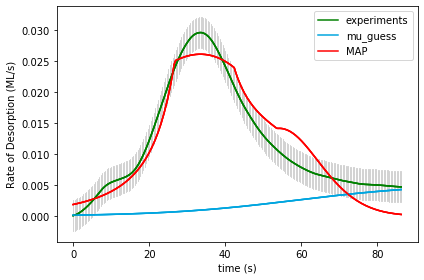
gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3,

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

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1 | .1 | 1.0 | .1 | 0 |
| Offset | 0 | .005 | 0 | .005 | 0 |
| Ea\_1 | 40 | 20 | 20 | 20 | 3 |
| Log\_A1 | 13 | 2 | 11 | 2 | 3 |
| gamma\_1 | 0.1 | 0.3 | -0.3 | 0.3 | 2 |
| gamma\_mod1 | 0 | 0.1 | 0.3 | 0.1 | 0 |
| gamma\_mod2 | 0 | 0.1 | -0.1 | 0.1 | 1 |
| gamma\_mod3 | 0 | 0.1 | 0.1 | 0.1 | 1 |
| gamma\_mod4 | 0 | 0.1 | 0 | 0.1 | 1 |
| gamma\_mod5 | 0 | 0.1 | 0 | 0.1 | 1 |
| gamma\_mod6 | 0 | 0.1 | -0.1 | 0.1 | 1 |
| logP |  |  | 225.8012765425206 |  |  |



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: 225.8012765425206

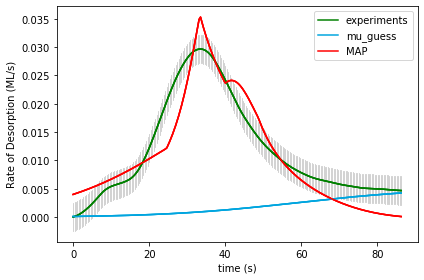
gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3,

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

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1 | .1 | 9.72403839e-01 | .1 | 0 |
| Offset | 0 | .005 | 2.45807149e-04 | .005 | 0 |
| Ea\_1 | 40 | 20 | 2.16720262e+01 | 20 | 1 |
| Log\_A1 | 13 | 2 | 1.17139968e+01 | 2 | 1 |
| gamma\_1 | 0.1 | 0.3 | -2.39634576e-05 | 0.3 | 0 |
| gamma\_mod1 | 0 | 0.1 | 2.00249952e-01 | 0.1 | 1 |
| gamma\_mod2 | 0 | 0.1 | 6.62735737e-05 | 0.1 | 0 |
| gamma\_mod3 | 0 | 0.1 | -1.06494051e-01 | 0.1 | 1 |
| gamma\_mod4 | 0 | 0.1 | 2.17505358e-05 | 0.1 | 0 |
| gamma\_mod5 | 0 | 0.1 | -1.00161392e-01 | 0.1 | 1 |
| gamma\_mod6 | 0 | 0.1 | 1.44611048e-04 | 0.1 | 0 |
| logP |  |  | -305.6950588158801 |  |  |



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: -305.6950588158801

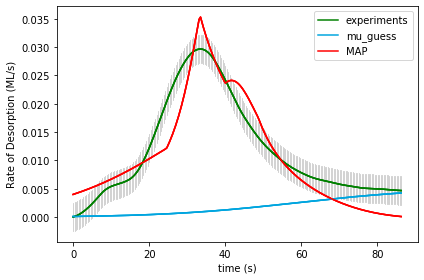
gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3,

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

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1 | .1 | 9.72403839e-01 | .1 | 0 |
| Offset | 0 | .005 | 2.45807149e-04 | .005 | 0 |
| Ea\_1 | 40 | 20 | 2.16720262e+01 | 20 | 1 |
| Log\_A1 | 13 | 2 | 1.17139968e+01 | 2 | 1 |
| gamma\_1 | 0.1 | 0.3 | -2.39634576e-05 | 0.3 | 0 |
| gamma\_mod1 | 0 | 0.1 | 2.00249952e-01 | 0.1 | 1 |
| gamma\_mod2 | 0 | 0.1 | 6.62735737e-05 | 0.1 | 0 |
| gamma\_mod3 | 0 | 0.1 | -1.06494051e-01 | 0.1 | 1 |
| gamma\_mod4 | 0 | 0.1 | 2.17505358e-05 | 0.1 | 0 |
| gamma\_mod5 | 0 | 0.1 | -1.00161392e-01 | 0.1 | 1 |
| gamma\_mod6 | 0 | 0.1 | 1.44611048e-04 | 0.1 | 0 |
| logP |  |  | -301.66703093574006 |  |  |



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: -301.66703093574006

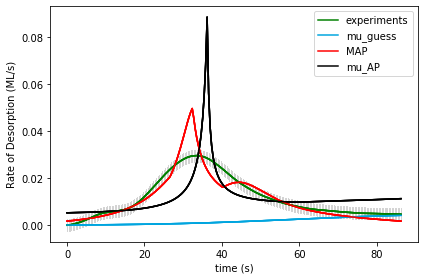
gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3,

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

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1 | .1 |  |  |  |
| Offset | 0 | .005 |  |  |  |
| Ea\_1 | 40 | 20 |  |  |  |
| Log\_A1 | 13 | 2 |  |  |  |
| gamma\_1 | 0.1 | 0.3 |  |  |  |
| gamma\_mod1 | 0 | 0.1 |  |  |  |
| gamma\_mod2 | 0 | 0.1 |  |  |  |
| gamma\_mod3 | 0 | 0.1 |  |  |  |
| gamma\_mod4 | 0 | 0.1 |  |  |  |
| gamma\_mod5 | 0 | 0.1 |  |  |  |
| gamma\_mod6 | 0 | 0.1 |  |  |  |
| logP |  |  |  |  |  |



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: [ 1.01568835e+00 1.13324397e-04 3.04885721e+01 1.60555690e+01

2.06581107e-02 5.27458167e-01 -1.45987528e-01 -1.76722128e-01

1.45870300e-02 -1.07755894e-01 -6.42334953e-02] final logP: [604.67049217]

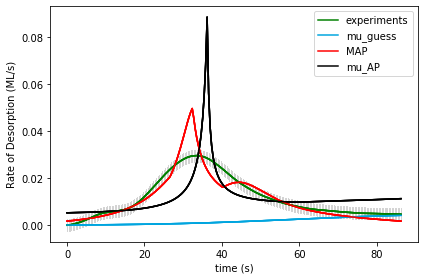
gridSamplingAbsoluteIntervalSize= [.1, 0.005, 20, 2, 0.3,

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

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1 | .1 |  |  |  |
| Offset | 0 | .005 |  |  |  |
| Ea\_1 | 40 | 20 |  |  |  |
| Log\_A1 | 13 | 2 |  |  |  |
| gamma\_1 | 0.1 | 0.3 |  |  |  |
| gamma\_mod1 | 0 | 0.1 |  |  |  |
| gamma\_mod2 | 0 | 0.1 |  |  |  |
| gamma\_mod3 | 0 | 0.1 |  |  |  |
| gamma\_mod4 | 0 | 0.1 |  |  |  |
| gamma\_mod5 | 0 | 0.1 |  |  |  |
| gamma\_mod6 | 0 | 0.1 |  |  |  |
| logP |  |  |  |  |  |



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: [ 1.01568835e+00 1.13324397e-04 3.04885721e+01 1.60555690e+01

2.06581107e-02 5.27458167e-01 -1.45987528e-01 -1.76722128e-01

1.45870300e-02 -1.07755894e-01 -6.42334953e-02] final logP: [593.8307297]

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]

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1 | .1 | 1.0 | 0 | 0 |
| Offset | 0 | .005 | 0.0 | 0 | 0 |
| Ea\_1 | 40 | 20 | 35.0 | 1.0 | 20 |
| Log\_A1 | 13 | 2 | 21.5 | 0.5 | 20 |
| gamma\_1 | 0.1 | 0.3 | 0.0 | 0.05 | 20 |
| gamma\_mod1 | 0 | 0.1 | 0.0 | 0 | 0 |
| gamma\_mod2 | 0 | 0.1 | 0.0 | 0 | 0 |
| gamma\_mod3 | 0 | 0.1 | 0.0 | 0 | 0 |
| gamma\_mod4 | 0 | 0.1 | 0.0 | 0 | 0 |
| gamma\_mod5 | 0 | 0.1 | 0.0 | 0 | 0 |
| gamma\_mod6 | 0 | 0.1 | 0.0 | 0 | 0 |
| logP |  |  | -1170.3915981999953 |  |  |



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]

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1 | .1 | 1 | 0 | 0 |
| Offset | 0 | .005 | 0 | 0 | 0 |
| Ea\_1 | 40 | 20 | 35 | 1.0 | 20 |
| Log\_A1 | 13 | 2 | 21.5 | 0.5 | 20 |
| gamma\_1 | 0.1 | 0.3 | 0 | 0.05 | 20 |
| gamma\_mod1 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod2 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod3 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod4 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod5 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod6 | 0 | 0.1 | 0 | 0 | 0 |
| logP |  |  | -1171.686471253084 |  |  |



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]

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1 | .1 | 1 | 0 | 0 |
| Offset | 0 | .005 | 0 | 0 | 0 |
| Ea\_1 | 40 | 10 | 35 | 1.0 | 20 |
| Log\_A1 | 13 | 2 | 21.5 | 0.5 | 20 |
| gamma\_1 | 0.1 | 0.3 | 0 | 0.05 | 20 |
| gamma\_mod1 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod2 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod3 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod4 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod5 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod6 | 0 | 0.1 | 1 | 0 | 0 |
| logP |  |  | -1170.3915981999953 |  |  |



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]

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter Name** | **Initial Value** | **Uncertainty** | **Final Value** | **Interval Size** | **Num Intervals** |
| Scaling | 1 | .1 | 1 | 0 | 0 |
| Offset | 0 | .005 | 0 | 0 | 0 |
| Ea\_1 | 40 | 10 | 35 | 1.0 | 20 |
| Log\_A1 | 13 | 2 | 21.5 | 0.5 | 20 |
| gamma\_1 | 0.1 | 0.3 | 0 | 0.05 | 20 |
| gamma\_mod1 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod2 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod3 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod4 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod5 | 0 | 0.1 | 0 | 0 | 0 |
| gamma\_mod6 | 0 | 0.1 | 1 | 0 | 0 |
| logP |  |  | -1171.087074072524 |  |  |



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]