|  |  |  |
| --- | --- | --- |
| J | h | MPF results |
| 15 | 0.0001 |  |
| 30 | 0.0001 |  |
| 40 | 0.0001 |  |
| 30 | 0.001 |  |
| 30 | 0.00001 |  |
| 我感觉，J越大variance越大。h为啥好像都没啥影响的？ | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **J** | **h** | **single** | **double** | **correlation** |  |
| 迭代15次 |  |  |  |  |  |
| 20 | 1 | 1.3123 | 0.83404 | 1.0143 |  |
| 27 | 1 | 1.1296 | 0.87187 | 1.0522 |  |
| 30 | 1 | 1.0599 | 0.88615 | 1.066 |  |
| 36 | 1 | 0.94182 | 0.91971 | 1.0776 |  |
| 60 | 1 | 0.67791 | 1.0382 | 1.1102 |  |
| 80 | 1 | 0.61157 | 1.0744 | 1.1187 |  |
| 迭代15次 |  |  |  |  |  |
| 20 | 1e-7 | 1.2698 | 0.82523 | 1.0181 |  |
| 22 | 1e-7 | 1.2212 | 0.8324 | 1.0253 |  |
| 25 | 1e-7 | 1.1671 | 0.85828 | 1.0447 |  |
| 27 | 1e-7 | 1.0583 | 0.87122 | 1.0551 |  |
| 30 | 1e-7 | 0.9663 | 0.8932 | 1.0674 |  |
| 33 | 1e-7 | 0.92902 | 0.91251 | 1.0767 |  |
| 36 | 1e-7 | 0.87047 | 0.9306 | 1.0841 |  |
| 迭代15次 |  |  |  |  |  |
| 25 | 1e-6 | 1.1583 | 0.86238 | 1.0484 |  |
| 26 | 1e-6 | 1.0781 | 0.8646 | 1.0517 |  |
| 27 | 1e-6 | 1.1063 | 0.87134 | 1.0597 |  |
| 28 | 1e-6 | 1.0363 | 0.87756 | 1.0592 |  |
| 29 | 1e-6 | 0.9568 | 0.8832 | 1.0634 |  |
| 30 | 1e-6 | 0.99702 | 0.89115 | 1.0673 |  |
| 迭代20次 |  |  |  |  |  |
| 29.2 | 1e-6 | 0.99636 | 0.88503 | 1.0641 |  |
| 29.4 | 1e-6 | 0.99826 | 0.88784 | 1.0684 |  |
| 29.6 | 1e-6 | 1.0094 | 0.89005 | 1.0661 |  |
| 29.8 | 1e-6 | 0.99399 | 0.89152 | 1.0686 |  |
| 30 | 1e-6 | 1.0017 | 0.88975 | 1.0684 |  |
| 迭代20次 |  |  |  |  |  |
| 29.5 | 5 | 1.6692 | 0.9551 | 1.0647 |  |
| 29.5 | 1 | 1.0232 | 0.89268 | 1.0674 |  |
| 29.5 | 0.5 | 1.0085 | 0.88938 | 1.0658 |  |
| 29.5 | 0.1 | 0.97676 | 0.88485 | 1.0641 |  |
| 29.5 | 0.05 | 1.0555 | 0.88933 | 1.0676 |  |
| 29.5 | 0.005 | 0.97364 | 0.89028 | 1.0666 |  |
| 29.5 | 0.0005 | 0.98857 | 0.88932 | 1.067 |  |
| 29.5 | 0.000005 | 1.0256 | 0.88586 | 1.0666 |  |
| 迭代20次 |  |  |  |  |  |
| 29.5 | 0.3 | 0.98595 | 0.88894 | 1.0646 |  |
| 29.5 | 0.4 | 0.99324 | 0.89266 | 1.0664 |  |
| 29.5 | 0.45 | 1.0135 | 0.89242 | 1.0684 |  |
| 29.5 | 0.455 | 0.99152 | 0.89194 | 1.0655 |  |
| 29.5 | 0.55 | 0.96562 | 0.89334 | 1.0665 |  |
| 29.5 | 0.6 | 1.0332 | 0.89069 | 1.0648 |  |
| 29.5 | 0.7 | 1.0187 | 0.89181 | 1.0669 |  |
| Max\_iter=10000 | | | | | |
| 29.5 | 0.455 |  |  |  |  |

10.19调参总结

应该先把迭代次数减少一点，然后利用循环一次跑多几个参数。我之前一个参数的迭代次数太多了，结果发现迭代10次和迭代10000次的结果差不太多。

Q: 其实我好像不需要画出那个图，所以其实能不能以两个参数为x,y轴，以得到的指标为z轴，作出一个图来看极值点呢？或者我直接让matlab自动帮我记录这些值，比如说我用一个矩阵来记录。

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|  |
| Eps\_max=1, MPF\_iters=200, BML\_iters=500, J=14.4, h=0.0001 |
| Eps\_max=1, MPF\_iters=1000, BML\_iters=1000, J=14.4, h=0.0001  Chart, scatter chart  Description automatically generated  Chart, scatter chart  Description automatically generated |
|  |
| Eps\_max=1, MPF\_iters=1000, BML\_iters=1000, J=14, h=0.0001 |
| Eps\_max=1, MPF\_iters=10000, BML\_iters=10000, J=14, h=0.0001 |
| Eps\_max=1, MPF\_iters=10000, BML\_iters=10000, J=14.4, h=0.0001（看起来过拟合了） |