Bayesian Optimization Report: Function 5

GP Health Summary per iteration:

Iteration	GP Health	Status
1	0.716	Good
2	0.825	Good
3	0.854	Good
4	0.868	Good
5	0.870	Good
6	0.869	Good
7	0.861	Good
8	0.849	Good
9	0.832	Good
10	0.814	Good
11	0.795	Good
12	0.774	Good
13	0.717	Good
14	0.734	Good
15	0.714	Good
16	0.694	Medium
17	0.676	Medium
18	0.618	Medium
19	0.641	Medium
20	0.626	Medium
21	0.611	Medium
22	0.598	Medium
23	0.585	Medium
24	0.574	Medium
25	0.564	Medium
26	0.555	Medium
27	0.546	Medium
28	0.500	Low
29	0.533	Medium
30	0.528	Medium

Candidate Sigma per iteration:

Iteration	Mean Sigma	Min Sigma	Max Sigma
1	197.2033	11.9906	800.0023
2	105.4545	14.6508	487.2812
3	103.6818	14.6871	482.2225
4	102.6647	15.3358	478.5207
5	102.9574	15.9504	475.8003
6	99.3341	16.4736	476.9926
7	99.3623	17.0195	475.5974
8	99.2506	17.7358	474.8475
9	99.1229	18.2090	474.3388
10	98.7601	18.2762	474.2458
11	98.7538	18.3940	474.3719
12	98.4123	18.6700	474.5402
13	101.8868	18.7562	475.8282
14	98.3615	18.8887	475.3893
15	98.2079	18.9557	475.9170
16	98.1914	19.4828	476.4921
17	97.5705	19.0819	477.0194
18	101.4760	19.7516	482.1318
19	97.2873	19.1829	478.2596
20	97.1531	19.1927	478.9023
21	97.0267	19.1963	480.0919
22	97.3278	19.8141	481.4807
23	96.7878	19.2104	482.8089
24	96.6790	19.1925	484.1526
25	96.5765	19.1701	485.4691
26	96.4798	19.1435	486.7648
27	96.8058	19.7275	488.0345
28	166.8382	19.1013	804.9604
29	96.2055	19.0569	490.4515
30	96.1269	19.0145	491.6722

Best Results per iteration:

n	Best Input	Best Output	Kernel	Acquisition	GP Health	Anc
	[0. 1. 1. 1.]	4004.9713845224605	hybrid_2	{'UCB_beta': 1.7898419809325197}	0.715937	Nor
	[0.23613219 1. 1. 1.]	4004.815452225012	hybrid_2	{'UCB_beta': 2.0077108468401486}	0.825087	Nor
	[0.40041837 1. 1. 1.]	4004.611084771934	hybrid_2	{'UCB_beta': 2.02211149541804}	0.854413	Nor

[0.56470456 1.	1.	1.	]	4004.3217132896807	hybrid_2	{'UCB_beta': 1.9975335409293271}	0.868493	Nor
[0.72899074 1.	1.	1.	]	4003.9408200028824	hybrid_2	{'UCB_beta': 1.943257389065182}	0.870115	Nor
[0.89327693 1.	1.	1.	]	4003.6073619523604	hybrid_4	{'UCB_beta': 1.8830269920933727}	0.869089	Nor
[0. 1. 1. 1.]				4004.8018601749873	hybrid_4	{'UCB_beta': 1.8087620219025025}	0.861315	Nor
[1. 1. 1. 1.]				4003.330152666451	hybrid_4	{'UCB_beta': 1.7262406754935826}	0.848971	Nor
[0. 1. 1. 1.]				4004.8497765523866	hybrid_4	{'UCB_beta': 1.6370485622902875}	0.832398	Nor
[0. 1. 1. 1.]				4004.873625355155	hybrid_4	{'UCB_beta': 1.5469484973015828}	0.814183	Nor
[1. 1. 1. 1.]				4003.351355813473	hybrid_4	{'UCB_beta': 1.45680422725704}	0.79462	Nor
[0. 1. 1. 1.]				4004.9151925436663	hybrid_4	{'UCB_beta': 1.3677913587992752}	0.774222	Nor
[0. 1. 1. 1.]				4004.931363502382	hybrid_2	{'UCB_beta': 1.2192075541803074}	0.717181	Nor
[0. 1. 1. 1.]				4004.9492773130655	hybrid_4	{'UCB_beta': 1.1982245538789236}	0.733607	Nor
[0. 1. 1. 1.]				4004.963061380548	hybrid_4	{'UCB_beta': 1.1181756774431078}	0.713729	Nor
[1. 1. 1. 1.]				4003.3624320923636	hybrid_4	{'UCB_beta': 1.0415736495781949}	0.694382	Nor
[0. 1. 1. 1.]				4004.986116645092	hybrid_4	{'UCB_beta': 0.9685849814314709}	0.675757	Nor
[0.84907216 1.	1.	1.	]	4003.7627560205165	hybrid_2	{'UCB_beta': 0.8442887091372355}	0.617772	Nor
[0. 1. 1. 1.]				4005.0054124441035	hybrid_4	{'UCB_beta': 0.8337658836669932}	0.641358	Nor
[0. 1. 1. 1.]				4005.0136361143304	hybrid_4	{'UCB_beta': 0.7716894562246147}	0.625694	Nor
[0. 1. 1. 1.]				4005.020793611806	hybrid_4	{'UCB_beta': 0.7129918347986997}	0.611136	Nor
[0.84907216 1.	1.	1.	]	4003.76707978179	hybrid_4	{'UCB_beta': 0.6574503985170341}	0.597682	Nor
[0. 1. 1. 1.]				4005.0327188185083	hybrid_4	{'UCB_beta': 0.6048562352694093}	0.585345	Nor
[0. 1. 1. 1.]				4005.0378153467163	hybrid_4	{'UCB_beta': 0.5549582875435628}	0.574095	Nor
[0. 1. 1. 1.]				4005.0422696330656	hybrid_4	{'UCB_beta': 0.5075136936406716}	0.563904	Nor
[0. 1. 1. 1.]				4005.0461698046274	hybrid_4	{'UCB_beta': 0.46226328849680104}	0.554716	Nor
[0.84907216 1.	1.	1.	]	4003.766489664901	hybrid_4	{'UCB_beta': 0.4189624499737595}	0.546473	Nor
[0.12929876 1.	1.	1.	]	4005.192446557322	hybrid_3	{'UCB_beta': 0.34975771164084}	0.499654	Nor
[0. 1. 1. 1.]				4005.066158347401	hybrid_4	{'UCB_beta': 0.3378534835402526}	0.533453	Nor
[0. 1. 1. 1.]				4005.0686482958076	hybrid_4	{'UCB_beta': 0.2989685252099202}	0.527592	Nor

Acquisition Values per Iteration:

Iteration 1

Method	Max Value
UCB	3089.802309

Iteration 2

Method	Max Value
UCB	3333.243222

Iteration 3

Method	Max Value
UCB	3451.894294

Iteration 4

Method	Max Value
UCB	3509.638086

Iteration 5

Method	Max Value
UCB	3516.227537

Iteration 6

Method	Max Value
UCB	3511.341157

Iteration 7

Method	Max Value
UCB	3478.729103

Iteration 8

Method	Max Value
UCB	3427.808789

Iteration 9

Method	Max Value
UCB	3359.427925

Iteration 10

Method	Max Value
UCB	3284.433649

Iteration 11

Method	Max Value
UCB	3204.222653

Iteration 12

Method	Max Value
UCB	3120.950706

Iteration 13

Method	Max Value
UCB	2889.008492

Iteration 14

Method	Max Value
UCB	2954.908644

Iteration 15

Method	Max Value
UCB	2873.784317

Iteration 16

Method	Max Value
UCB	2794.611382

Iteration 17

Method	Max Value
UCB	2719.060630

Iteration 18

Method	Max Value
UCB	2483.715429

Iteration 19

Method	Max Value
UCB	2579.033417

Iteration 20

Method	Max Value
UCB	2515.288360

Iteration 21

Method	Max Value

UCB	2456.064862

Iteration 22

Method	Max Value
UCB	2400.766122

Iteration 23

Method	Max Value
UCB	2351.194225

Iteration 24

Method	Max Value
UCB	2305.442327

Iteration 25

Method	Max Value
UCB	2263.992829

Iteration 26

Method	Max Value
UCB	2226.610735

Iteration 27

Method	Max Value
UCB	2192.465961

Iteration 28

Method	Max Value
UCB	2004.551611

Iteration 29

Method	Max Value
UCB	2139.973941

Iteration 30

Method	Max Value
UCB	2116.060182