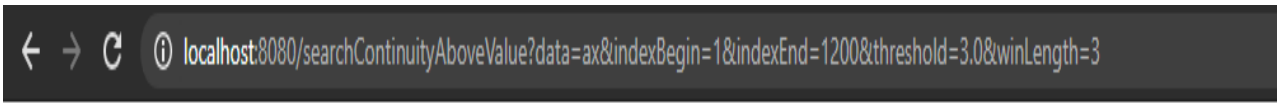
Test searchContinuityAboveValue



888

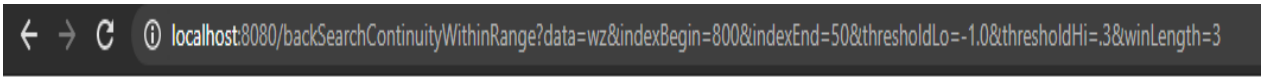
Data = ax indexBegin = 1 Index End = 1200 Threshold =3 winLength= 3

CSV comparison highlighting red cells meeting threshold value for ax column.

First cell meeting criteria is 885. The 4th concurrent cell meeting this criterion is 888 and is returned in the function above.

884	1102584	1.094727	-
885	1103834	3.641602	-
886	1105081	12.19727	-
887	1106330	16.39453	-
888	1107579	12.9707	-
889	1108827	4.844727	-
890	1110076	3.648438	-
891	1111325	3.27832	-

Test backSearchContinuityWithinRange



714

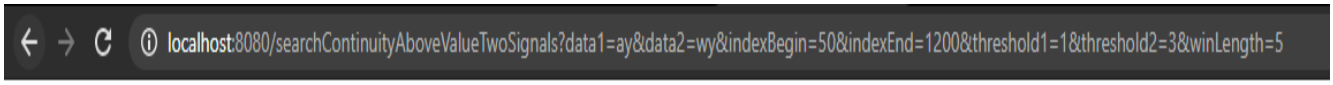
Data = wz IndexBegin = 800 IndexEnd = 50 ThresholdLo = -1 ThreholdHi = .3 winLength = 3

CSV comparison highlighting red cells meeting threshold value for wz column.

First cell meeting criteria is 721 working backwards from 800. However, because of the concurrency requirement 721:719 < 3 cells therefore the function sees 717:714 > 3 and returns 714

714	890310	0.458984	0.374023	-0.03711	1.009857	3.796551	0.136352
715	891557	0.458984	0.367188	-0.02441	0.990683	3.862596	0.193876
716	892806	0.46582	0.351562	0.017578	1.018379	3.935033	0.247138
717	894054	0.478516	0.382812	0.041992	1.060989	4.001079	0.291878
718	895303	0.494141	0.40332	0.052734	1.097208	4.069255	0.300401
719	896552	0.519531	0.422852	0.06543	1.127034	4.154475	0.281226
720	897802	0.535156	0.436523	0.05957	1.1526	4.25887	0.279095
721	899051	0.484375	0.472656	-0.00977	1.171775	4.352612	0.289748

Test searchContinuityAboveValueTwoSignals



766

Data1 = ay Data2 = wy indexBegin = 50 IndexEnd = 1200 threshold1 =1 threshhold2 = 3 winLength =5

CSV comparison highlighting red cells meeting threshold value for ay and wy columns.

First instance of match up is 761 after more than 5 cells meet the criteria for both the cell is returned

760	947750	-0.39648	0.957031	-0.08106	1.090816	7.388574
761	948998	-0.39648	1.003906	-0.05078	1.112121	7.473794
762	950245	-0.47754	1.042969	-0.16016	1.139817	7.505751
763	951494	-0.57129	1.050781	-0.24805	1.120643	7.520665
764	952742	-0.6084	1.03418	-0.22168	1.103599	7.546231
765	953991	-0.62305	1.047852	-0.12695	1.103599	7.571797
766	955240	-0.65137	1.067383	-0.11914	1.101468	7.590972
767	956490	-0.70117	1.089844	-0.14941	1.080164	7.588841
768	957737	-0.7627	1.101562	-0.1875	1.052467	7.58671

Test searchMultiContinuityWithinRange

localhost:8080/searchMultiContinuityWithinRange?data=wy&indexBegin=15&indexEnd=1200&thresholdLo=-.5&thresholdHi=.5&winLength=8


```
{"79":87,"183":191,"192":200,"201":209,"210":218,"219":227,"228":236,"237":245,"246":254,"255":263,"264":272,"327":335,"336":344,"345":353,"354":362,"363":371,"372":380,"381":389,"390":398,"473":481,"482":490,"491":499,"565":573,"994":1002,"1003":1011,"1012":1020,"1021":1029,"1030":1038,"1074":1082,"1083":1091}
```


Data = wy indexBegin =15 indexEnd = 1200 threshholdLo = -.5 thresholdHI = .5 winLength = 8

CSV comparison highlighting red cells meeting threshold value for wy column. Only some shown.

79:87

77	94901	0.925781	0.222656	-0.25195	2.328636	-0.5795
78	96148	0.904297	0.219727	-0.22266	2.324375	-0.5028
79	97397	0.876953	0.222656	-0.20801	2.322245	-0.45806
80	98646	0.827148	0.213867	-0.20898	2.303071	-0.44101
81	99894	0.787109	0.22168	-0.20117	2.286027	-0.41758
82	101143	0.751953	0.227539	-0.19824	2.283896	-0.40906
83	102394	0.726562	0.232422	-0.18262	2.294548	-0.41758
84	103640	0.748047	0.270508	-0.13867	2.279635	-0.39627
85	104889	0.697266	0.313477	-0.16699	2.213589	-0.39201
86	106138	0.666016	0.307617	-0.17773	2.149675	-0.43036
87	107386	0.65332	0.304688	-0.1709	2.102803	-0.4751
88	108635	0.647461	0.305664	-0.16211	2.055932	-0.51984

183:191

182	226011	0.915039	0.225586	0.023437	-0.10653	-0.50493
183	227259	0.927734	0.225586	0.011719	-0.10866	-0.44741
184	228510	0.93457	0.21582	0.010742	-0.08948	-0.38775
185	229757	0.951172	0.205078	0.017578	-0.05752	-0.33023
186	231005	0.957031	0.204102	0.017578	-0.02344	-0.27057
187	232254	0.949219	0.203125	0.017578	0.002131	-0.2237
188	233507	0.941406	0.209961	0.011719	0.025566	-0.18535
189	234753	0.942383	0.233398	0.011719	0.038349	-0.14701
190	236000	0.936523	0.231445	0.017578	0.049002	-0.10653
191	237249	0.9375	0.228516	0.017578	0.068176	-0.07031
192	238498	0.938477	0.230469	0.012695	0.08735	-0.04048
193	239746	0.938477	0.245117	0.006836	0.08735	-0.00852

182:200

191	237249	0.9375	0.228516	0.017578	0.068176	-0.07031
192	238498	0.938477	0.230469	0.012695	0.08735	-0.04048
193	239746	0.938477	0.245117	0.006836	0.08735	-0.00852
194	240997	0.942383	0.25	-0.00293	0.076698	0.017044
195	242245	0.954102	0.253906	0	0.063915	0.049002
196	243492	0.963867	0.259766	0.023437	0.061784	0.093742
197	244741	0.960938	0.254883	0.040039	0.066046	0.142743
198	245990	0.963867	0.24707	0.042969	0.074567	0.183223
199	247238	0.969727	0.261719	0.043945	0.063915	0.221572
200	248487	0.970703	0.277344	0.043945	0.04048	0.262051
201	249736	0.957031	0.251953	0.085937	0.04261	0.289748