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Playing Matches
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Match #	Opponent	AB_Improved		AB_Custom		AB_Custom_2		AB_Custom_3	
		Won	Lost	Won	Lost	Won	Lost	Won	Lost
1	Random	8	2	8	2	9	1	9	1
2	MM_Open	8	2	6	4	9	1	5	5
3	MM_Center	7	3	7	3	7	3	6	4
4	MM_Improved	5	5	5	5	3	7	3	7
5	AB_Open	5	5	5	5	4	6	4	6
6	AB_Center	4	6	5	5	1	9	6	4
7	AB_Improved	2	8	6	4	4	6	5	5

| | Win Rate: | 55.7% | | 60.0% | | 52.9% | | 54.3% | |

There were 3.0 timeouts during the tournament -- make sure your agent handles search timeout correctly, and consider increasing the timeout margin for your agent.

Your agents forfeited 246.0 games while there were still legal moves available to play.

For custom_score I use the number of own legal moves subtract the number of opponent's legal moves then multiply the distance of opponent's location to the center subtract the distance of own player's location to the center. In this way, I considered the (#my_moves - #opponent_moves) and the difference between distance of opponent's location to the center and distance of my player's location to the center meanwhile.

For custom_score_2 I use my my player's location to the center distance subtract opponent's location to the center distance as the score, which should be better than only use   my player's location to the center distance as the score. Since nearer distance to center means more potential legal moves, further opponent's distance and nearer own distance means greater win rate.

For custom_score_3 I use the average distance of my legal moves to center subtract the average distance of opponent's legal moves to center as the score which means in the future my potential legal moves will greater or less than opponent's potential legal moves.

I recommend using custom_score as the evaluation function since it considered the legal moves difference and the distance difference to center in the meanwhile.

Based on the data above, there are three reasons to recommend custom_score evaluation function.

1. It win the AB_Improved by 6:4 .
2. It has the highest win rate in the all evaluation functions.
3. It has a tradeoff between evaluation effect and time consuming, since if only combine with my player's distance to center the evaluation effect will be not very well, but use the difference of all legal moves average distance to center

will consume much more time. This evaluation function has a good tradeoff between these considerations.