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Horizon - Sky View ^[3]

Horizon, (Horizon Chess) a [WinBoard](#) compatible chess engine by primary author [Ron Murawski](#) and chess advisor and book author [Jim Monaghan](#). Written in [C](#), the programming started in July 2001, first release was already in October 2001 ^[1]. Initially running atop a much-modified version of [Colin Frayn's](#) open-source [Beowulf](#) infrastructure, there's very little of Beowulf that remains within [Horizon](#) and less with each release ^[2].

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Common Features

- [Aspirated PVS](#)
- [Quiescent search](#) with [check extensions](#)
- [Null move](#)
- [Iterative deepening](#)
- [Internal iterative deepening](#)
- [Move ordering](#) is ordinary except for possible "threat moves" which get boosted
- Two [killer moves](#) for each [ply](#), 1 [mate killer](#)
- [Extensions](#) for: [checkmate threat](#), [single reply](#), [check](#), [revealed check](#), [recaptures](#), [7th rank pawn pushes](#)
- Adaptive [razoring reductions](#) for non-dangerous moves
- [Search](#) uses [lazy eval](#) for [pruning](#) decisions

Various Features

- Up to 3 [null moves](#) per search line
- [Null-move reduction](#) range: 2 -> 4.5 plies
- [Null-move verification search](#)
- No [history reductions](#)
- No [attack board](#)
- [Search aspiration](#) is asymmetric based on [side-to-move](#)
- [Thinking time](#) extended for "interesting" positions

Tournament Play

Horizon played the [WCRCC 2007](#) and [WCRCC 2008](#) Annual ACCA World Computer Rapid Chess Championship.

Selected Games

[WCRCC 2008](#), round 14, [Horizon](#) - [Tornado](#) ^{[\[5\]](#)}

```
[Event "WCRCC 2008"]  
[Site "Internet Chess Club"]  
[Date "2008.06.22"]
```

```
[Round "14"]  
[White "Horizon"]  
[Black "Tornado"]  
[Result "1-0"]
```

```
1.d4 Nf6 2.c4 e6 3.Nf3 d5 4.Nc3 c6 5.e3 Nbd7 6.Bd3 dxc4 7.Bxc4 b5 8.Bd  
3 Bb7  
9.O-O a6 10.a4 b4 11.Nb1 c5 12.Nbd2 cxd4 13.exd4 Be7 14.Nc4 O-  
O 15.Be3 Ng4  
16.h3 Nxe3 17.fxe3 Rc8 18.Qe2 Qc7 19.e4 Kh8 20.Rac1 f6 21.Nfd2 e5 22.N  
b3 exd4  
23.Nca5 Qb8 24.Nxb7 Rxc1 25.Rxc1 Qxb7 26.Bxa6 Qa7 27.Bb5 d3+ 28.Qf2 Qx  
f2+  
29.Kxf2 f5 30.Bxd7 fxe4+ 31.Kg1 e3 32.Bb5 d2 33.Rb1 Bf6 34.Be2 g6 35.a  
5 Be5  
36.Bf3 Bxb2 37.a6 Rf7 38.a7 Rxa7 39.Rxb2 Rd7 40.Rb1 Rd3 41.Kf1 h5 42.B  
d1 Rc3  
43.Ke2 h4 44.Nd4 Rc5 45.Nc2 Rg5 46.Nxe3 Rb5 47.Rb3 Rb8 48.Bc2 Kg7 49.K  
xd2 Rb5  
1-0
```

See also

- [Horizon Effect](#)
- [Horizon Node](#)

External Links

Chess Engine

- [Horizon Chess - Main - Horizon Chess](#)
- [Horizon Chess - Main - EngineTechnicalDescription](#)
- [Horizon](#) from [WBEC Ridderkerk](#)

Misc

- [Horizon from Wikipedia](#)
- [Horizon \(disambiguation\) from Wikipedia](#)
- [Horizon effect from Wikipedia](#)

References

1. [^] [Horizon](#) from [WBEC Ridderkerk](#)
2. [^] [Horizon Chess - Main - Acknowledgements](#)

3. [^ Sky View 2](#) by gierszewski, 2005, Sunrise at [Calgary](#), [Wikimedia Commons](#)
4. [^](#) Features from [Horizon Chess - Main - EngineTechnicalDescription](#)
5. [^](#) [2008 Second Annual ACCA World Computer Chess Championships - Results - PGN-Download](#)

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