

Intertemporal Arbitrage Strategy (Corn)-- Strategy Report

【Strategy Content】

The strategy uses the spread between the near-month and far-month contract opening prices as the basis for entry signals. A position is opened when the spread breaches a threshold (set at the 5-year mean +2 standard deviation) and closed when it reverts to the mean. Specifically:

- When the spread exceeds the threshold, short the spread (sell near-month, buy far-month).
- When the spread reverts to the mean, close the position (buy near-month, sell far-month).

The strategy accounts for slippage (impact cost: 1 tick/contract) and transaction fee for Corn is 1.51 CNY/contract (open/close)

【Strategy Performance】

The intertemporal arbitrage strategy exhibits low risk. Based on data from January 1, 2020, to June 30, 2025, it achieved a high win rate (60%) and annual return rate (50%)

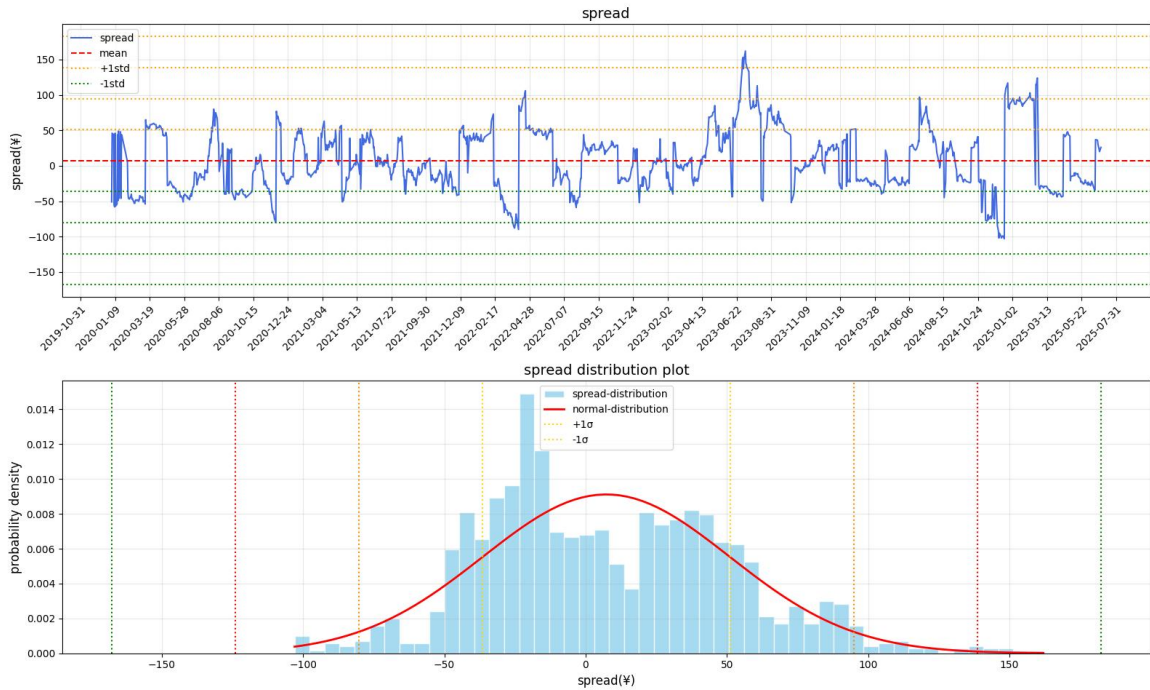
Corn contracts: Average holding period ~17 days, ~3 trades per year.

【Optimization Directions】

Incorporate a moving average to dynamically adjust the threshold.

I . Corn Intertemporal Arbitrage

(1) Spread Distribution (Near-Month – Far-Month Contract)



Note:

Data sourced from East Money;

spread calculated as main continuous contract – secondary main continuous contract.

Spread Statistics:

Mean: 7.33

Standard Deviation: 43.77

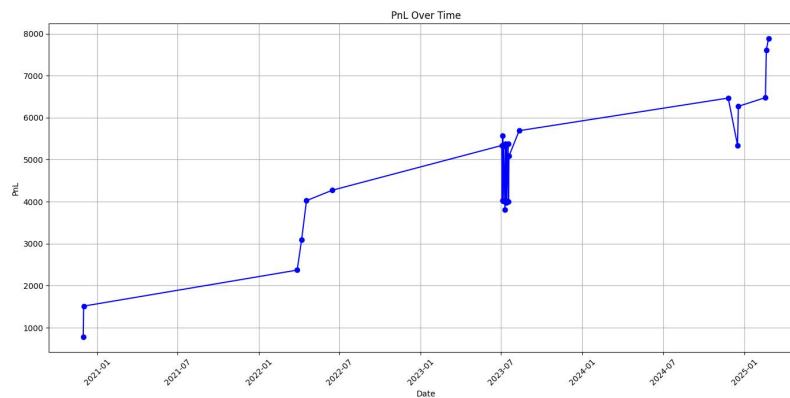
Maximum: 162.00 (3.5σ)

Minimum: -103.00 (-2.5σ)

*[Corn contract multiplier: 10 tons/contract; minimum price movement: 1 CNY/ton
→ Impact cost of 1 tick = 1 CNY]

(2) Strategy Performance

1、Strategy Returns



Trading Details

Total trades: 13
Winning trades: 8
Win rate: 61.54%
Profit-Loss Ratio: 10.49

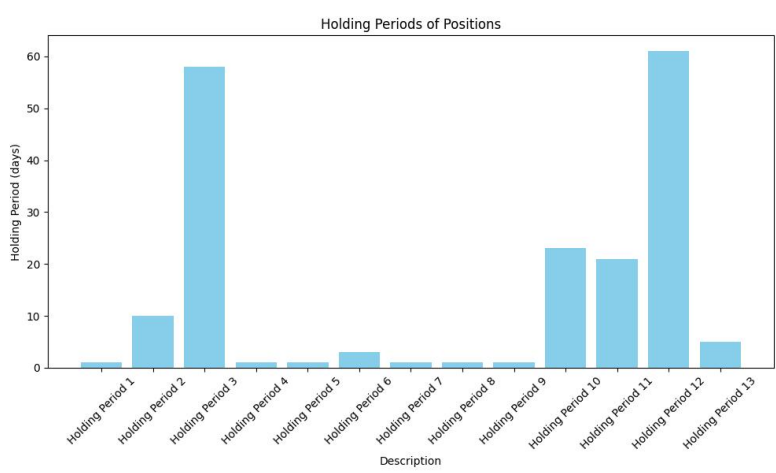
Trades Summary:

	Start Date	Holding Period (days)	Open Spread	Close Spread	Total PnL	\
0	2020-11-30	1	-80	76	1513.96	
1	2022-03-28	10	-88	75	1583.96	
2	2022-04-18	58	95	-27	1173.96	
3	2023-07-03	1	109	129	-246.04	
4	2023-07-05	1	157	154	-16.04	
5	2023-07-07	3	134	150	-206.04	
6	2023-07-11	1	160	139	163.96	
7	2023-07-13	1	138	129	43.96	
8	2023-07-17	1	139	136	-16.04	
9	2023-07-19	23	111	-63	1693.96	
10	2024-11-25	21	-80	-110	-346.04	
11	2024-12-18	61	95	-23	1133.96	
12	2025-02-19	5	116	-29	1403.96	

Absolute Return

0	0.504653
1	0.527987
2	0.391320
3	-0.082013
4	-0.005347
5	-0.068680
6	0.054653
7	0.014653
8	-0.005347
9	0.564653
10	-0.115347
11	0.377987
12	0.467987

2、Average Holding Period: 14.38 days



3、Open Signal Analysis

