Test Statistic -5.320532

p-value 0.000005

#Lags Used 6.000000

Number of Observations Used 363.000000

Critical Value (1%) -3.448494

Critical Value (5%) -2.869535

Critical Value (10%) -2.571029

dtype: float64

是否平稳(1/0): 1

E:\math\_model\2023 mathorcup\DC25\_DC62.py:77: UserWarning: Glyph 8722 (\N{MINUS SIGN}) missing from current font.

plt.show()

BIC 最小的p值 和 q 值：0,0

RUNNING THE L-BFGS-B CODE

\* \* \*

Machine precision = 2.220D-16

N = 6 M = 10

This problem is unconstrained.

At X0 0 variables are exactly at the bounds

At iterate 0 f= 2.44043D+01 |proj g|= 7.43608D-05

ys=-4.772E+01 -gs= 5.636E-01 BFGS update SKIPPED

ys=-7.237E+01 -gs= 5.658E-01 BFGS update SKIPPED

ys=-1.047E+02 -gs= 5.672E-01 BFGS update SKIPPED

ys=-4.734E+01 -gs= 5.635E-01 BFGS update SKIPPED

\* \* \*

Tit = total number of iterations

Tnf = total number of function evaluations

Tnint = total number of segments explored during Cauchy searches

Skip = number of BFGS updates skipped

Nact = number of active bounds at final generalized Cauchy point

Projg = norm of the final projected gradient

F = final function value

\* \* \*

N Tit Tnf Tnint Skip Nact Projg F

6 5 70 5 4 0 1.295D+04 1.352D+01

F = 13.5171205760064

ABNORMAL\_TERMINATION\_IN\_LNSRCH

Line search cannot locate an adequate point after MAXLS

function and gradient evaluations.

Previous x, f and g restored.

Possible causes: 1 error in function or gradient evaluation;

2 rounding error dominate computation.

==============================================================================

coef std err z P>|z| [0.025 0.975]

------------------------------------------------------------------------------

date

[9666, 8116, 8834, 8501, 8655, 8584, 8617, 8602, 8609, 8605, 8607, 8606, 8607, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606, 8606]

[10675, 8116, 10090, 9846, 10111, 10148, 10294, 10419, 10512, 10294, 9952, 10062, 10152, 10241, 10423, 10283, 9751, 10062, 10170, 9951, 9862, 10509, 10151, 10242, 10333, 10424, 10510, 10609, 10649, 9615, 9951]