With the objective of tackling the problem of inaccurate long-term El Niño Southern Oscillation (ENSO) forecast, this study develops a new dynamical-statistical forecast model of sea surface temperature anomaly (SSTA) field. A self-memorization principle is introduced to improve the dynamic reconstruction model, making the model more appropriate for describing such chaotic systems like ENSO. Compared with six mature models published previously, the present model has an advantage in prediction precision and time length, and is a novel exploration of the ENSO forecast method. Thus, I recommend its possible publication in the OS after some minor revisions.

Major:

- 1. Line633-663: I think there is no need to spend space here to introduce the definition of overfitting and you just have to give a reference. The discussion whether the model is overfitting or not is redundant and the discussion should focus on the good forecast results of new examples. This part of the discussion can be properly streamlined.
- 2. Line371: Why *p* value was in the range 5 to 15? Is this the experience of the predecessors? Or is it the result of the author's own experiment?
- 3. Line597-615: The purpose of this section is to show that a certain impact on the pattern of the 2nd EOF will not make our forecast unstable. But this section here occupied the space too much and I think there is no need to make a list of table5 alone. The author just says the difference among forecast results of both TC and MAPE of five different sample data are less. Because the main purpose of this paper is to prove that the prediction accuracy of SST and ENSO of the model. Therefore, it is not necessary for table5 to list separately. It is recommended that this part should be simplified.
- 4. Line243-249: The author introduced the standardization of the data before modelling and it is too wordy here. The author just list the standardized formula here. So the section should be suggested to be simplified.

- 5. Line269 and 298: The abbreviation appears for the first time, and there is no need to repeat the Pearson correlation coefficient (CC).
- 6. Dynamic model recommendations are consistent, the topic is dynamical-st, followed by several dynamic text in a number of tense inconsistency, it is recommended to be consistent.

Minor:

1.Line649: "the forecast results of the Cross-validated" should be revised as" the forecast results of the cross-validated".

- 2.Line 30, "dynamical reconstruction" is more appropriate
- 3.Line 35, "pearson" should be "Pearson"
- 4.Line 36, "approximately" should be "approximate" or "about"
- 5.Line 38,"but" should be "but also"
- 6.Line 52,"influences" should be "influence"
- 7.Line 57,"gradually improved" should be "gradual improvement"
- 8.Line 67,"large a amount of" should be " a large amount of "
- 9.Line 75,"advanced" should be "been advanced"
- 10.Line 91,"This is because" should be "It is because that"