General comments

The paper has been improved but some issues remain.

The method of obtaining the value of *k* remains unclear. Page 8, line 27 "… we can get the value of parameter *k* by counting all changes …". If it is obtained by counting changes, how can be negative?

The use of functions with jumps (see fig. 8) remains unjustified. All the developments and definitions are done with the logistic model or piecewise **continuous** functions, but the application to the real system has jumps between the initial state and the transition process and between the transition process and the final state.

Specific comments

Page 7, line 26. It is stated "*The parameters v, u and k of the logistic model are set as -1.0, 2.0, 0.1,* ..." but in figure 5, the v and u values seem to be -0.5 and 2.5 respectively. In page 8, the recovered values are 2.92, 2.65 and 2.58, converging to 2.5 as deduced from the graphic instead to the value stated in the text (2.0).

The recovered values show big differences (2.92 - 46% error, 2.65 - 32.5% error and 2.58 - 29% error) with respect to to the original value (2.0). This lack of agreement contrasts with the good results in the real case showed in fig. 11.

May be, this disagreement due to the introduction of random variations (uniformly distributed?) which are always positive (range 0-1).

Technical corrections

Page 2, line 19-20 "It is difficult to detect the abrupt change occurs at the end of sequence." Is there something missing? For example "... abrupt change [that] occurs ...".

Page 4, line 6 "detect the transition period (Yan et al, 2015). Here, the detection method is troduced" Should be "introduced"? Misspelling?

Page 13, line 26 "Due to the lake of enough data..." Misspelling? Lack?