Can be seen from the Fig. 6, the two control methods both have reached a stable control effect, but the effect of the use of self-adjusting fuzzy control was significantly better than the ordinary control the effect. The transition time of using self-adjusting function is obviously cut down, quickly reaches a steady state. Same time, by enlarge the vertical axis scale to carefully observe, the adjustment controller does not use the function, when the control achieves stable, there is also a slight error, but the use of the self-adjustment function, a smooth control is not errors.

V. Conclusions

The fuzzy control has a very wide range of application, so it has a very large theoretical value and practical significance to study a simple and practical fuzzy controller. The adjustment method mentioned in this paper is simple in application and function selection, thus it can greatly short the time to get the optimum scale factor and quantitative factors by repeated simulation with the satisfactory practical application. But without systems theory analysis to coordinate the functional relationship, an in-depth study is needed based on the basic theory.

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