Table 2. Actual control of elevation of vertical formwork for pier # 2 (unit)

Location	Pier 2#small mileage			Pier 2#big mileage		
	Measured elevation	Predicted elevation	Error	Measured elevation	Predicted elevation	Error
12#	841.263	842.264	-0.001	840.639	840.648	-0.009
13#	842.491	842.488	0.003	840.696	840.691	0.005
14#	842.636	842.638	-0.002	840.715	840.722	-0.007
15#	842.759	842.751	0.008	840.684	840.681	0.003

Note: The positive value in the table represents that the measured beam bottom elevation is greater than the theoretical elevation, otherwise, the error is negative.

5. CONCLUSIONS

This paper discusses some concepts of the Grey System Theory in forecasting and the method of establishing grey model. The Grey System Theory is adopted to establish the model, and the difference sequence of the theoretical deflection and the measured deflection after the tension of each section is selected as the original sequence in the construction process. The difference value between the theoretical value and the measured value in the following construction stage is predicted, and the relative error is obtained by comparing the predicted value with the measured value in the following construction stage. It is shown that the Grey System Theory can be well applied to the construction monitoring of continuous beam bridge with cantilever construction method, and the control effect of construction monitoring can be effectively strengthened. According to the monitoring data of 72 + 133 + 72m continuous rigid frame bridge of Manjiang Bridge, the Grey System Theory model is used for prediction, and the application effect of Grey System Theory in construction monitoring is confirmed according to the predicted value and measuredvalue inactual construction.

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