Further Discussion on the Period Change of YY Eridani

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A total of nine times of minimum lights for YY Eri were determined from the relatively new or unpublished photoelectric observations collected from Korea, New Zealand and Turkey. A total of 466 the minima available to us, including ours, were intensively analyzed in two points of view: one is from abrupt changes of the period and the other any sinusoidal regularities. The latter needs one more degree of freedom in a fitting ephemeris, namely, a secular quadratic term. The former shows that the period decrease and increase seem to appear more or less irregularly which phenomena is still unexplained with the standard mass transfer or mass loss theories. The latter suggested whether an unseen third body in the system exist or strong magnetic activity on one component of YY Eri occurs cyclically. These two points of view were discussed with their implications and other observables.