

The last three outbursts of H 1743-322 observed by RXTE in its latest service phase

Thursday, 25 April 2013 17:45 (5 minutes)

After 2010, three outbursts of H 1743-322 were detected by RXTE. We have carried out timing and spectral analysis of the data, emphasizing on the two with relatively complete evolution history presented in the RXTE/PCA observations. We then constitute an enlarged outburst sample for H 1743-322, which allows to investigate the spectral transitions in more details. We find that the spectral transitions to high-soft state constrain a region for four outbursts in hardness-intensity diagram. An extension of the region locates in the vicinity of the failed outburst in 2008, and excludes it from a successful group. We therefore suggest the failed outburst in 2008 may present the first almost successful outburst sample, which is important for modelling the outburst, especially upon the conditions required for transition to high-soft state.

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