INTEGRAL detection of a long powerful burst from SLX 1735–269

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We present results of an analysis of the bursting behavior of the low mass X-ray binary system SLX 1735–269 during INTEGRAL observations of the Galactic Center region in 2003. Six type-I X-ray bursts were detected in total with one being much longer and more powerful than others. A strong dependence of the burst recurrence time on the mass accretion rate is observed, that is likely caused by a change in the burning regime. The long burst demonstrated a photospheric radius expansion. We discuss possible scenarios of this long burst and show that it was unlikely a carbon burning flash but rather burning of a large pile of hydrogen and helium accelerated by electron capture processes in a dense accumulated layer.