The slowly rotating Neutron Star in the Supernova Remnant RCW 103

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The Central Compact Object (CCO) in the supernova renmant RCW 103 has been observed by the Chandra X-ray Observatory twenty times over the past six and one half years. A 50 ks observation on 2002 March 02 revealed a periodic behavior with a period of 6.67 hours and a strong fourth harmonic at 1.66 hours. A flare from the CCO was observed in early 2000 where the intensity of the source increased by more than fifty times. Over the past six years the source has slowly faded while its spectral parameters have remainded nearly constant. The CCO remains above its preoutburst intensity. Possible mechanisms to slow the rotation to such a slow rate, such as magnetic braking will be discussed. This work was supported in part by NASA grants NAS8-38252, NAS8-01128 and SV4-74018.