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RX J0852.0-4622 - the nearest historical supernova remnant

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The supernova remnant RX J0852.0-4622, also called by its nickname Vela Jr., was discovered in X-rays by ROSAT. Gamma-rays from the radioactive decay have been reported as well. The combination of the X-ray and gamma-ray measurements allows a fairly precise determination of distance (200 pc) and age (680 yrs). However, later on, the gamma-ray measurements were heavily disputed, so that
doubts arise about the distance and age values. Meanwhile, the expansion rate of the SNR has been measured, which, in angular terms, is the fastest of all known SNRs, but less than expexted, so that the age could be 1000 yrs - 3000 yrs and the distance 1 kpc. Even then, RX J0852.0-4622 would be the nearest historical SNR known. But I will show that a hydrodynamical evolution slightly more complex than the straight application of the Sedov relations predict, could bring age and distance back to the originally reported values.

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