Extended Data Fig. 1 | Shock geometry. The brown dwarf companion is irradiated by the pulsar wind, causing it to be hotter on the side facing the pulsar[26], and inflated, nearly filling its Roche lobe[27]. Outflowing material is shocked by the pulsar wind, leaving a cometary-like tail of material. This tail is asymmetric because of the companion's orbital motion, which leads to eclipse egress lasting substantially longer than ingress. The companion and separations are drawn roughly to scale, whereas the pulsar is not: the light cylinder radius of 76 km would be indistinguishable on this figure. The inclination of the system is conservatively constrained to $50° < i < 85°$ (ref. [13]). v_p and v_c are the velocities of the pulsar and companion, a is the semi-major axis of the orbit, and R_{roche} is the Roche lobe of the companion.