

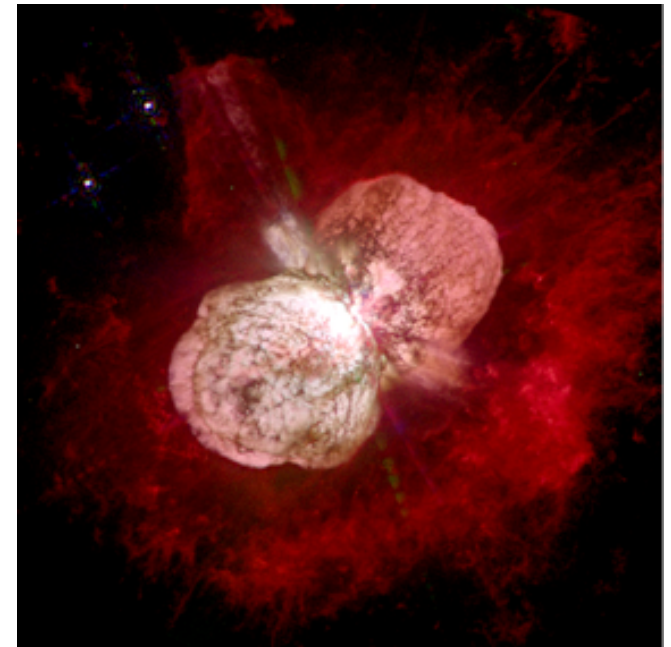
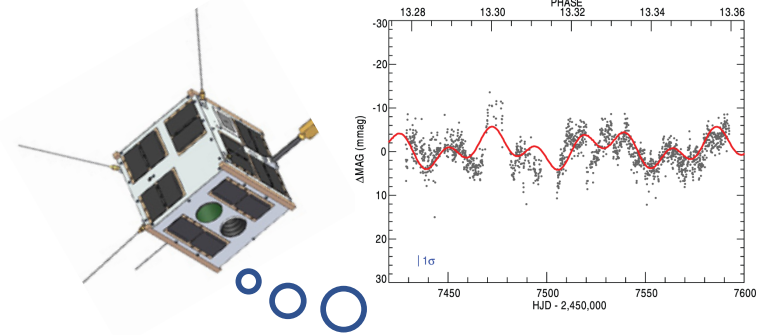
Hearing the heartbeat of η Carinae

What is the science question?: What is the state of evolution of η Carinae, the brightest and most massive star in our cosmic neighborhood?

What are the findings?: The *BRITE* nanosatellite constellation found recent interesting changes in the optical brightness of η Carinae.

What is the impact?: The star may have been oscillating stably in one frequency for nearly four decades due to a tidal tug by a companion star when the two stars are at their closest approach.

Why does It matter to non-scientists?: Someday (possibly in our lifetime) η Carinae will explode spectacularly as a nearby supernova. Studying how it changes in brightness can give important clues to its evolutionary state and tell us how close the star is to exploding.



N. D. Richardson, H. Pablo, C. Sterken, A. Pigulski, G. Koenigsberger, A. F. J. Moffat, T. I. Madura, K. Hamaguchi (662), M. F. Corcoran (662), A. Damineli, T. R. Gull (667), D. J. Hillier, G. Weigelt, G. Handler, A. Popowicz, G. A. Wade, W. W. Weiss, K. Zwintz (2018) MNRAS, 475, 5417: BRITE-Constellation reveals evidence for pulsations in the enigmatic binary η Carinae