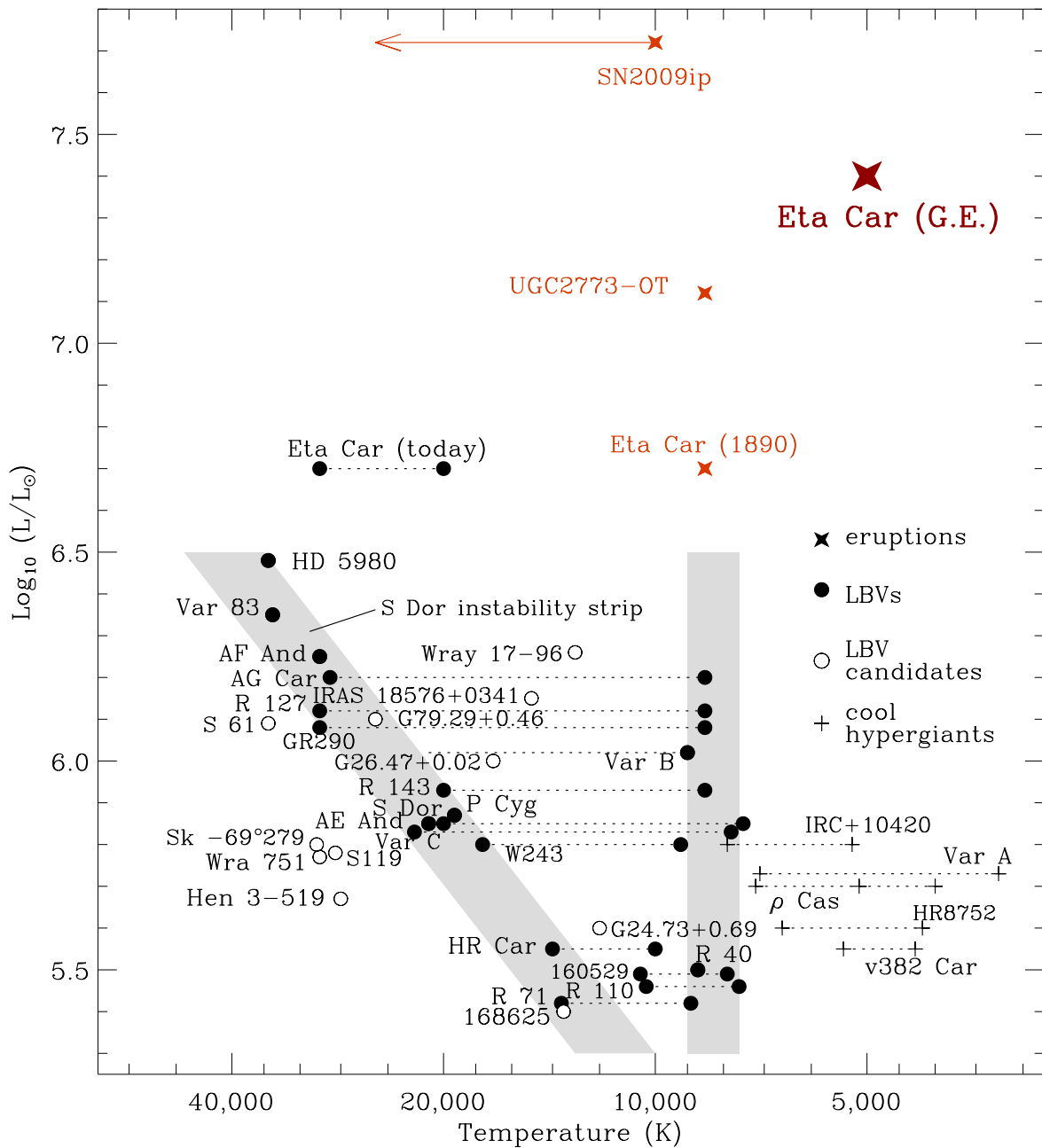


light echoes of η -Carinae





snitn + 2004

Davids on 997

virgin

vir 2009

Linear Bilinear

Luminous Blue Variables

η Car-like

- 1.increase in luminosity (*unexplained*)
- 2.super-Eddington wind
- 3.optically thick pseudo-photosphere forms at larger radius than hydrostatic stellar surface
- 4.mass loss, decrease in effective temp
- 5.pseudo-photosphere moves out (no expansion of star)

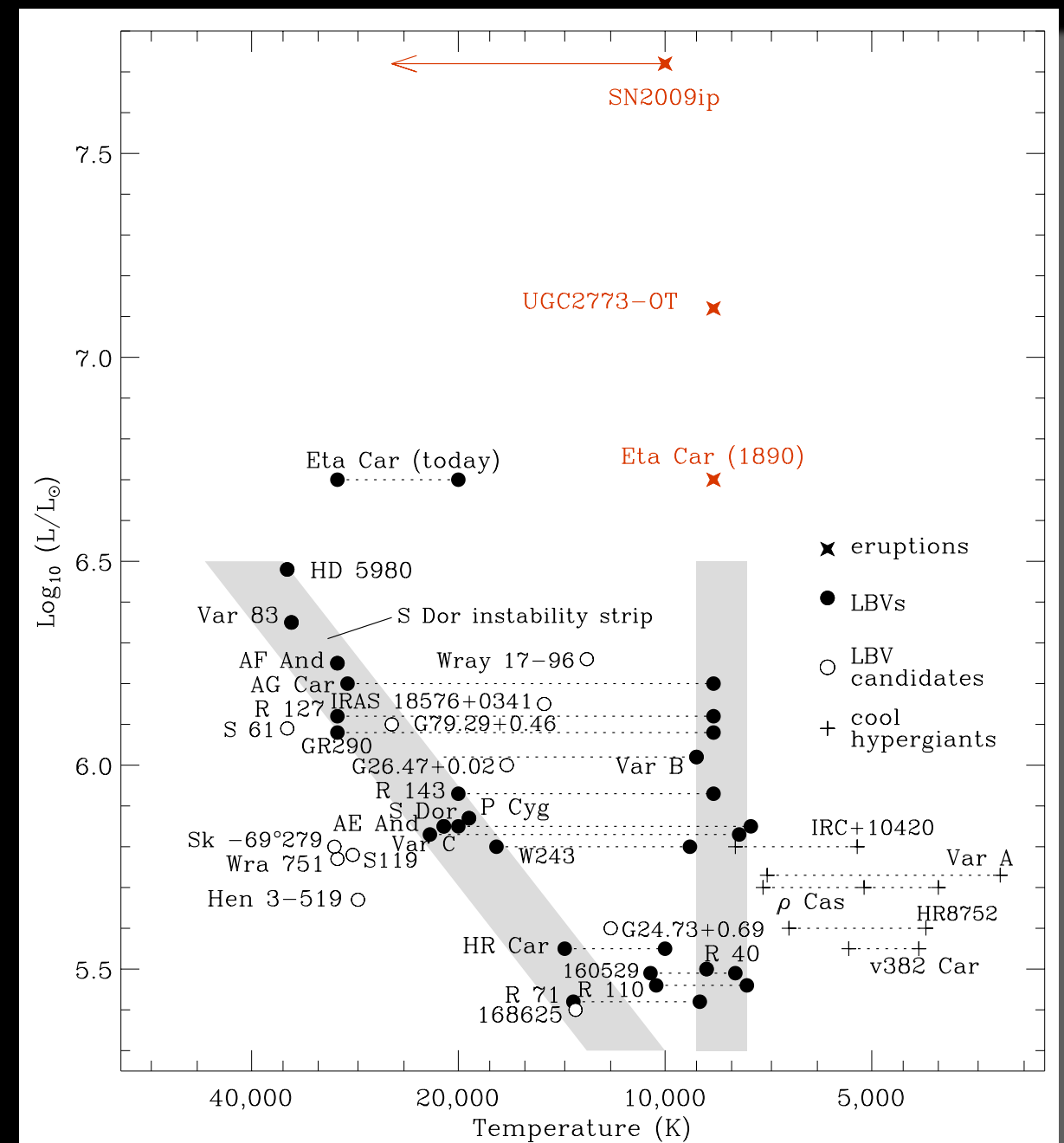
HARD LIMIT $T \geq 7000\text{K}$, F-type spectrum

S Dor-like

- 1.massive star attempts to evolve redward
- 2.encounters the Humphreys-Davidson Limit beyond which no stable stars are observed

HARD LIMIT $T \geq 7000\text{--}9000\text{K}$ A-F-type

“We emphasize however that neither η -Car type nor S-Dor type variations are understood.”



Vick 2009

Smith+ 2004

Vick 1997

Davidson 1997

light echoes of η -Carinae

Chapter II

The Great Eruption

light echoes of η -Carinae