

Massive Star Wind Variability in the Ultraviolet: Considerations for Optimal Mission Design

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Mind the Gap Splinter Session – AAS 243

Expanding atmospheres

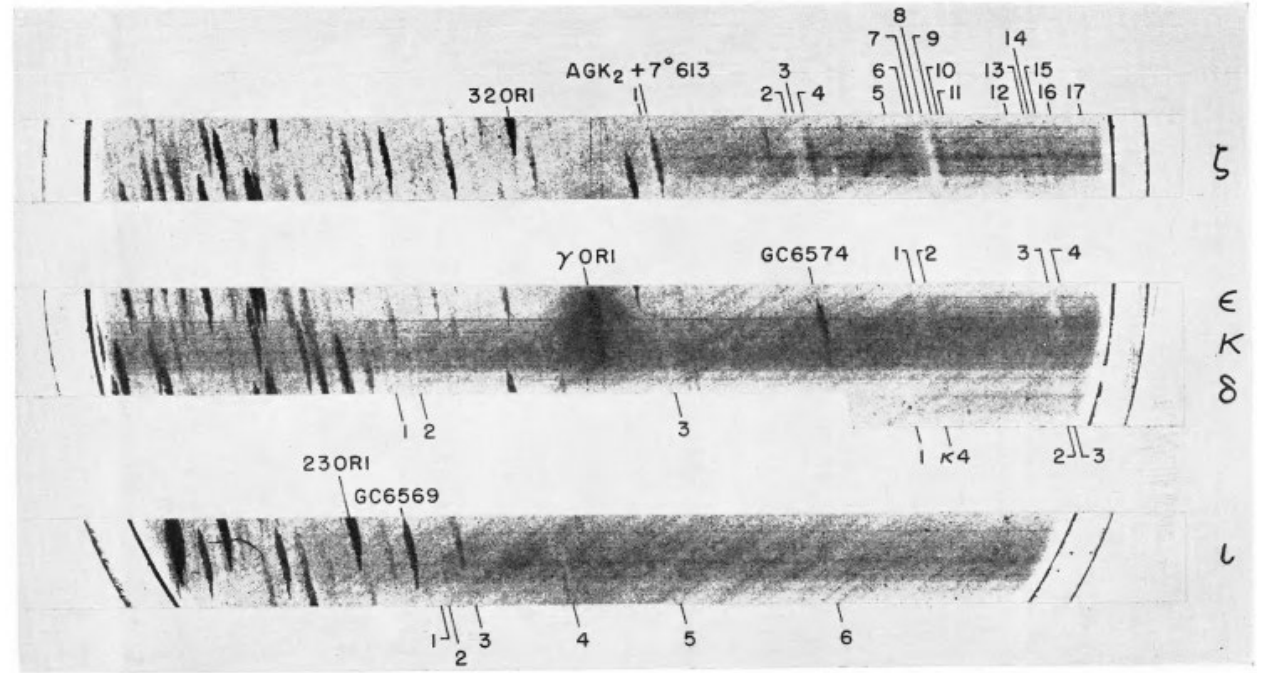


FIG. 3.—Enlarged portions of Fig. 2 with the line identifications by the numbers in Tables 2 and 3. Wavelengths increase toward the right

THE ASTROPHYSICAL JOURNAL, Vol. 150, November 1967

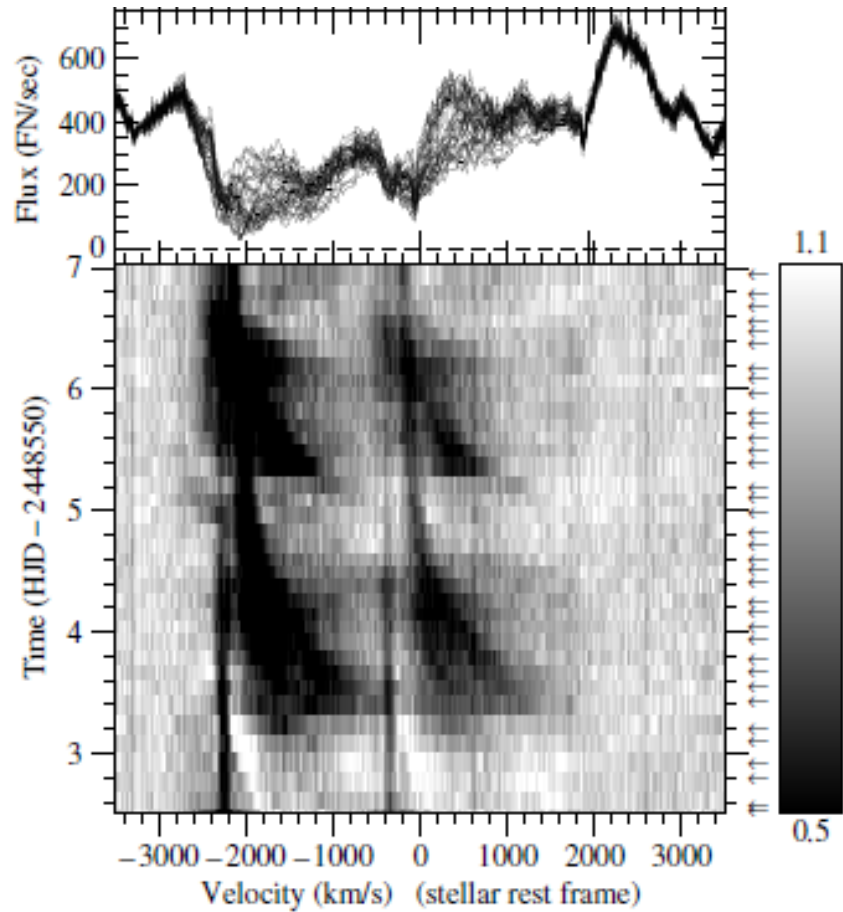
MASS LOSS FROM THREE OB SUPERGIANTS IN ORION

DONALD C. MORTON

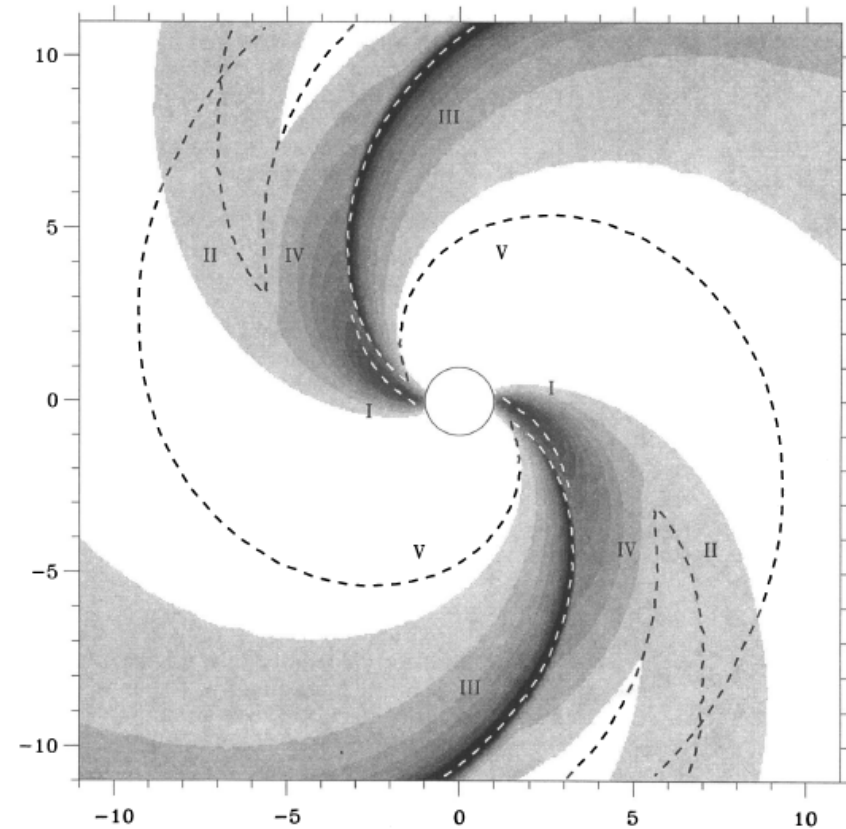
Princeton University Observatory

Received March 1, 1967; revised May 16, 1967 and in proofs

Wind structures inferred from dynamic spectra

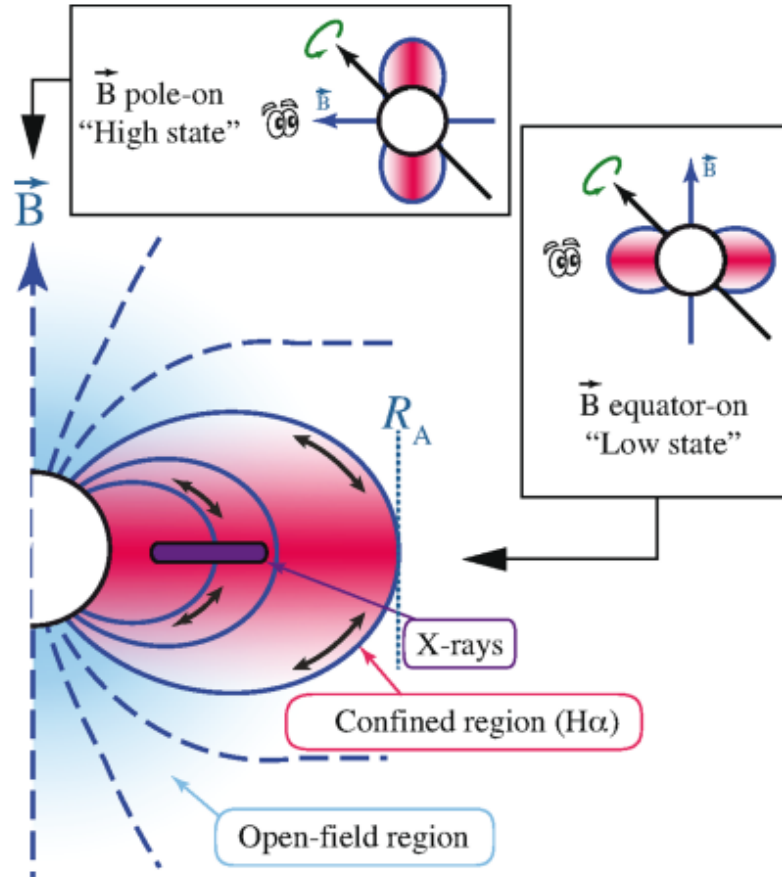


Kaper et al., 1997

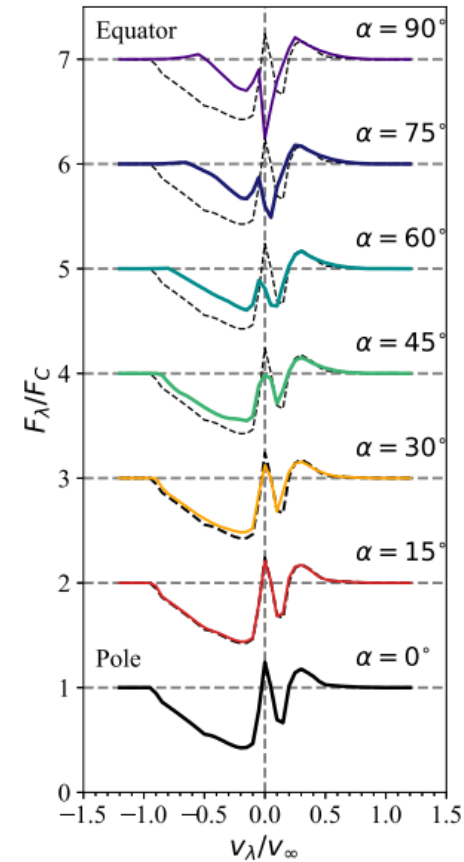


Cranmer & Owocki, 1996

More dramatic large-scale wind structures

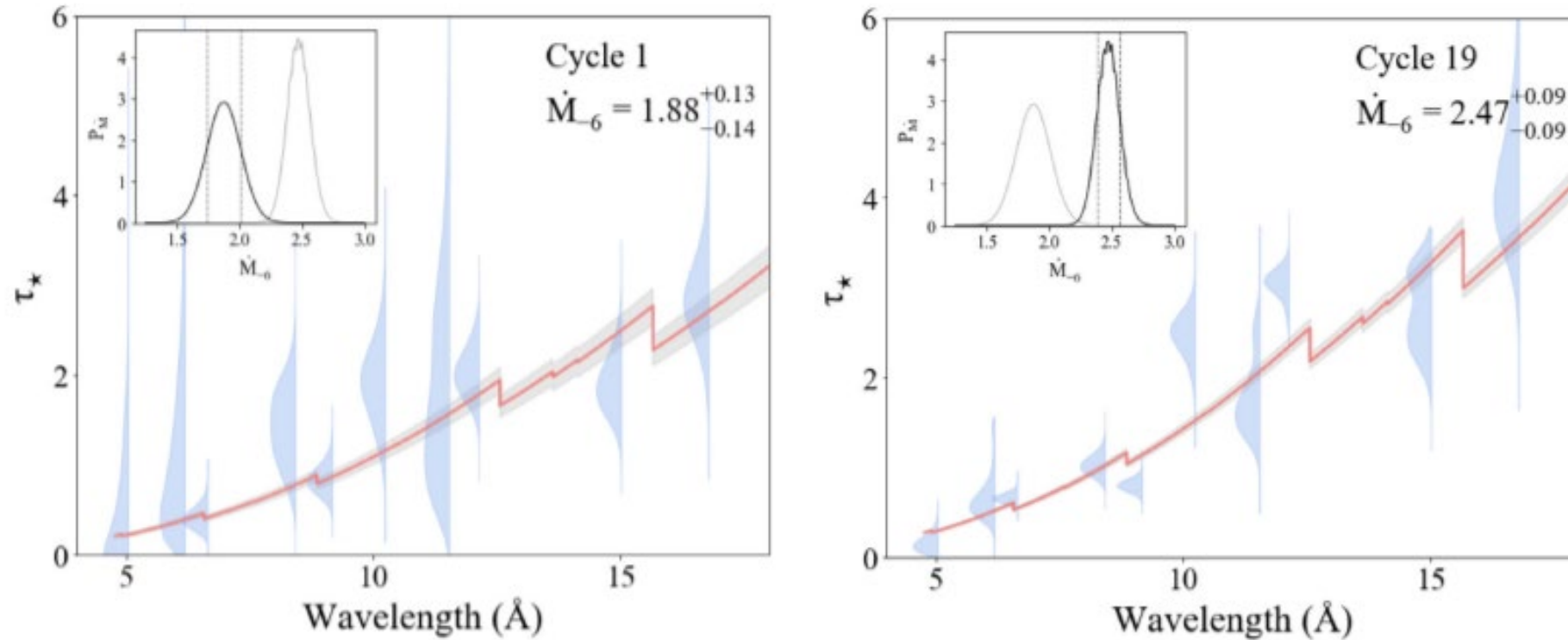


Petit et al., 2015

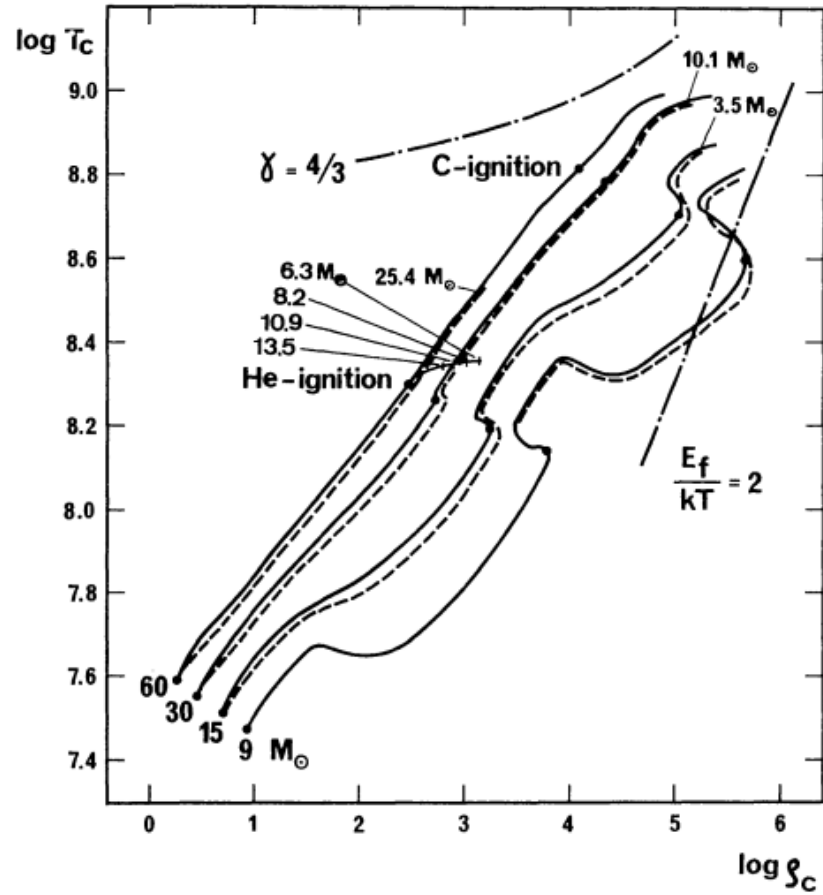


Erba et al., 2021

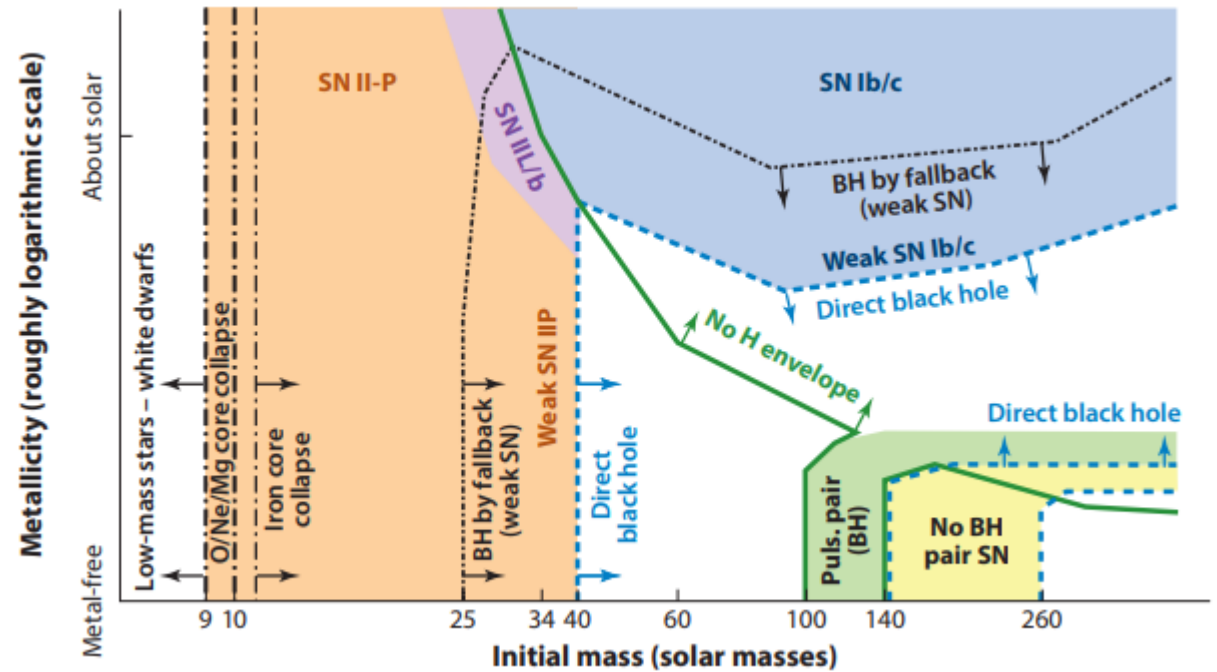
New timescales of variability?



These are fundamental questions



Chiosi & Maeder, 1986



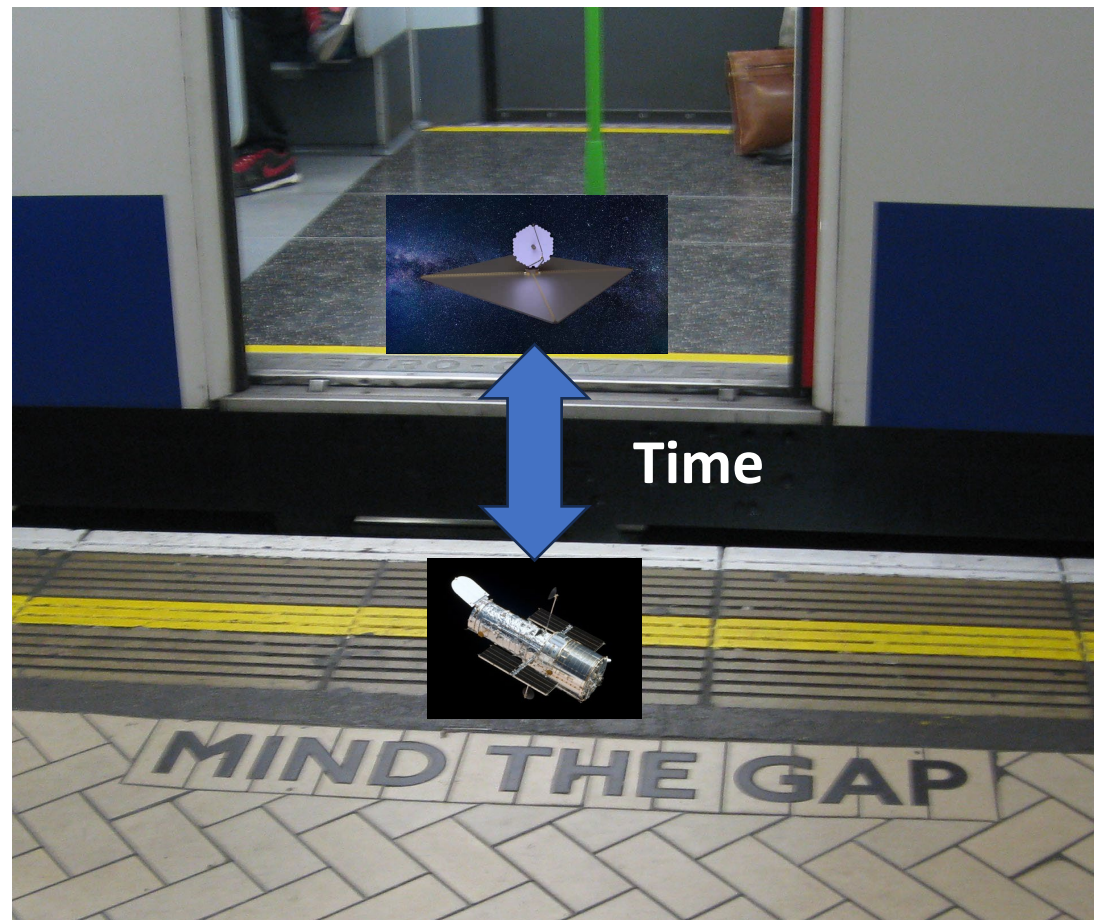
Smith, 2014

The name of the game...

... is time-domain.

To probe the multi-scale spatial and temporal properties of massive star winds, we must develop an *agile* suite of observing tools that can deliver *precision*, short *cadence*, and a long *temporal baseline*.

Mind the gap



Mind the gap

