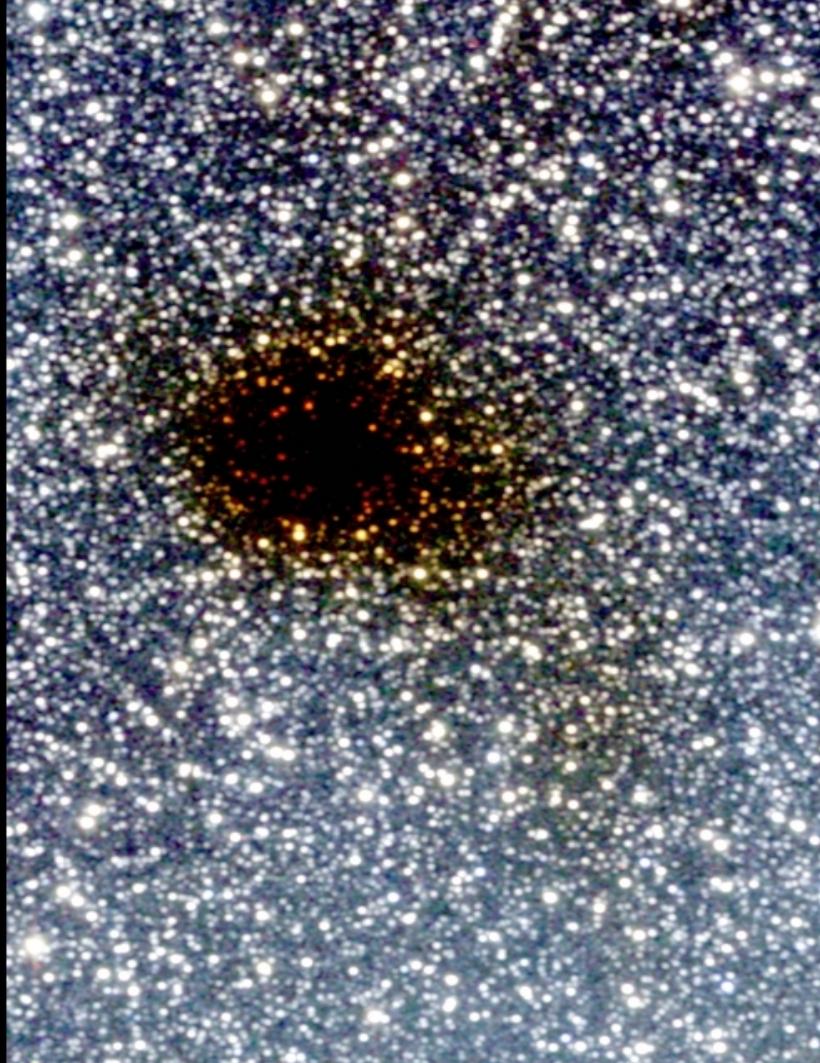


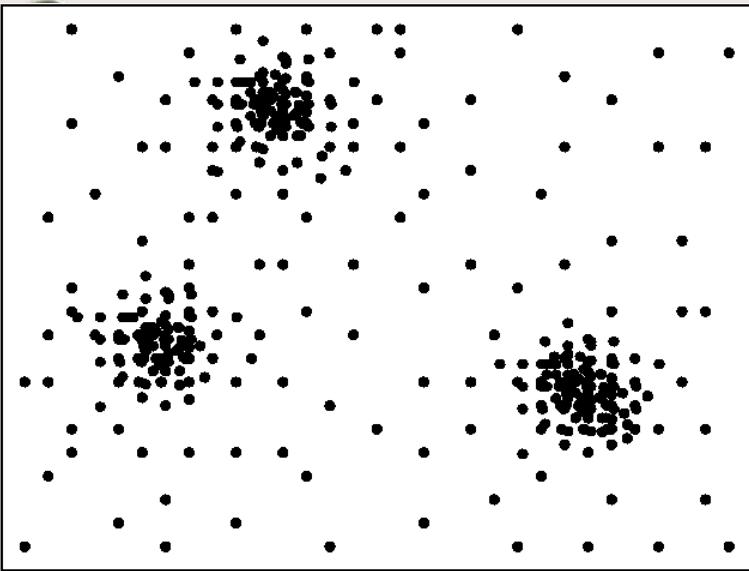


# The Dark Cloud FeSt 1-457

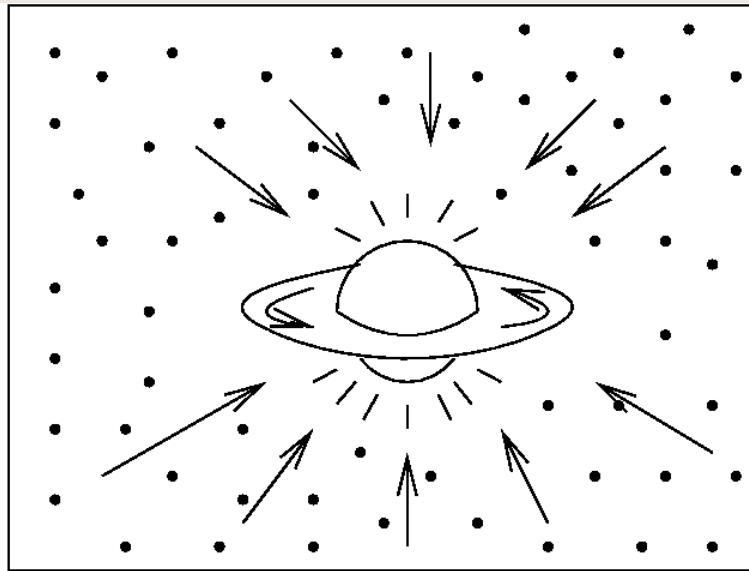


Two Micron All Sky Survey  
– Southern Facility –  
2MASS Atlas Image

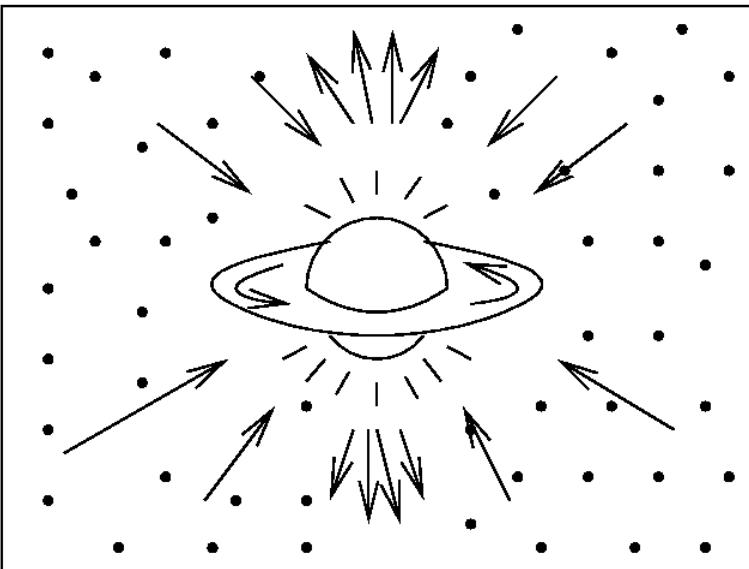
Infrared Processing and Analysis Center & University of Massachusetts



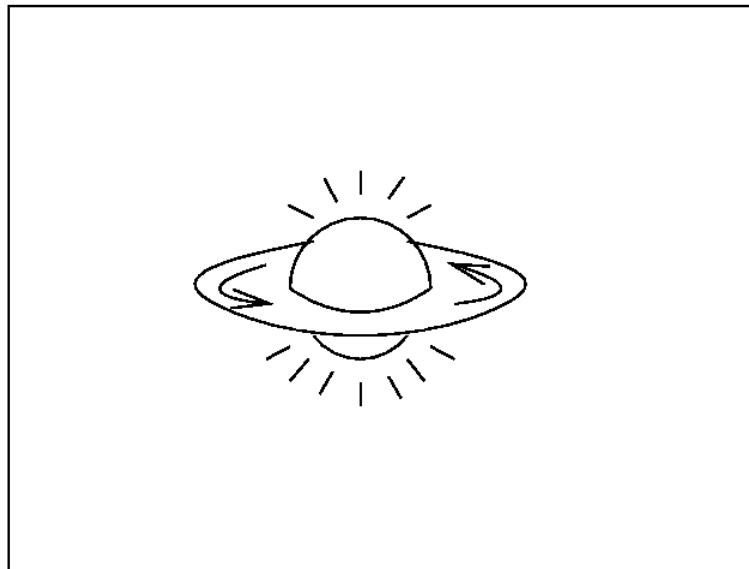
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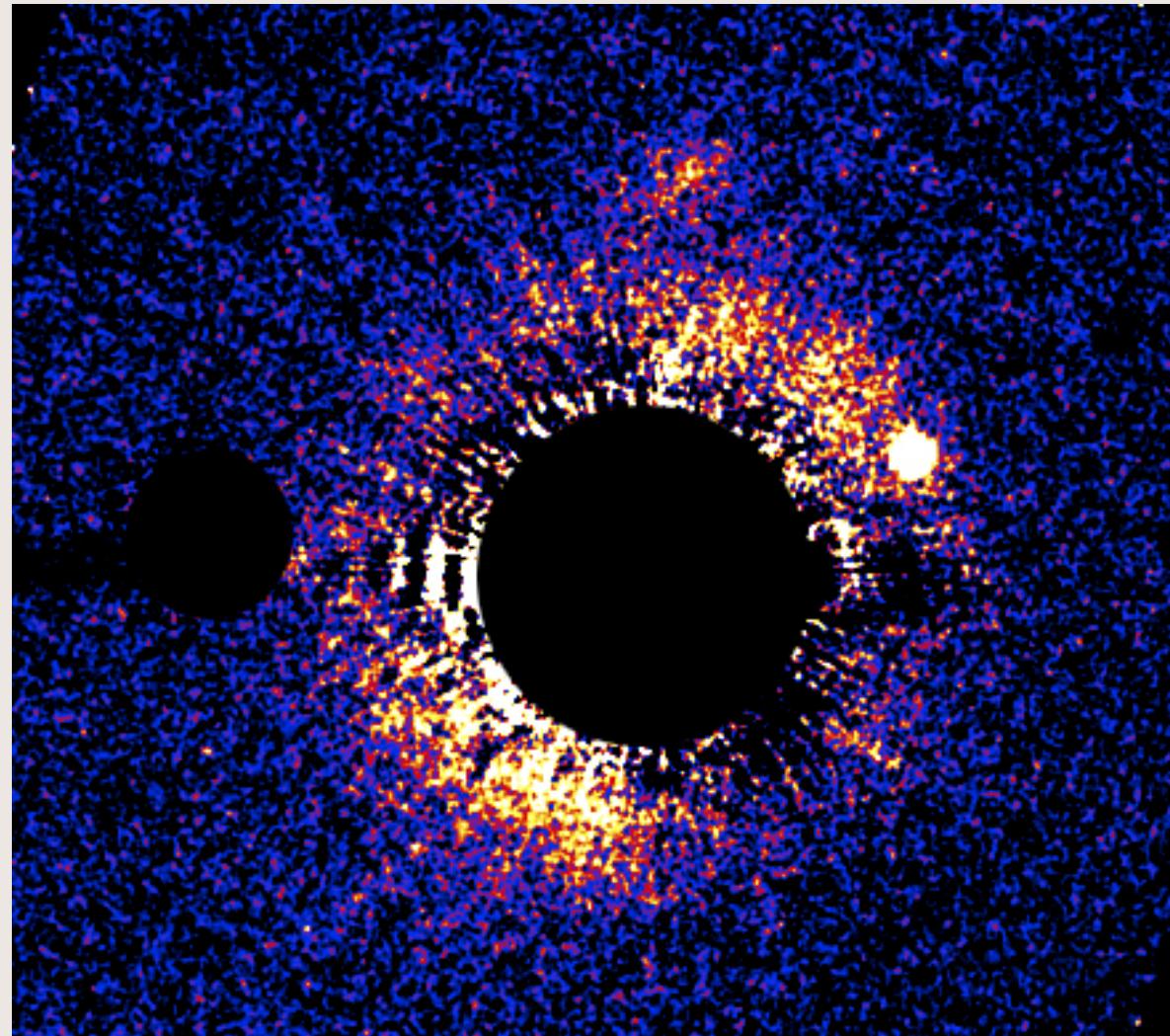
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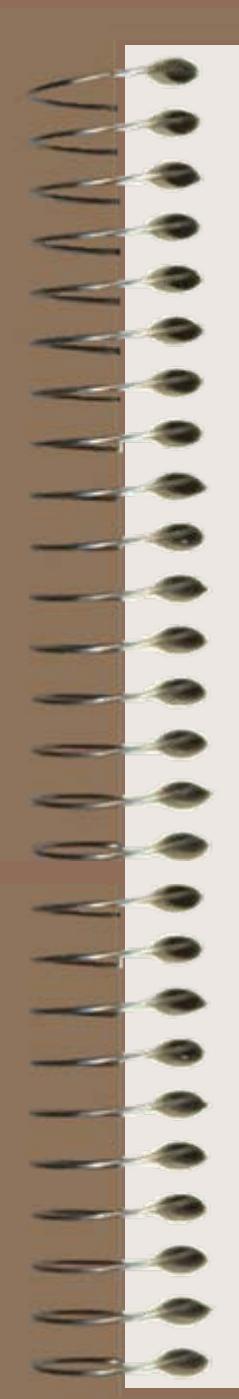
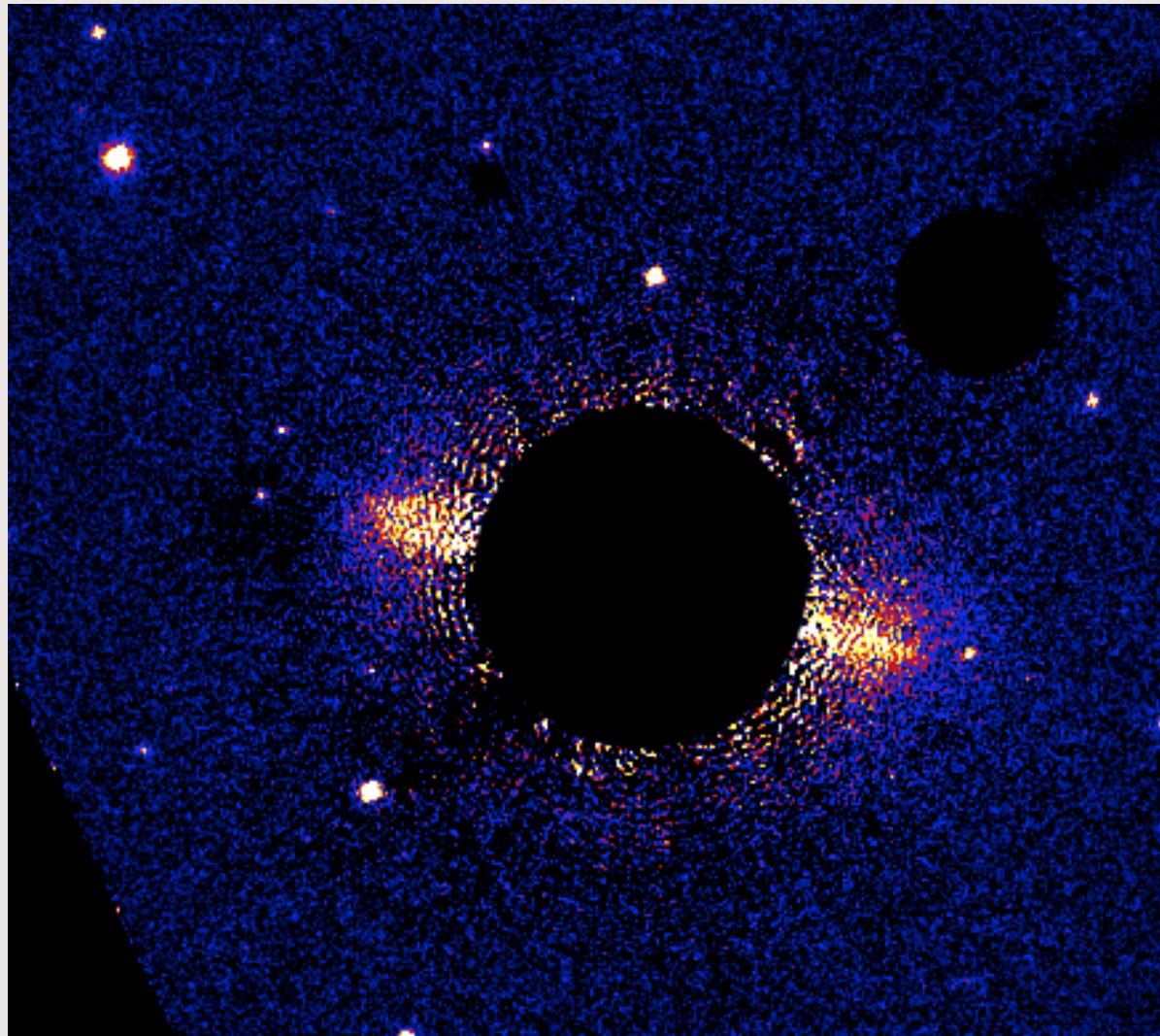


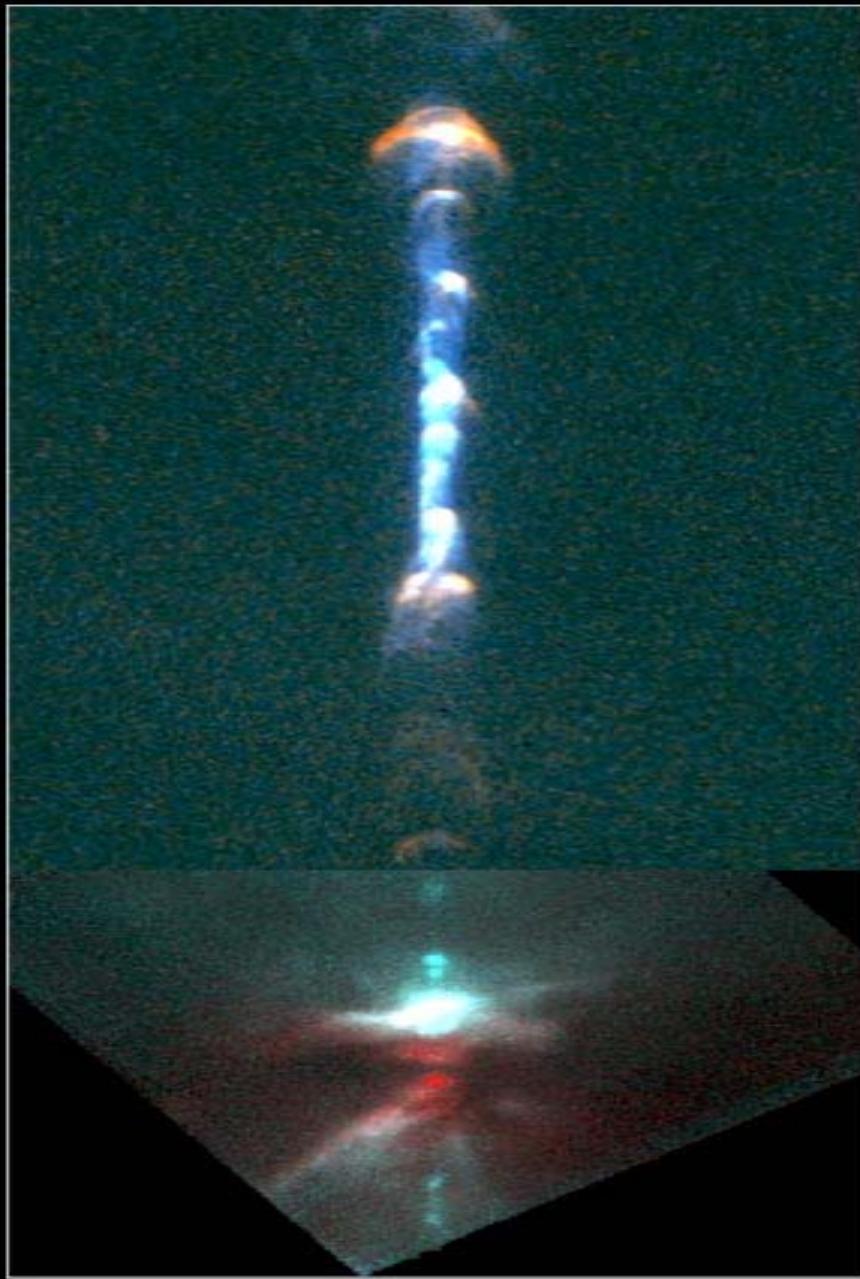
c.



d.







Visible • WFPC2

Infrared • NICMOS

**HH111**  
Hubble Space Telescope  
WFPC2 • NICMOS

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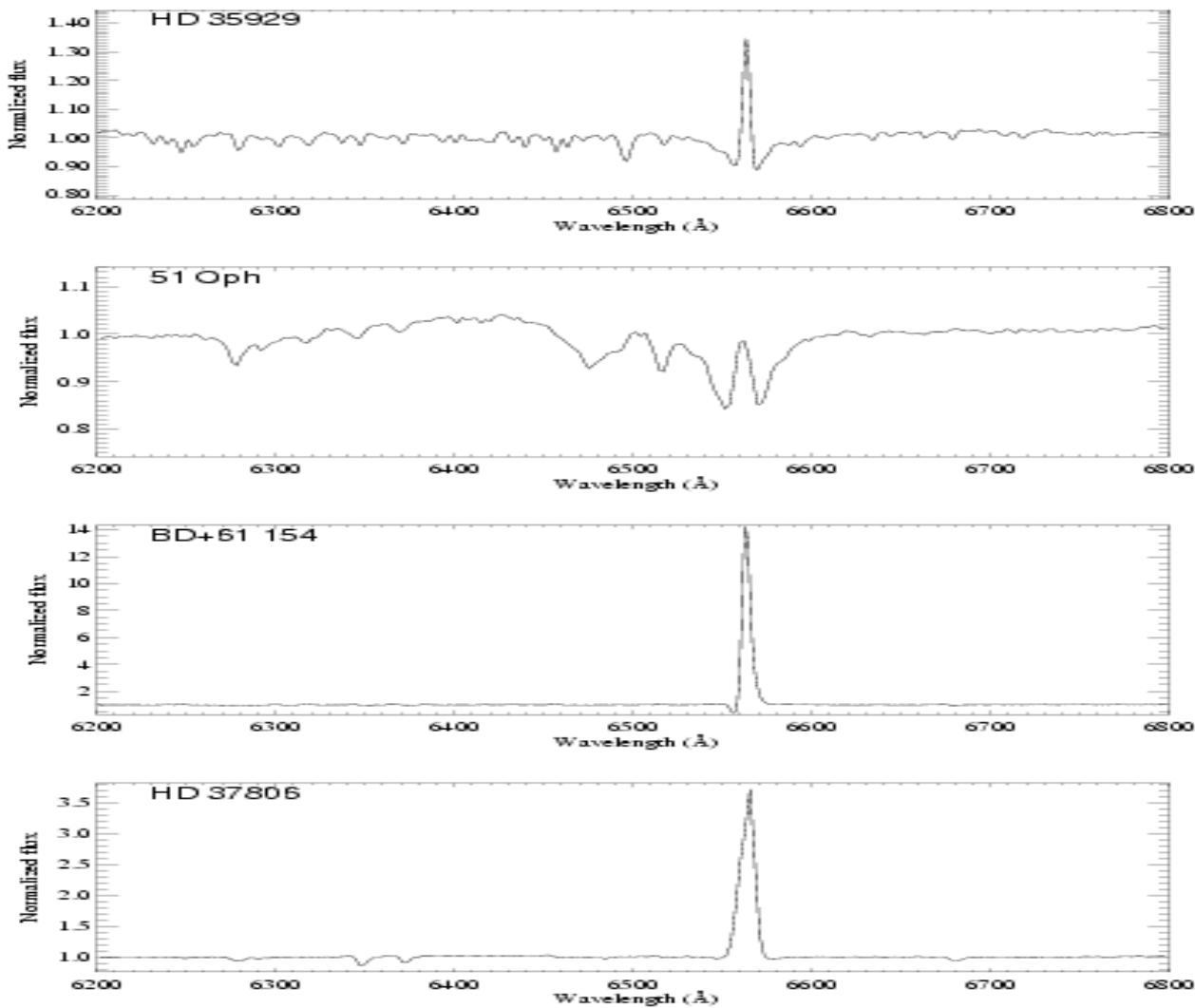


Figure A.1: continued

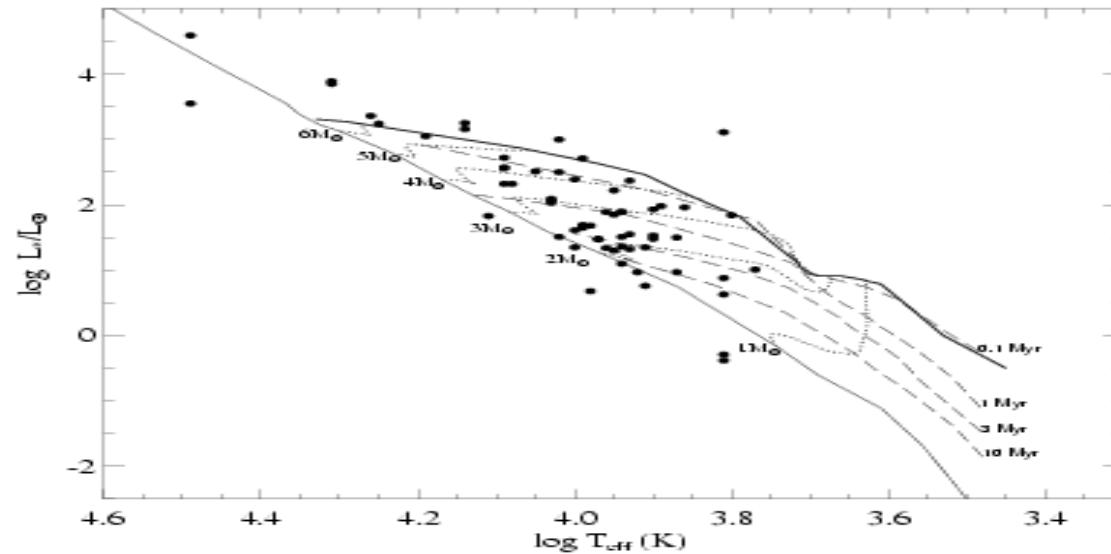


Figure 2.1: The HR diagram for Herbig Ae/Be stars. The pre-main sequence evolutionary tracks for different masses (dotted lines) and isochrones for different ages (dashed lines) are from Palla & Stahler (1993). The thick solid line represents the birthline for an accretion rate  $\dot{M}_{\text{acc}}$  of  $10^{-5} M_\odot \text{yr}^{-1}$ .

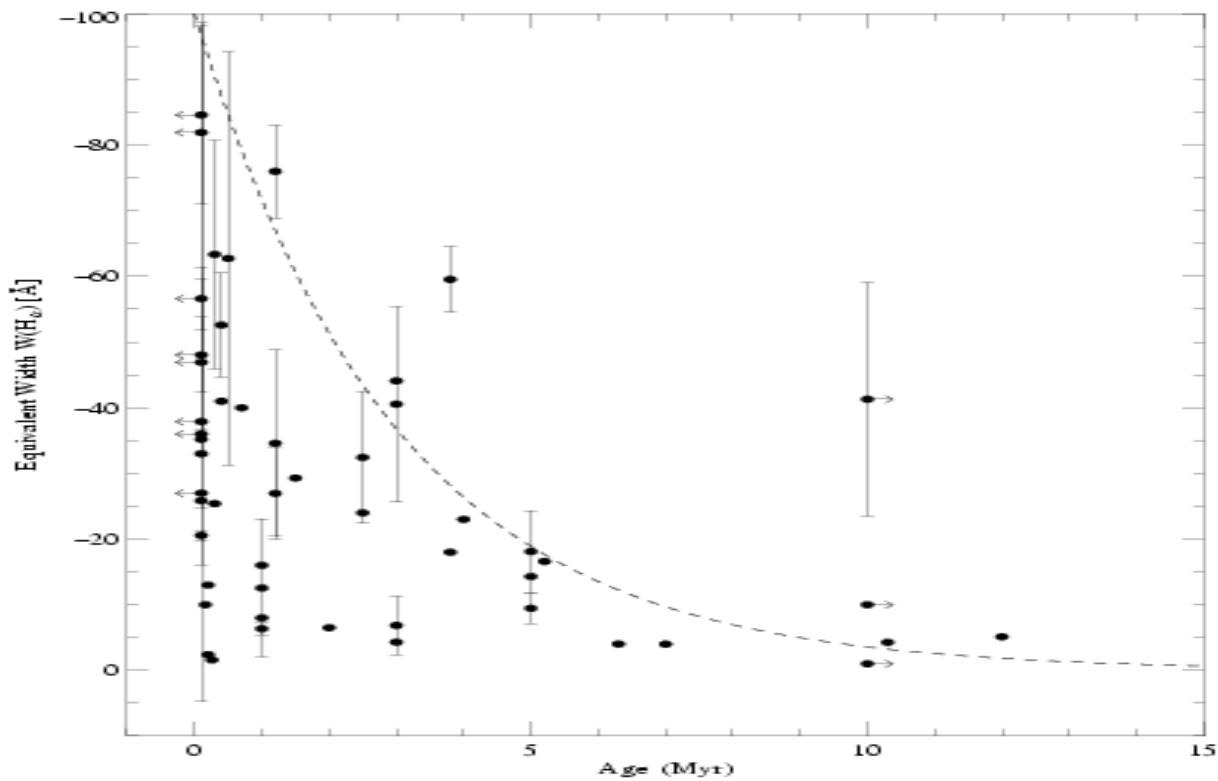


Figure 2.2:  $H\alpha$  equivalent widths of Herbig Ae/Be stars plotted against derived stellar ages. Error bars in  $W(H\alpha)$  represents the dispersion in the equivalent width measurements given in Table 2.3. The dashed line is of the functional form  $W = W(0)e^{-age/\tau}$  with  $W(0) = -100$  and  $\tau = 3Myr$ .