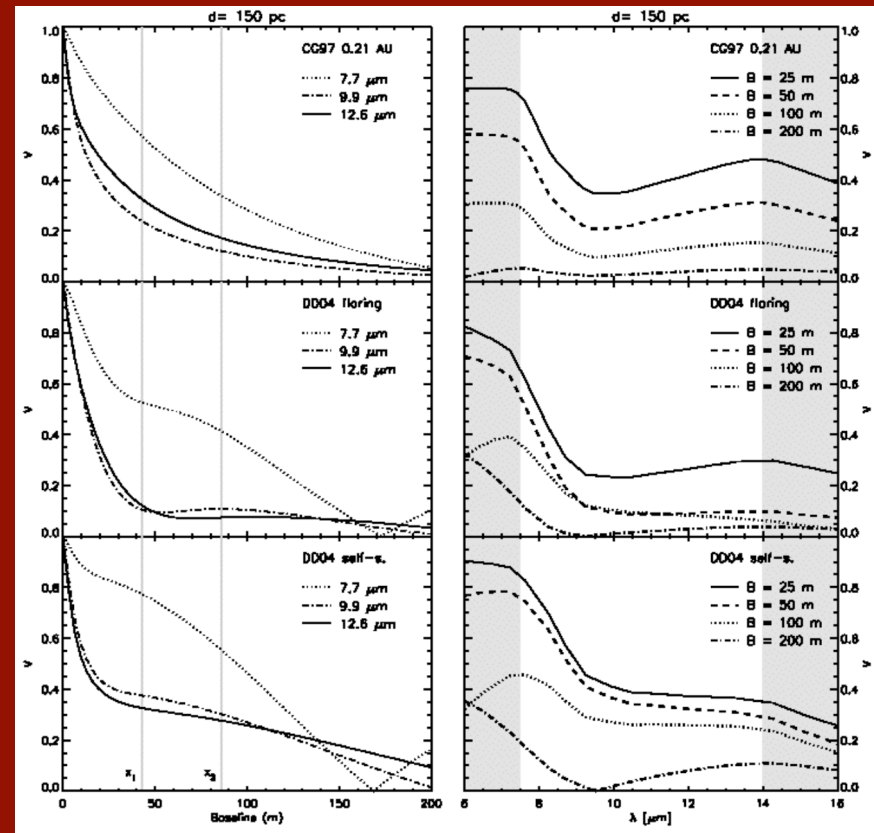
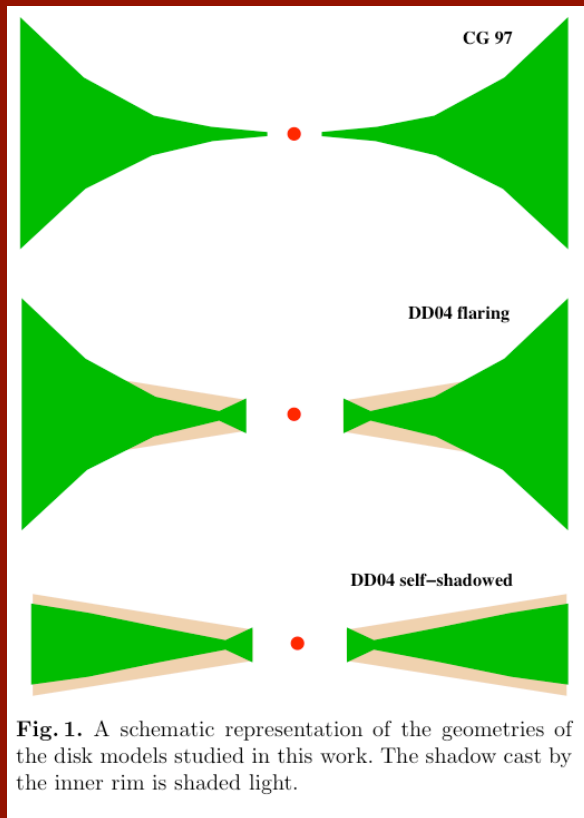


Circumstellar discs around Herbig Ae/Be stars: *verifying self-shadowing models by correlating AMBER and MIDI observations*



Dullemond & Dominik 2004

Van Boekel et al. 2005

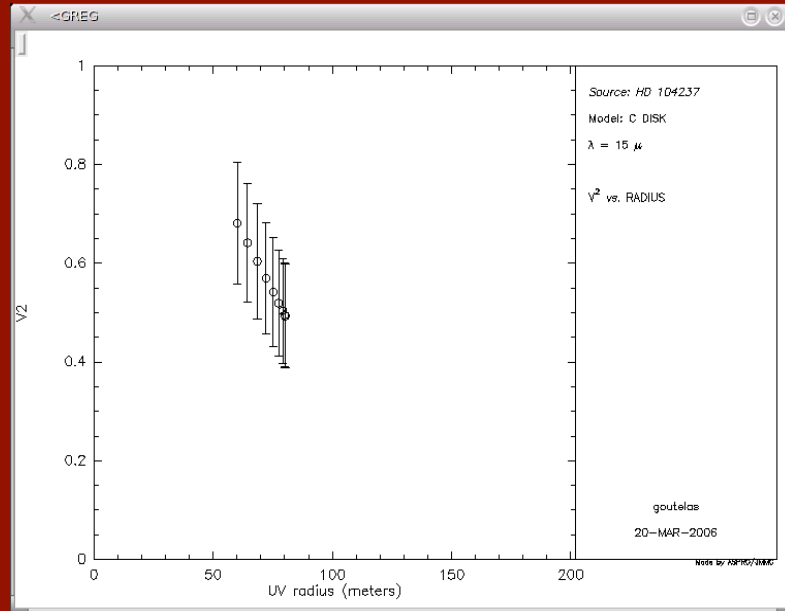
Deirdre, Gwendolyn, Rachel and Vanessa

Sample: 13 Herbig Ae/Be stars in total

8 flared (group I) - 5 flat discs (group II) - 5 already observed (Leinert et al. 2004)

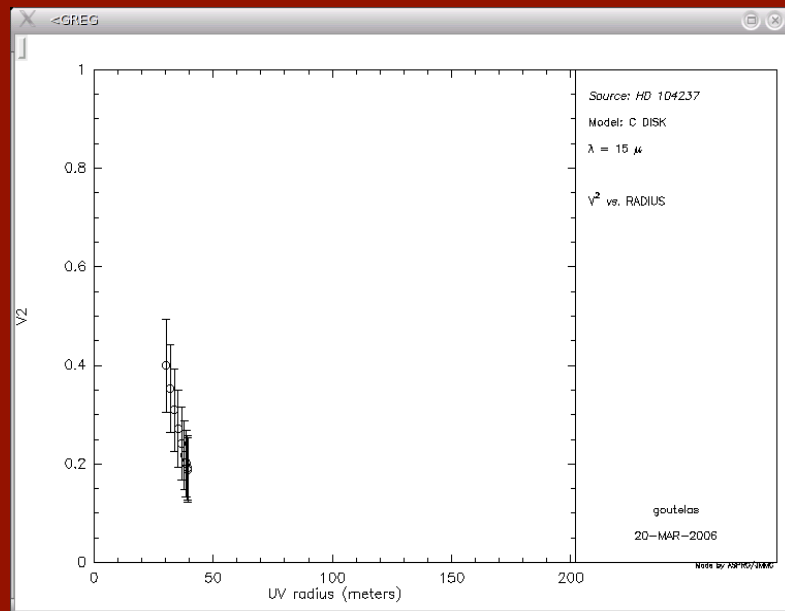
=> 3 objects for this semester, 5 for next

Star	Group	H mag	Flux 12um (mag)	Silicate Feature	Calibration Star
AB Aur	I	5.21	27.2 Jy (0.421)	emission	HD35620 (MIDI) HD32683 (MIDI) HD34790 (A) HD34499 (A)
HD100453	I	6.32	7.2 Jy (1.89)	absent	HD102461 (MIDI) HD96918 (MIDI) HD101976 (A) HD102756 (A)
HD104237	II	5.14	23.6 Jy (0.595)	emission	HD105340 (MIDI) HD92682 (MIDI) HD106911 (A) HD101727 (A)

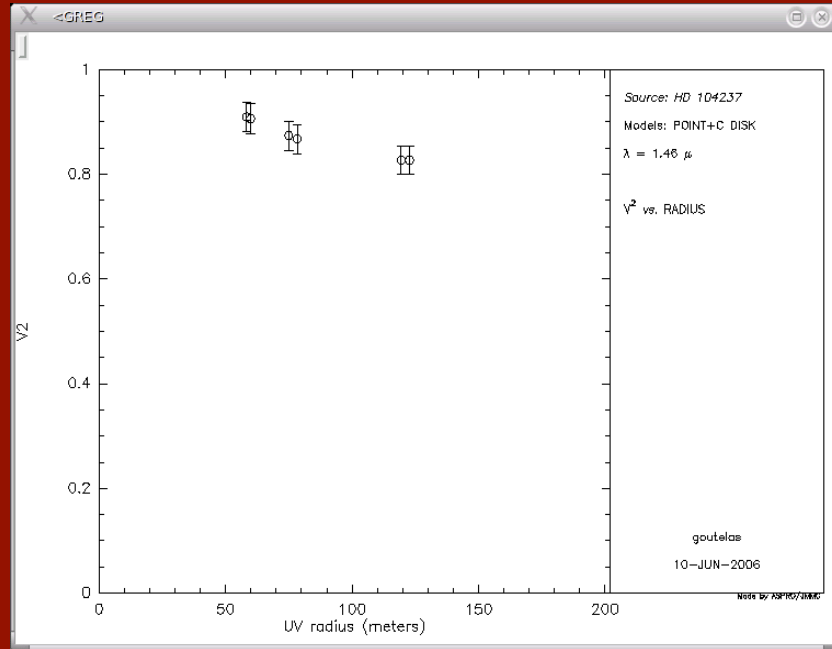


**MIDI: Outer disc region
containing warm dust
(3 to 20 AU or 0.02 to 0.13 arcsec)**

*Disc size at 15 micron:
~ 0.02 arcsec (3 AU): UT1-UT3*

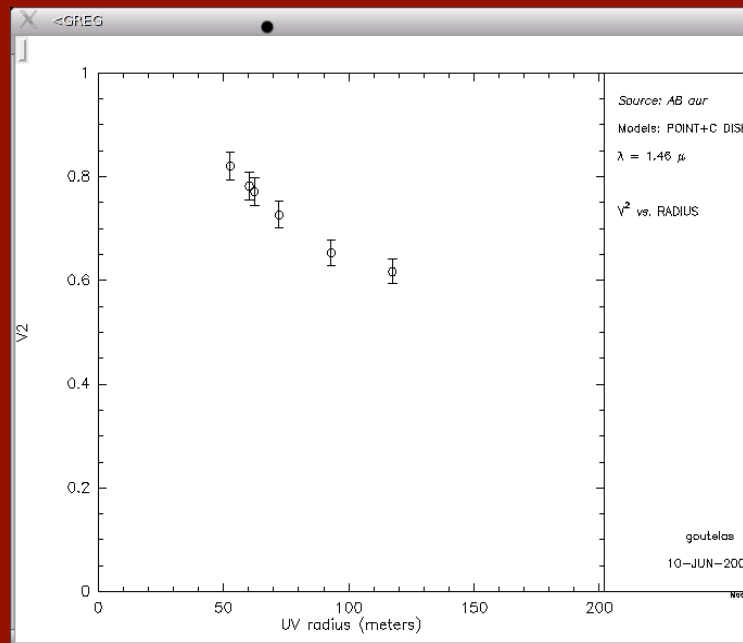


*Disc size at 15 micron:
~ 0.06 arcsec (9AU): UT2-UT3*



**AMBER: inner disc region
containing hot dust (inner wall?)
(Size 0.3 to 0.8 AU 3 to 6 mas)
UT1-UT3-UT4**

*HD104237: group II, lower disc
contribution*



*AB Aur: group I, higher disc
contribution*

What do we propose for the VLTI?

Instrument	Baseline	Wavelength	Amount of vis. points	Sampling	Total time needed
AMBER	UT1-UT3-UT4	1.46 micron Low resolution	2 per star	90 min	3 * 2h = 6h
MIDI	UT1-UT3 UT2-UT3	7-13 micron prism	2 per star	60 min	3 * 2 * 2h = 12h

AMBER: location and relative brightness of inner disc rim

MIDI: spectrally resolved information about region where flaring takes place.

By correlating both results we want to constrain disc models.