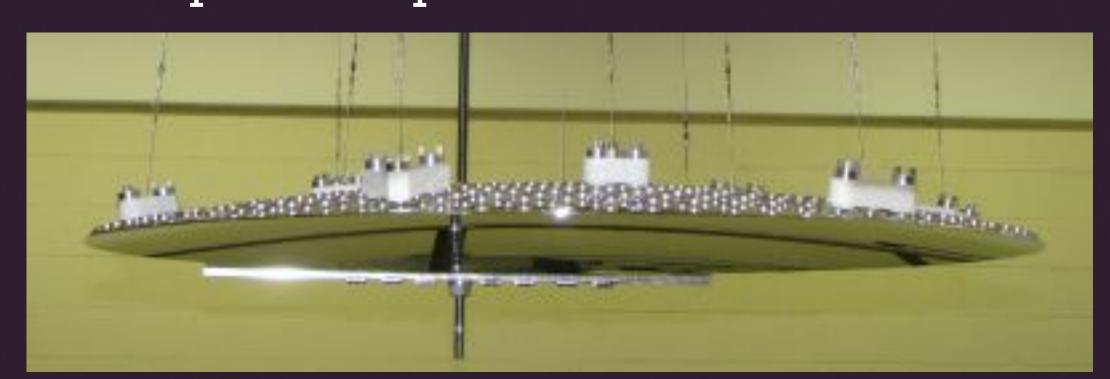
Follow us at visao.as.arizona.edu

Adaptive Secondary Mirror Spatial Frequencies Down to ~29cm





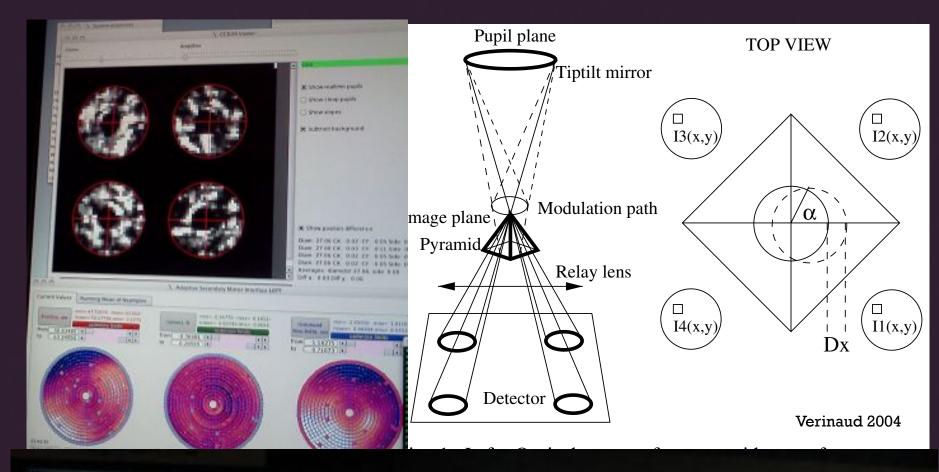
Comounted Science Cameras

Simultaneous Visible and NIR Imaging

6.5m primary
85.1cm ASM
585 actuators
24cm pitch

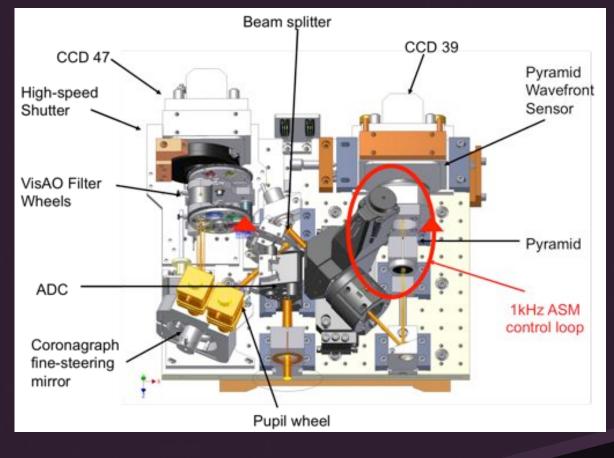
Pyramid Wavefront Sensor

Faint Guide Star Science



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es (0)	63 W	1	12. 73	3 8	00	00:	影影	影影	要が
~ .0i	@ (8)		000	00	00	影影	1.50%	Se (0)	- 10°

AO Correction at Visible Wavelengths

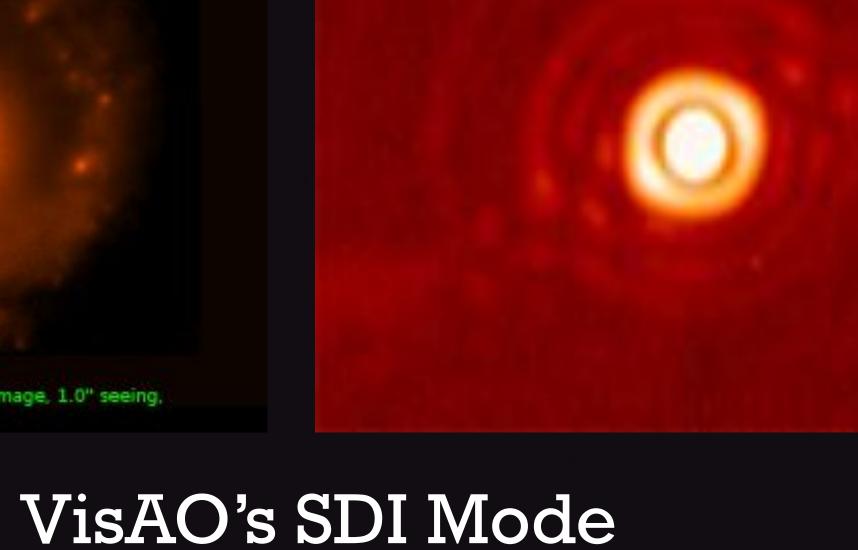


		Bin 1	Bin 2	Bin 3	Bin 4	Bin 5
nt	Maximum number of controlled KL modes	250	100	66	28	21
X	Maximum Guide Star R magnitude	8.4	12.7	14.2	15.6	16.0
0						

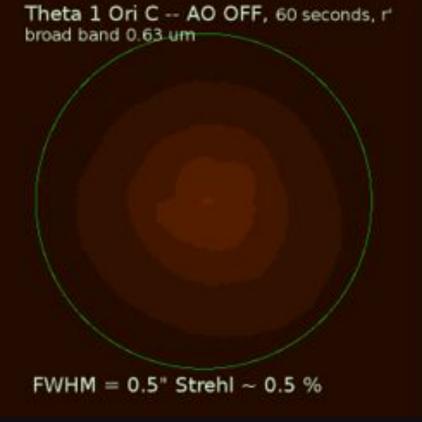
AO COLLECTION AT VISIDIE VVAVETENGINS

Clio NIR (1-5µm) Performance

MagAO guided on R-15 core. 0.25" image. 1.0" seeing. 30x30" H band 17 min. on Clio



VisAO (0.63-1µm) Performance



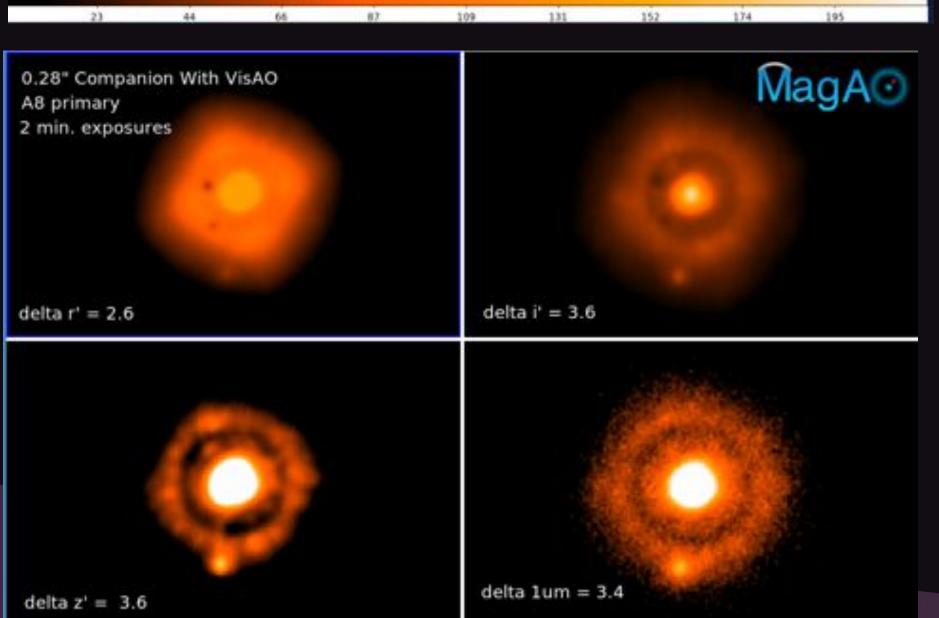
with PWFS

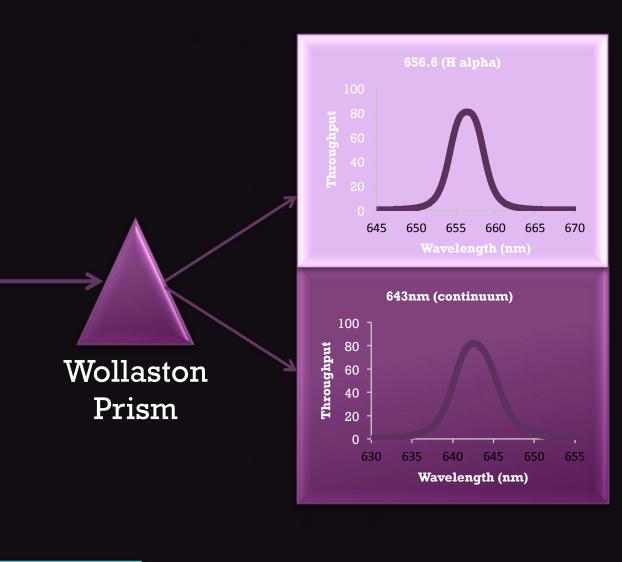
ASM on

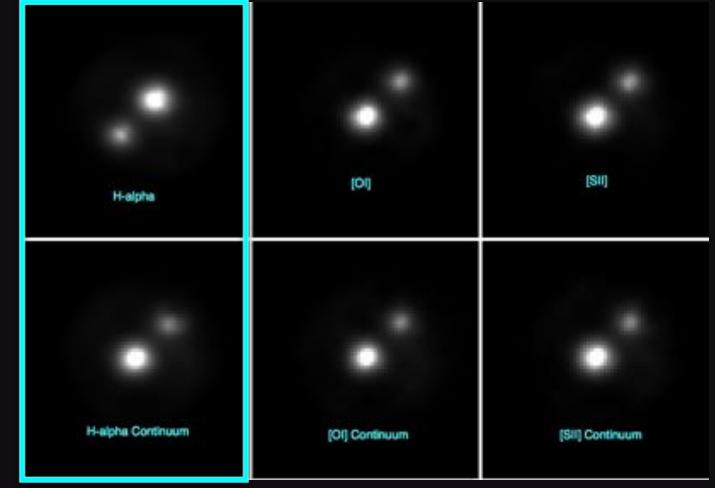
Magellan

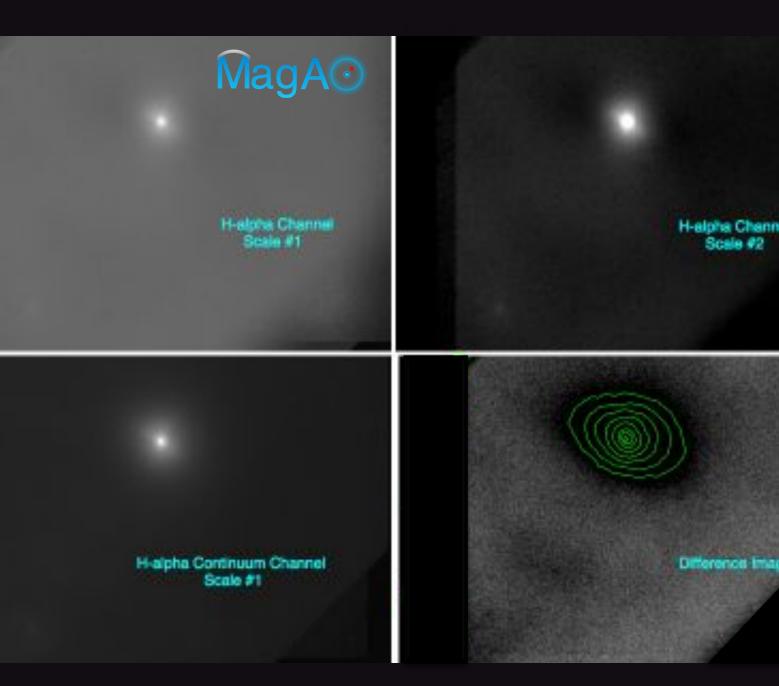


0.5 % FWHM	FWHM = 0.027" Strehl~20%			
AO ON 1 KHz, 250 modes, 0.63 um 53% Strehl 0.021" FWH 0.023 msec narrow-band [HM 44% Strehl 0.025" FWHM			
Theta 1 Ori C A and B a V=5 mag 0.03" Binary	broad band filter 1.12 airmasses with triple ADC			
AO OFF (but ASM in best shape) r', 60 sec ~1% Strehl 0.5" FWHM				
Without MagAO correction the binary is no resolved and the image is 20 times less sharp and much fainter look in the nex box to the right for a deeper stretch>	NOTE this box is 0.7" tall. The inner green			
	AO ON 1 KHz, 250 modes, 0.63 um 53% Strehl 0.021" FWH 0.023 msec narrow-band 1 v=5 mag 0.03" Binary AO OFF (but ASM in best shape) r', 60 sec ~1% Strehl 0.5" FWHM Without MagAO correction the binary is no resolved and the image is 20 times less sharp ~ and much fainter ~ look in the new			









First disk imaged in silhouette from the ground



HST ACS Ricci 2008

MagA

First Light Results

Nov 18-Dec 7 2012

Kate Follette

On behalf of the MagAO Commissioning Team

Arizona: Laird Close (PI), Jared Males, Katie Morzinski, Phil Hinz, TJ Rodigas, Derek Kopon, Ya-Lin Wu

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