Massive Companions to HzRGs at z~1.5

Audrey Galametz

(ESO, JPL, Observatoire de Strasbourg)

Team:

C. De Breuck, J. Vernet, M. Allen, C. Marmo, A. Omont, A. Rettura, N. Seymour, D. Stern, B. Rocca-Volmerange

Selection of the targets

Purpose of the project:

- Study clustering around HzRGs in the redshift range 1.5 < z < 2 using large FoV images

- The 3 radio galaxies

Radiogalaxy	z
7c1756 + 6520	1.48
7c1751+ 6809	1.54
7c1805 + 6332	1.84

Selection of the targets

Purpose of the project:

- Study clustering around HzRGs in the redshift range 1.5 < z < 2 using large FoV images

- The data

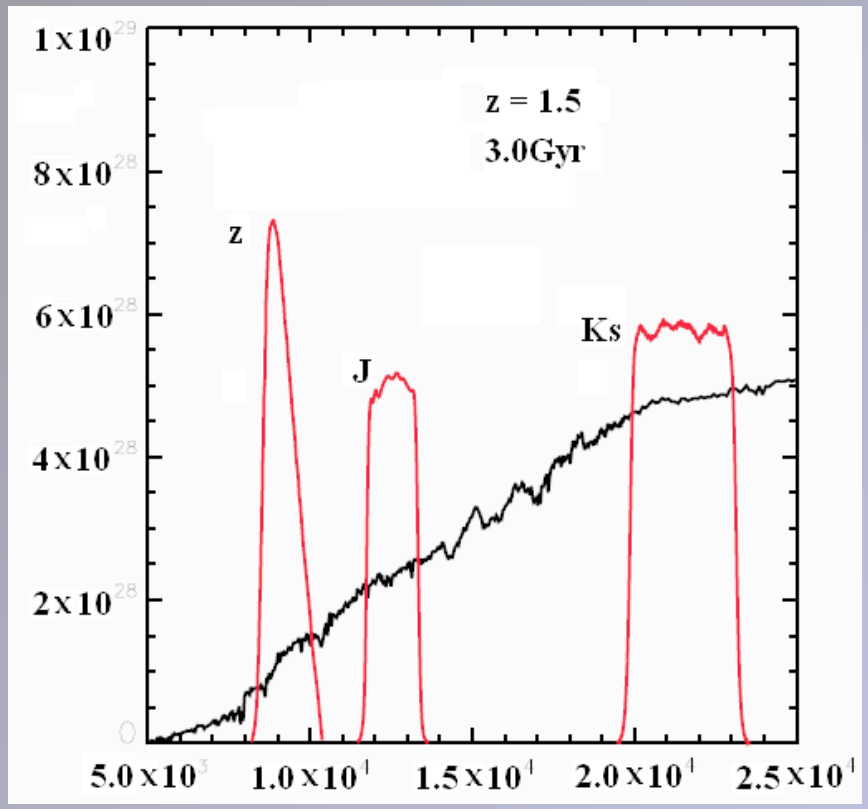
Camera	Filter	FoV (final mosaic)	Magnitude limit (Vega)
LFC / Palomar	z	25' x 25'	23.8
WIRCAM/CFHT	J	20' x 20'	22.9
WIRCAM/CFHT	Ks	20' x 20'	21
IRAC/*Spitzer*	3.6, 4.5, 5.8 and 8.0μm	~ 6' x 12'	17.1, 16.2, 13.9 and 12.9

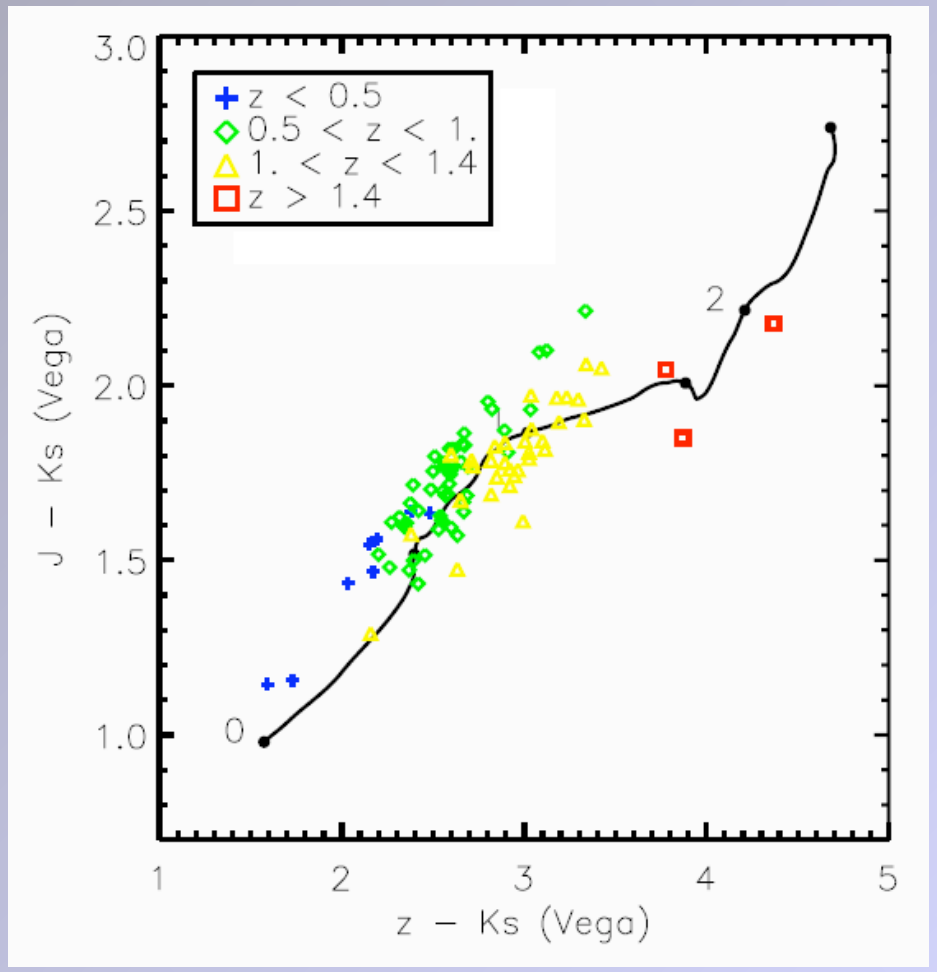
Optimal criteria for

Studies on the SEDs of ellipticals

PEGASE2

(Fioc & Rocca Volmerange 1999)





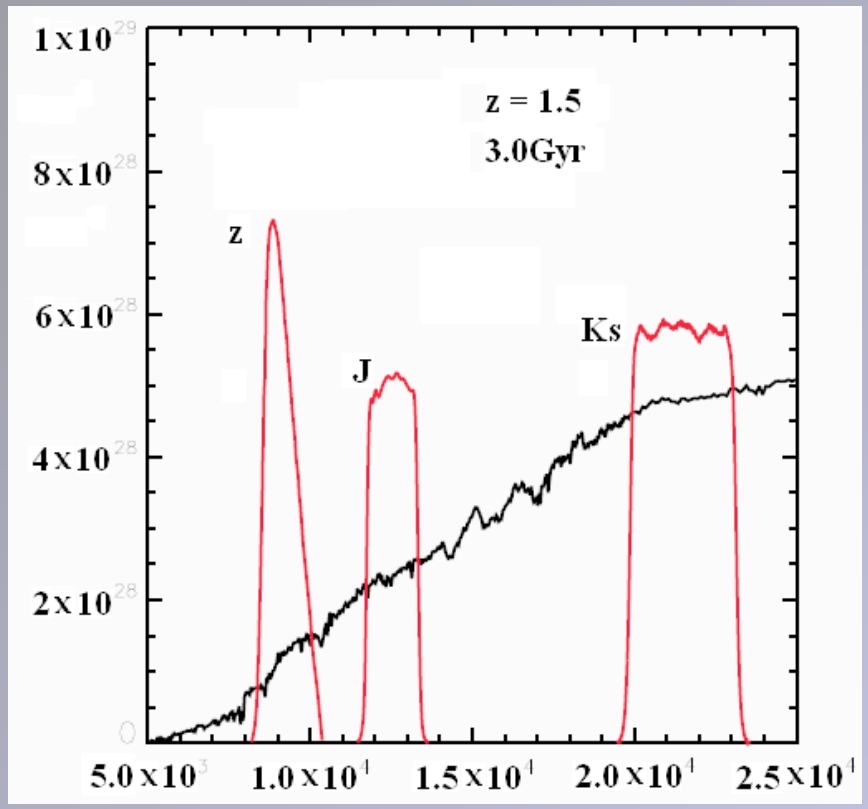
Grazian et al 2006 - GOODS MUSIC catalog

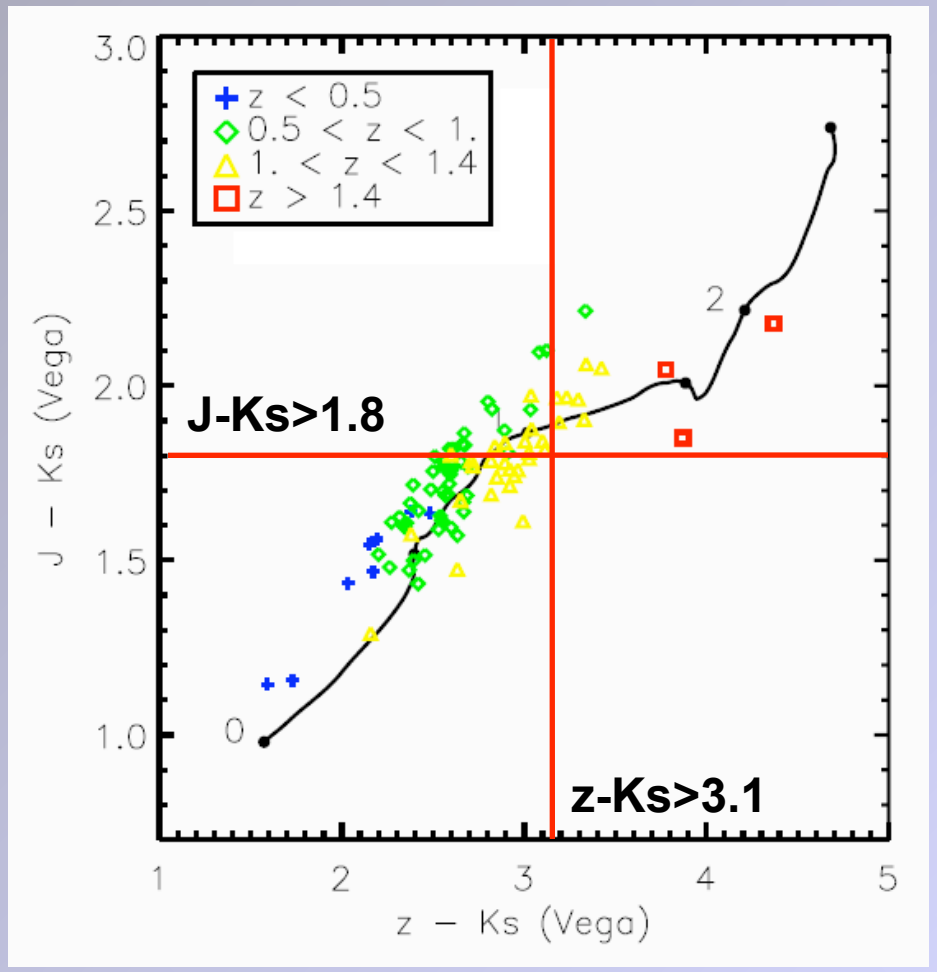
Optimal criteria for

Studies on the SEDs of ellipticals

PEGASE2

(Fioc & Rocca Volmerange 1999)

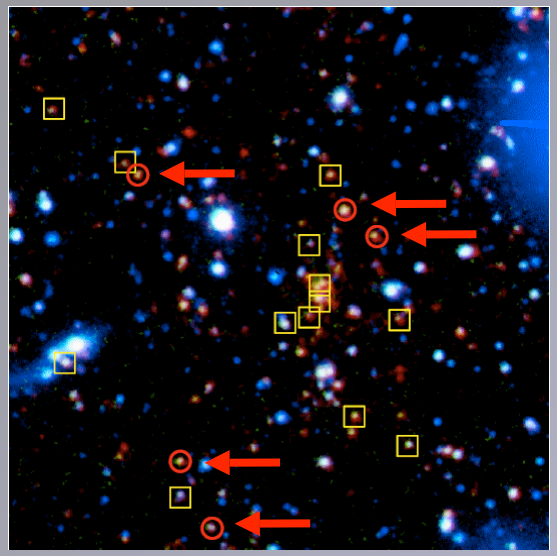




Grazian et al 2006 - GOODS MUSIC catalog

Reliability of the near infrared criteria

- ‘J-Ks > 1.8’ criterion

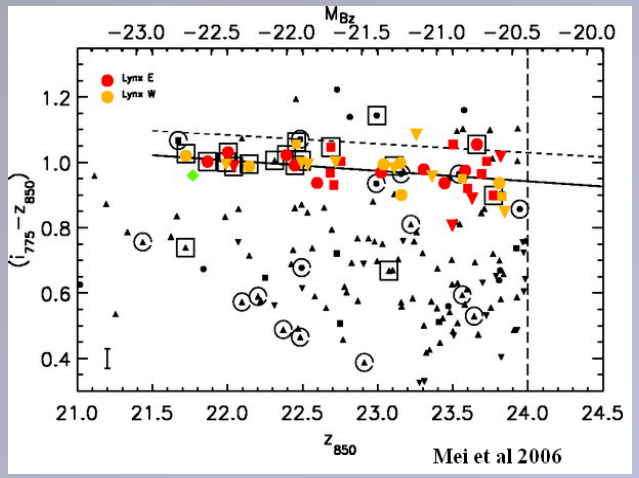


ID	z	J-Ks
2.152126	1.4172	1.80
2.110934	1.4147	2.63
2.084779	1.4153	1.99
2.046758	1.4166	1.83
2.121325	1.4028	1.93

Cf. Stanford et al 2005

Brodwin et al 2006

- ‘z-Ks > 3.1’ criterion



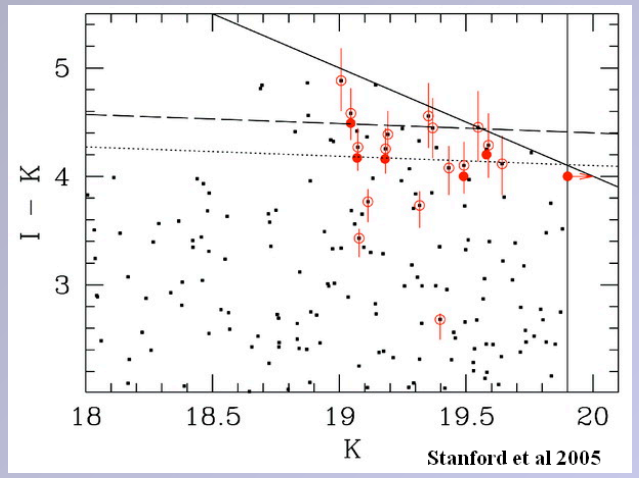
Mei et al 2006

z = 1 .26

i – z ~ 1.1 (Vega)

Consistent for

1 < z < 1.5



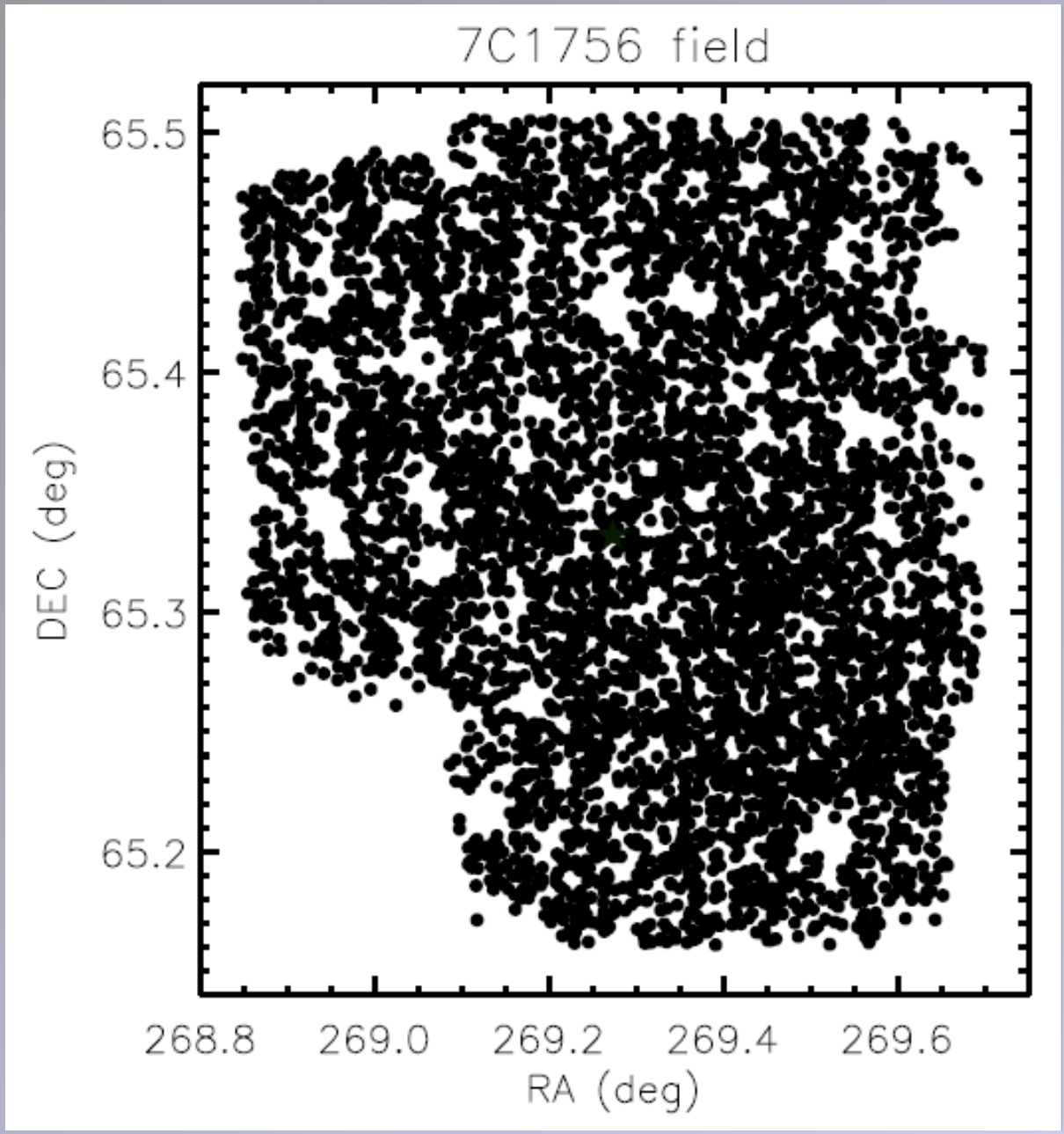
Stanford et al 2005

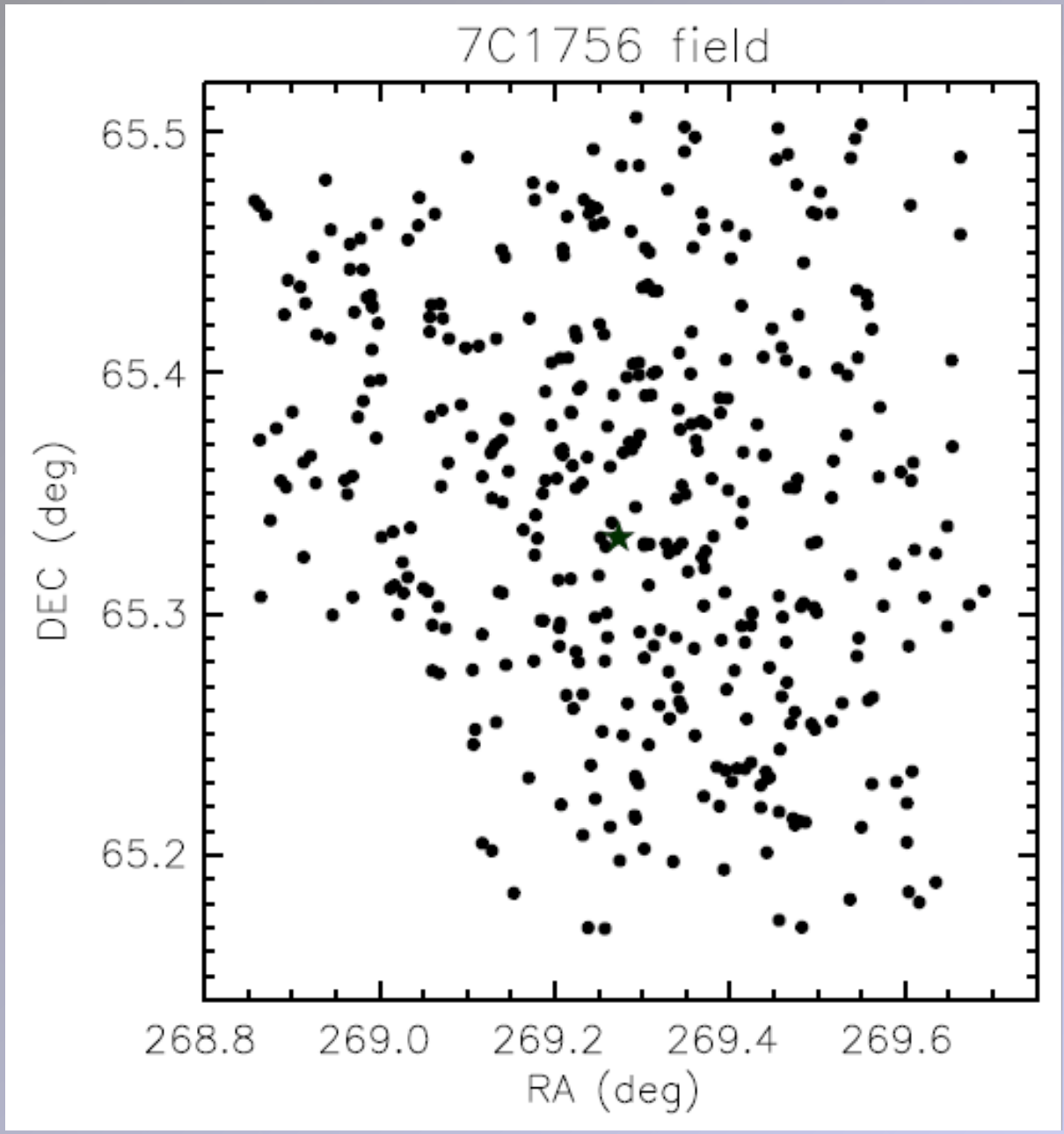
z = 1.45

I - K ~ 4.3 (Vega)

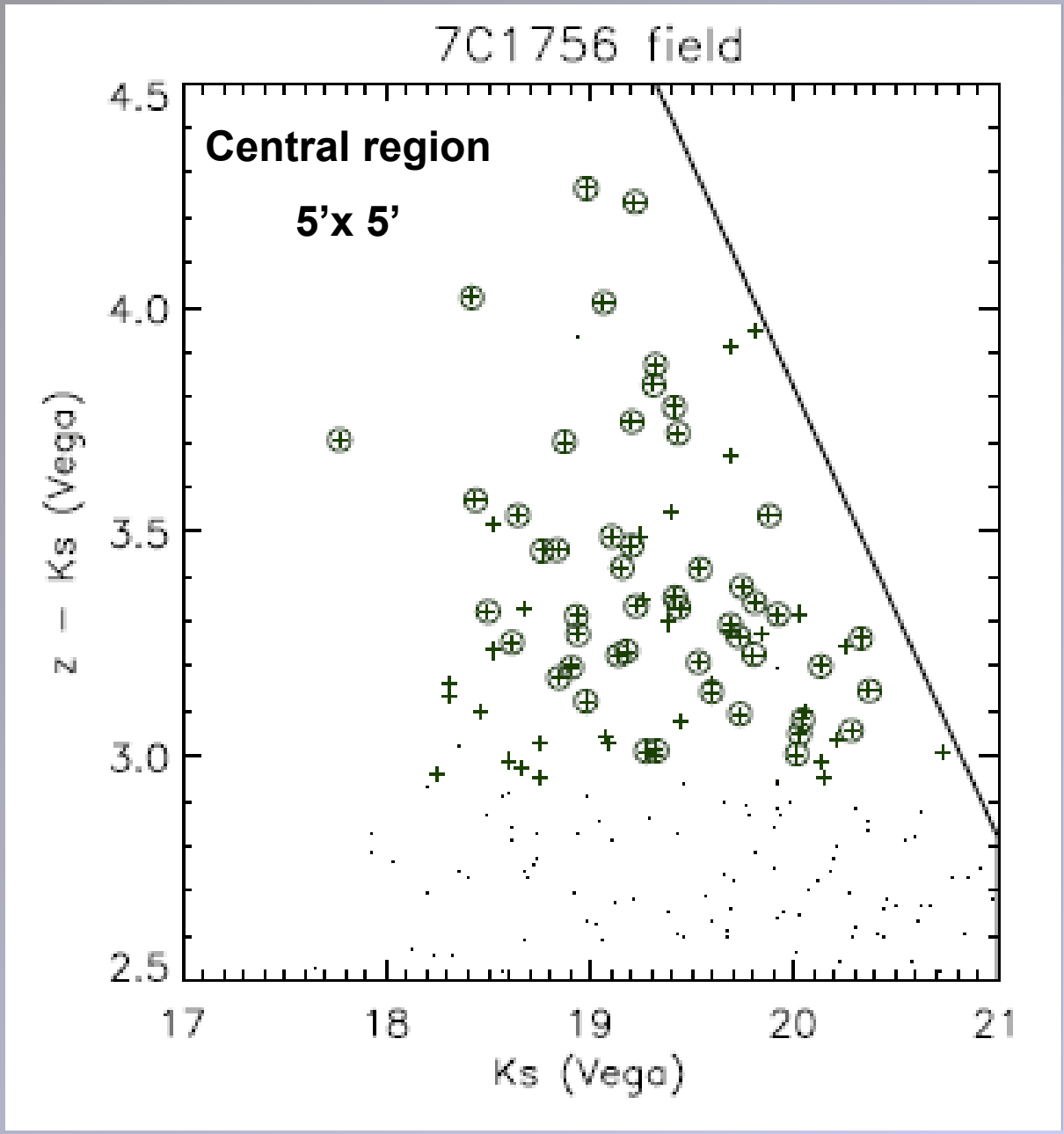
→ z – Ks ~ 3.2

→ Consistent with the criterion


7C1756 field
65.5
65.4
65.3
65.2
DEC (deg)
268.8
269.0
269.2
269.4
269.6
RA (deg)


7C1756 field
65.5
65.4
65.3
65.2
DEC (deg)
268.8
269.0
269.2
269.4
269.6
RA (deg)

z - Ks > 3.1 & J - Ks > 1.8

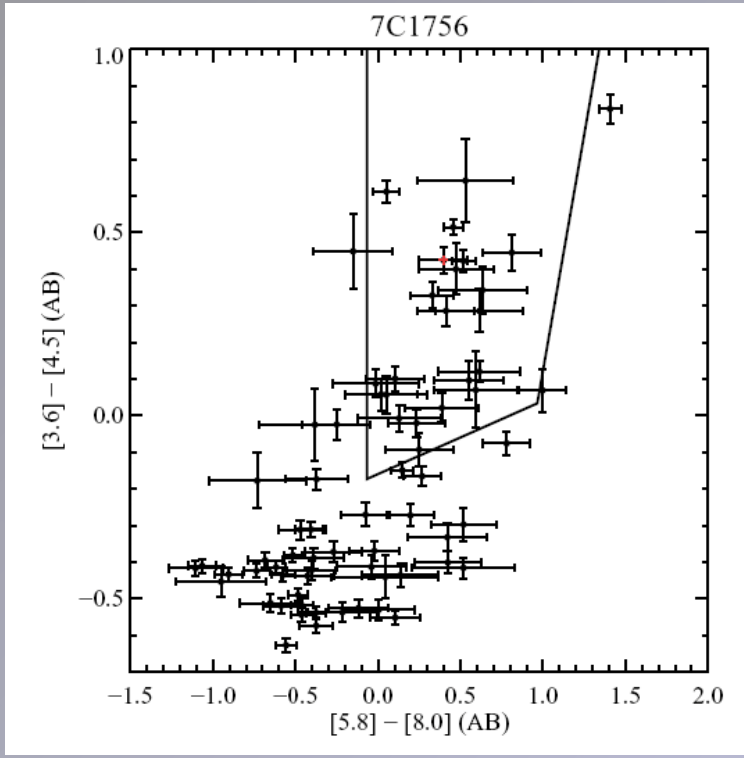


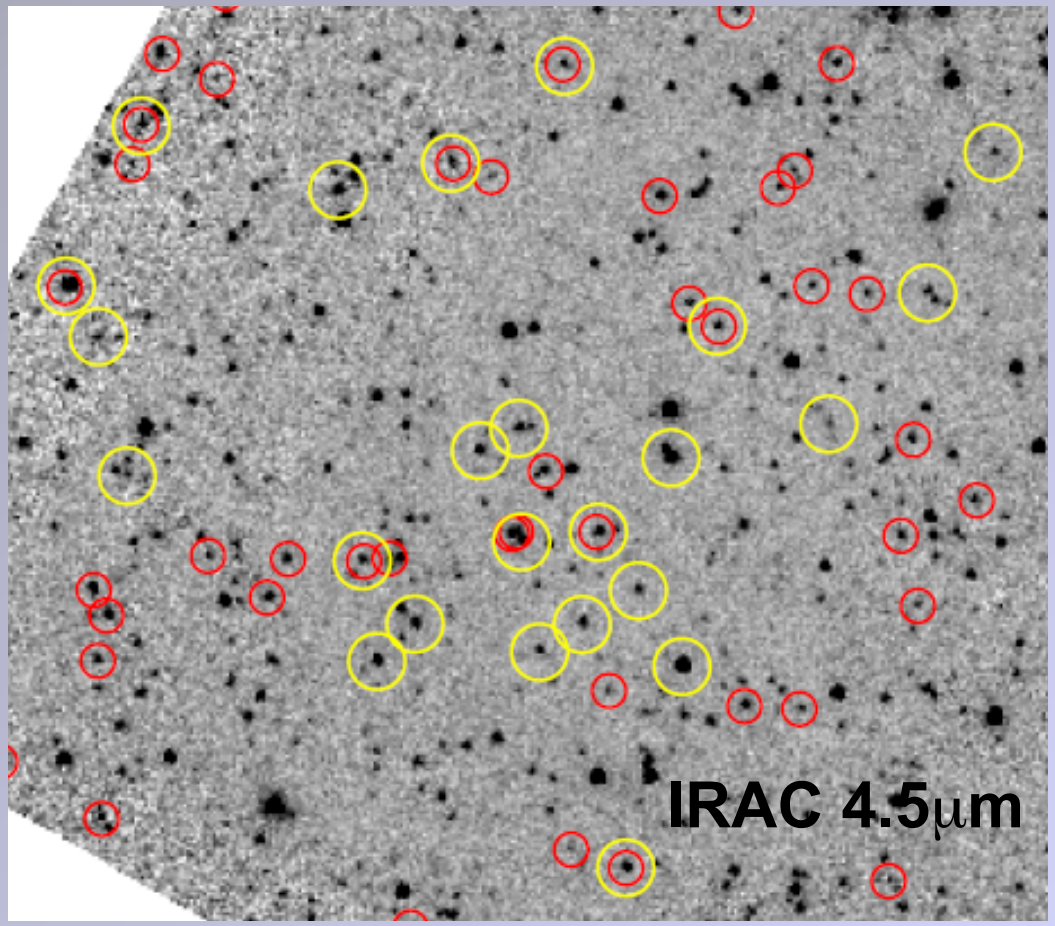
z - Ks > 3.1 & J - Ks > 1.8 & I1 - I2 > - 0.1

Cluster of AGNs ?

- Stern et al 2005 :

  → AGN candidates using IRAC bands





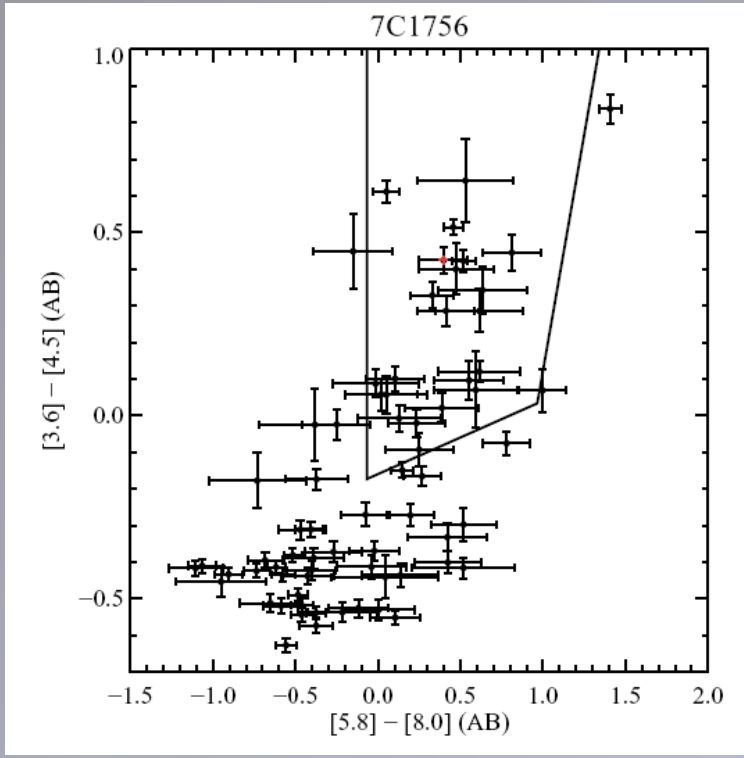
AGN candidates

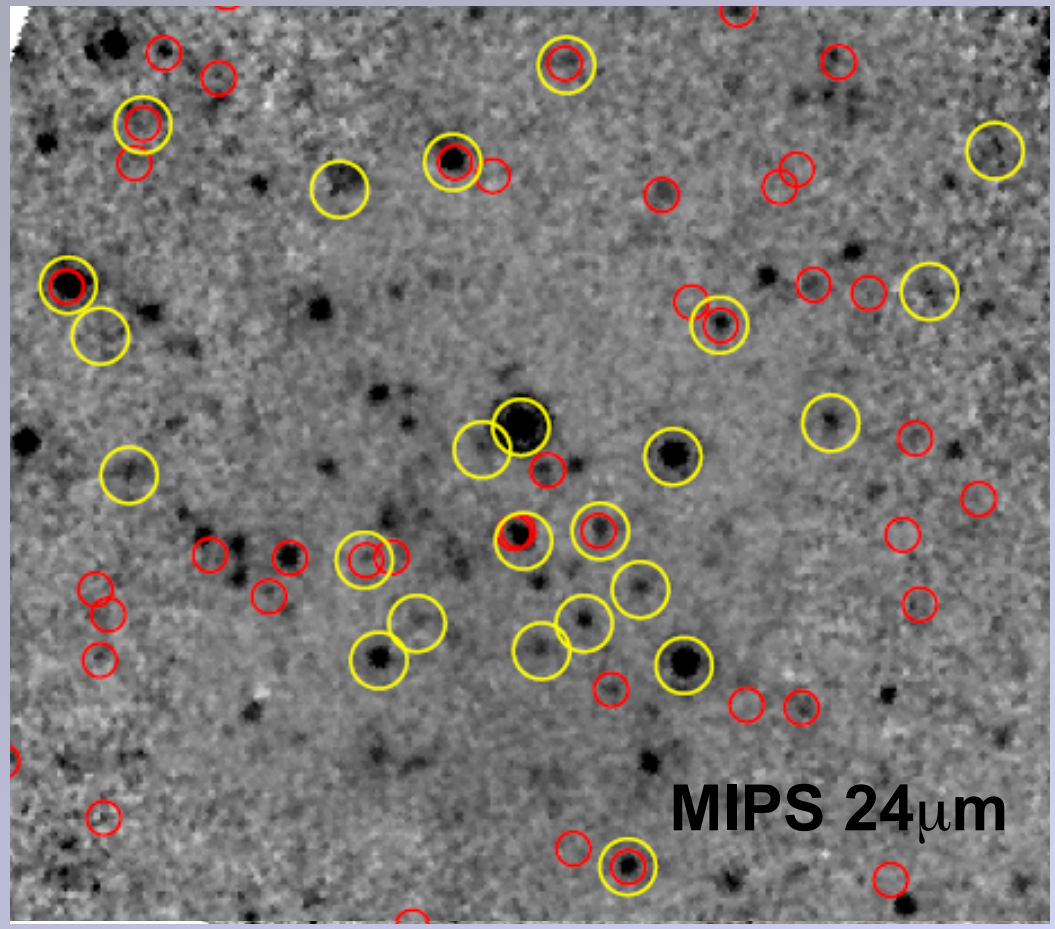
zJK selected

Cluster of AGNs ?

- Stern et al 2005 :

  → AGN candidates using IRAC bands





AGN candidates

zJK selected