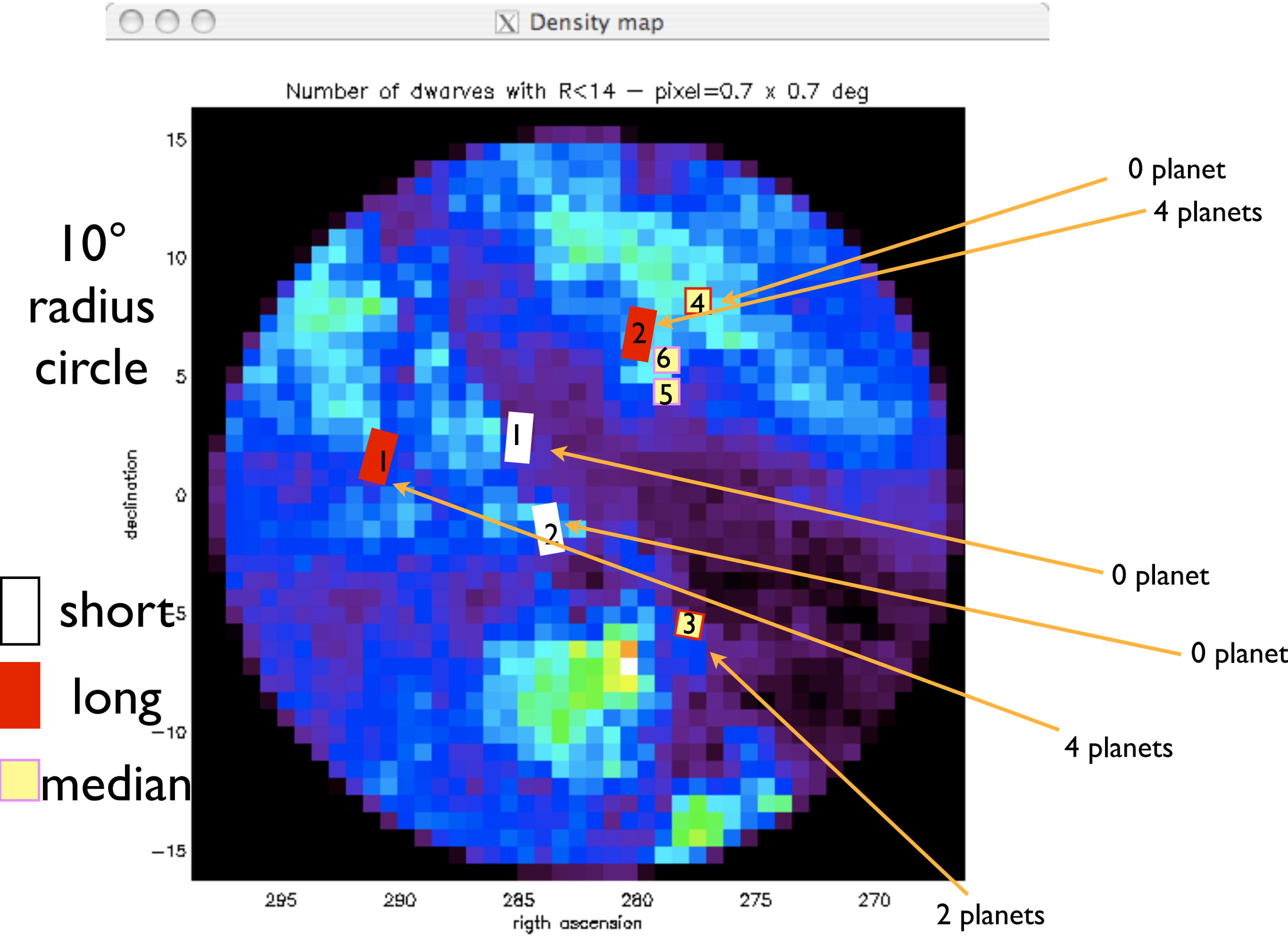

Density map
Number of dwarves with R<14 — pixel=0.7 x 0.7 deg
10° radius circle
short
long
median
declination
rigth ascension
15
10
5
0
−5
−10
−15
295
290
285
280
275
270
1
2
3
4
5
6
0 planet
4 planets
0 planet
0 planet
4 planets
2 planets

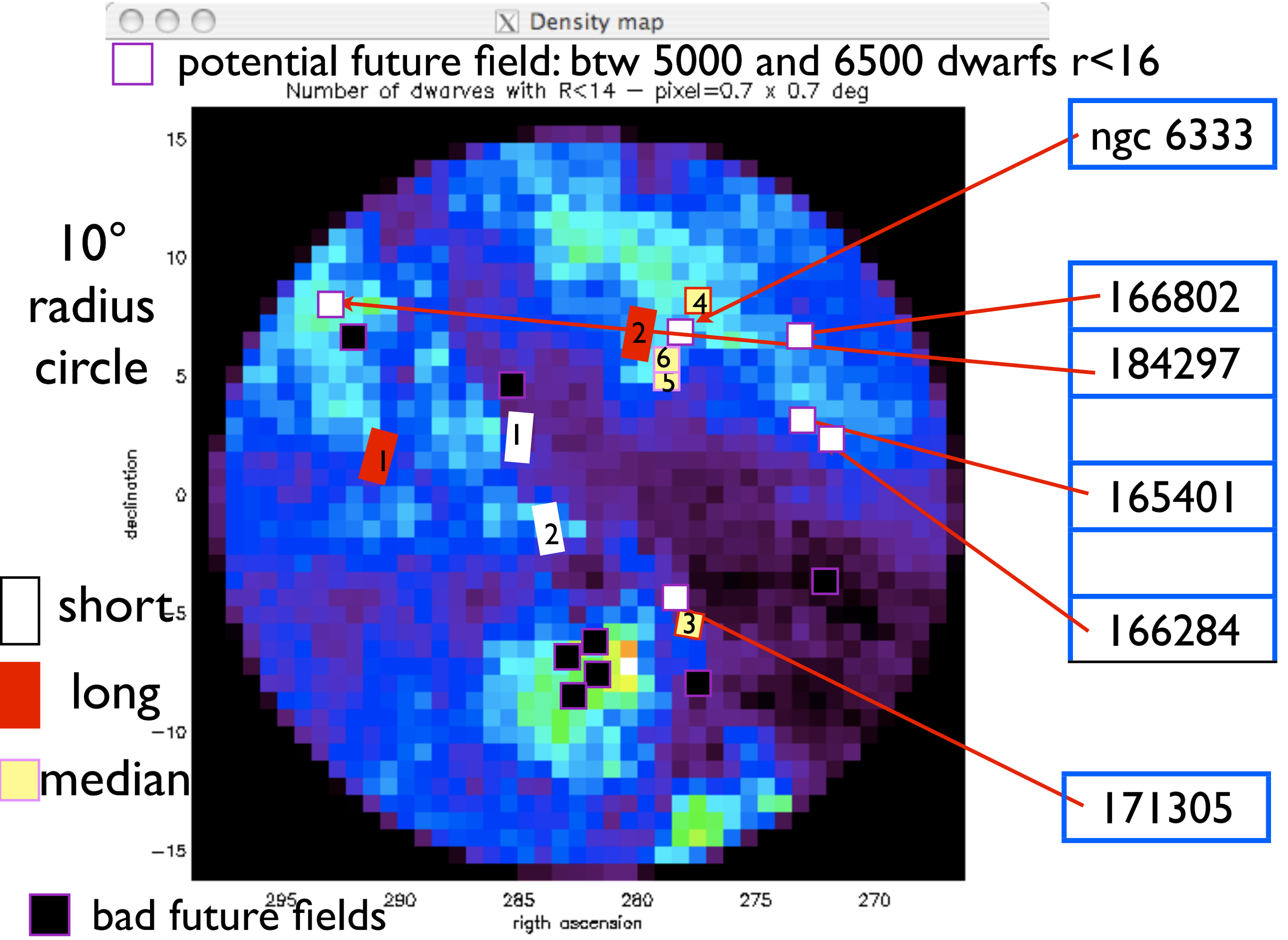
center fields

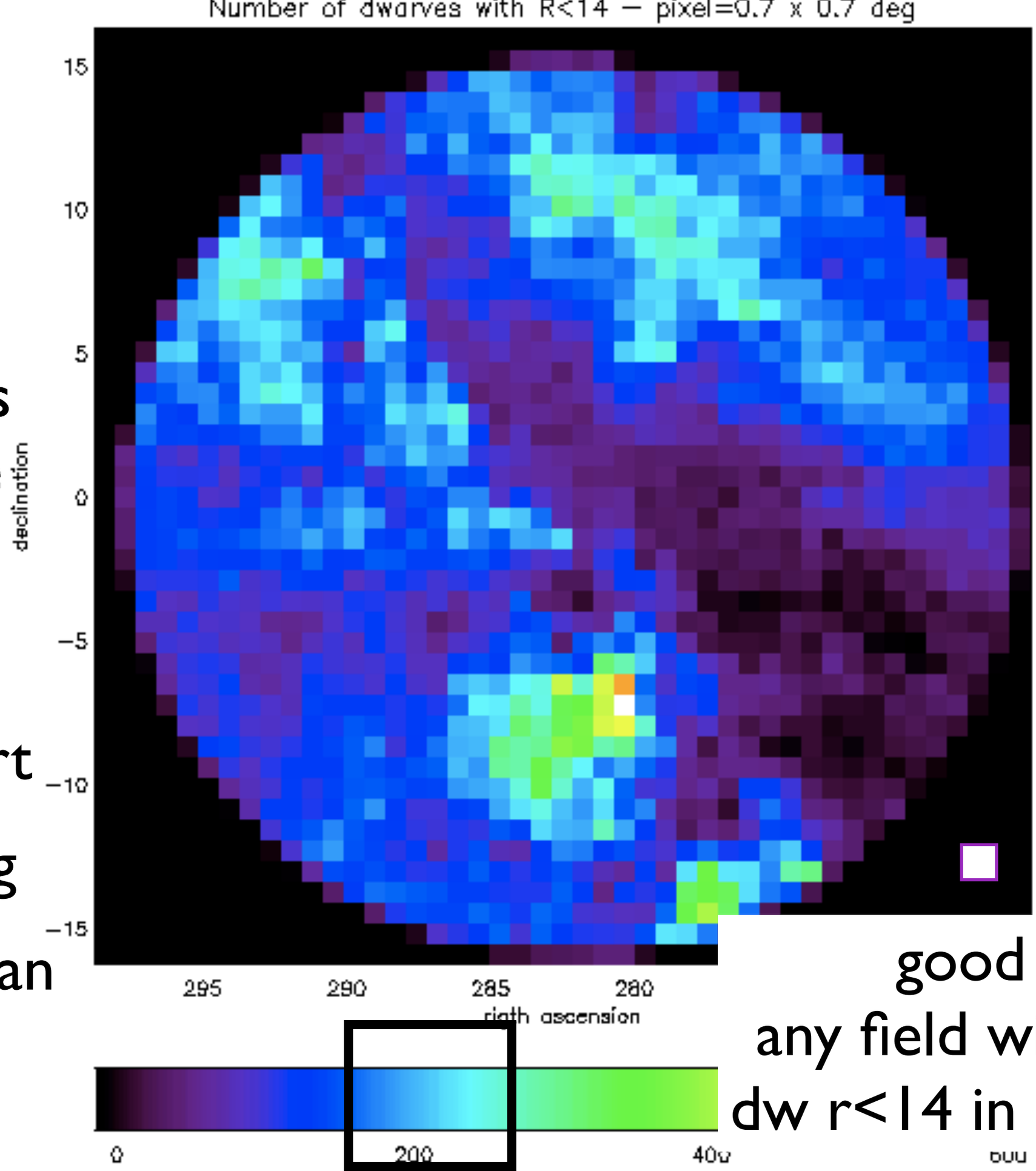
field name	dw r<16	nb planets
LRc05	2000	0
SRc01	2800	0
LRc06	3300	-
LRc03	3300	2
SRc02	4000	0
LRc01	4700	4
LRc02	5250	4
LRc04	8400	0

(per ccd)

field name	dw r<16
168443	3470
ngc 6333	5040
184297	5440
166284	5440
171305	5730*
165401	6370
166802	6400
184013	9030
ngc 6705	12000*
173783	13100*
173673	13300*
172275	15567*

* but large giant contamination


Density map
potential future field: btw 5000 and 6500 dwarfs r<16
Number of dwarves with R<14 — pixel=0.7 x 0.7 deg
10° radius circle
ngc 6333
166802
184297
165401
166284
171305
short
long
median
bad future fields
declination
rigth ascension
15
10
5
0
−5
−10
−15
295
290
285
280
275
270
1
2
3
4
5
6



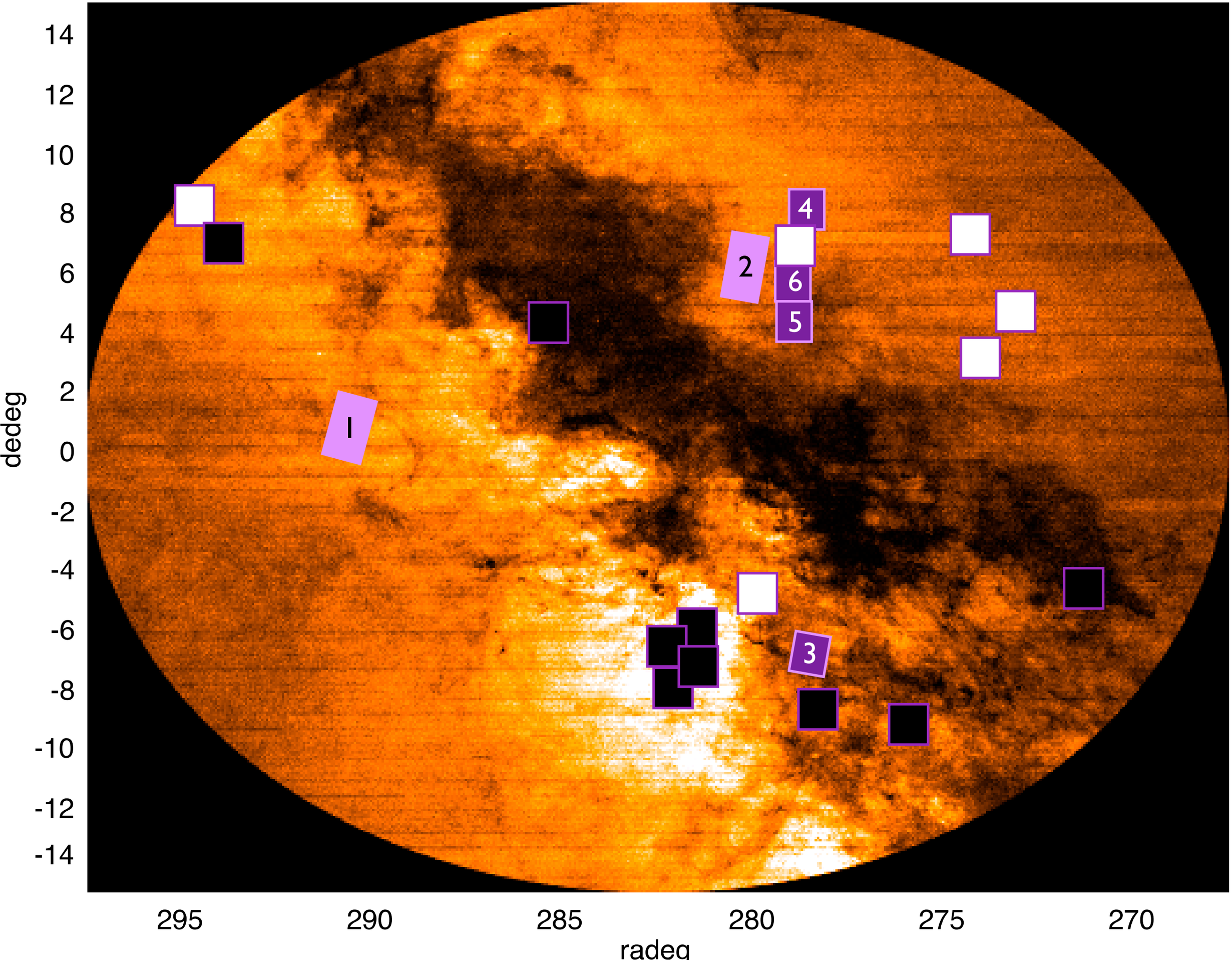
10° radius circle

short

long

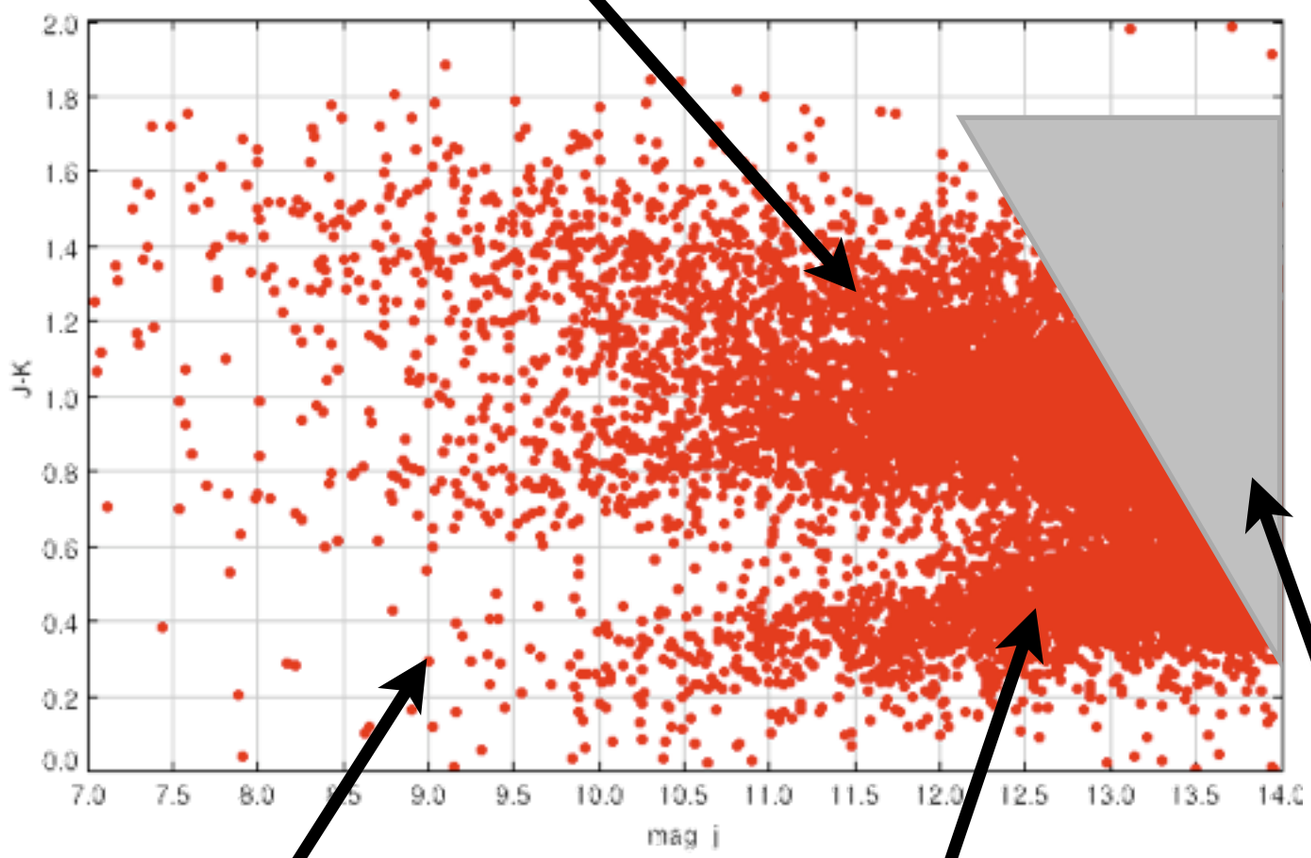
median

good field=
any field with 180-250
dw r<14 in pix= CCD/4


14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
dedeg
295
290
285
280
275
270
radeg
1
2
3
4
5
6

Method

J, J-K diagram
(always available)



minimize contaminants

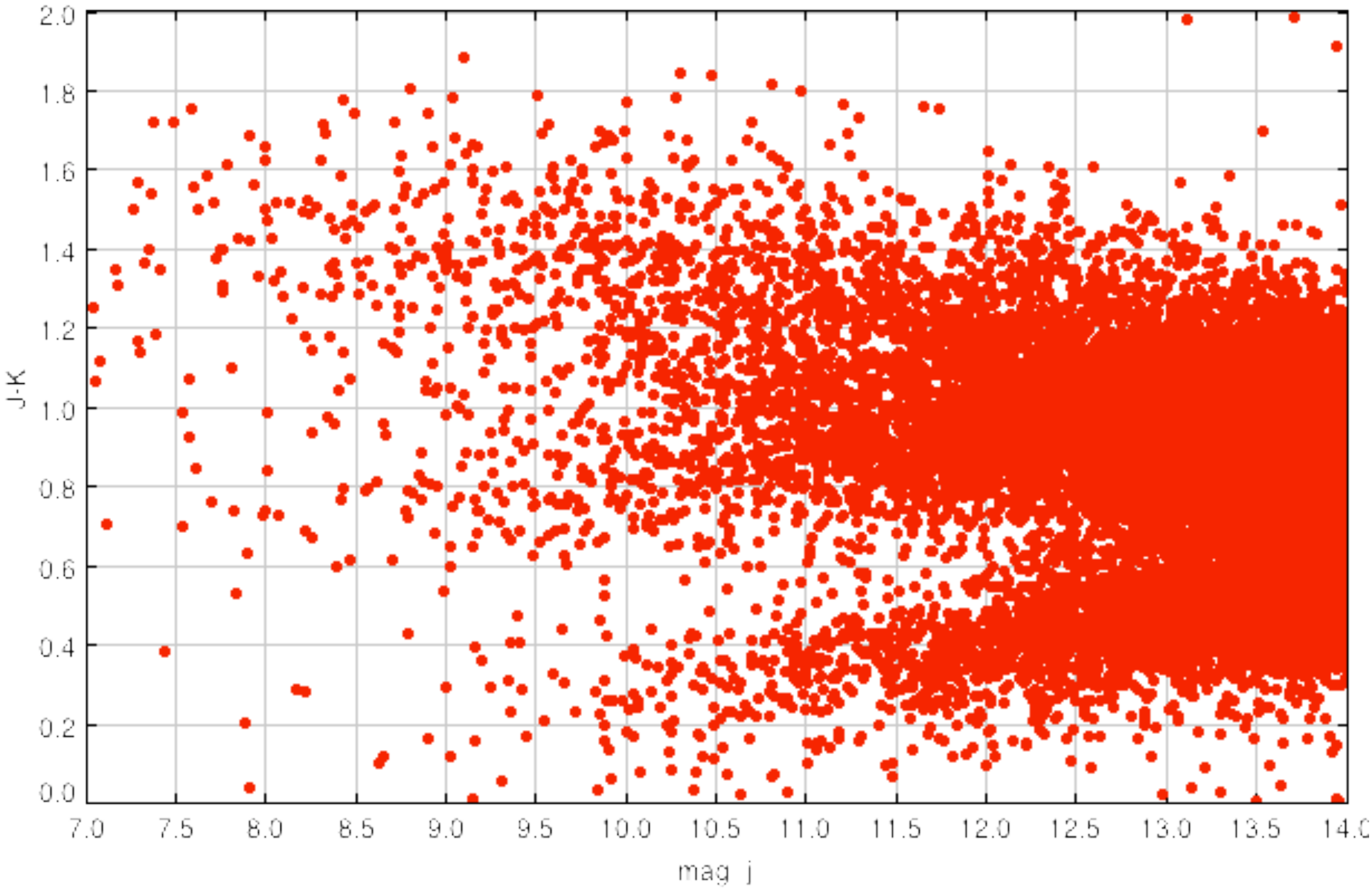
maximize bright stars

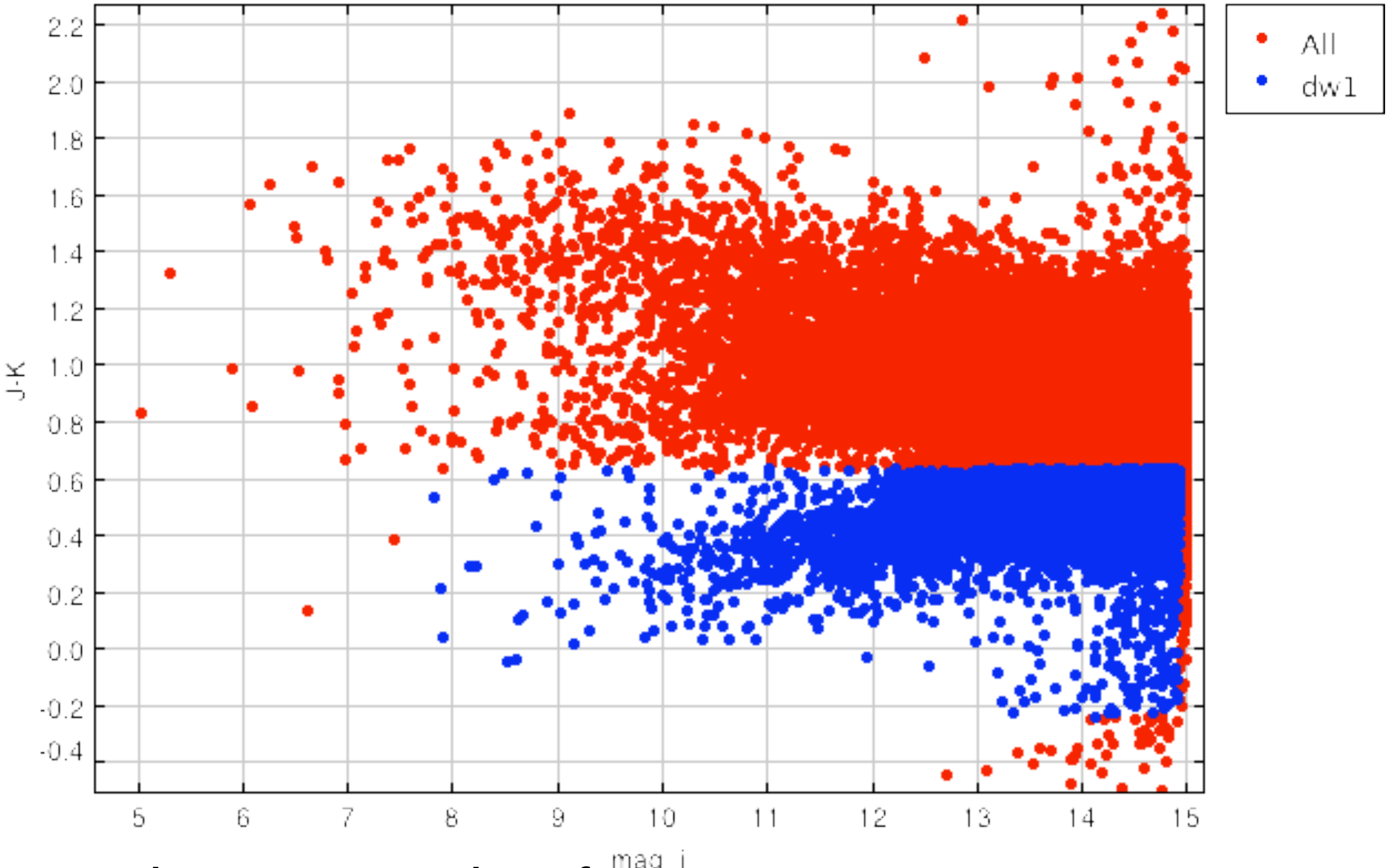
maximize population

this corner disappears when mag_r limit applies

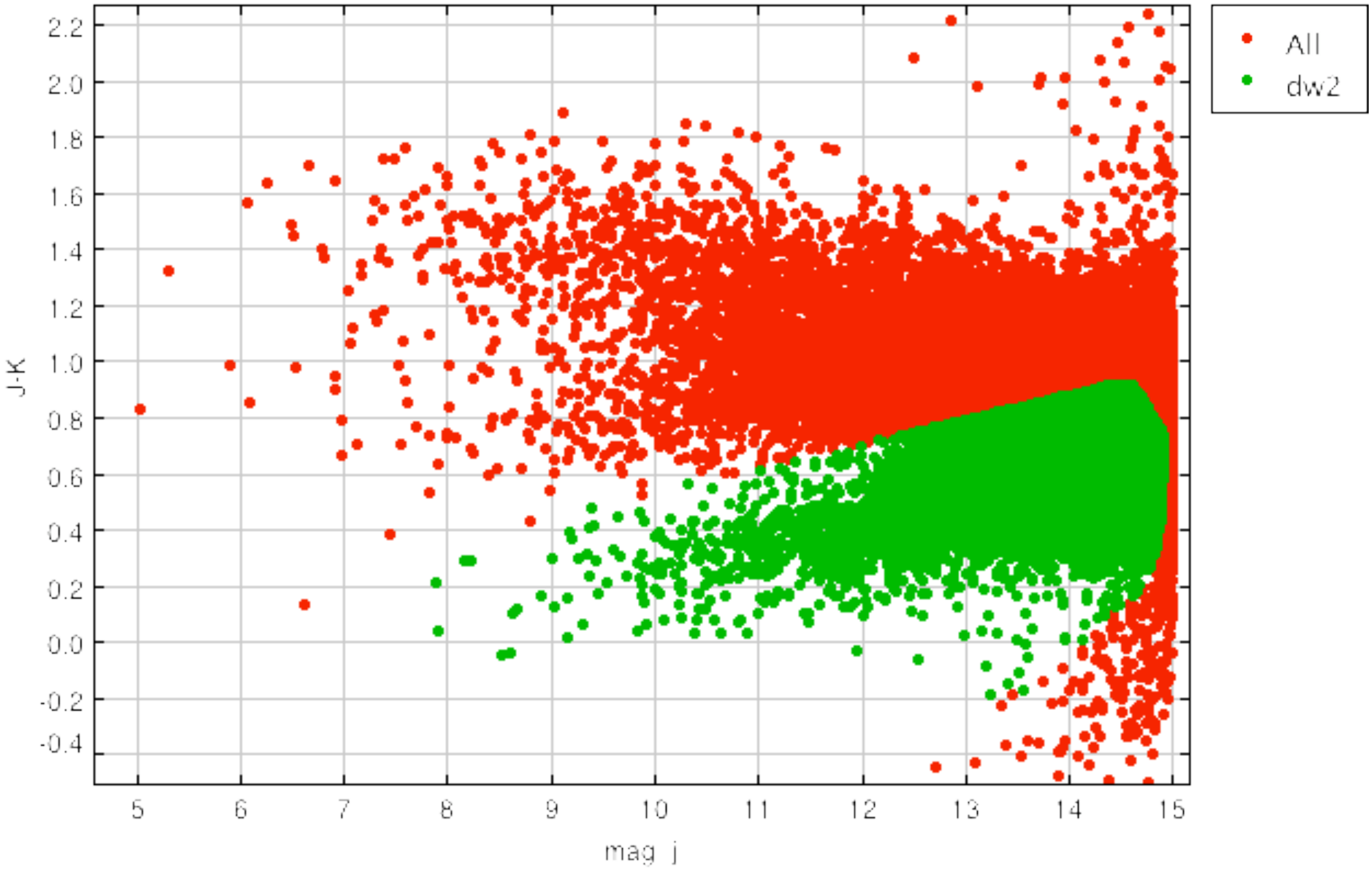
dwarf and giant branches may be 'easily' distinguished but their location varies in this space

+ dwarf counts

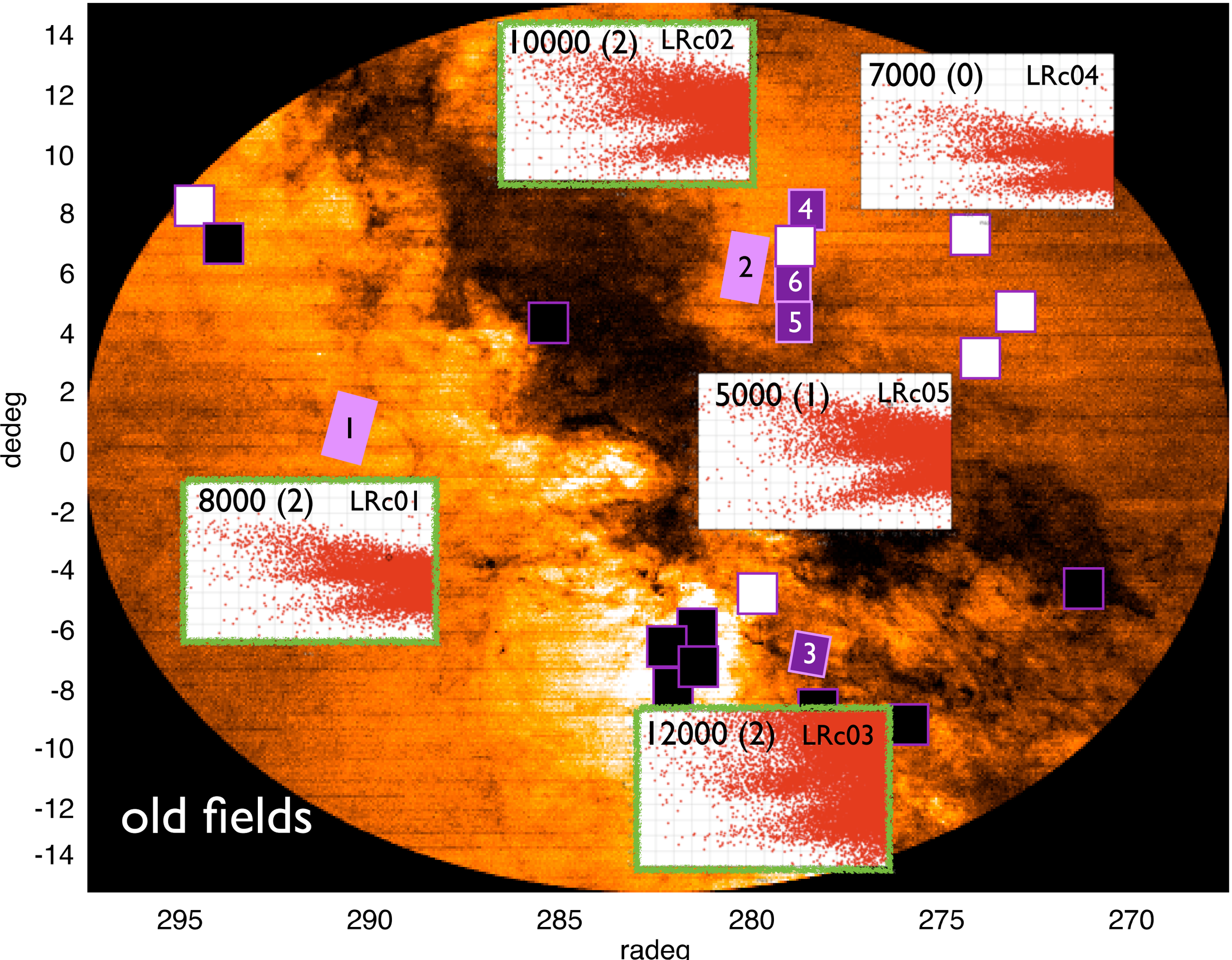

2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
J-K
7.0
7.5
8.0
8.5
9.0
9.5
10.0
10.5
11.0
11.5
12.0
12.5
13.0
13.5
14.0
mag j



underestimates dwarf counts



overestimates dwarf counts

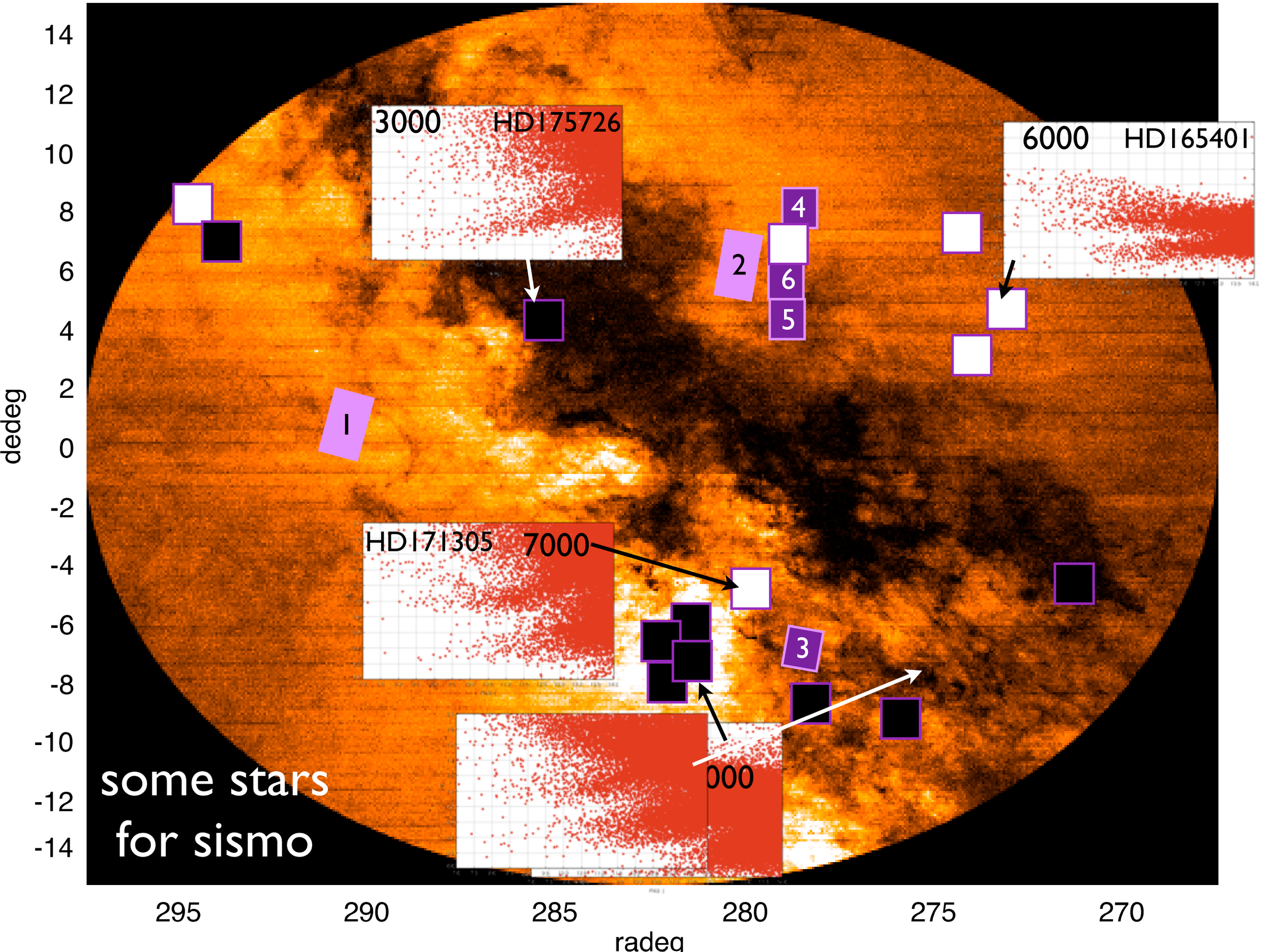

10000 (2) LRc02
7000 (0) LRc04
5000 (1) LRc05
8000 (2) LRc01
12000 (2) LRc03
1
2
3
4
5
6
old fields
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
decdeg
295
290
285
280
275
270
radeg

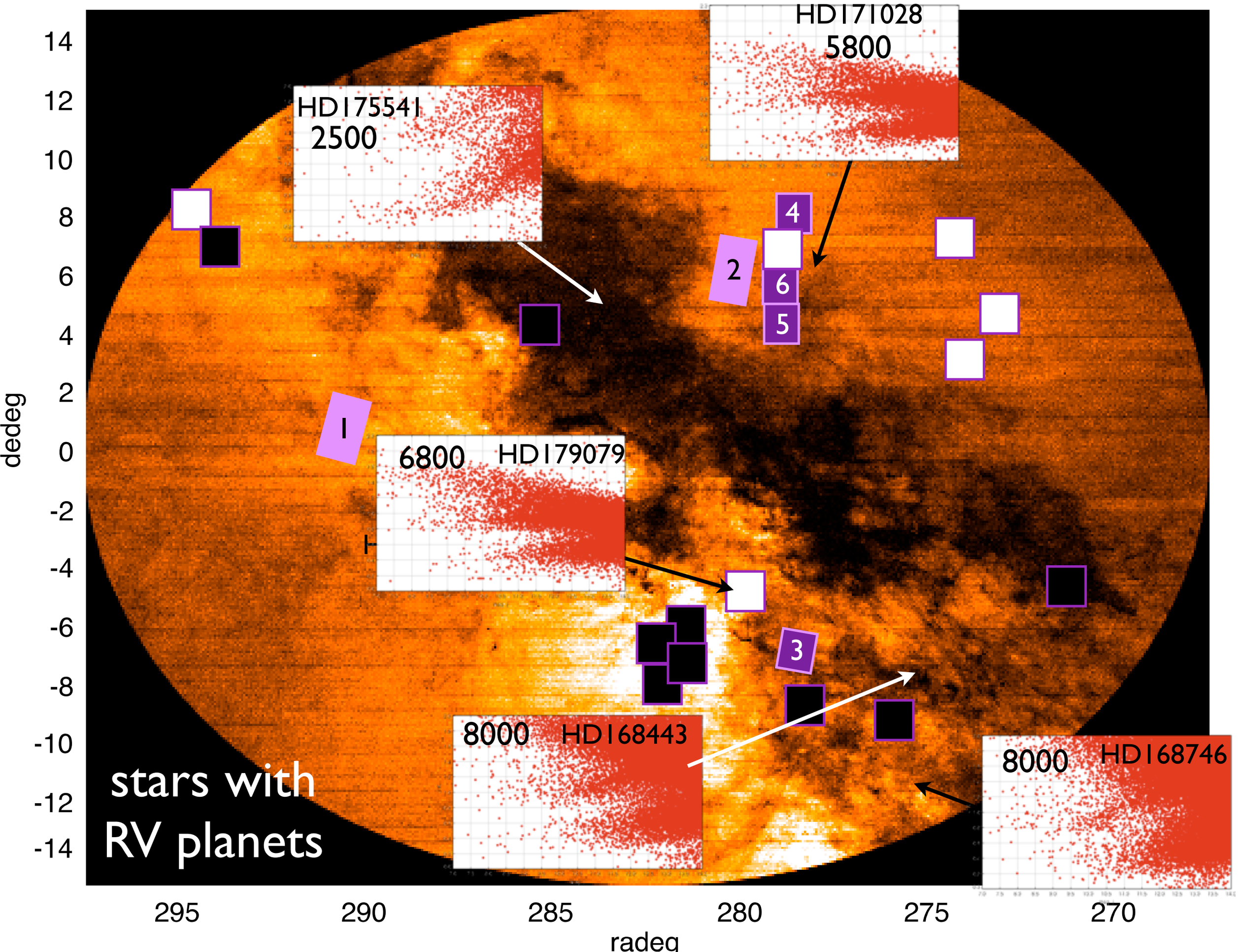
1. the planet count is 1 ± 1 per CCD

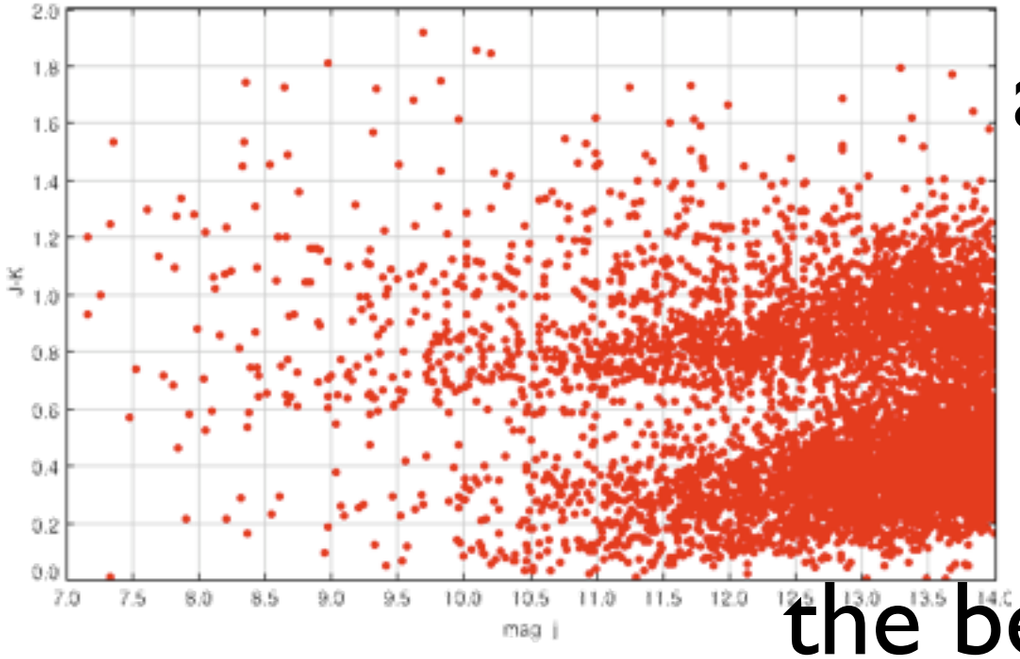
2. small number statistics: be careful with predictions

3. common sense still recommends enough dwarfs

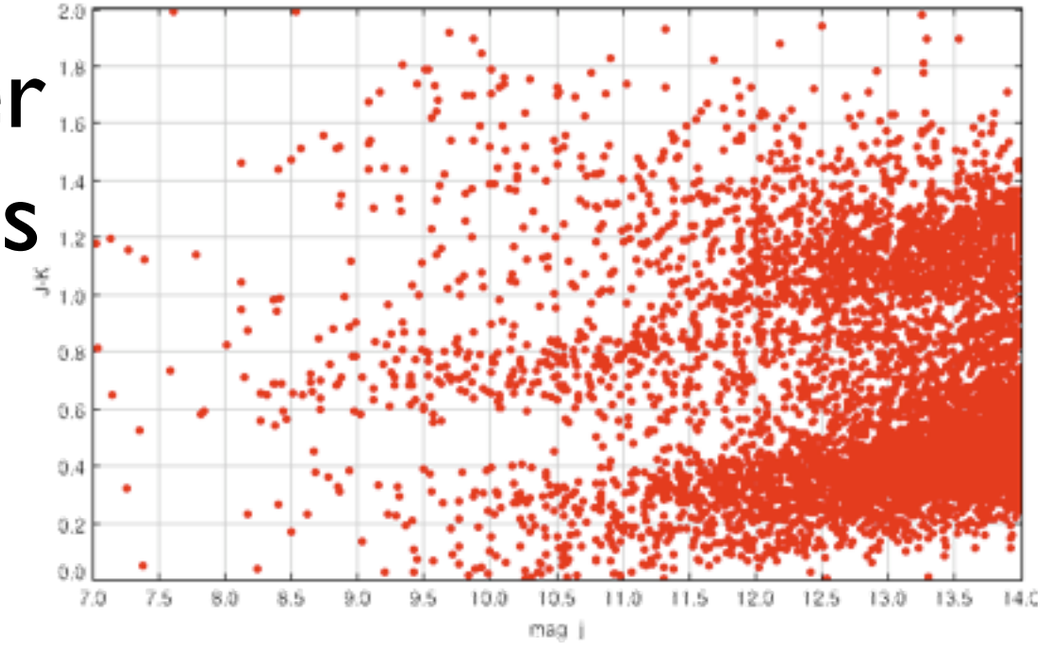
4. contamination rate to be taken into account (avg number of stars per PSF: false positives)


3000
HD175726
6000
HD165401
HD171305
7000
1
2
3
4
5
6
000
some stars
for sismo
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
dedeg
295
290
285
280
275
270
radeg

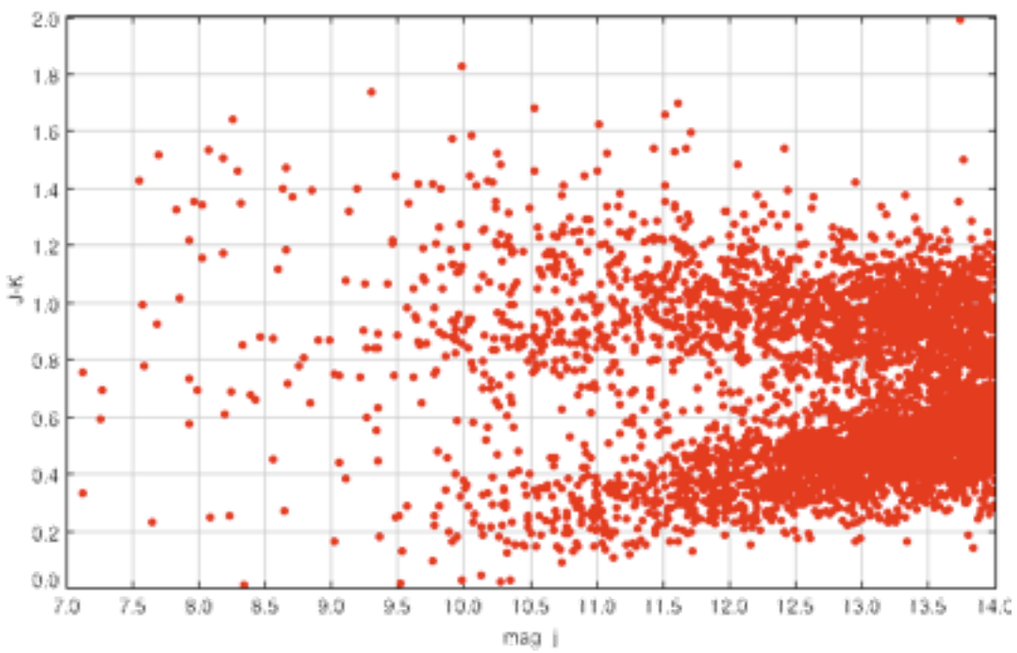

HD171028
5800
HD175541
2500
6800
HD179079
8000
HD168443
8000
HD168746
1
2
3
4
5
6
stars with
RV planets
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
dedeg
295
290
285
280
275
270
radeg

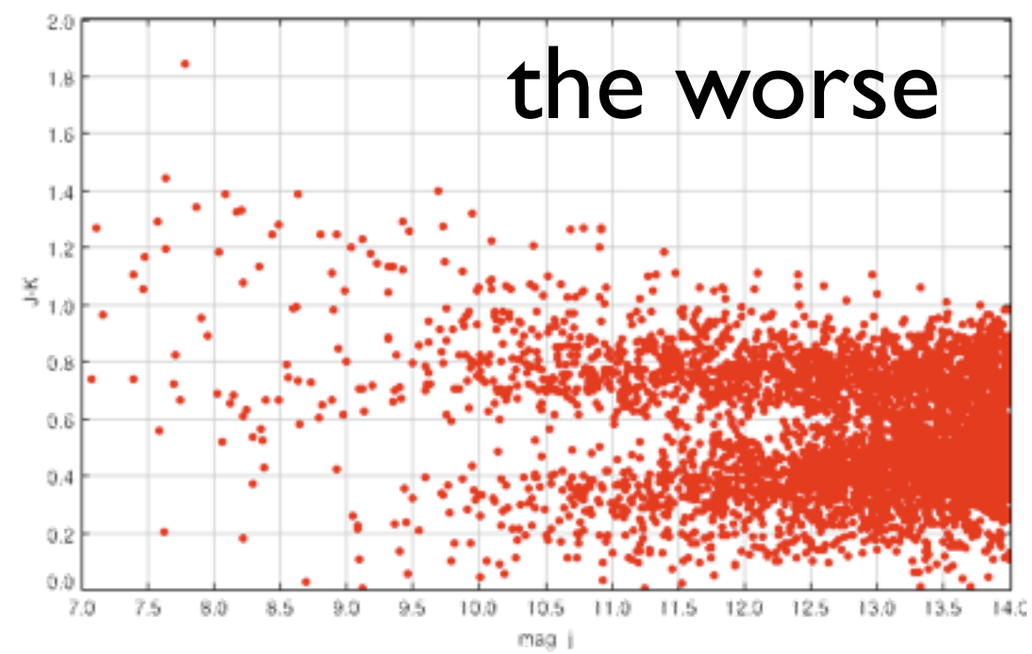


anticenter
past fields

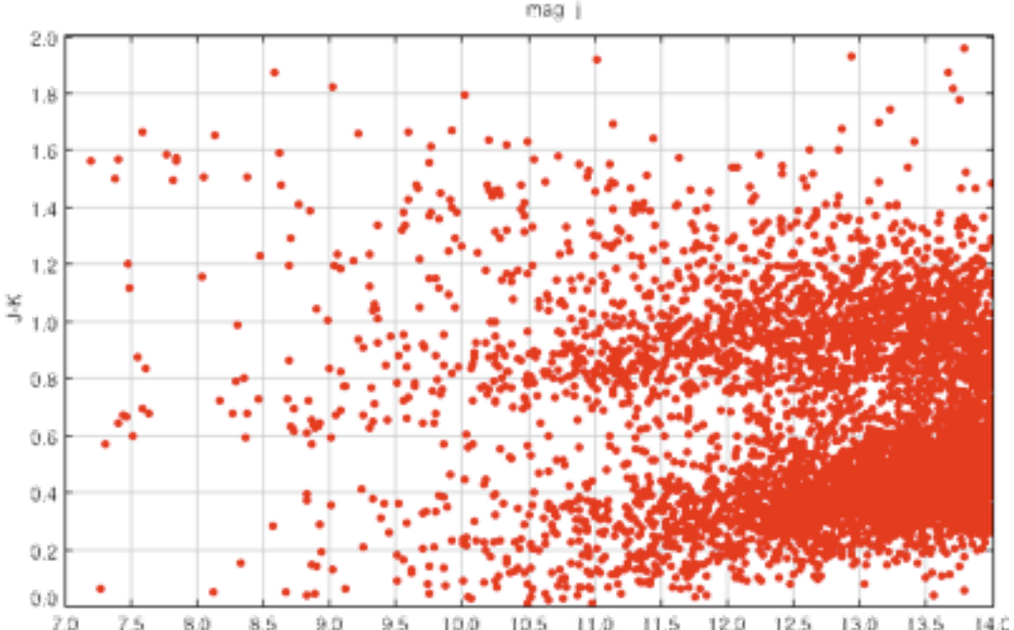


the best ones



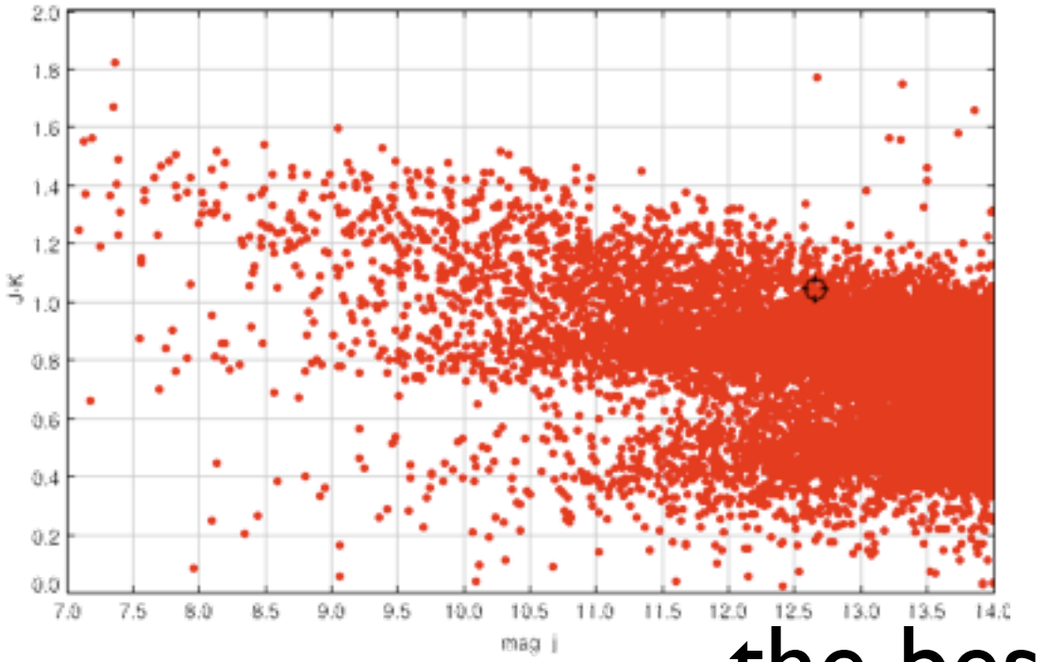


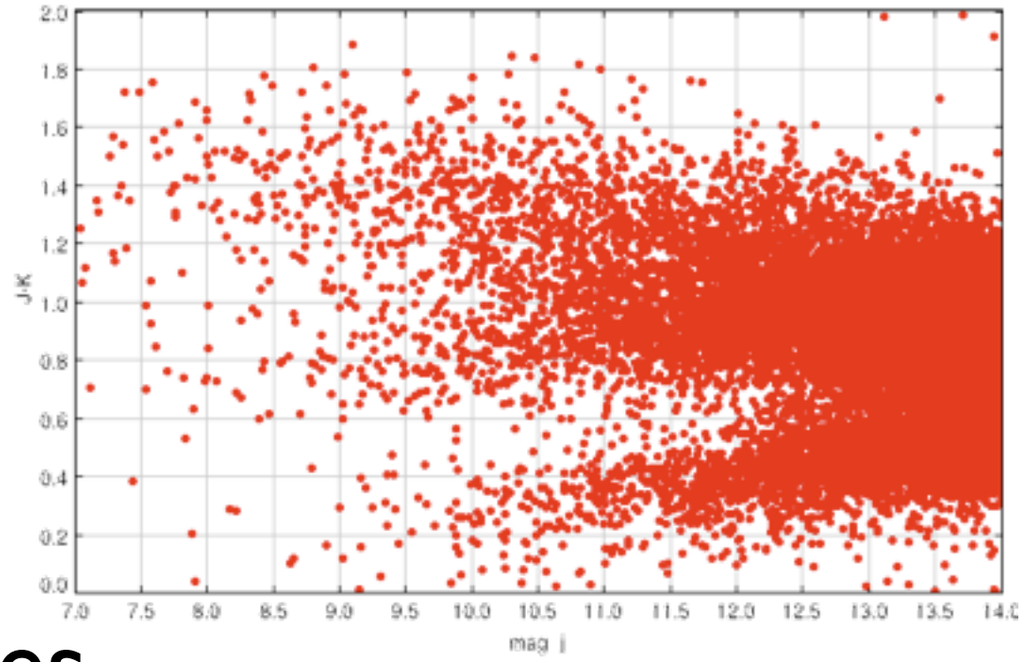
the worse



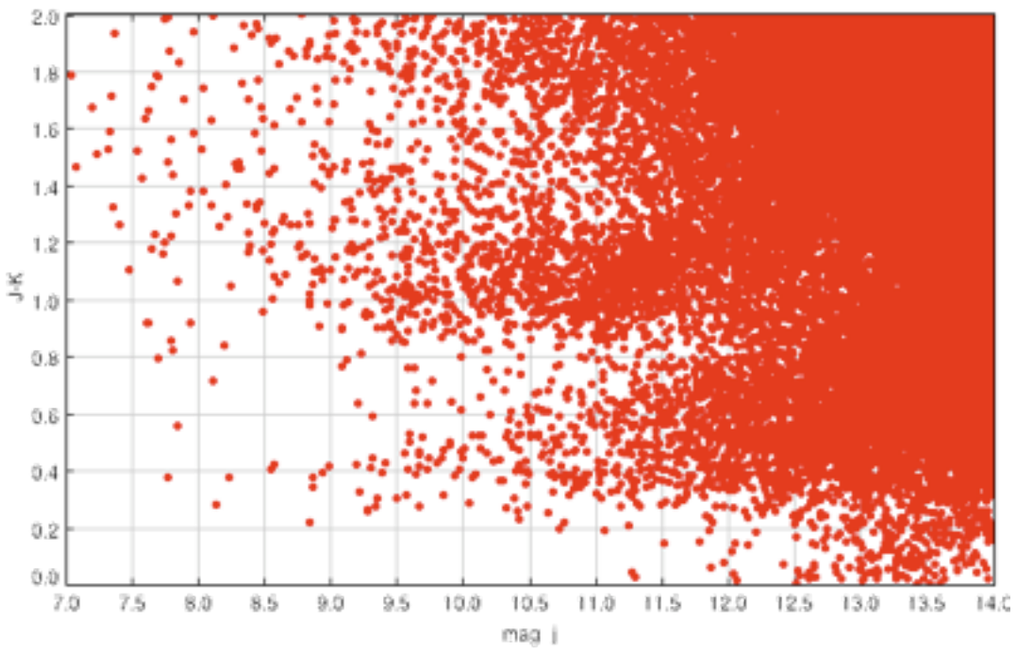
HD 47129
looks ok

but dwarf
counts 4500

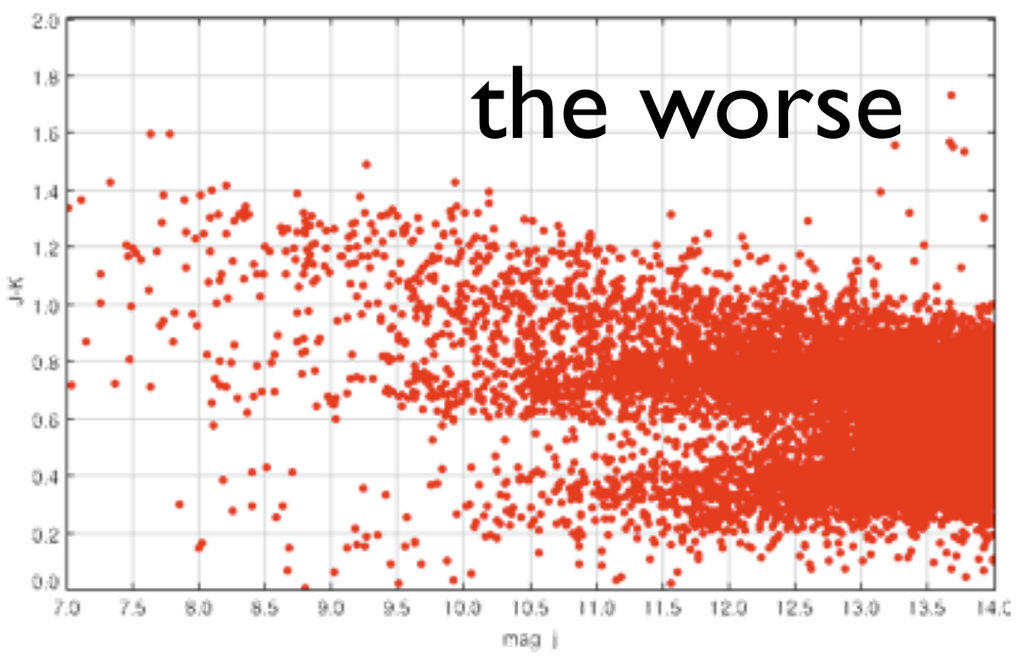


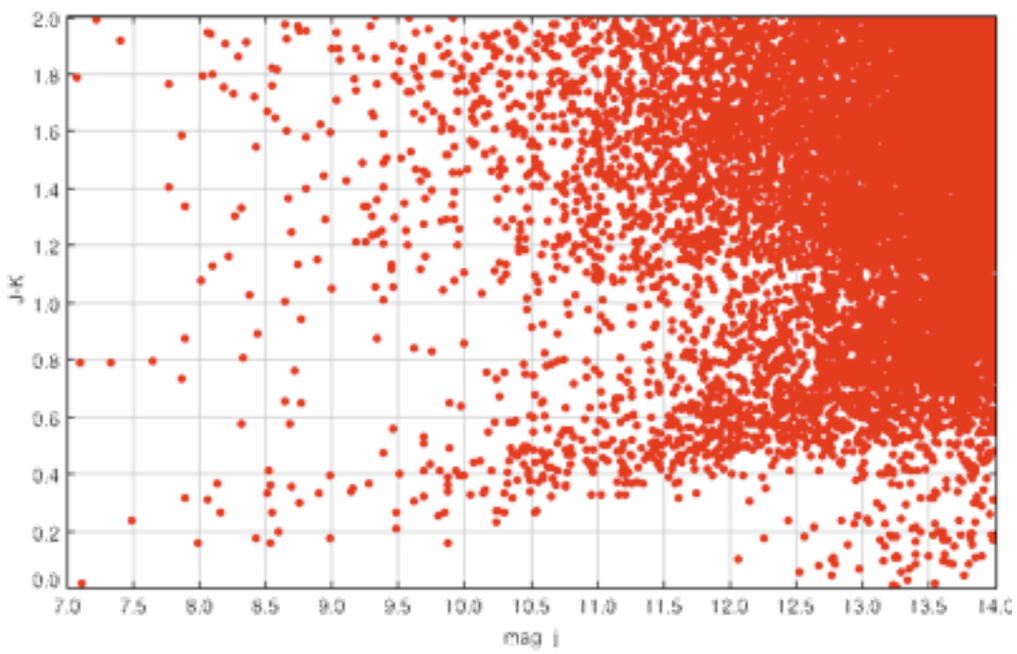


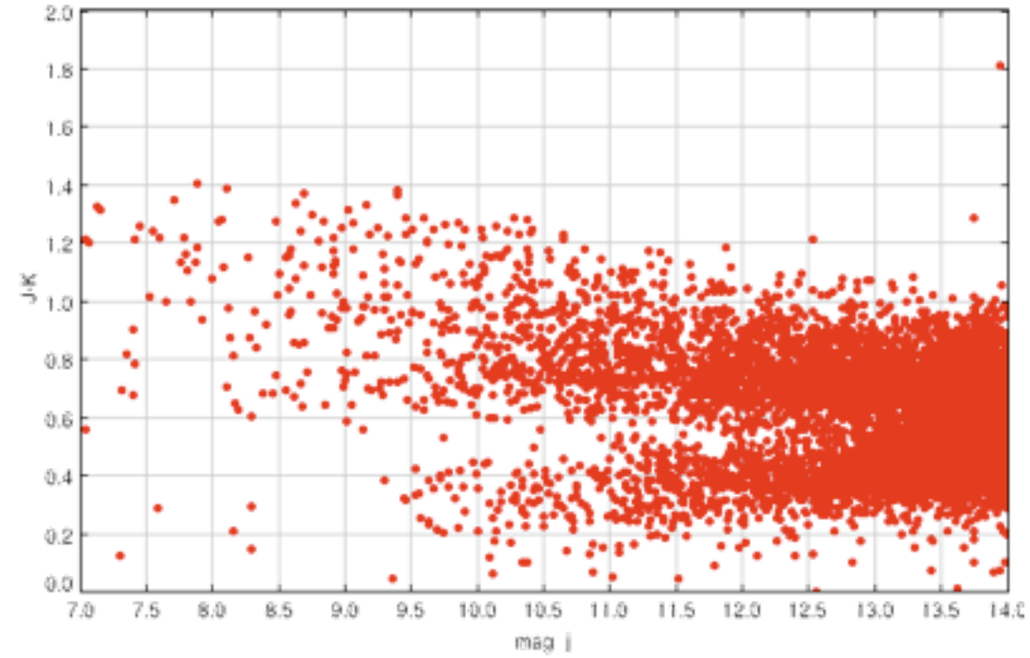
the best ones



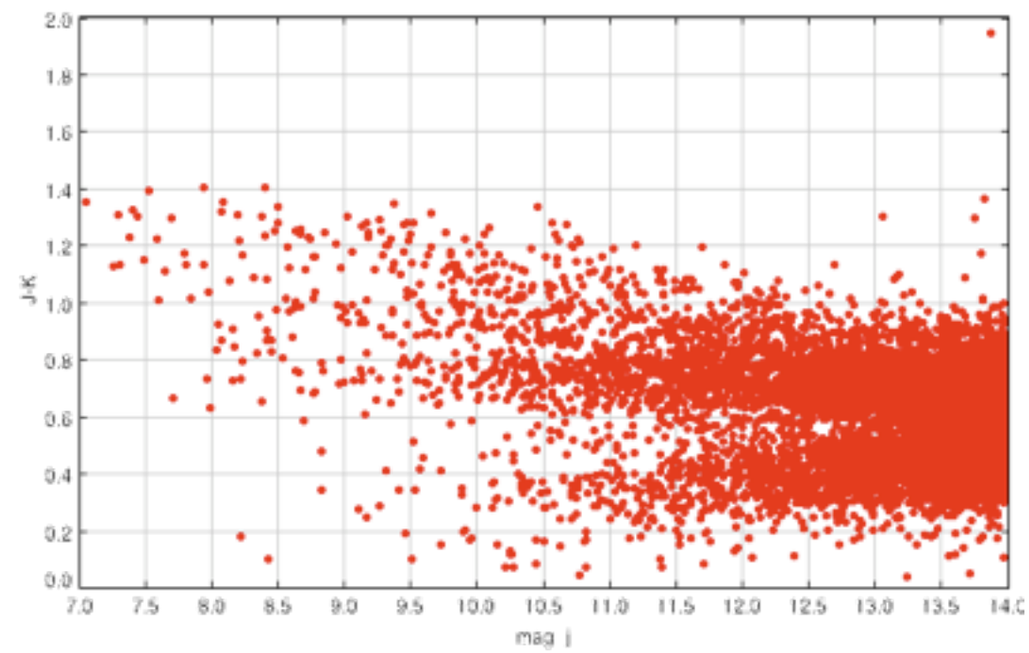
center
past fields

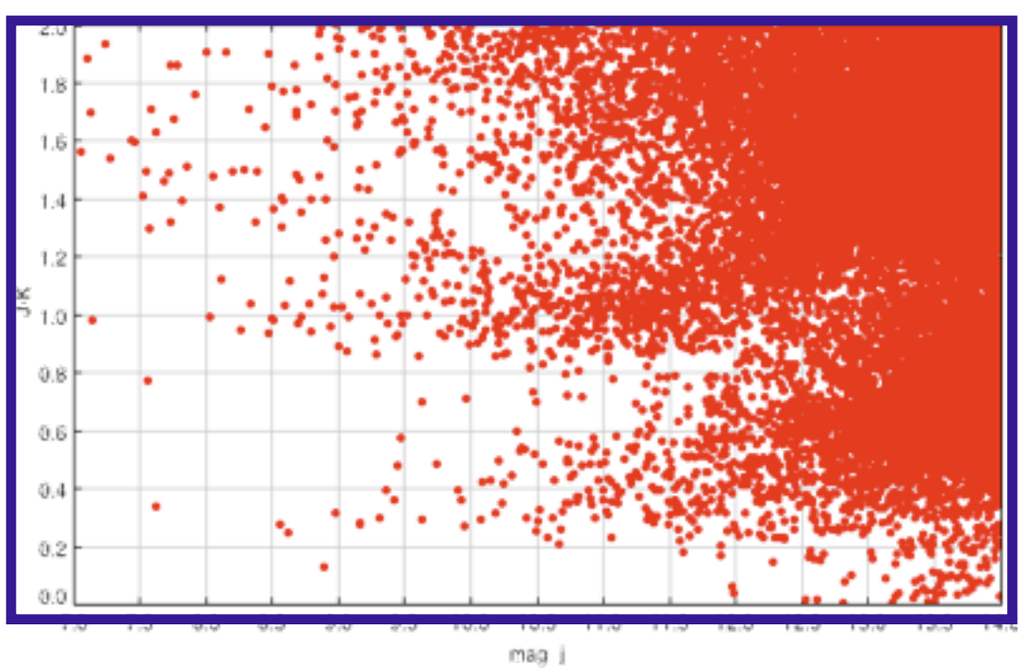




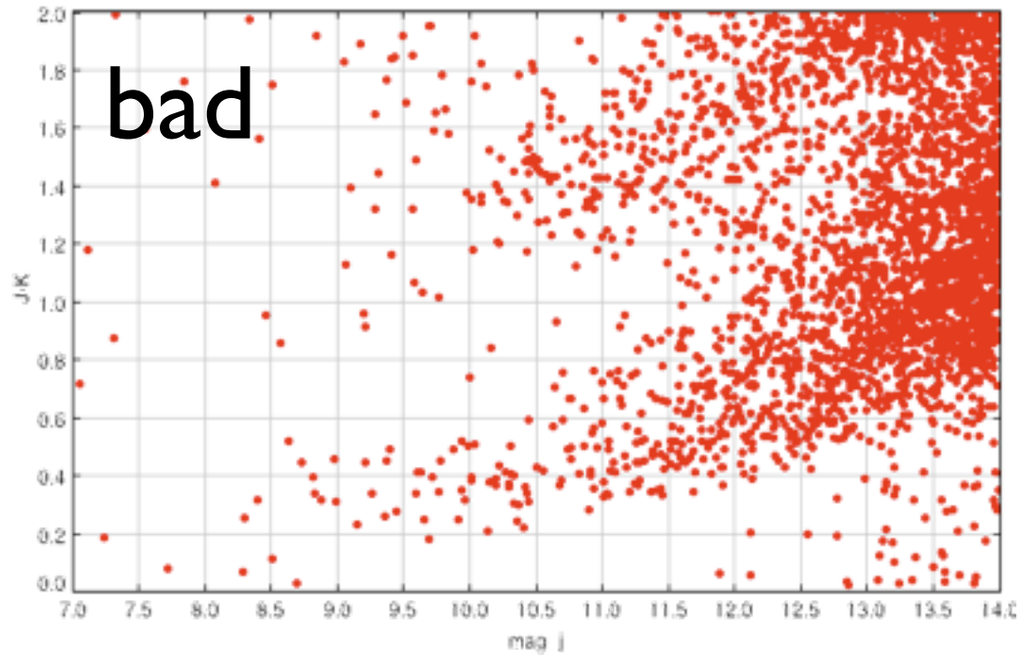


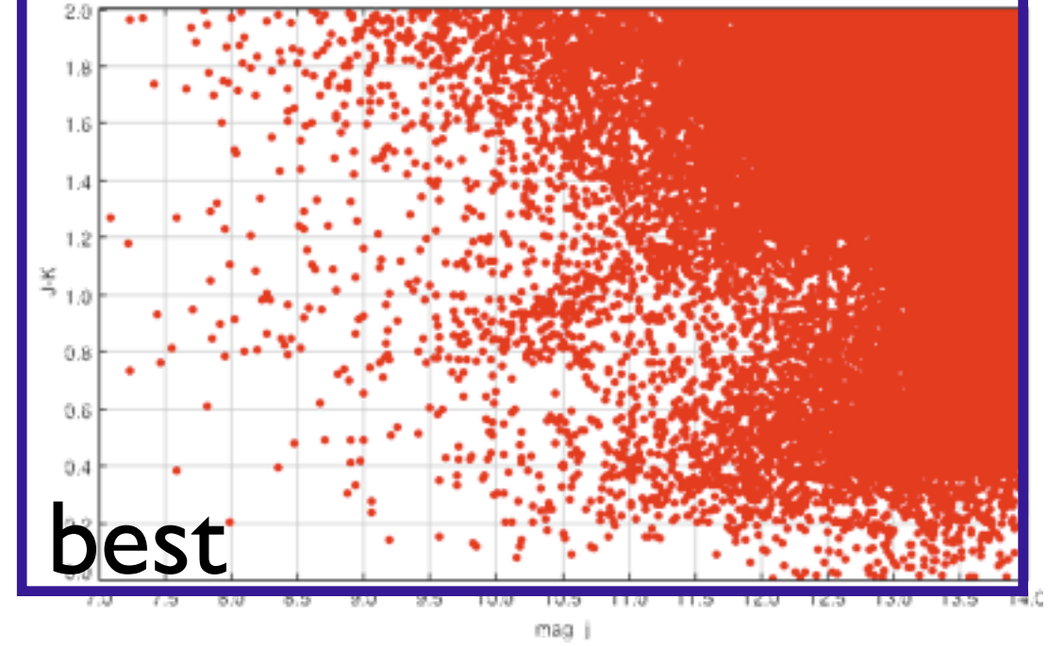
solar like

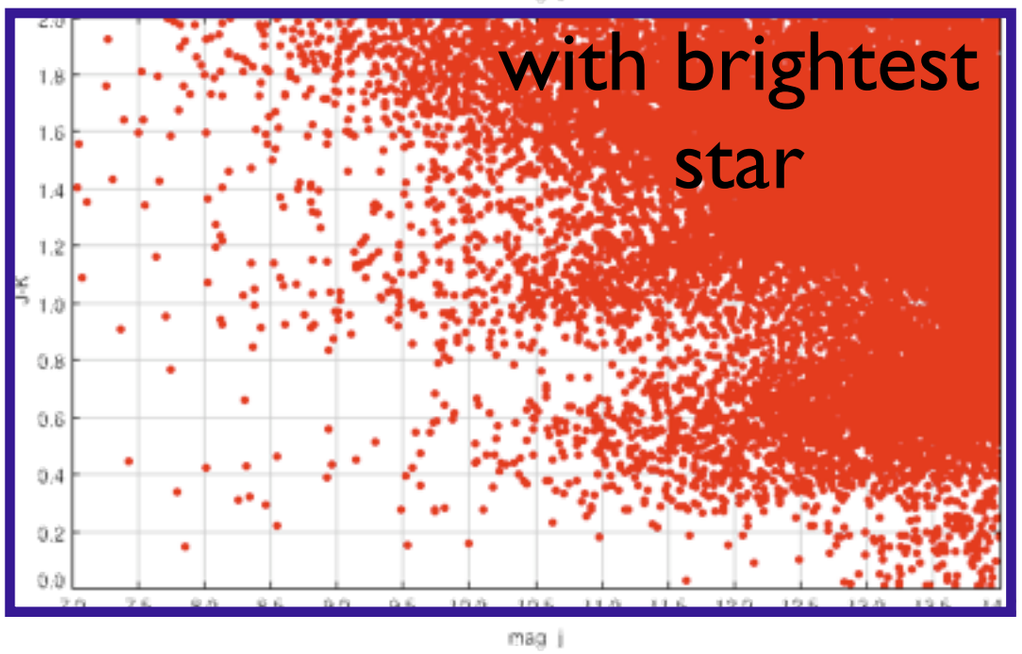


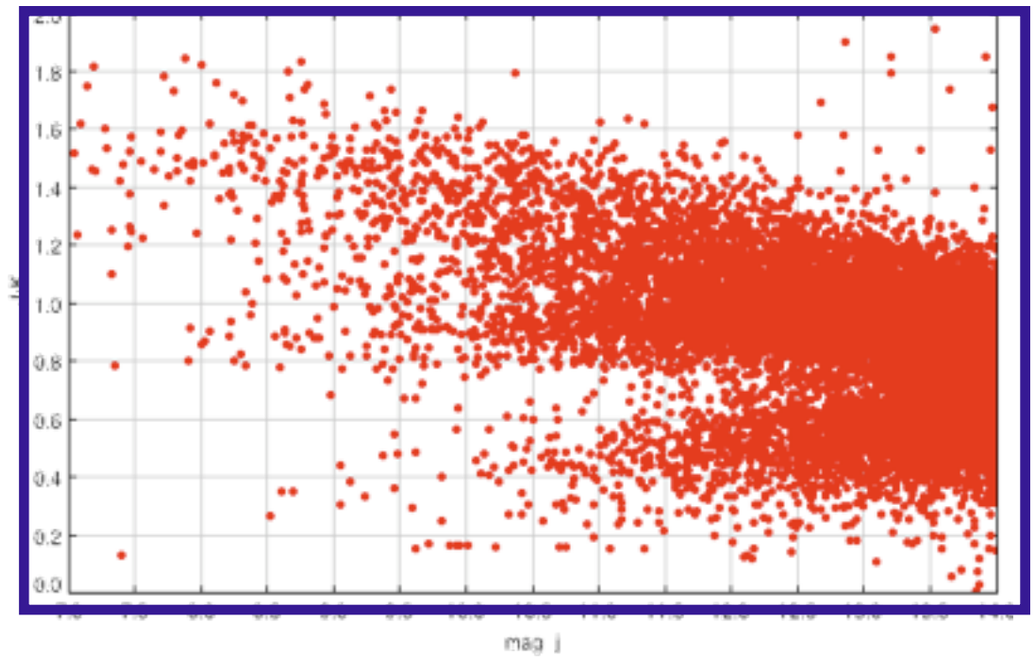


B star HD 171305

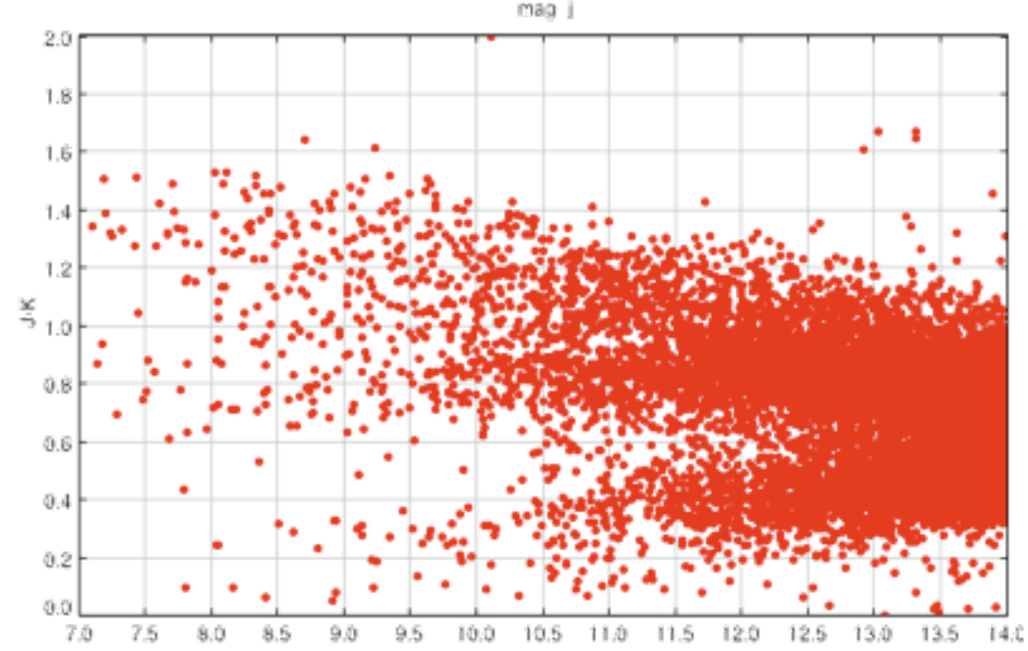






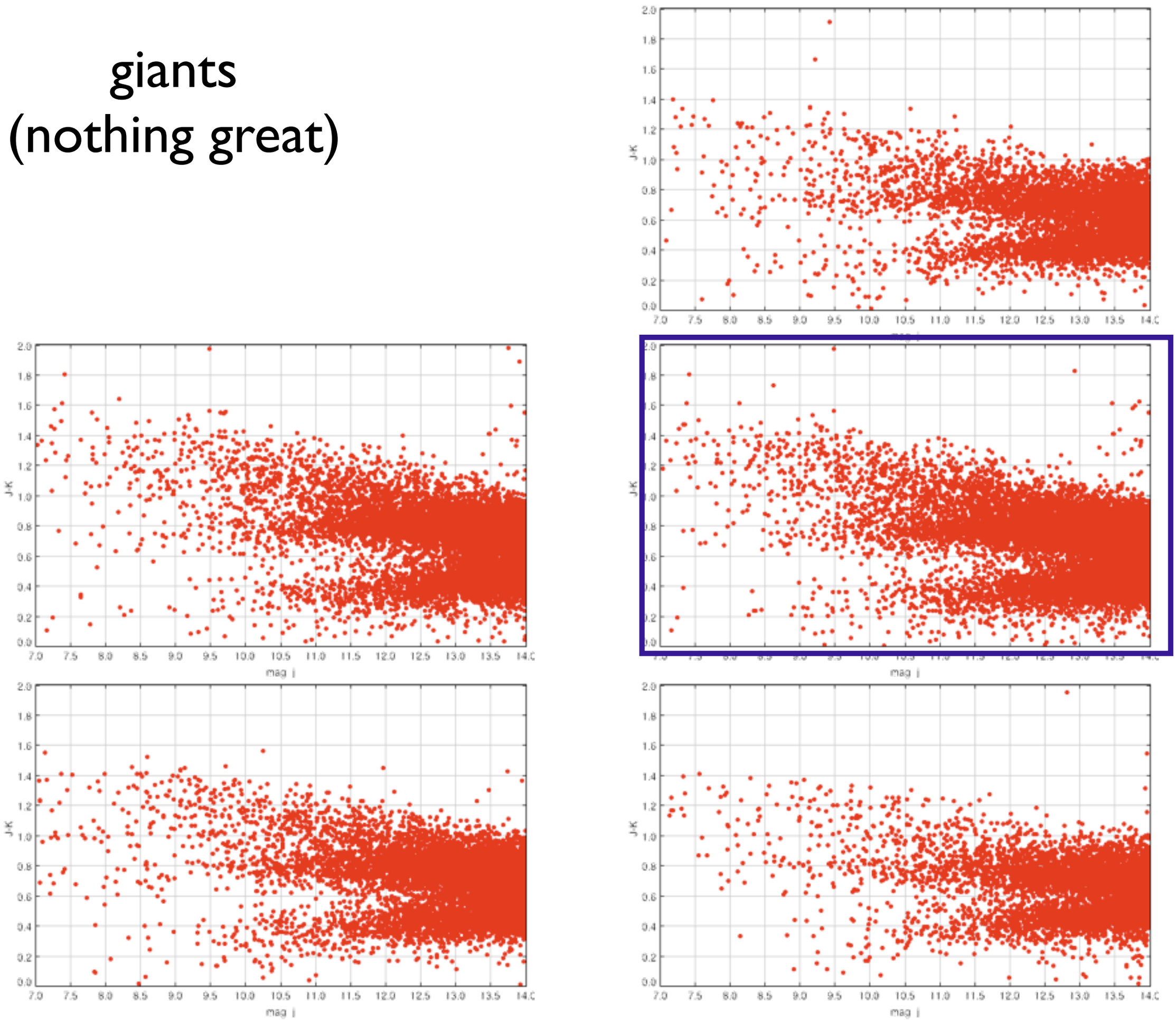


stars with known RV planets



LRc02	9000	15000
LRc01	7500	9500
LRc03	12200	13500
LRc04	6300	9400
LRc05	5000	5500
HD180409	5400	5700
HD165401	5000	6700
HD171305	6400	8600
HD171028	5600	5900
HD175541	2200	2940
HD179079	6200	7600
HD168746	8300	8700
HD168443	7400	9200

giants
(nothing great)



giants

HD163115	3900	3900
HD162113	3500	3500
HD166284	4700	4700
HD184013	7200	7600
HD184297	4700	5600

1. OK for HD47129 during next anticenter season

2. Preferred options for next center season:

a star with a planet in the sismo field (exo prg)

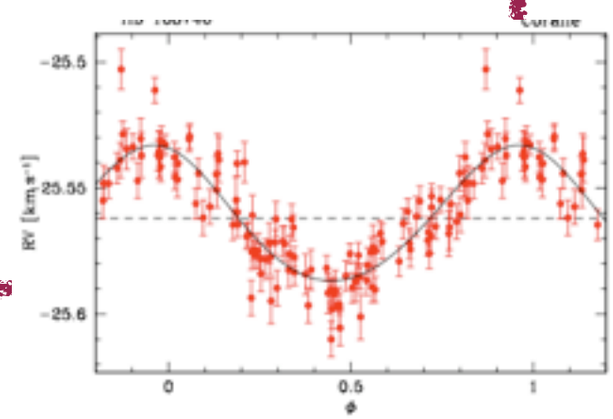
P1 HD 168746, short P,V=8
or HD179079, small mass
HD 168443; long P, massive;V=7 for S studies

P2 HD 171305: a B type star among S high priorities
+ a good content in bright dwarfs

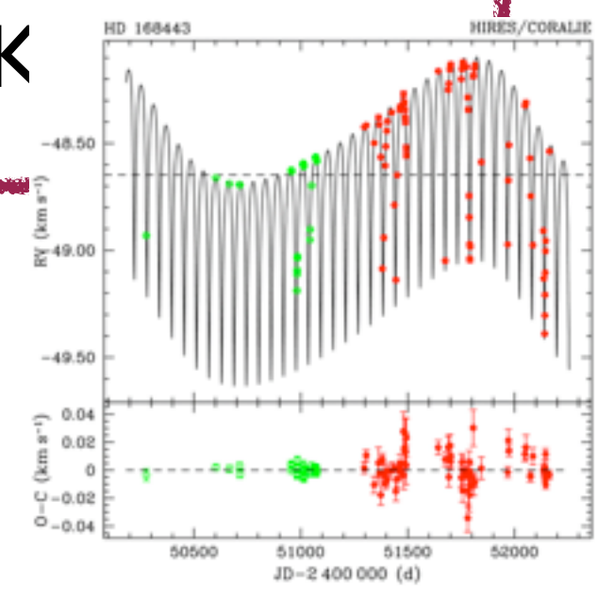
P3 HD 184013 giant

3. Preference for run of 150 d (to be discussed)

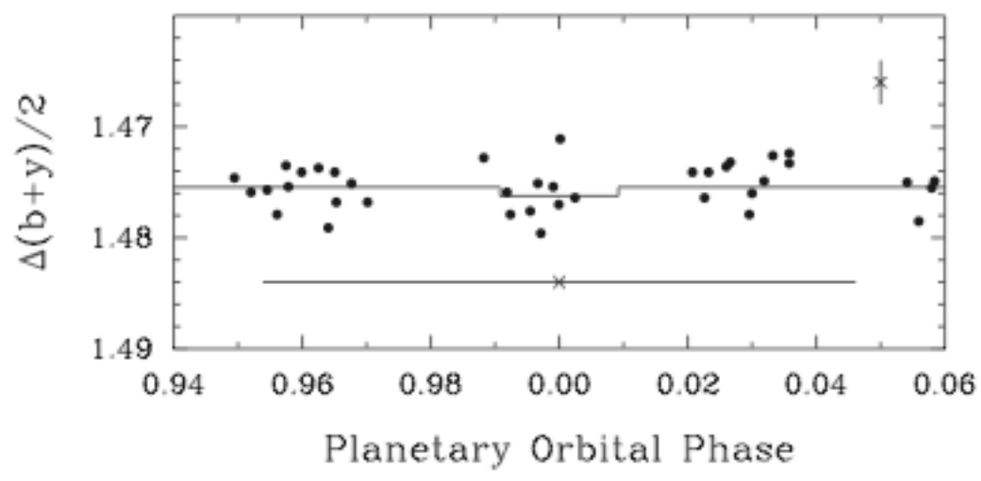
HD 168746 G5 V=8.0
0.23 Mjup
P=6.4d
transit search by Olsen?
0.88Msun 1.12Rsun
5610K

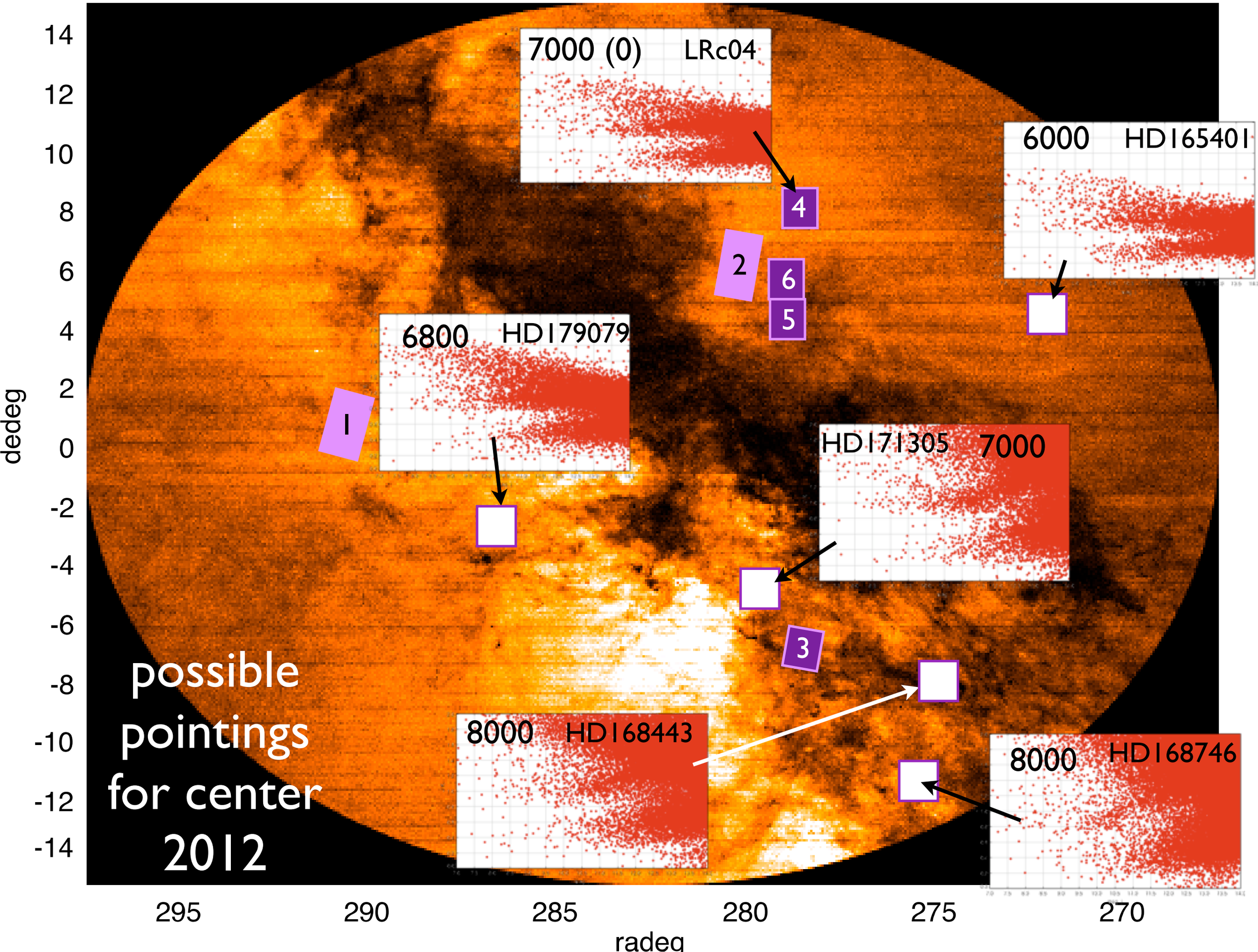


HD 168443 G5 V=6.9
7.6 Mjup
P=58d
e=0.53
a=0.19-0.61 AU
+long period BD with i=36°
transit search?
1.0Msun 1.5Rsun
5590K



HD 179079 G5IV V=8.0
0.08 Mjup
P=14.5d
ref?
transit search?
1.08Msun 1.48Rsun
Teff=5720K




7000 (0) LRc04
6000 HD165401
6800 HD179079
HD171305 7000
8000 HD168443
8000 HD168746
1
2
3
4
5
6
possible pointings for center 2012
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
dedeg
295
290
285
280
275
270
radeg