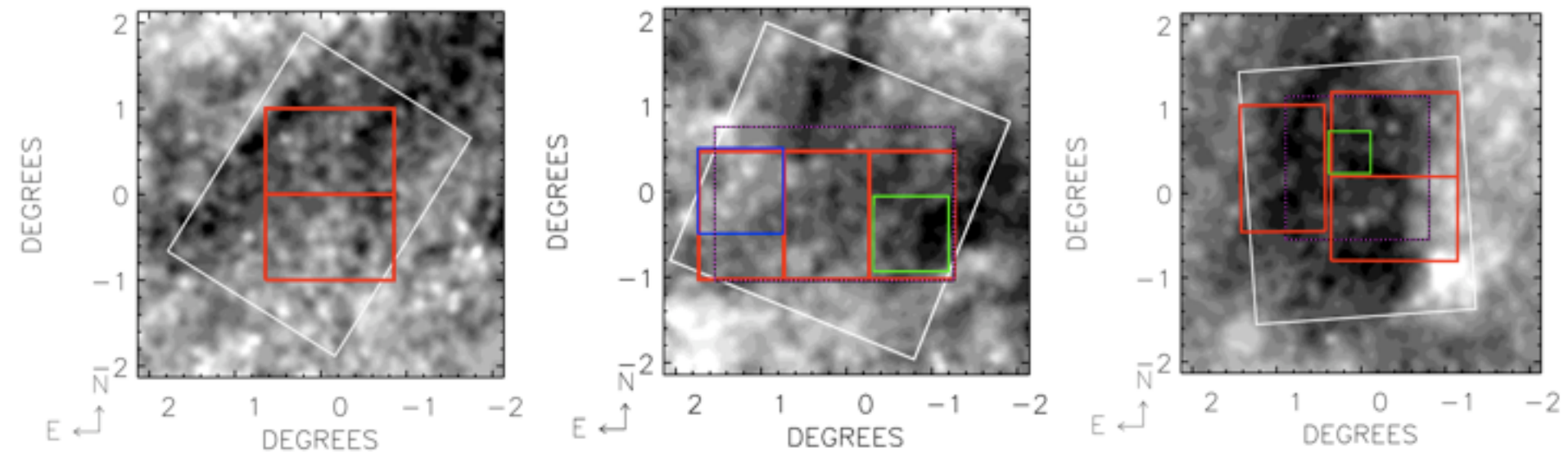


# VIDEO

Matt Jarvis & Dave Bonfield  
University of Hertfordshire

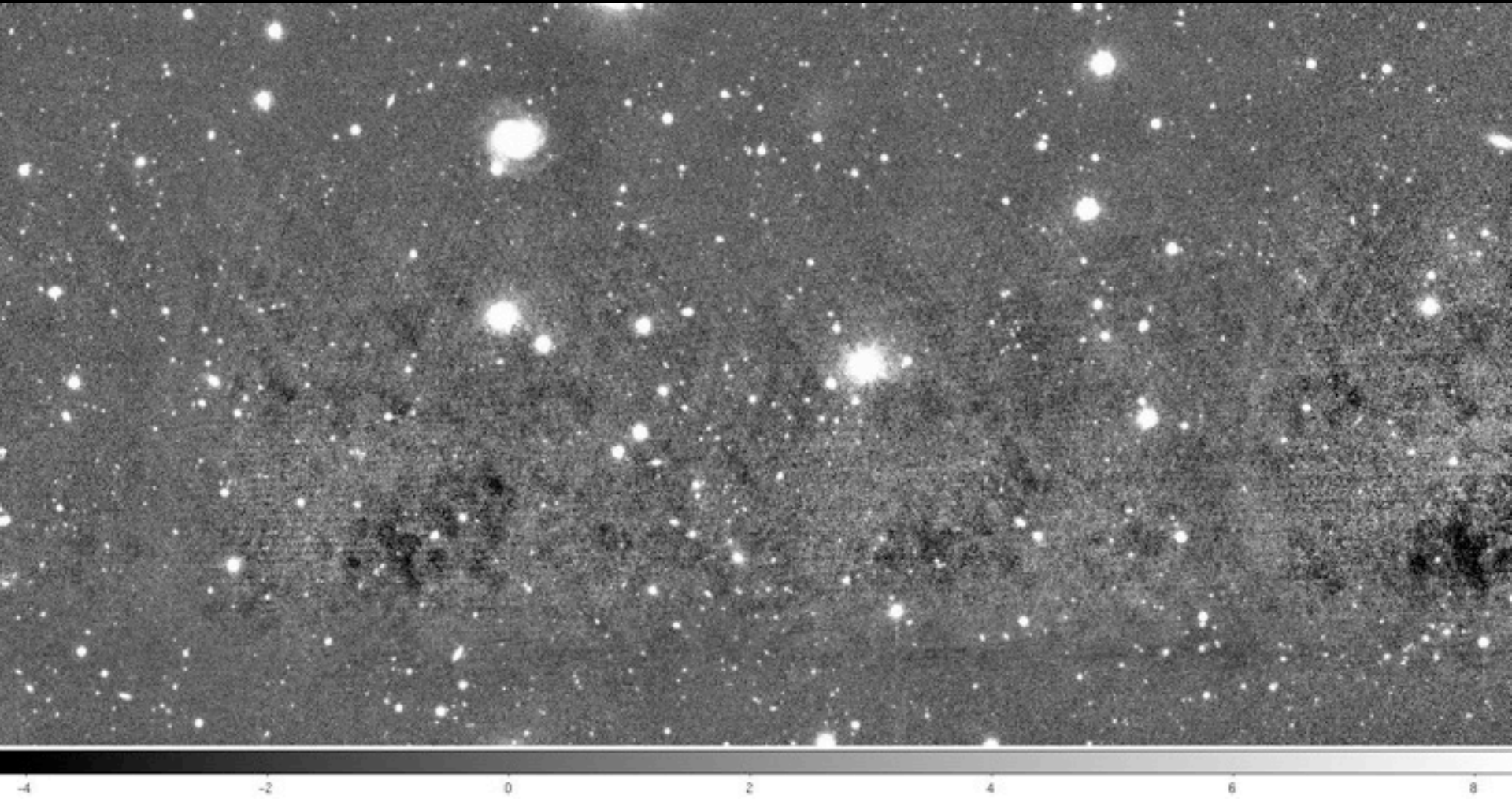


# The VIDEO Survey



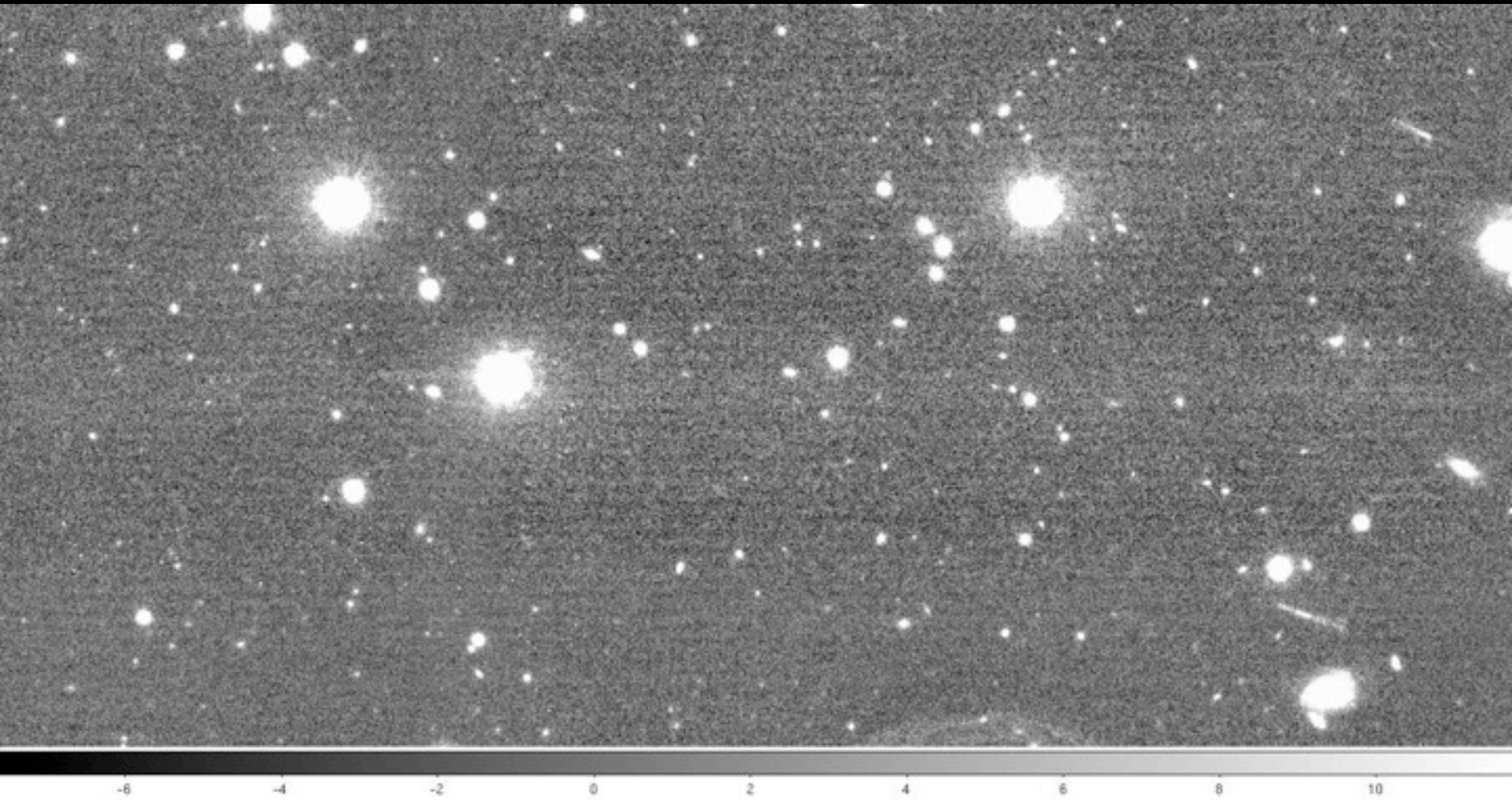
Filter	Time (per source)	Time (full survey)	$5\sigma$ AB	$5\sigma$ Vega	UKIDSS -DXS	Seeing	Moon
Z	17.5 hours	456 hours	25.7	25.2	-	0.8	D
Y	6.7 hours	175 hours	24.6	24.0	-	0.8	G
J	8.0 hours	209 hours	24.5	23.7	22.3	0.8	G
H	8.0 hours	221 hours	24.0	22.7	22	0.8	B
$K_s$	6.7 hours	180 hours	23.5	21.7	20.8	0.8	B

# SV Y-band Data in UDS (detector16)

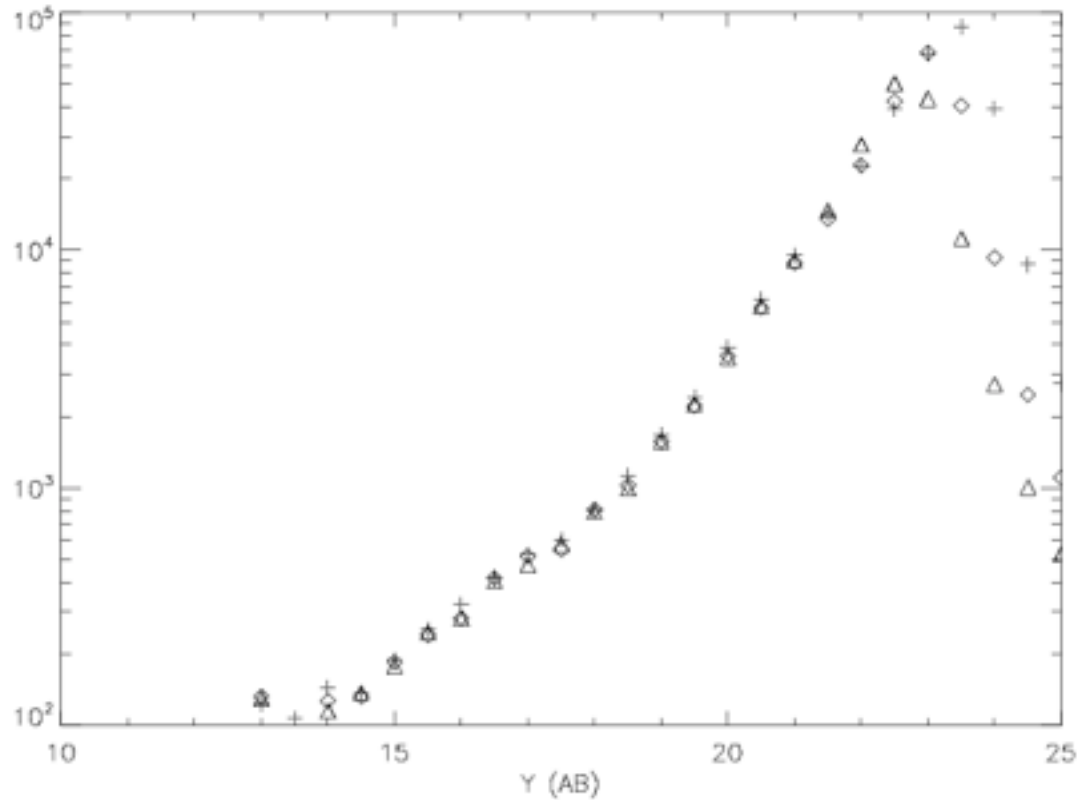




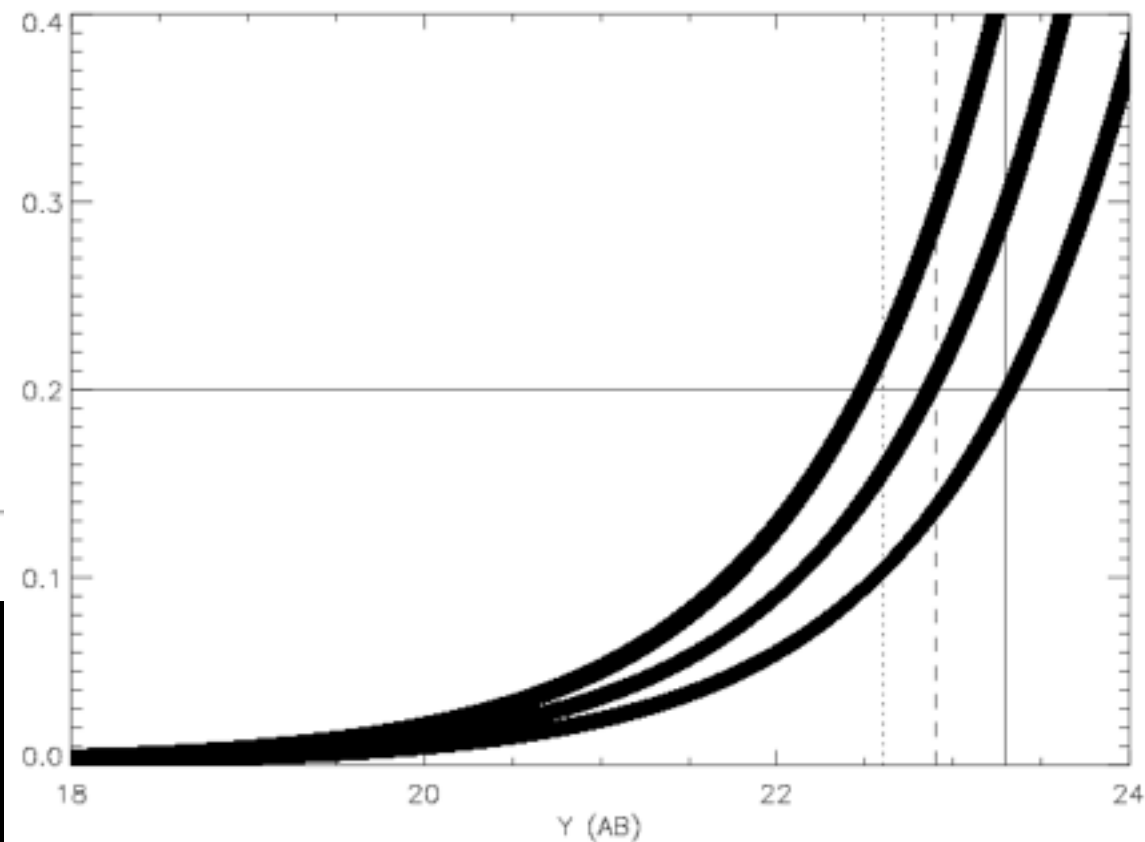
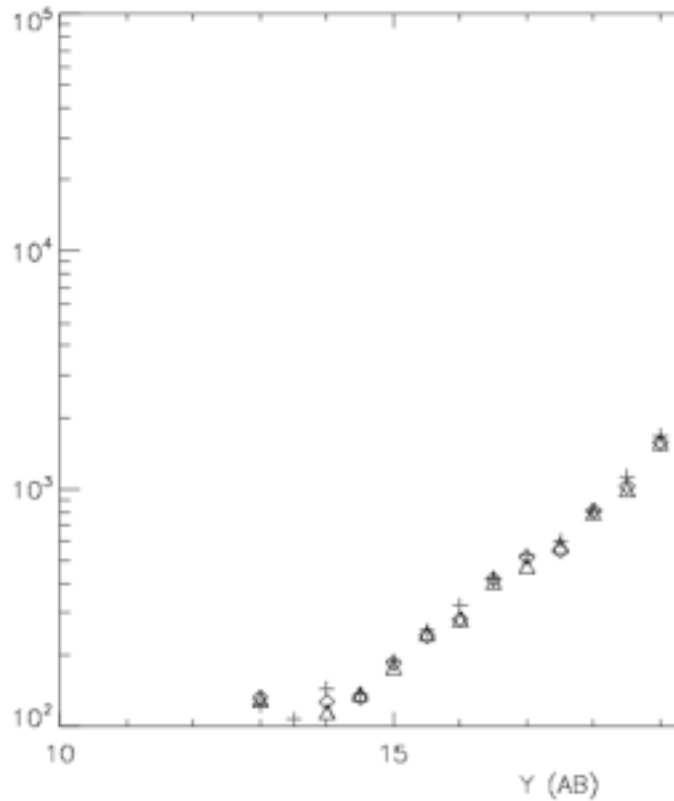
# SV Y-band Data in UDS



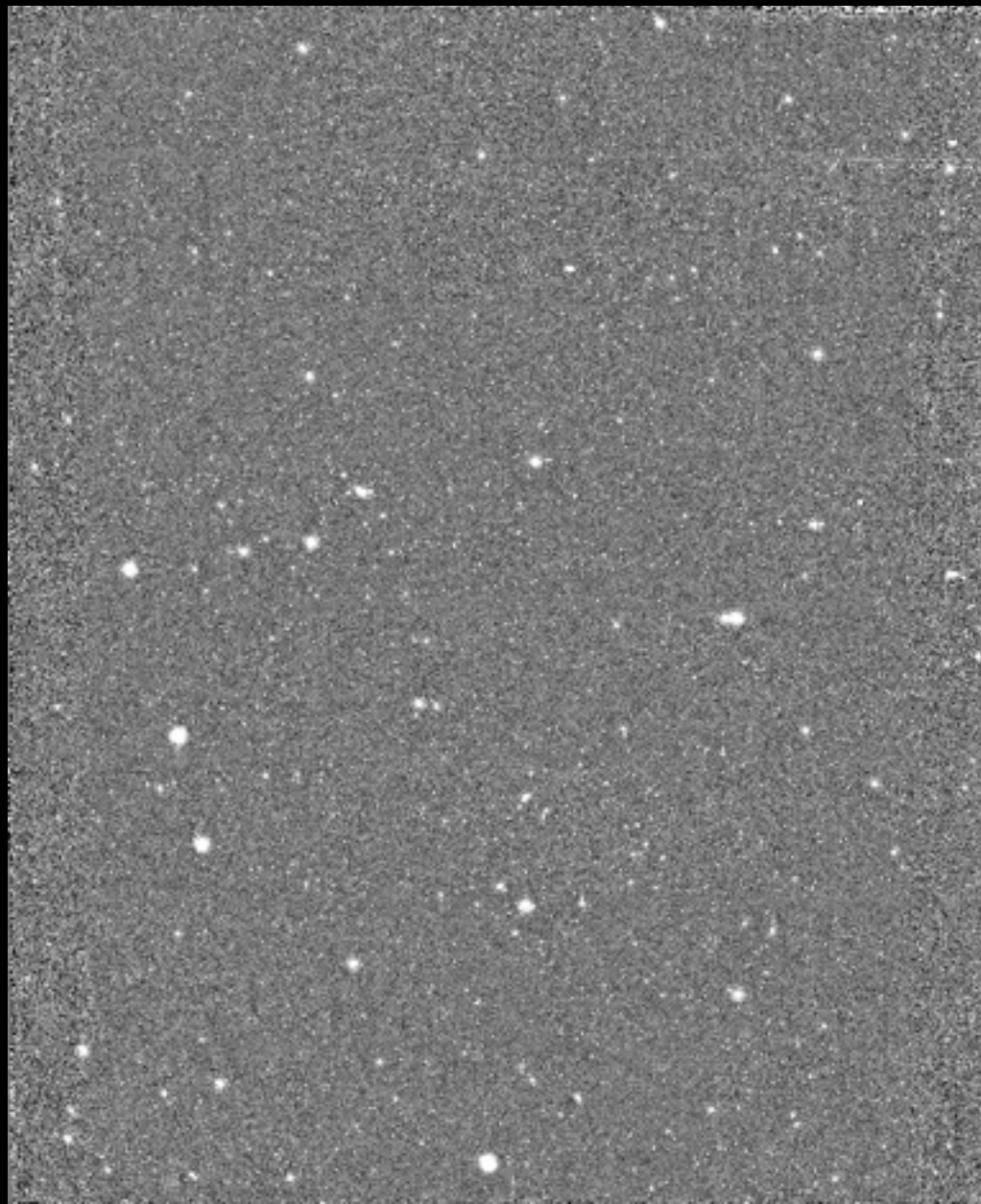
# SV Y-band Data in UDS



# SV Y-band Data in UDS

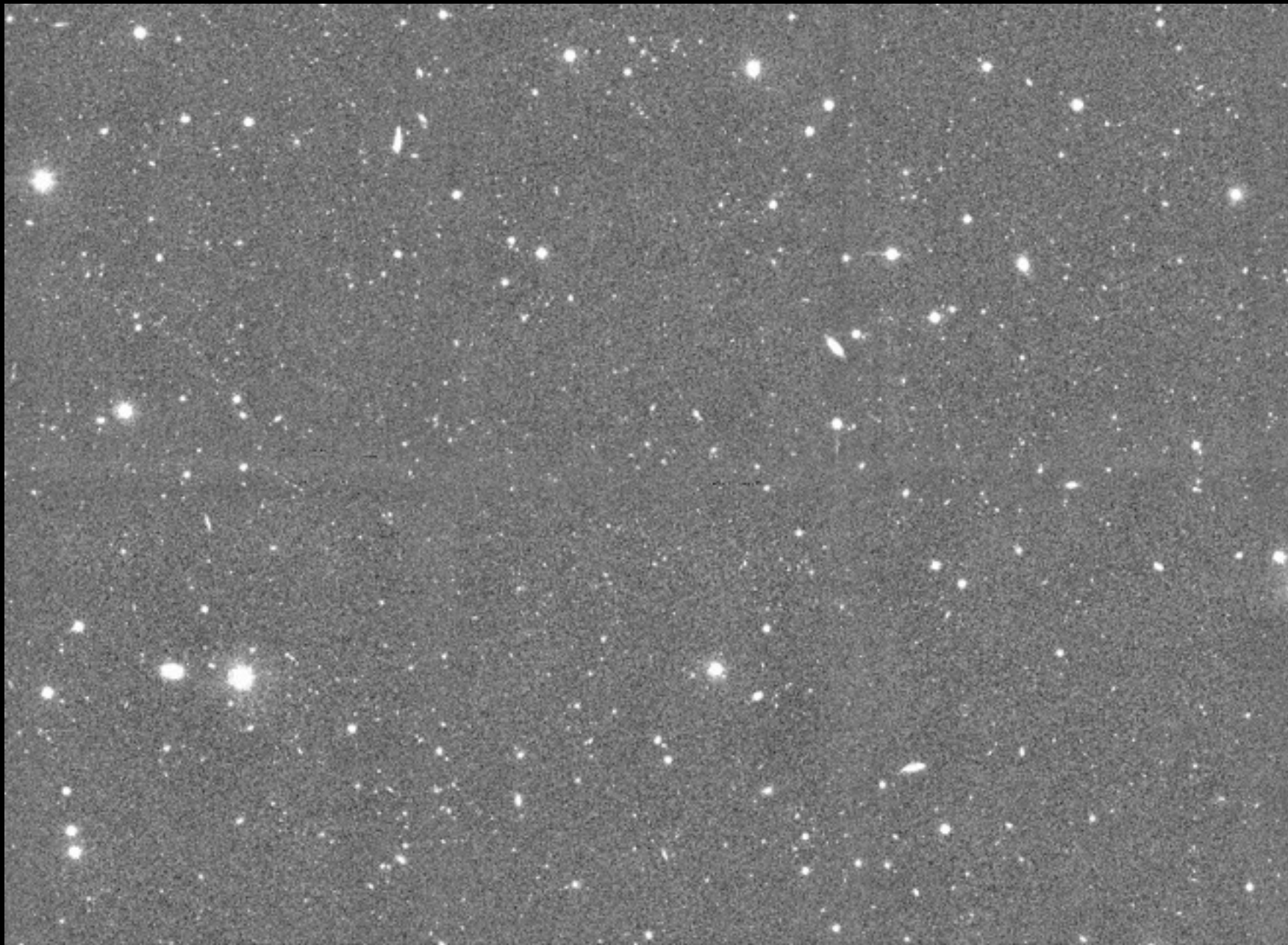


# Dry-Run H-band Data in CFHTLS-D1



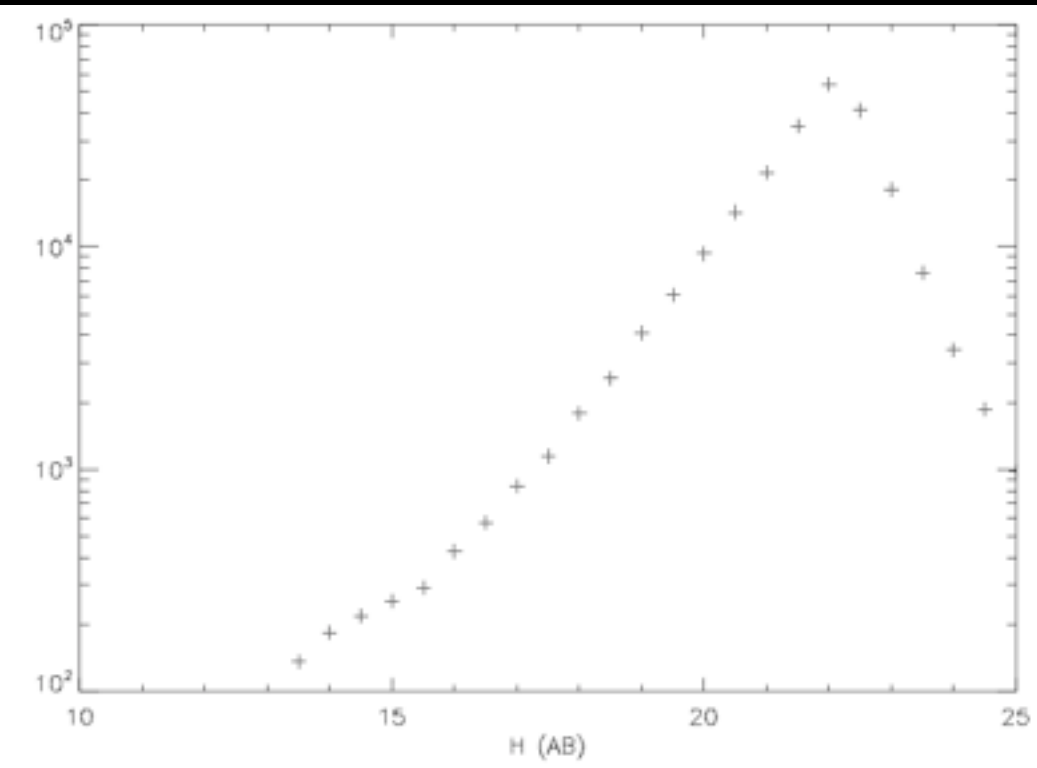


# Dry-Run H-band Data in CFHTLS-D1

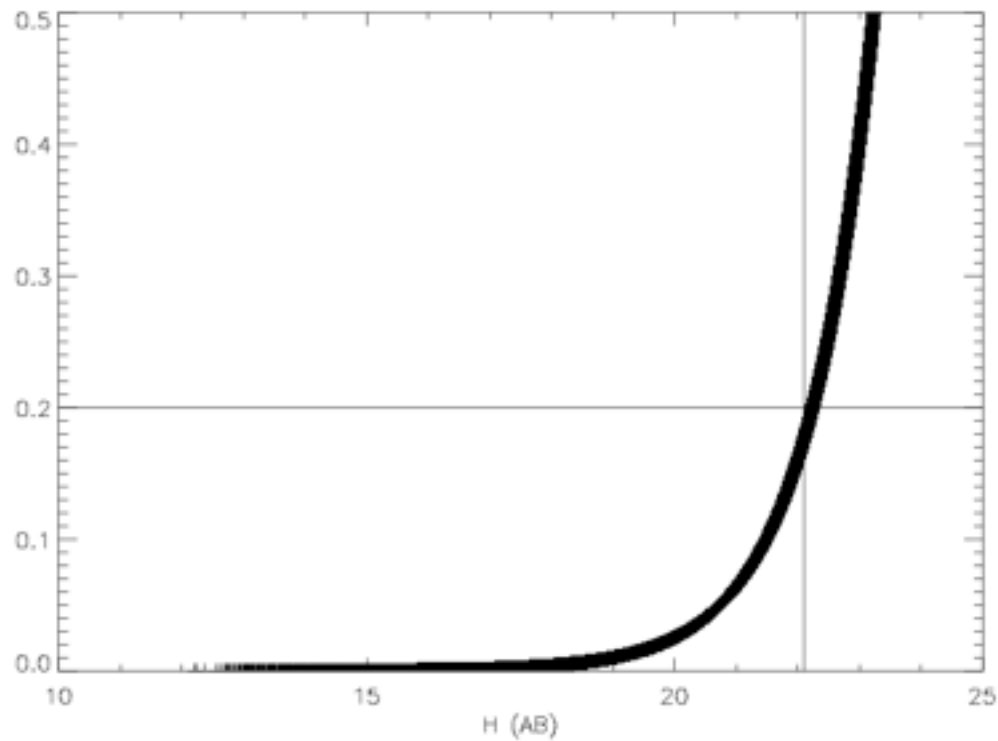
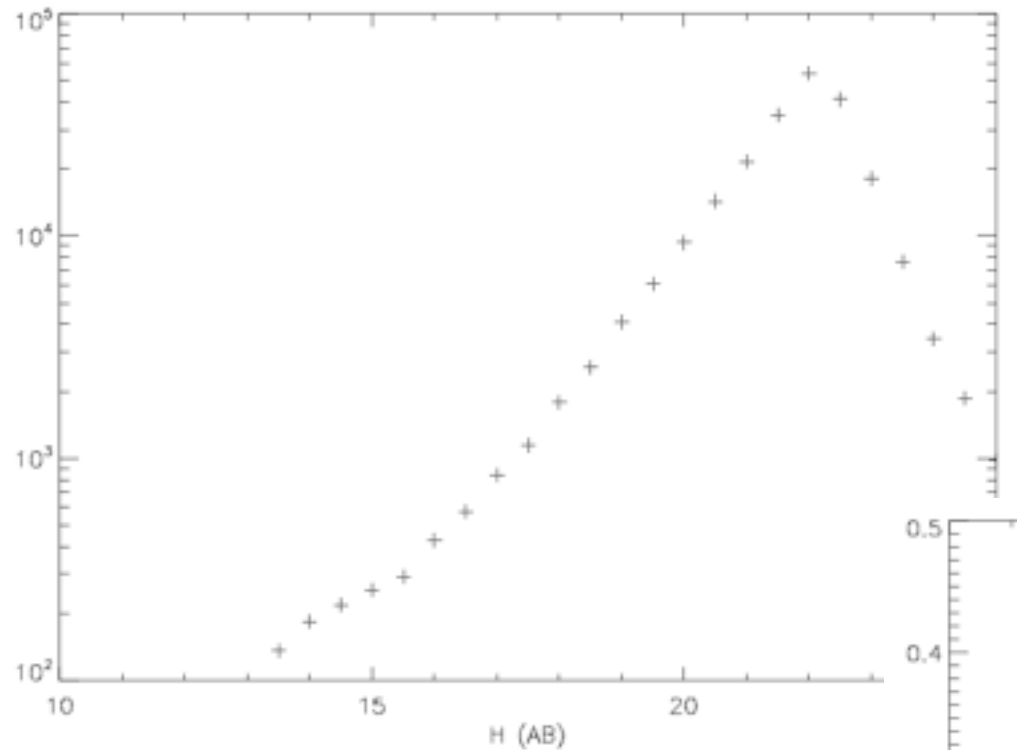




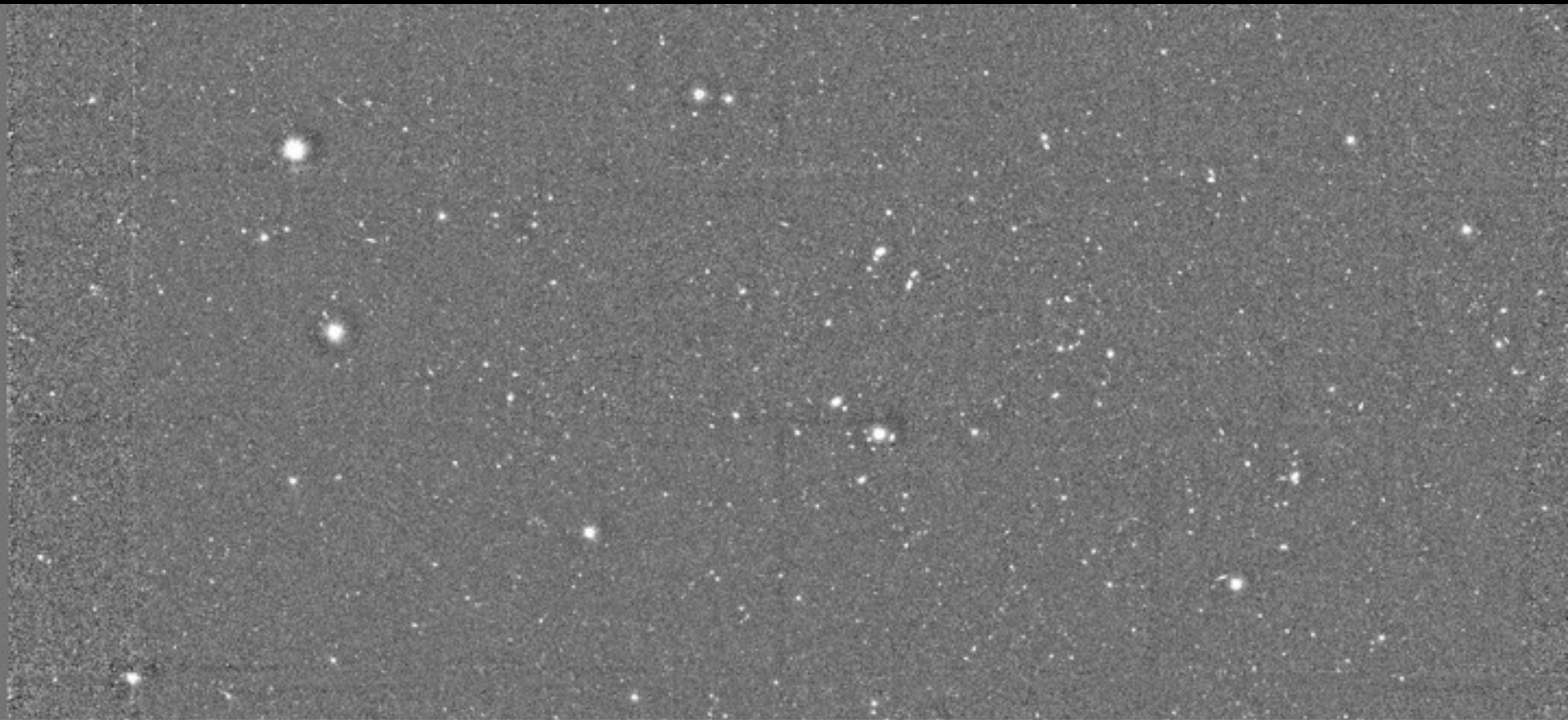
# Dry-Run H-band Data in CFHTLS-D1



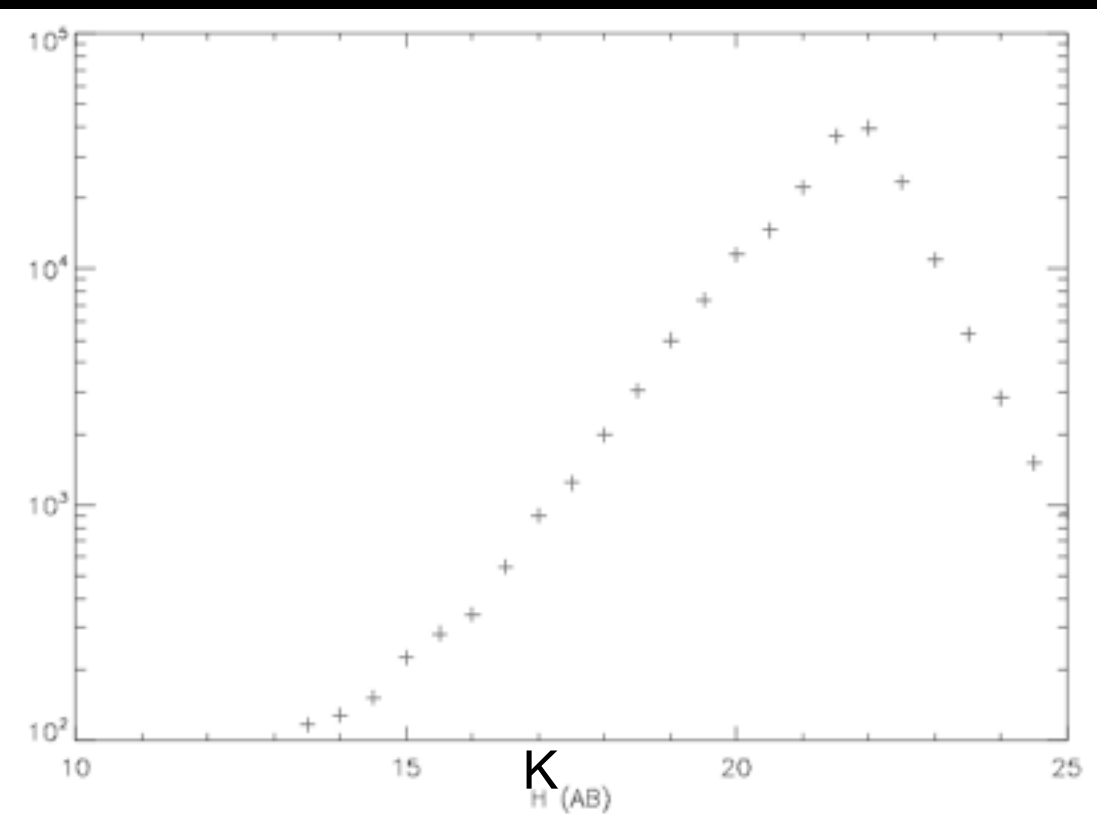
# Dry-Run H-band Data in CFHTLS-D1



# Dry-Run Ks-band Data in CFHTLS-D1

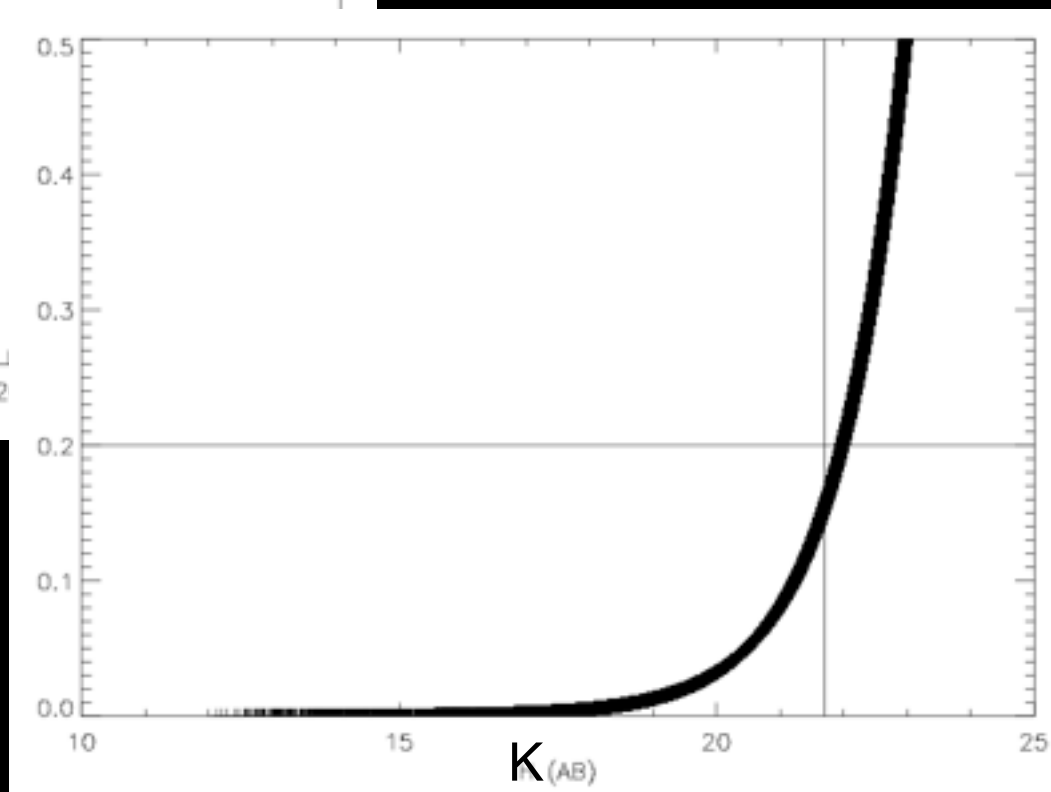
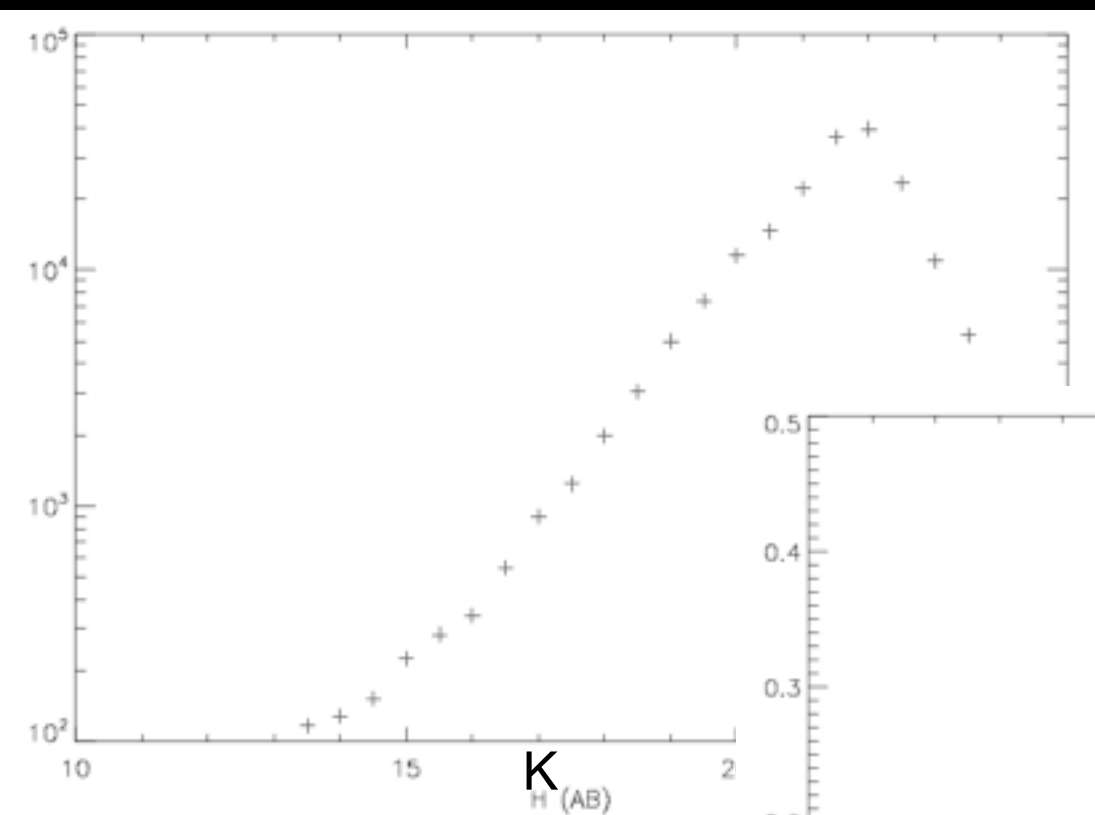


# Dry-Run Ks-band Data in CFHTLS-D1





# Dry-Run Ks-band Data in CFHTLS-D1



Currently, this is where we stand on CFHTLS-D1 in terms of complete OBs(which are all approx 1 hour):

K 17/42 = 40%

H 21/39 = 54%

J 27/36 = 75%

Y 21/28 = 75%

Z 0/61 = 0%

# Wish List from CASU

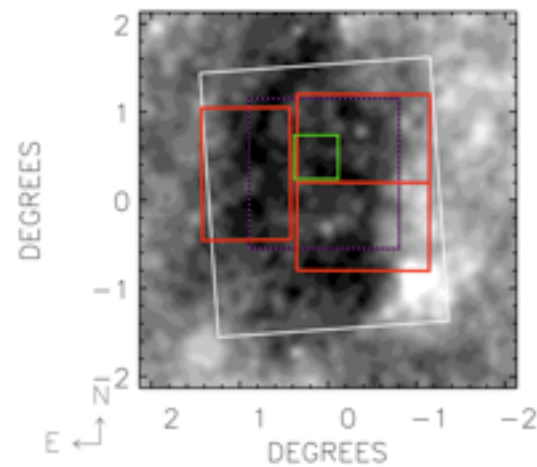
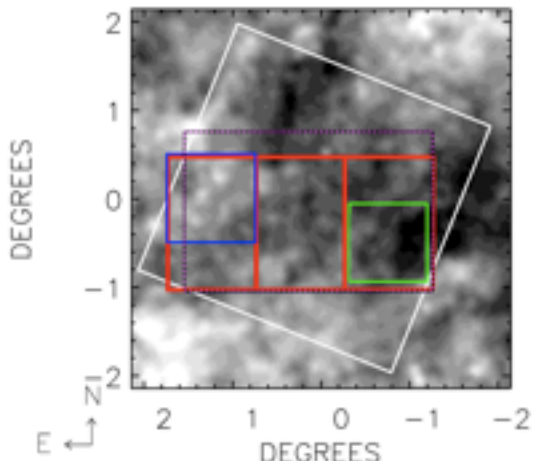
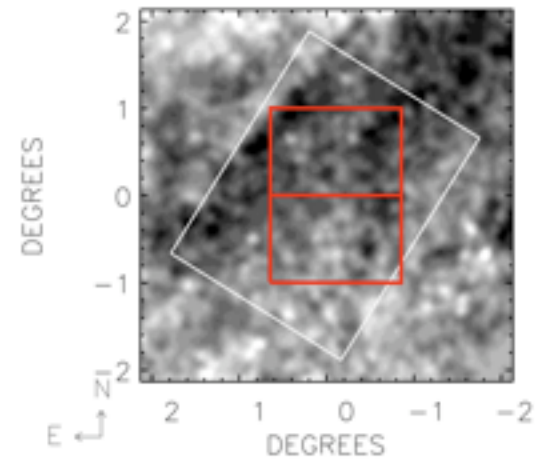
- Reprocessing with updated object mask for each filter on each field (can test with single object mask per tile – 8 tiles total)
- Drizzle and interpolate to full tile from individual paw prints – keep resampled pixel scale throughout ?
- Uncertainty maps for all paw print images?
- Would like both nebulosity removal and without (at least in year 1 to check) on the paw prints (or the code)
- Need illumination paw-print to use to extract catalogues after stacking (why can't this be done before all processing?)

# Wish List from ESO

- How are OBs rejected – what are the conditions – is it strictly within our constraints? (i.e.  $<0.8''$  – if so why do we have images with  $1''$ ?)
- Can we ensure that ZYJ-bands are done 3 hours after twilight?
- Knowledge of how OBs are scheduled – ESO simulation may not be in line with Survey strategy (overflow the queue) – can we feed into it?
- Need to know more about allocation in future Periods to enable us to plan strategy for current period
- How do priorities/groups/constraints all work together at Paranal?
- Clarity on when products are delivered to ESO. My understanding is 6 months after the Period end in which the OBs were done (just basic products)

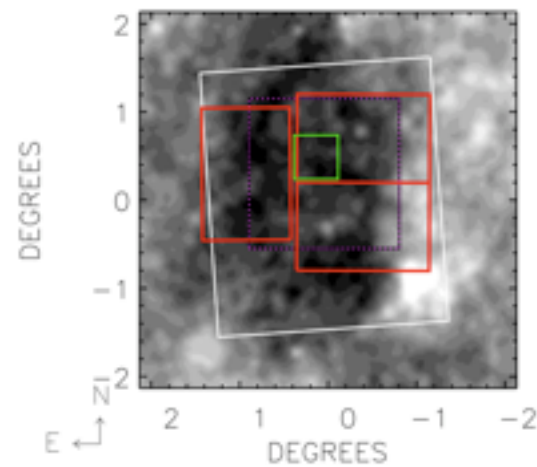
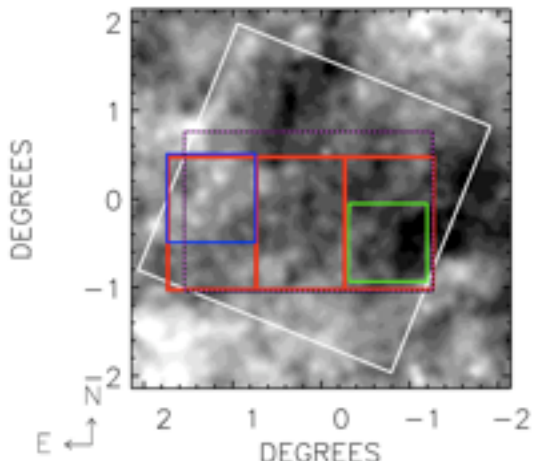
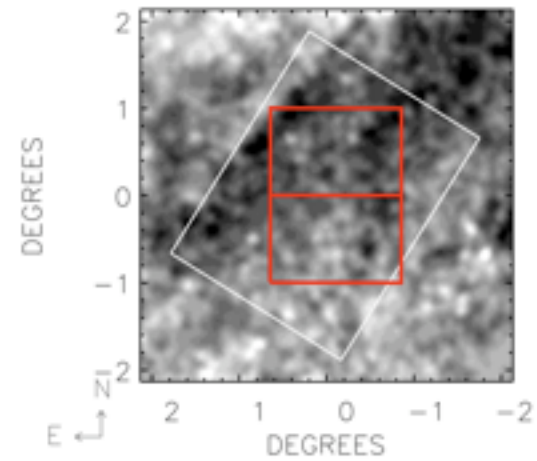


# VIDEO+SERVs+DES



# VIDEO+SERVs+DES

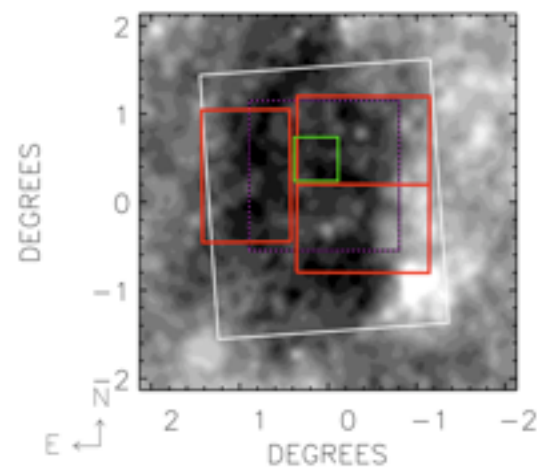
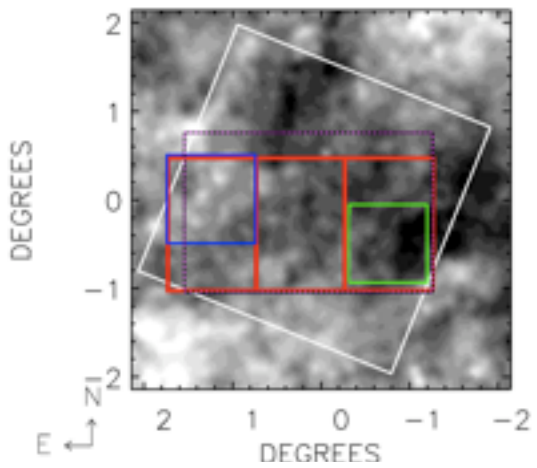
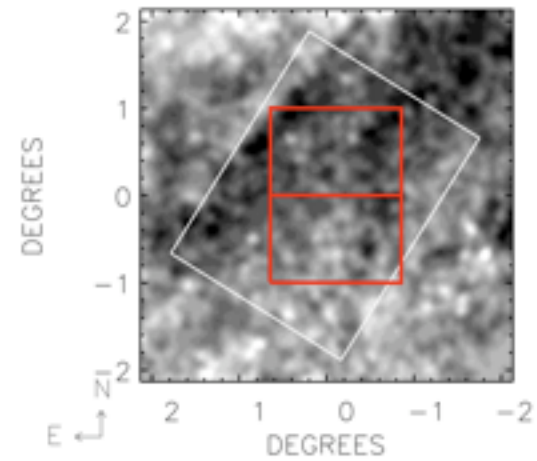
Spitzer Representative Volume Survey (SERVS) approved to cover VIDEO survey regions + LH and Elais-N1



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(1400 hours allocated – PI Mark Lacy)

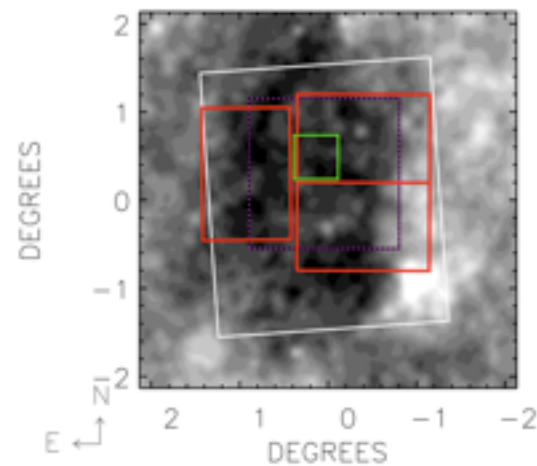
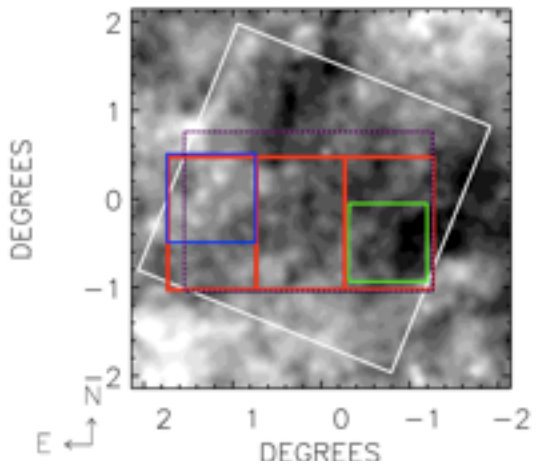
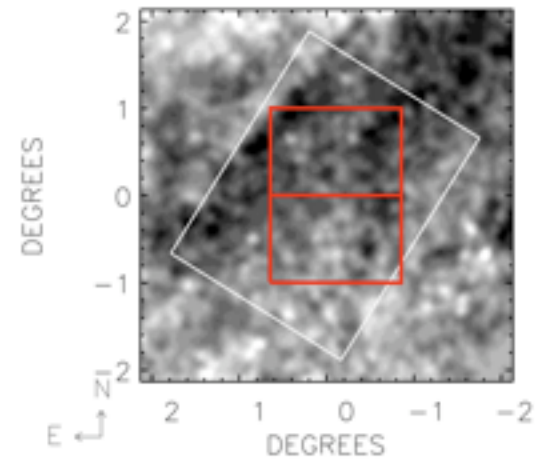


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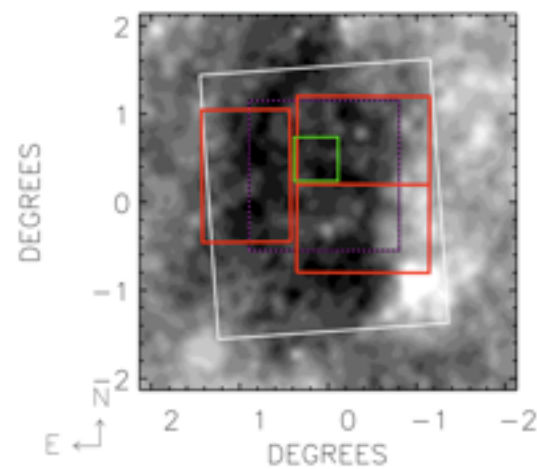
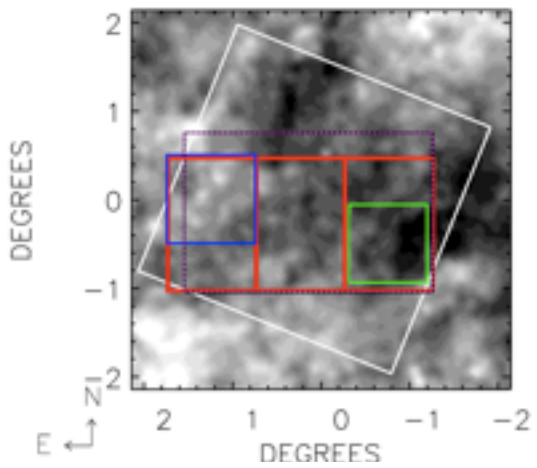
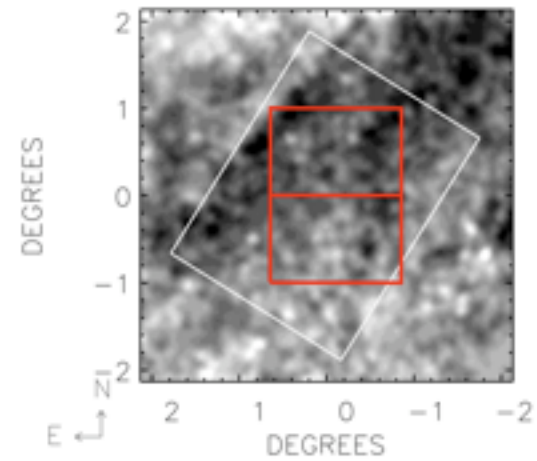
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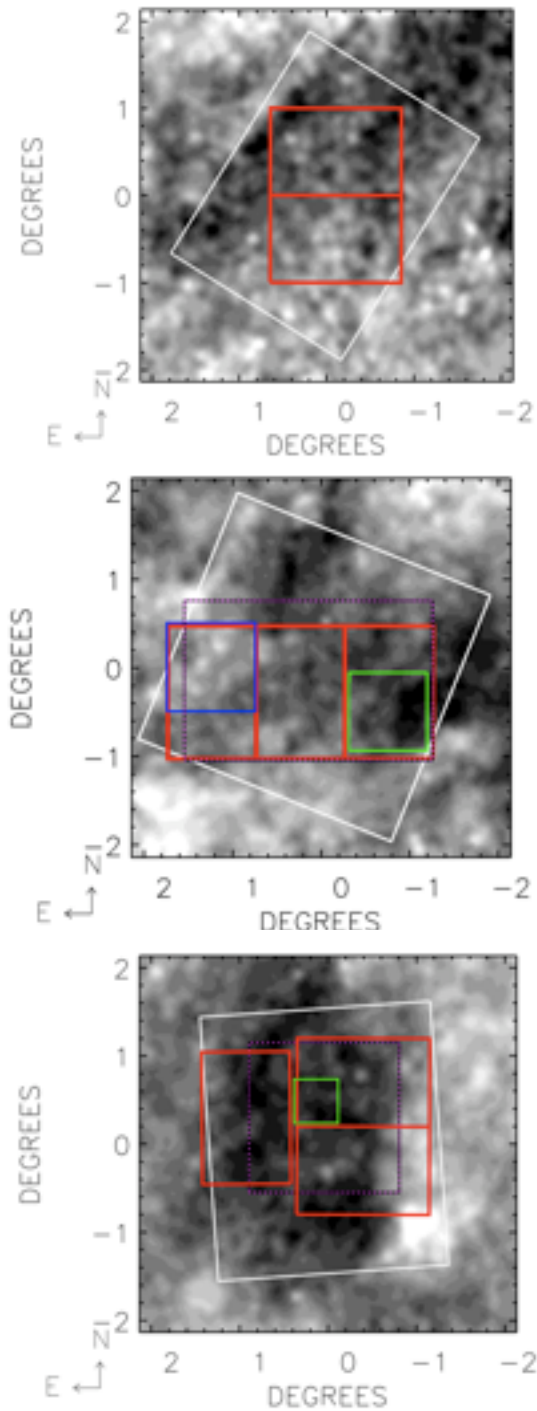
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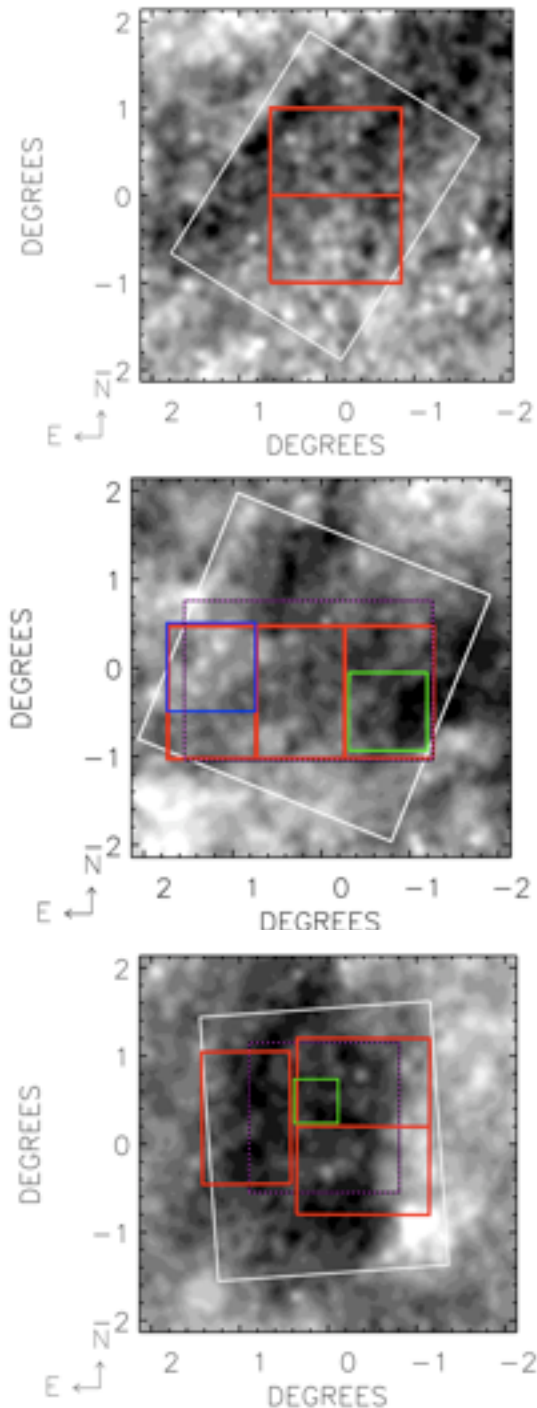
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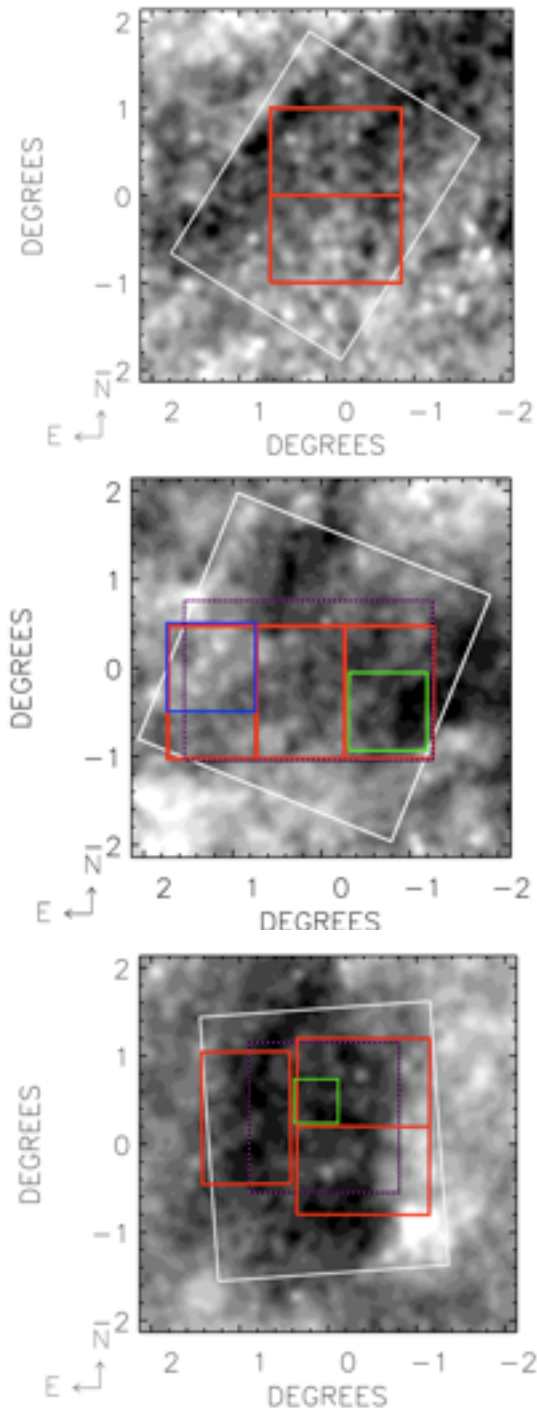
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Concentrating on SNe science initially.



# Planned papers from Dry-Run (14 so far)

- The VIDEO Survey – Jarvis, Bonfield et al.
- 3-D clustering as a function of mass and redshift – Bonfield, Jarvis et al.
- 2-D clustering of DRGs – Parish et al.
- $z \sim 6$  LBGs/QSOs in VIDEO - McLure et al.
- Galaxy evolution as a function of environment – Burton, Jarvis et al.
- Stellar mass and star formation (with HerMES) – Hurley, Oliver et al.
- ID of optical blank FIR sources (with HerMES) – Oliver, Hurley et al.
- HzRGs and their environments – Teimourian, Jarvis et al.
- Galaxy clusters in VIDEO – Geach, Smail, Jarvis et al.
- SEDs of X-ray selected EROs – Trichas et al.
- $z \sim 5$  LBGs/QSOs in VIDEO (with SERVs) – Verma, et al.
- Tracing the assembly of massive galaxies at high- $z$  – Bruce, McLure et al.
- Contribution of mergers to the mass assembly at high- $z$  – de Ravel et al.
- Old passive galaxies at  $1 < z < 2$  – Caputi et al.