

# COMPLEMENT GAIA in Star forming regions

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## Sensitivity

GAIA complete up to  $V \sim 20$  mag

=  $\sim 25 M_{\text{Jup}}$  at 1 Myr and 100 pc

Mass Function goes down to  $3 \sim 4 M_{\text{Jup}}$

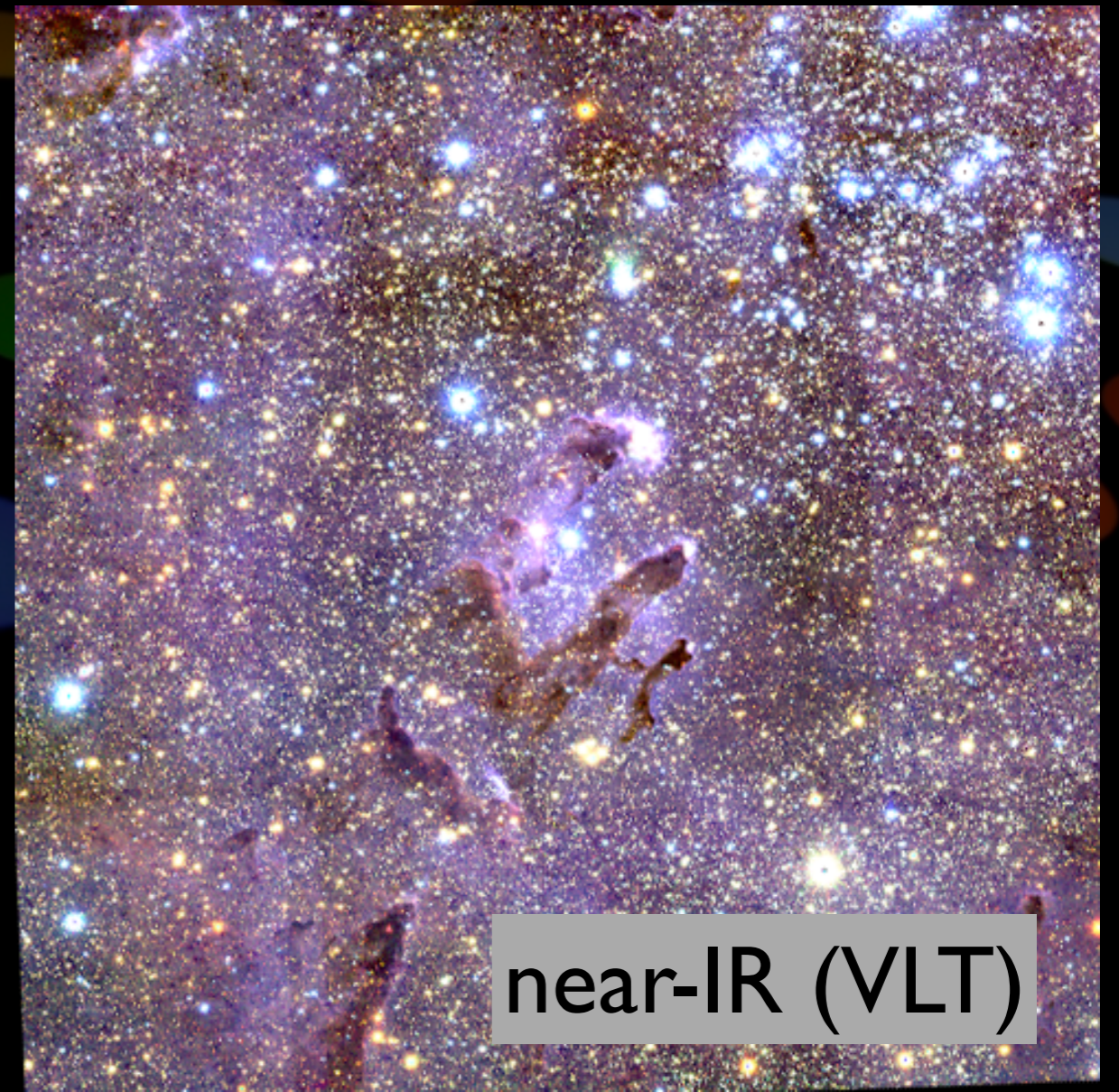
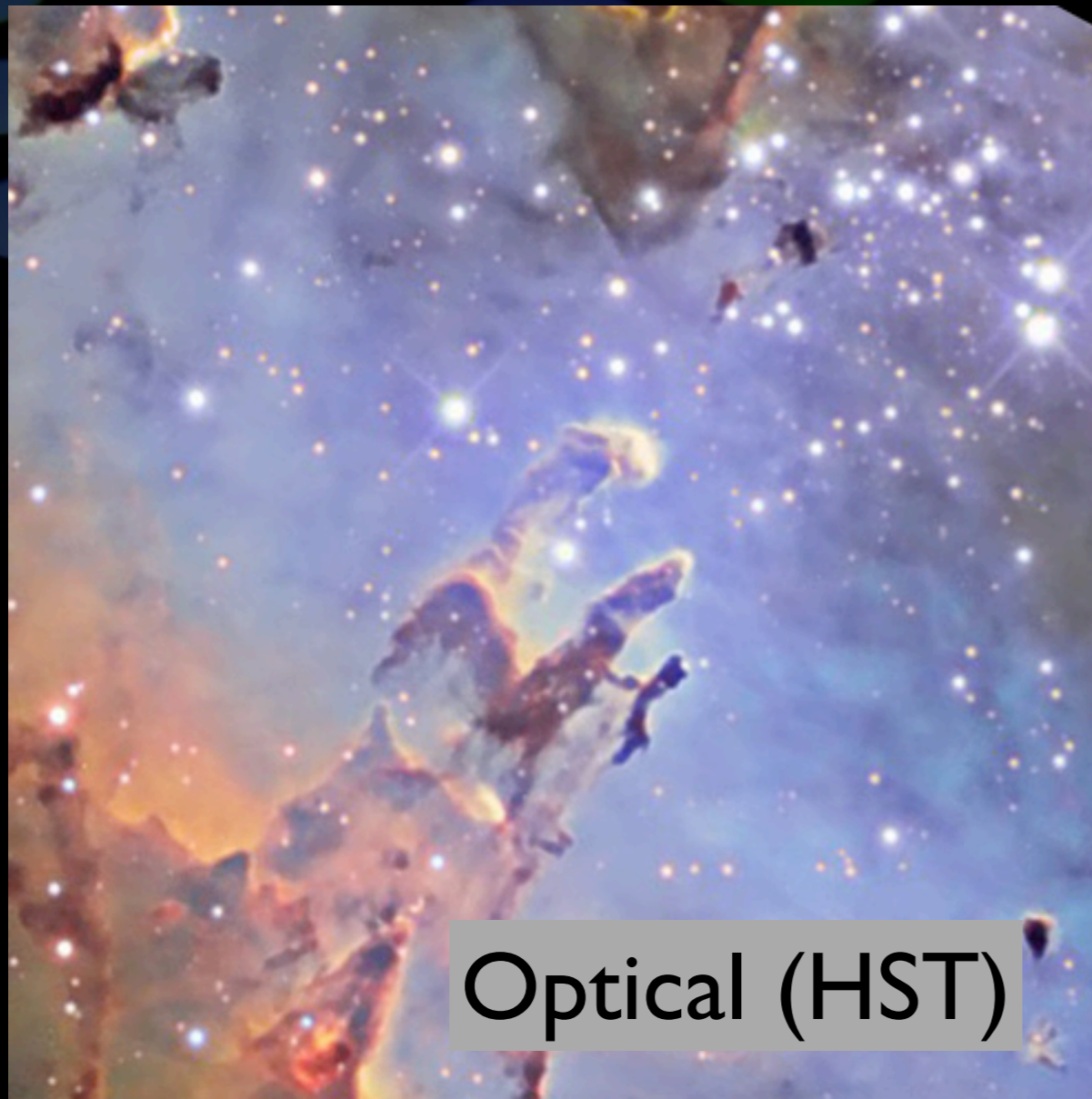
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## Extinction & Nebulosities

GAIA worst enemy

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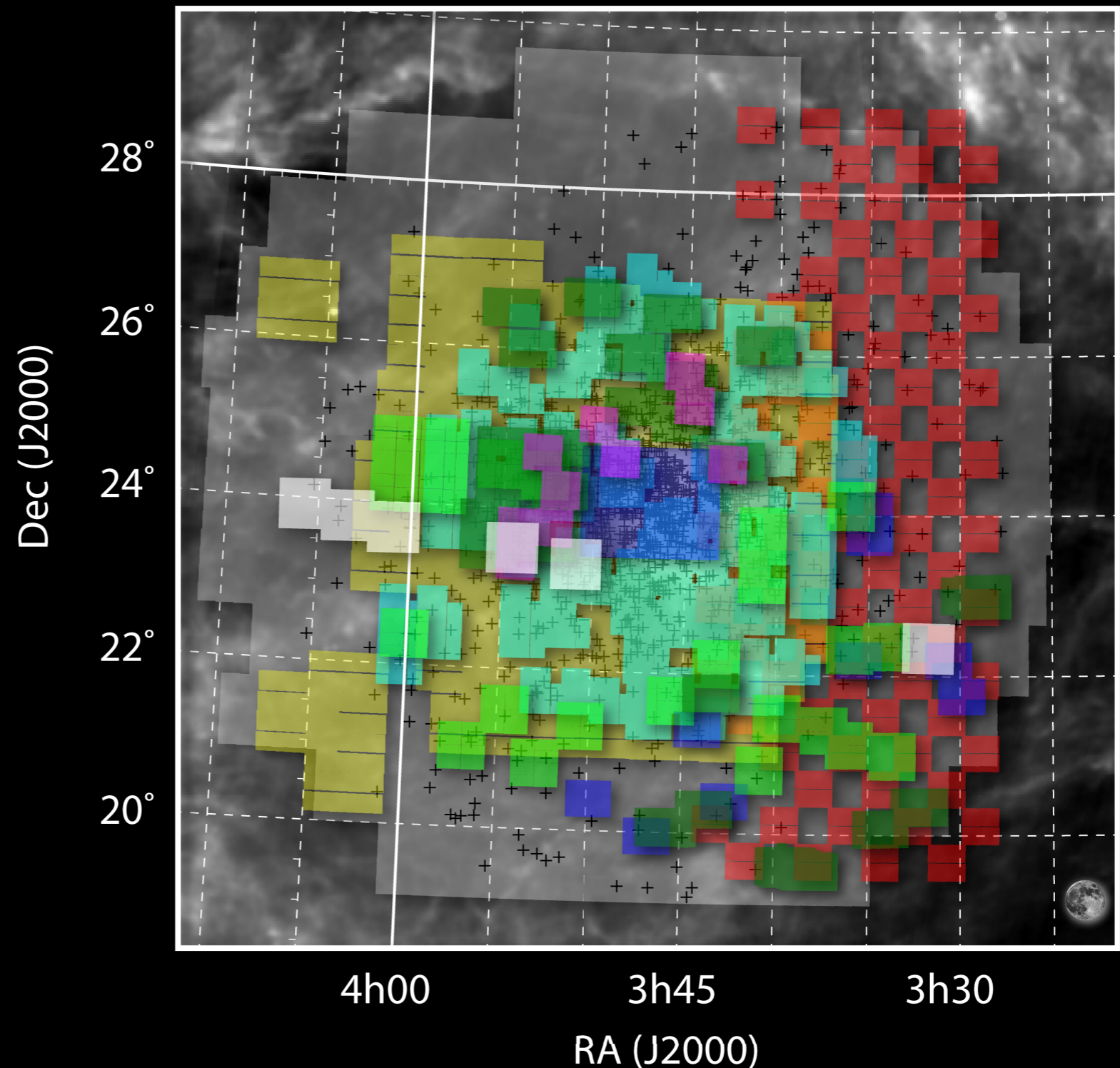
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# Test bench: The Pleiades

KPNO/Mosaic1 UKIRT/WFCAM Subaru/SuprimeCam CFHT/CFHT12K  
INT/WFC CFHT/UH8K KPNO/NEWFIRM CTIO/MOSAIC2 CFHT/MegaCam

~100 deg<sup>2</sup>  
~18000 images  
2x10<sup>11</sup> pixels  
1.1Tb  
**10<sup>7</sup> sources**



# Targets

Association	Age [Myr]	Distance [pc]	$\mu$ RA [mas/yr]	$\mu$ Dec [mas/yr]	1st Epoch Data?
Pleiades	120	120	-35	-15	✓
CrA	1	130	-35	51	✓
$\eta$ Cha	9	100	-30	28	✓
Upper Sco	5	125	-9	-24	✓
$\alpha$ Per	50	180	24	-26	✓
IC2391	55	155	-25	23	✓
IC2602	50	145	-22	10	✓
Lupus	3	140	-17	-27	✓
IC348	3	350	7	-9	✓
NGC1333	1	350	7	-9	✓
Serpens	3	450	?	?	✓
Praesepe	650	180	-36	-13	✓
Ophiuchus	1	145	-10	-25	✓
Taurus	3	140	-8	-25	✓
Blanco I	100	210	19	4	✓
Hyades	625	40	~100		✓
Orion	1-10	400			✓
<b>Galactic Plane</b>	IPHAS, UKIDSS, VPHAS, VISTA, CFHT				✓

Southern

Northern

# Facilities

## Wide Field Imagers

Optical	near-IR
INT/WFC (0.3 sq deg)	CAHA/PANIC (0.5 sq deg)
WHT/PAUCam	

## Wide Field High Resolution Spectrographs

Optical	near-IR
CAHA/CAFE	CAHA/CARMENES
CAHA/HEXA	GTC/MIRADAS
ING/WEAVE	