

	Band 1A	Band 1B	Band 2A	Band 2B	Band 2C	Band 2D
Band center (λ_c)	6 continuous filters 25-45 microns (linear-variable filters with spectral resolving power R = 10)	6 continuous filters 45-80 microns (linear-variable filters with spectral resolving power R = 10)	96 μm	126 μm	172 μm	235 μm
Band edges	25–45 μm	45–80 μm	80–103 μm	110–141 μm	150–193 μm	204–265 μm
# of pixels	63x23	35x24	36x31	24x21	18x16	12x11
Pixel size	3.6"	6.3"	9.23"	13.3"	17.1"	24.0"
Band centre FWHM ^a (1.05 λ_c/D)	3.7" (4.3")	6.6" (7.8")	9.7" (11.3")	13.2" (15.5")	18.1" (21.2")	24.7" (29.0")
Point Source sensitivity (total power, I)	220 μJy	300 μJy	200 μJy	300 μJy	400 μJy	500 μJy
Point Source sensitivity in P = $(Q^2+U^2)^{1/2}$			300 μJy	400 μJy	550 μJy	700 μJy
Surface brightness sensitivity (total power, I)	1.1 MJy/sr	450 kJy/sr	150 kJy/sr	100 kJy/sr	80 kJy/sr	60 kJy/sr
Surface brightness sensitivity in P = $(Q^2+U^2)^{1/2}$			210 kJy/sr	150 kJy/sr	110 kJy/sr	80 kJy/sr
Estimates** of point source sensitivity including confusion (Extragalactic science cases)	240 μJy for the 6 filters	300, 320, 340, 370, 500, 610 μJy	800 μJy	3 mJy	10 mJy	13 mJy

Sensitivities are expressed for the 5 σ level in a 1 square degree area mapped for 10hr

*This is highly model dependent and may be changed in the future.

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Assumptions:

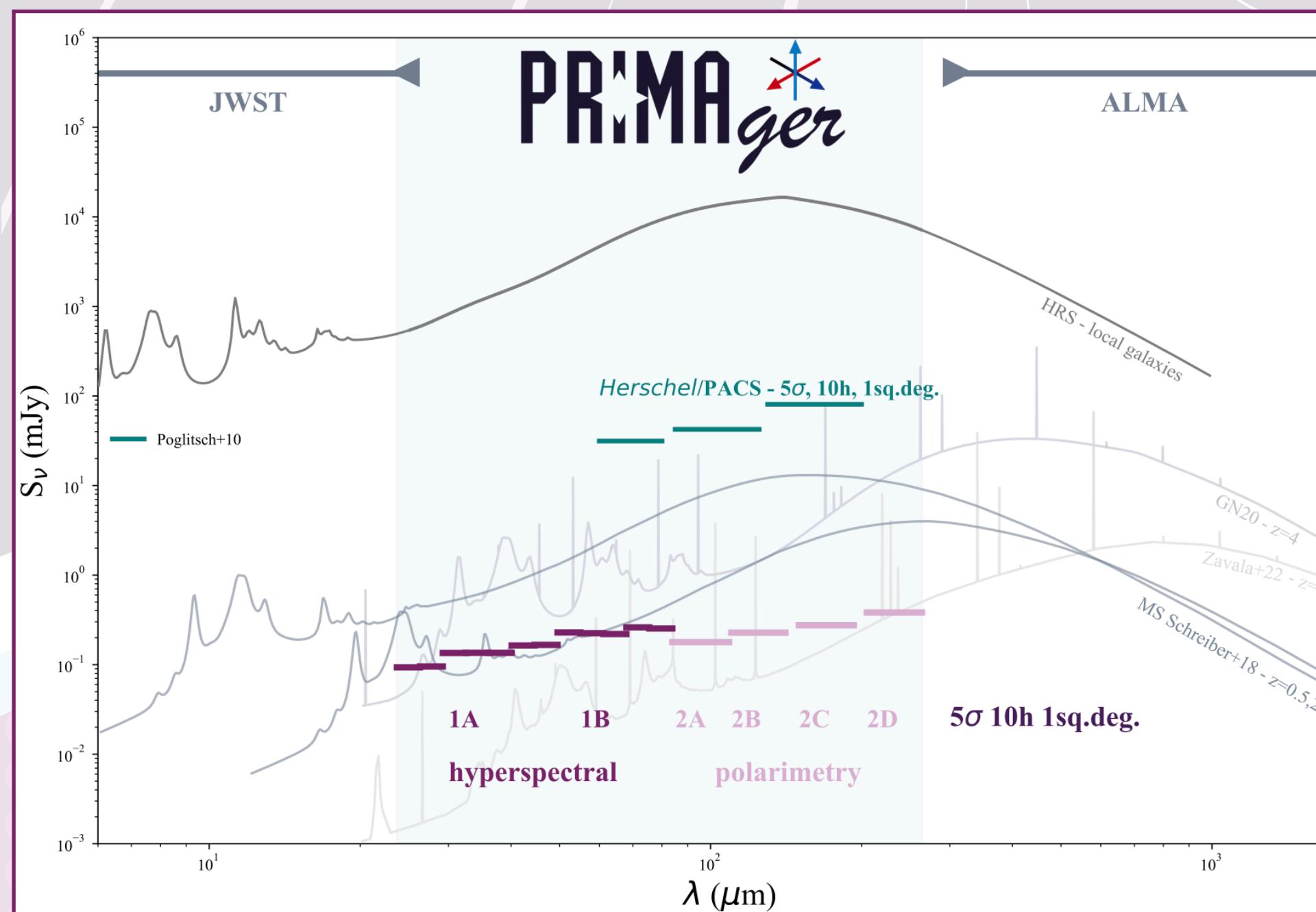
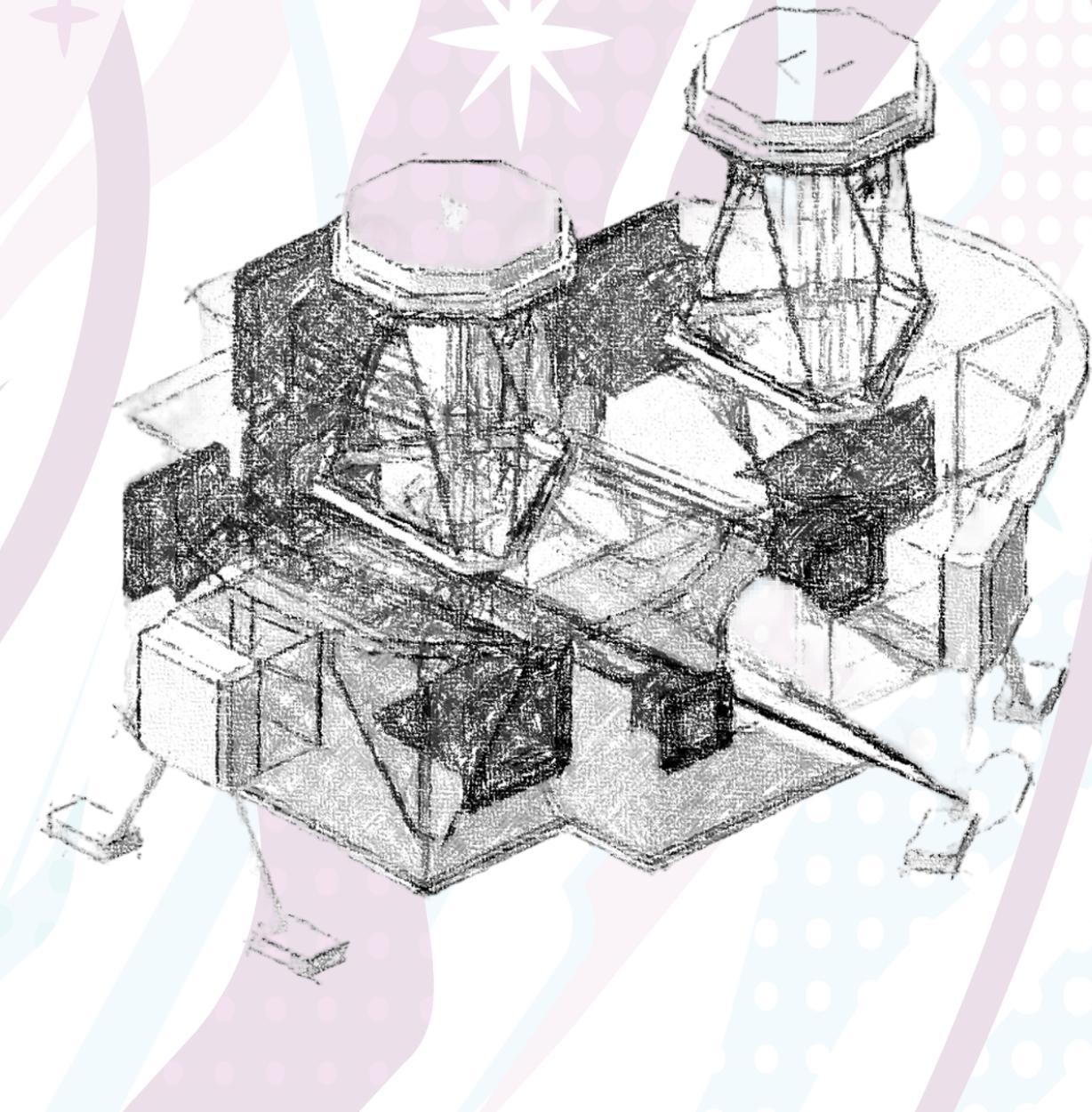
NEP is background dominated

Telescope mirror temperature: 4.5 K

Mirror: Ø2 m, 1.8 % areal obscuration

Background includes:

- Zodiacal light, ISM, CIB, CMB at location typical of **extragalactic deep fields**



Hyperspectral imaging:
12 continuous filters between 25 and 80 microns with R=10

Imaging with polarimetry:
4 broad band filters with R=4 sensitive to 3 angles of polarization

The two bands will observe simultaneously, with all filters.

