STEP 2 - CALCULATING THE SKY FRAME

Assuming that we use observations from one 'NOTCam script' that was carried out in less than 20-30 minutes or so, the sky haven't had time to change that much and we can simplify things by only calculating one sky frame.

Also, assuming that 'beam switching' was used (as in the example data) we need some more lists...

off_cube.list	me180231[*,*,1]	off.list	off1
	me180232[*,*,1]		off2
	me180235[*,*,1]		off3
	. . .		. . .
	me180260[*,*,1]		off16

Most science observation scripts with NOTCam uses the 'frame' command to take exposures, this means that the images we get actually are cubes, with the first frame [*,*,1] being the final image, followed by intermediate non-destructive read-outs and finally the reset frame. So for a "frame 6 5" exposure we get a 1024x1024x7 cube.

If we're not going to use the intermediate readouts (usually only the final frame is needed), we can write:

imcopy @off_cube.list @off.list

This command copies the first frame in each cube to the images in the off.list, now we must make another header fix:

epar hedit	images = @off.list
	fields = wcsdim
	value = 2
	verify = no

No we will not confuse imcombine with unnecessary extra dimensions! Median filtering now gives the final sky frame:

epar imcombine	input = @off.list
	output = sky_Ks
	combine = median
	scale = none

The sky frame is here called 'sky_Ks' and will contain the bias + dark + IR sky (filter Ks)

STEP 3 - SUBTRACTING THE SKY AND FLATFIELDING

Guess what, we need two more lists! They could for instance look like this:

on_cube.list	me180229[*,*,1]	on.list	on1
	me180230[*,*,1]		on2
	me180233[*,*,1]		on3
	. . .		. . .
	me180258[*,*,1]		on16

Removing the sky is now as simple as: imarith @on_cube.list - sky_Ks @on.list

Yet another dimensional fix is now required:

epar hedit	images = @on.list
	fields = wcsdim
	value = 2
	verify = no

Flatfielding is then done with: imarith @on.list / masterflat_Ks @on.list

(this operation overwrites the on1-on16 images with flatfielded ones)