Plan for experimenting with HiRes:

1. Generate source image from spitzer data
    - Load spitzer 24um image
    - Convert to HIPE level 1 data scans
    - Convolve with SPIRE beam
    - Convolve with beam approx 2*res of spire to give a 'truth' image - this beam can either be generated from the spire beam, or directly taken from the output of HiRes
    - Could also generate a lower res image from spitzer by downsampling, giving the advantage of not having to rely on the beam data, might be good for visual comparisons but may not work for computational ones

2. Run HiRes over image
    - Generate maps of original data, HiRes and our 2*beam for comparison

3. Work out a system for the difference between 2 images
    - Possibly may be as simple as normalised (wont need to normalise if flux is conserved) average square difference of pixels, although will have to super-sample images to get to the same pixel resolution
    - Can compare power spectra
    - Can compare histograms although presumably in the absence of artefacts introduced by hiRes these will just be scaled and the same shape - needs investigating

4. Repeat while artificially changing image parameters and see if sensible thresholds can be found
    - Adjust SNR of image
    - Add synthetic sources to see how hires works with different image types
    - May want to look at how bright point sources in the image affect HiRes, especially in the case of foreground stars
    - Check for different herschel image types:
        Galaxies at various inclinations
        Milky way images
        Deep field images
        'dark' sky images if there are any