| Q13 | Q9_u | Q9_g | Q9_r | Q9_i | Q9_z | Q9_y | Q8_#u | Q8_2_#g | Q8_3_#r | Q8_4_#i | Q8_5_#z | Q8_6_#y | Q11 | Q12 | Q10 | Q5 | Q6 | Q7_1_1 | Q7_2_1 | Q9_1 | Q9_2 | Q10_1 | Q10_2 | Q10_3 | Q10_4 | Q10_5 | Q10_6 | Q10_7 | Q10_8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Which group are you representing for this survey?** | u | g | r | i | z | y | #u | #g | #r | #i | #z | #y | Prefered Cadence | SSOs? | If you care: Max # back-to-back exposures with coherence in atmospheric PSF. | Variation of the PSF across the focal plan should be: | Sky model should be based on: | Clouds? | Vingnetting? | In Sky Model: Gradients across image? | In Sky Model: Twilight? | Sensor: Fringing | Sensor: AR Coatings | Sensor: Brighter Fatter | Sensor: Tree Rings | Sensor: Edge Effects | Sensor: Saturation | Sensor: Blooming | Sensor: Simulated electronics readout |
| **Photoz** | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | WFD | | N/A | | OpSim | Yes | Yes | No | No | | Yes | | | | | | |
| **SL CX2 Twinkles** | 1 | 1 | 1 | 1 | 1 | 1 | 56 | 80 | 184 | 184 | 160 | 160 | WFD | No | N/A | LSST Like | OpSim | No | No | Yes | Yes | No | | No | No | No | Yes | Yes | No |
| **Supernova** | | | 1 | | | | 0 | 0 | 100 | 0 | 0 | 0 | Twinkles DDF | No | N/A | | OpSim | No | No | No | No | No | No | No | No | No | Yes | Yes | No |
| **LSS (Updated)** | | | 1 | | | | | | 50 | | | | WFD | No | N/A. | 8m optics | OpSim | No | Yes | | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **WL** | | | 1 | 1 | | | | | 10 | | | | DDF | No | | 1 | LSST Like | OpSim | No | Yes | No | No | No | No | Yes | No | No | No | No | No |
| **Clusters (Updated)** | | | 1 | 1 | | | | | 50 | 50 | | | | No | N/A | | Fixed bright and dark with and without moon. | No | No | | | No | No | No | No | No | Yes | Yes | No |
| **Notes / Consensus** | Photo-Z not necessary in DC1<br>R&I will fulfill everyone except Twinkles.<br>150 visits in both?<br>WL will use GalSim<br>Twinkles(SN/SL) is running as a path finder and creating the necessary CI infrastructure.<br>For DC1: Make for LSS and Clusters in R&I | | | | | | | | | | | | | No<br>**(BLANK = Don't Care)** | Only WL cares | LSST Like | OpSim | No | Mixed | Only Twinkles for both | | Yellow is consensus<br>Orange represent LSS specific folowup data sets<br>**(BLANK = Don't Care)** | | | | | Except WL | Except WL | |

| Q15 | Q14 | Q13 |
|---|---|---|
| **Any particular data delivery, processing, formatting expectations we should be aware of?** | **Are there any important wavelength dependent effects necessary?** | **Are there any details of the simulations that we haven't captured?** |
| In short term, Photoz just cares about getting colors and uncertainties right. In long term, we'd like to have tracking of photo,entry and eff Clive pass bands for each observation. | Filter effective passband variations (eventually) | N/a |
| We will be trying to emulate DM Level 2 light curve production, ie forced photometry on DIAObjects. We are willing to workaround. | Would be nice - but only if DM can cope. | Sprinkled lenses and SNe |
| FITS files / Processed individual processCcd.py results on each image / Co-add and forced photometry on individual images based on the sources detected in this co-add. / / Access to catalogs should be easy to do without having to grab the full set of image data. / / Accessing a particular image should be simple and direct. | | Run the validation tools that have been developed as part of the current Twinkles effort. E.g., validate_drp and Simon's scripts. There will likely be a month of development on these through mid-April 2016. Take whatever's done by that point. |
| | | As noted in the SRM, we want versions of DC1 PhoSim Deep both with and without the various sensor effects turned on, cognizant that DM does not yet correct well for some of them. / Also following the SRM, the goal is to test dithering patterns, so we want to run a version of DC1 PhoSim Deep with no/tiny dithering, and at least one more with a well-chosen large dither pattern. / / There should be at least 4 overlapping LSST fields simulated, with their cadence drawn from OpSim. |
| Series of FITS files. | Chromatic PSF | We need ~100 pointings to get to ~1e8 galaxies total. / For DDF: 1 exposure per night. / Optimal dithering in x, y, theta. |
| We expect to work on either individual images, DM stacked images, or photometric catalogs (for testing redmapper--only if photo-zs will work) | Wavelength dependence will be essential for us by DC3, but not now (it's actually in our independent cluster sims) | For CL, none of these simulations are critical to the DC1-age tasks, so in some sense these are all "would like" requests so CL can start playing with DC simulations in advance of DC2. The two tests we would like to do is test the weak lensing detection of clusters, and to test optical detection via redmapper of the clusters. Note, that in the DC1 era, there are two sets of simulations that are not captured here. Eventually, it will be useful to merge the functionalities we're working on separately, so I will describe the two tasks here. (1) To test the mapping between image shapes and shear in the cluster regime and blending biases, we are building high-fidelity ray-trace cluster lens simulations including full strong-lensing features (something not in phosim/galsim) and real galaxies (noise stripped so we don't turn noise into arcs). For the DC2 era we were going to include chromatic variation in the galaxies, and that may be a task to get help with. (2) to test the mapping between shear s and cluster masses we are taking analytic hsear maps derived from N-body simulations and measuring the biases in the mass modeling for different mass and radius limits and several error sources (centering, baryonic biases). These are effects we'll need in DC2-3. |