Mocks are generated by placing 8 observers in 256 dark matter simulation boxes, for a total of 2,048 non-overlapping catalogues. Filenames are generated as "…R19XXX.Y_err_corr", where XXX denotes the simulation number and Y denotes the observer's location. The observers for a given Y are placed at the following coordinates within the boxes:

0: $[x, y, z] = [\ 250,\ 260,\ 300]\ h^{-1}Mpc$.
1: $[x, y, z] = [\ 250,\ 260,\ 1200]\ h^{-1}Mpc$.
2: $[x, y, z] = [\ 250,\ 1160,\ 300]\ h^{-1}Mpc$.
3: $[x, y, z] = [\ 250,\ 1160,\ 1200]\ h^{-1}Mpc$.
4: $[x, y, z] = [1150,\ 260,\ 300]\ h^{-1}Mpc$.
5: $[x, y, z] = [1150,\ 260,\ 1200]\ h^{-1}Mpc$.
6: $[x, y, z] = [1150,\ 1160,\ 300]\ h^{-1}Mpc$.
7: $[x, y, z] = [1150,\ 1160,\ 1200]\ h^{-1}Mpc$.

ID: Mock galaxy ID.
RA: Right Ascension in deg.
Dec: Declination in deg.
z_true: cosmological redshift.
z_obs: observed redshift (can be treated as CMB-frame redshift).
z_obs_cen: observed redshift of the halo centre (can be treated as group averaged CMB-frame redshift). Equal to **z_obs** for central galaxies.
cen_flag: Whether the galaxy is a central (cen_flag == 1) or satellite (cen_flag == 0) galaxy.
subhalomass: $\log_{10}$ of the mass, in units of $h^{-1}M_{sol}$, of the subhalo in which the galaxy resides. Equal to **parenthalomass** for central galaxies.
parenthalomass: $\log_{10}$ of the mass, in units of $h^{-1}M_{sol}$, of the parent halo in which the galaxy resides.
deVMag_r: *r*-band apparent magnitude.
gmr: *g-r* colour of the mock galaxy.
kcor: *r*-band *k*-correction from Chilingarian et. al., 2014 using **g-r** colours.
extinction_r: Milky Way Galactic extinction in the *r*-band.
rtrue: true value of $\log_{10}$(effective radius). One of the fundamental plane parameters. Effective radius has units of h^{-1} kpc.
r: observed value of $\log_{10}$(effective radius).
er: error on **r**.
strue: true value of $\log_{10}$(velocity dispersion). One of the fundamental plane parameters. Velocity dispersion has units of km s^{-1}.
s: observed value of $\log_{10}$(velocity dispersion).
es: error on **s**.
itrue: true value of $\log_{10}$(surface brightness at the effective radius). One of the fundamental plane parameters. Surface brightness has units of L_{sun} pc^{-2}.
i: observed value of $\log_{10}$(surface brightness at the effective radius).
ei: error on **i**.
x: The cartesian *x*-coordinate of the galaxy within the *full* simulation box, not relative to the observer.
y: The cartesian *y*-coordinate of the galaxy within the *full* simulation box, not relative to the observer.
z: The cartesian *z*-coordinate of the galaxy within the *full* simulation box, not relative to the observer.
vxcen: The peculiar velocity of the parent halo centre in the cartesian *x*-direction. Can be treated as the group-averaged peculiar velocity.
vycen: As above but in the cartesian *y*-direction.
vzcen: As above but in the cartesian *z*-direction.
vx: The peculiar velocity of the galaxy in the cartesian *x*-direction. Equal to **vxcen** for central galaxies.
vy: The peculiar velocity of the galaxy in the cartesian y-direction. Equal to **vycen** for central galaxies.
vz: The peculiar velocity of the galaxy in the cartesian *z*-direction. Equal to **vzcen** for central galaxies.
nbar: Number density of SDSS galaxies per unit volume at the galaxy's location. Units of h^3 Mpc^{-3}, used mainly for clustering measurements.
logdist_true: True logdistance ratio, computed from the known cosmological and observed redshifts **z_true** and **z_obs**. Equivalent to $\log_{10}(d_z/d_H)$, where d_z is the distance to **z_obs** assuming some cosmological model, and d_H is the distance to **z_true**.
logdist: Mean of the observed logarithmic distance ratio distribution evaluated from fitting the fundamental plane. Can be treated as the Gaussian mean if **logdist_alpha** is ignored (but is not the skew-normal 'location' parameter).
logdist_err: Standard deviation of the logdistance ratio distribution from fitting the fundamental plane. Can be treated as the Gaussian standard deviation if **logdist_alpha** is ignored (but is not the skew-normal 'scale' parameter).
logdist_alpha: The "alpha" parameter of the skew-normal pdf calculated for each galaxy's logarithmic distance ratio distribution from fitting the fundamental plane. Gives an overall skewness quite close to zero because the pdf for each galaxy is close to Gaussian.