### input\_catalog

name	type	primary_key	autoincrement	comment
input_catalog_id	INTEGER	True	False	Unique identifier for input catalogs
input_catalog_name	VARCHAR	False	False	Name of the input catalog (e.g., Gaia DR2, HSC-SSP PDR3, etc.)
input_catalog_description	VARCHAR	False	False	Description of the input catalog
created_at	DATETIME	False	False	
updated_at	DATETIME	False	False	

# proposal\_category

name	type	primary_key	autoincrement	comment
proposal_category_id	INTEGER	True	False	Unique identifier of proposal category
proposal_category_name	VARCHAR	False	False	Proposal category name (e.g., Openuse, Keck, Gemini, and UH)
proposal_category_description	VARCHAR	False	False	Proposal category description (e.g., Openuse, Time exchange, etc.
created_at	DATETIME	False	False	Creation time
updated_at	DATETIME	False	False	Update time

# target\_type

name	type	primary_key	autoincrement	comment
target_type_id	INTEGER	True	False	Unique identifier for target types
target_type_name	VARCHAR	False	False	Name for the target type.

target_type_description	VARCHAR	False	False	Description of the target type
created_at	DATETIME	False	False	
updated_at	DATETIME	False	False	

#### fluxstd

name	type	primary_key	autoincrement	comment
fluxstd_id	BIGINT	True	True	Unique identifier for each flux standard star
obj_id	BIGINT	False	False	Gaia EDR3 sourceid
ra	FLOAT	False	False	RA (ICRS, degree)
dec	FLOAT	False	False	Dec (ICRS, degree)
epoch	VARCHAR	False	False	Epoch (e.g., J2000.0, J2015.5 etc.)
parallax	FLOAT	False	False	Parallax (mas)
parallax_error	FLOAT	False	False	Standard error of parallax (mas)
pmra	FLOAT	False	False	Proper motion in right ascension direction (mas/yr)
pmra_error	FLOAT	False	False	Standard error of pmra (mas/yr)
pmdec	FLOAT	False	False	Proper motion in declination direction (mas/yr)
pmdec_error	FLOAT	False	False	Standard error of pmdec (mas/yr)
tract	INTEGER	False	False	same definition as HSC-SSP?; can be derived from the coordinate
patch	INTEGER	False	False	same definition as HSC-SSP?; can be derived from the coordinate; Note that it's defined as an integer
target_type_id	INTEGER	False	False	target_type_id from the target_type table (must be 3 for FLUXSTD)
input_catalog_id	INTEGER	False	False	input_catalog_id from the input_catalog table

psf_mag_g	FLOAT	False	False	g-band PSF magnitude (AB mag)
psf_mag_r	FLOAT	False	False	r-band PSF magnitude (AB mag)
psf_mag_i	FLOAT	False	False	i-band PSF magnitude (AB mag)
psf_mag_z	FLOAT	False	False	z-band PSF magnitude (AB mag)
psf_mag_y	FLOAT	False	False	y-band PSF magnitude (AB mag)
psf_mag_j	FLOAT	False	False	J band PSF magnitude (AB mag)
psf_flux_g	FLOAT	False	False	g-band PSF flux (nJy)
psf_flux_r	FLOAT	False	False	r-band PSF flux (nJy)
psf_flux_i	FLOAT	False	False	i-band PSF flux (nJy)
psf_flux_z	FLOAT	False	False	z-band PSF flux (nJy)
psf_flux_y	FLOAT	False	False	y-band PSF flux (nJy)
psf_flux_j	FLOAT	False	False	J band PSF flux (nJy)
prob_f_star	FLOAT	False	False	Probability of being an F-type star
flags_dist	BOOLEAN	False	False	Distance uncertanty flag, True if parallax_error/parallax > 0.2
flags_ebv	BOOLEAN	False	False	E(B-V) uncertainty flag, True if E(B-V) uncertainty is greater than 20%
version	VARCHAR	False	False	Version string of the F-star selection
created_at	DATETIME	False	False	
updated_at	DATETIME	False	False	

#### proposal

name	type	primary_key	autoincrement	comment
proposal_id	VARCHAR	True	False	Unique identifier for proposal (e.g, S21B-OT06?)
group_id	VARCHAR	False	False	Group ID in STARS (e.g., o21195?)

pi_first_name	VARCHAR	False	False	PI's first name
pi_last_name	VARCHAR	False	False	PI's last name
pi_middle_name	VARCHAR	False	False	PI's middle name
rank	FLOAT	False	False	TAC score
grade	VARCHAR	False	False	TAC grade (A/B/C/F in the case of HSC queue)
allocated_time	FLOAT	False	False	Total fiberhours allocated by TAC (hour)
proposal_category_id	INTEGER	False	False	
created_at	DATETIME	False	False	Creation time [YYYY- MM-DDThh:mm:ss] (UTC or HST?)
updated_at	DATETIME	False	False	Update time [YYYY-MM-DDThh:mm:ss] (UTC or HST?)

### sky

name	type	primary_key	autoincrement	comment
sky_id	BIGINT	True	True	Unique identifier for each sky position
obj_id	BIGINT	False	False	Object ID in the sky catalog
ra	FLOAT	False	False	RA (ICRS, degree)
dec	FLOAT	False	False	Dec (ICRS, degree)
epoch	VARCHAR	False	False	Epoch (e.g., J2000.0, J2015.5, etc.)
tract	INTEGER	False	False	Tract from HSC-SSP
patch	INTEGER	False	False	Patch from HSC-SSP
target_type_id	INTEGER	False	False	target_type_id from the target_type table (must be 2 for SKY)
input_catalog_id	INTEGER	False	False	input_catalog_id from the input_catalog table
mag_thresh	FLOAT	False	False	Sky intensity threshold in mag/arcsec^2 (only for HSC-SSP).
version	VARCHAR	False	False	Version string of the sky position

created_at	DATETIME	False	False	
updated_at	DATETIME	False	False	

# target

name	type	primary_key	autoincrement	comment
target_id	BIGINT	True	True	Unique identifier for each target
proposal_id	VARCHAR	False	False	
obj_id	BIGINT	False	False	Object ID as specified by the observer at Phase 2 (can be same as the input_catalog_object_id
ra	FLOAT	False	False	RA (ICRS, degree)
dec	FLOAT	False	False	Dec (ICRS, degree)
epoch	VARCHAR	False	False	Epoch (default: J2000.0
parallax	FLOAT	False	False	Parallax (mas)
pmra	FLOAT	False	False	Proper motion in right ascension direction (mas/yr)
pmdec	FLOAT	False	False	Proper motion in declination direction (mas/yr)
tract	INTEGER	False	False	same definition as HSC- SSP?; can be derived from the coordinate
patch	INTEGER	False	False	same definition as HSC- SSP?; can be derived from the coordinate; Note that it's defined as an integer
target_type_id	INTEGER	False	False	
input_catalog_id	INTEGER	False	False	Input catalog ID from the input_catalog table
fiber_mag_g	FLOAT	False	False	g-band magnitude within a fiber (AB mag)
fiber_mag_r	FLOAT	False	False	r-band magnitude withir a fiber (AB mag)
fiber_mag_i	FLOAT	False	False	i-band magnitude withir

				a fiber (AB mag)
fiber_mag_z	FLOAT	False	False	z-band magnitude within a fiber (AB mag)
fiber_mag_y	FLOAT	False	False	y-band magnitude within a fiber (AB mag)
fiber_mag_j	FLOAT	False	False	J band magnitude within a fiber (AB mag)
psf_mag_g	FLOAT	False	False	g-band PSF magnitude (AB mag)
psf_mag_r	FLOAT	False	False	r-band PSF magnitude (AB mag)
psf_mag_i	FLOAT	False	False	i-band PSF magnitude (AB mag)
psf_mag_z	FLOAT	False	False	z-band PSF magnitude (AB mag)
psf_mag_y	FLOAT	False	False	y-band PSF magnitude (AB mag)
psf_mag_j	FLOAT	False	False	J band PSF magnitude (AB mag)
psf_flux_g	FLOAT	False	False	g-band PSF flux (nJy)
psf_flux_r	FLOAT	False	False	r-band PSF flux (nJy)
psf_flux_i	FLOAT	False	False	i-band PSF flux (nJy)
psf_flux_z	FLOAT	False	False	z-band PSF flux (nJy)
psf_flux_y	FLOAT	False	False	y-band PSF flux (nJy)
psf_flux_j	FLOAT	False	False	J band PSF flux (nJy)
priority	FLOAT	False	False	Priority of the target specified by the observer within the proposal
effective_exptime	FLOAT	False	False	Requested effective exposure time (s)
is_medium_resolution	BOOLEAN	False	False	True if the medium resolution mode is requested
qa_relative_throughput	FLOAT	False	False	Relative throughput to the reference value requested by the observer (default: 1.0)

qa_relative_noise	FLOAT	False	False	Relative noise to the reference value requested by the observer (default: 1.0)
qa_reference_lambda	FLOAT	False	False	Reference wavelength to evaluate effective exposure time (angstrom or nm?)
is_cluster	BOOLEAN	False	False	True if it is a cluster of multiple targets.
created_at	DATETIME	False	False	
updated_at	DATETIME	False	False	

#### cluster

name	type	primary_key	autoincrement	comment
cluster_id	BIGINT	True	False	Unique identifier of clusters found at duplication checking
target_id	BIGINT	True	False	
n_targets	INTEGER	False	False	Number of targets in the cluster
ra_cluster	FLOAT	False	False	Mean RA of targets in the cluster (ICRS, degree)
dec_cluster	FLOAT	False	False	Mean Dec of targets in the cluster (ICRS, degree)
d_ra	FLOAT	False	False	RA(target) - RA(cluster) (degree)
d_dec	FLOAT	False	False	Dec(target) - Dec(cluster) (degree)
input_catalog_id	INTEGER	False	False	Input catalog ID from the input_catalog table
created_at	DATETIME	False	False	UTC
updated_at	DATETIME	False	False	UTC