

input_catalog

| name | type | primary_key | autoincrement | comment |
|---------------------------|----------|-------------|---------------|--|
| input_catalog_id | INTEGER | True | True | 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 | |

object_type

| name | type | primary_key | autoincrement | comment |
|-------------------------|----------|-------------|---------------|---|
| object_type_id | INTEGER | True | True | Unique identifier for target types |
| object_type_name | VARCHAR | False | False | Name for the target type (e.g., star, galaxy, quasar, etc.) |
| object_type_description | VARCHAR | False | False | Description of the target type |
| created_at | DATETIME | False | False | |
| updated_at | DATETIME | False | False | |

proposal_category

| name | type | primary_key | autoincrement | comment |
|-------------------------------|---------|-------------|---------------|--|
| proposal_category_id | INTEGER | True | True | 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, |

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|------------|----------|-------|-------|---------------------|
| | | | | Time exchange, etc. |
| created_at | DATETIME | False | False | Creation time |
| updated_at | DATETIME | False | False | Update time |

unique_object

| name | type | primary_key | autoincrement | comment |
|------------------|----------|-------------|---------------|---|
| unique_object_id | BIGINT | True | True | Unique unique_object identifier |
| ra | FLOAT | False | False | ICRS (degree) |
| decl | FLOAT | False | False | ICRS (degree) |
| epoch | VARCHAR | False | False | Reference epoch, e.g., J2000.0, J2015.5, etc. |
| 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 |

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|--|--|--|--|-------|
| | | | | HST?) |
|--|--|--|--|-------|

target

| name | type | primary_key | autoincrement | comment |
|----------------------|---------|-------------|---------------|--|
| target_id | BIGINT | True | True | Unique identifier for each target |
| unique_object_id | BIGINT | False | False | |
| 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) |
| user_ra | FLOAT | False | False | Original RA submitted by the observer at Phase 2 (ICRS, degree) |
| user_decl | FLOAT | False | False | Original Dec submitted by the observer at Phase 2 (ICRS, degree) |
| user_epoch | VARCHAR | False | False | Original Epoch submitted by the observer at Phase 2 |
| match_distance | FLOAT | False | False | Distance between the matched unique_object and the original coordinate (arcsec) |
| tract | INTEGER | False | False | same definition as HSC-SSP?; can be derived from the coordinate |
| patch | VARCHAR | False | False | same definition as HSC-SSP?; can be derived from the coordinate |
| object_type_id | INTEGER | False | False | |
| input_catalog_id | INTEGER | False | False | Input catalog ID from the input_catalog table |
| input_catalog_obj_id | BIGINT | False | False | Object ID in the specified input catalog |
| fiber_mag_g | FLOAT | False | False | g-band magnitude within a fiber (AB mag) |
| fiber_mag_r | FLOAT | False | False | r-band magnitude within a fiber (AB mag) |
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|-------------|----------|-------|-------|--|
| fiber_mag_i | FLOAT | False | False | i-band magnitude within 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) |
| photoz | FLOAT | False | False | Photometric redshift for the object |
| created_at | DATETIME | False | False | |
| updated_at | DATETIME | False | False | |