

How to create a Target List

Optional and required columns:

- **RA0** (Mandatory, either in degrees or HMS (Format: X.XX or XX:XX:XX))
- **DecI0** (Mandatory, either in degrees or DMS (Format: X.XX or XX:XX:XX))
- **User** (Highly recommended, used for fits header and folder names)
- **Target** (Highly recommended, used for fits header and folder names)
- **Exposures** (Highly recommended, takes precedence over default setting of 500 exposures in Nina)
- **Magnitude ('PMag' or 'Gmag0')** (Highly recommended, used for exposure time calculation and filtering in NINA. (Unit: mag))
- **Secondary magnitude ('SMag' or 'Gmag1')** (Highly recommended, used for exposure time calculation and filtering in NINA (Unit: mag))
- **Separation** (Highly recommended, used for filtering when loading targets in Nina, (Unit: arcseconds))
- **Filter** (Recommended, will take precedence over default setting of Sloan R / R in Nina. Set to "-" to make sure not to change filters in the template. Useful when using a template with multiple filters. See [Telescope Information - PW1000](#) or [Telescope Information - CDK24](#) for the telescopes in Chile)
- **Nights** (Optional - number of nights the target will automatically be run on)
- **Cycles** (Optional, will take precedence over default setting of 1 observation cycle per target in Nina)
- **Airmass** (Optional, maximum airmass to image at (Unit: air masses))
- **MinAltitude** (Optional, entered value takes precedence over default setting of 50 (degrees altitude) in Nina (Unit: degrees))
- **GetRef** (Optional, will not use a reference star for a target if "0" is specified in this column (Unit: 1 or 0))
- **ExposureTime** (Optional. See [How to use the speckle exposure time calculation](#) (Unit: seconds))
- **NoCalculation** (Optional, if a 1 is entered in this column, the calculation will not be used. If this column doesn't exist, the calculation will be used. See [How to use the speckle exposure time calculation](#) (Unit: 1 or 0))
- **Template** (Optional, will use a non-default target template in NINA if one was created for specific requirements).

Other columns can be added, or already are depending on who generated the list, but will be ignored by NINA.

Basically, you can export the GDS targets preferably with WDS data and there's a couple of extra columns at the start:

User Target Priority Nights Cycles Filter Exposures ExposureTime

More columns can always be included and would be ignored by NINA (though please don't include special characters). The "highly recommended" columns are still technically optional and can be left out if you'd like.

As for exposure times, any provided value will be used over the calculation and the default. If there's no provided value, the calculation will be used based on the magnitude (in Jan2023), and if there's neither magnitude or provided value, a default of 0.1s will be used.

Information on the telescopes and filters/filter names is available under ChileTelescopes -> Documentation -> Telescope Documentation

Various Examples:

User	Target	Filter	ExposureTime	Exposures	Cycles	Nights	RA0	Decl0	Gaia Sep	Gmag0
Leon	Pluto and Charon	Sloan R	0.2	5000	1	1	19:59:40	-22:44:49	0.3	14.3
Leon	Pluto and Charon	Sloan R	0.4	5000	1	1	19:59:41	-22:44:50	0.3	14.3

([Pluto](#))

[illegible]

User	Target	Ra	Dec	RA0	DecI0	Nights	Cycles	Priority	Rotation	Airmass	MinAltitude	GetRef	ExposureTime	Exposures	Magnitude	Separation	Template	Filter	Completed_cycles	Completed_ref_cycles	Completed_nights	Note
Nick	14460-2527_SOZ14	14:45:59.91	-25:26:37.1	14:45:59.91	-25:26:37.1	2	1	0	0	0	10	1	1	10	5.005	8.116	Speckle Target 1		0	0	0	Target cannot be imaged tonight.
Nick	14234+0827_STF1835	14:23:22.62	08:26:47.7	14:23:22.62	08:26:47.7	2	1	0	0	0	10	1	1	10	5.017	6.285	Speckle Target 1		0	0	0	Target cannot be imaged tonight.

Nick	19299- 2659_ HN119	19:29: 52.21	-26:59: 08.9	19:29: 52.21	-26:59: 08.9	2	1	0	0	0	10	1	1	10	5.164	7.438	Speckl e Target 1		0	0	0	Target cannot be image d tonight .
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(Both at https://docs.google.com/spreadsheets/d/1jc2t3KRA1SII_3gvCIHrvJIUXjYgJ_AX29uENVVv_0/edit?usp=sharing)