16364 - ULLYSES LMC O4 Stars

Cycle: 28, Proposal Category: GO/DD

(Availability Mode: SUPPORTED)

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
2S	(2) SK-67D167 WAVE	STIS/CCD STIS/FUV-MAMA	1	22-Oct-2021 09:00:28.0	yes
3S	(3) SK-67D69 WAVE	STIS/CCD STIS/FUV-MAMA	2	22-Oct-2021 09:00:29.0	yes
CS	(3) SK-67D69 WAVE	STIS/CCD STIS/FUV-MAMA	2	22-Oct-2021 09:00:31.0	yes
4S	(4) SK-70D60 WAVE	STIS/CCD STIS/FUV-MAMA	2	22-Oct-2021 09:00:32.0	yes
DS	(4) SK-70D60 WAVE	STIS/CCD STIS/FUV-MAMA	2	22-Oct-2021 09:00:33.0	yes
IS	(4) SK-70D60 WAVE	STIS/CCD STIS/FUV-MAMA	2	22-Oct-2021 09:00:34.0	yes
4T	(4) SK-70D60 WAVE	STIS/CCD STIS/FUV-MAMA	2	22-Oct-2021 09:00:35.0	yes
DT	(4) SK-70D60 WAVE	STIS/CCD STIS/FUV-MAMA	2	22-Oct-2021 09:00:36.0	yes

15 Total Orbits Used

ABSTRACT

The Space Telescope Science Institute (STScI) Director has decided to devote up to 1000 orbits of Director's Discretionary time in observing Cycles 27-29 to a new Hubble Ultraviolet Legacy program focused on star formation and associated stellar physics. This new program, ULLYSES (UV Legacy Library of Young Stars as Essential Standards), will provide a UV spectroscopic reference sample of young (< 10 Myr) high- and low-mass stars. It will target over ~150 OB stars in the Magellanic Clouds and lower metallicity galaxies in the Local Group, and ~40 T Tauri stars and brown dwarfs in the Milky Way. In addition, ULLYSES will monitor 4 typical T Tauri stars over different rotational phases through at least three rotation periods, and over timescales of months to years. The resulting library will provide template spectra of massive stars at metallicities substantially below the well studied, while the low mass sample will cover a wide range of ages, accretion rates, and masses, including objects down to well below 0.5 M_sun. The legacy of this large UV dataset on the first 10 Myr of stellar evolution will be enhanced by complementary datasets obtained by the scientific community. In addition to the core goals of the program related to stellar astrophysics of low and high mass stars, this data will also enable exciting science in the fields of ISM, CGM, jets, and exoplanets. ULLYSES will be modeled after the Frontier Fields program: all data obtained will be non-proprietary. The implementation team at STScI is developing high-level science data products and a sophisticated database and website for disseminating data from the ULLYSES program and ancillary datasets for the ULLYSES target sample from space and ground-based facilities.

OBSERVING DESCRIPTION

This proposal includes a subset of the massive ULLYSES stars being observed in the Magellanic clouds.

Depending on target brightness, the main FUV spectral range will generally use either the STIS E140M setting or the combination of the COS c1291 + c1611 settings. Sufficiently bright stars without good FUSE data in the archive will also be observed with the COS c1096 setting to provide coverage at shorter wavelengths. Where time permits, stars of type O9 or later will also be observed with STIS E230M/1978, while for supergiants of spectral type B5 or later E230M/2707 may also be included. Where possible, targets of a given spectral type were selected to span both a range in extinction and in rotation rates to support a variety of stellar and ISM studies.

Signal-to-noise requirements used to determine the desired exposures times were defined as follows:
COS/G130M/c1096: 20 / nine-pixel resel at 1080 A
COS/G130M/c1291: 30 / six-pixel resel at 1150 A
COS/G160M/c1611: 30 / six-pixel resel at 1590 A

COS/G185M/c1953: 30 / three-pixel resel at 1860 A
COS/G185M/c1986: 30 / three-pixel resel at 1980 A
STIS/E140M/c1425: 20 / two-pixel resel at 1200 A
STIS/E230M/c1978: 20 / two-pixel resel at 1800 A
STIS/E230M/c2707: 20 / two-pixel resel at 2800 A
The actual implemented exposure times may be adjusted to efficiently use HST orbits, but should always provide at least 80% of the desired time as defined by the above requirements.

Additional details about the scientific motivation and technical implementation strategy of the ULLYSES observations can be found at http://www.stsci.edu/stsci-research/research-topics-and-programs/ullyses. The ULLYSES program is based on the recommendations of a working group led by Sally Oey; the full text of that group's report can be found at http://www.stsci.edu/files/live/sites/www/files/home/stsci-research/research-topics-and-programs/ullyses/_documents/HSTUV-report-ULLYSES.pdf.

Visit

Proposal 16364, SK-67D167-STIS (2S), completed Fri Oct 22 13:00:36 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: SCHED 100%

Comments: vstatus; 2S; SK-67D167; P/STIS approved for submission; P/TS 15/05/20 ; internal review complete ; P/DW 26/10/20
vcheck; Enter targ name & Inst. & Resp. Sci.; SK-67D167 ; STIS ; TS
vcheck; ETC numbers entered in APT?; Completed
vcheck; Any screening violations?; NO - 1 safe GSC2 stars which is the target itself
vcheck; S/N ETC calcs done & documented?; YES ...
ETC# STIS.sp.1454684 gives SNR = 16, but SNR plot (saved as E140M_SN.png) shows actual SNR is closer to ~20 around 1200 angstrom.
vcheck; Field images checked & saved?; YES - SK-67D167_DSS.png, SK-67D167_2MASS.png
vcheck; Selected ACQ strategy?; STIS CCD F28X50LP, 0.3 gives SNR=94
vcheck; Possible ACQ or Sci spoilers?; NO
vcheck; Field BOT clear?; YES
vcheck; Visual BOT check for stars not in catalog?; Complete - no other bright stars found.
vcheck; Orbit packing finalized?; YES - 1 orbit
vcheck; Buffer times optimized?; YES - 4/5 of ETC suggestion
vcheck; Verify visit grouping correct; N/A
vcheck; Is visit ready for int. review?; YES
Allocated STIS orbits = 1

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SK-67D167	RA: 05 31 51.9164 (82.9663183d)		V=12.53	Reference Frame: ICRS
	Alt Name1: SK-67-167	Dec: -67 39 41.36 (-67.66149d)		SpT=O4 Inf+; E(B-V)=0.06; U=11.2; B=12.3; V=12.5; F1160=2.70e-12; F1360=1.58e-12; F1700=1.12e-12; F2200=5.33e-13	
	Alt Name2: M2002-152366	Equinox: J2000			

Comments: SK-67D167 : [M2002]_152366, Sk -67 167, SK -67 167
Previous name : Sk -67 167
Input file: LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv
SIMBAD link (SK -67 167): https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SK+-67+167&submit=submit+id
SpT = O4 Inf+
COS/G130M/c1096 : rn-max(WM-Basic(O4 I, Z=0.008, Teff=45709, log_lum=6.13, log_g=3.73) (extinction lmcavg=0.060), flux1160 +- 30.0A flux=2.7e-12 Flam)
COS/G130M/c1291 : rn-max(WM-Basic(O4 I, Z=0.008, Teff=45709, log_lum=6.13, log_g=3.73) (extinction lmcavg=0.060), flux1360 +- 30.0A flux=1.6e-12 Flam)
COS/G160M/c1611 : rn-max(WM-Basic(O4 I, Z=0.008, Teff=45709, log_lum=6.13, log_g=3.73) (extinction lmcavg=0.060), flux1700 +- 5.0A flux=1.1e-12 Flam)
COS/G185M/c1921 : rn-max(WM-Basic(O4 I, Z=0.008, Teff=45709, log_lum=6.13, log_g=3.73) (extinction lmcavg=0.060), flux1700 +- 5.0A flux=1.1e-12 Flam)
COS/G185M/c1953 : rn-max(WM-Basic(O4 I, Z=0.008, Teff=45709, log_lum=6.13, log_g=3.73) (extinction lmcavg=0.060), flux1700 +- 5.0A flux=1.1e-12 Flam)
COS/G185M/c1986 : rn-max(WM-Basic(O4 I, Z=0.008, Teff=45709, log_lum=6.13, log_g=3.73) (extinction lmcavg=0.060), flux2200 +- 5.0A flux=5.3e-13 Flam)
STIS/E140M/c1425 : rn-max(WM-Basic(O4 I, Z=0.008, Teff=45709, log_lum=6.13, log_g=3.73) (extinction lmcavg=0.060), flux1360 +- 30.0A flux=1.6e-12 Flam)
STIS/E230M/c1978 : rn-max(WM-Basic(O4 I, Z=0.008, Teff=45709, log_lum=6.13, log_g=3.73) (extinction lmcavg=0.060), flux2200 +- 5.0A flux=5.3e-13 Flam)
STIS/E230M/c2707 : rn-max(WM-Basic(O4 I, Z=0.008, Teff=45709, log_lum=6.13, log_g=3.73) (extinction lmcavg=0.060), flux2200 +- 5.0A flux=5.3e-13 Flam)
Coordinate pedigree: Gaia
v sin i = 155
Calculation performed 2020-02-24T18:00:34, v0.4
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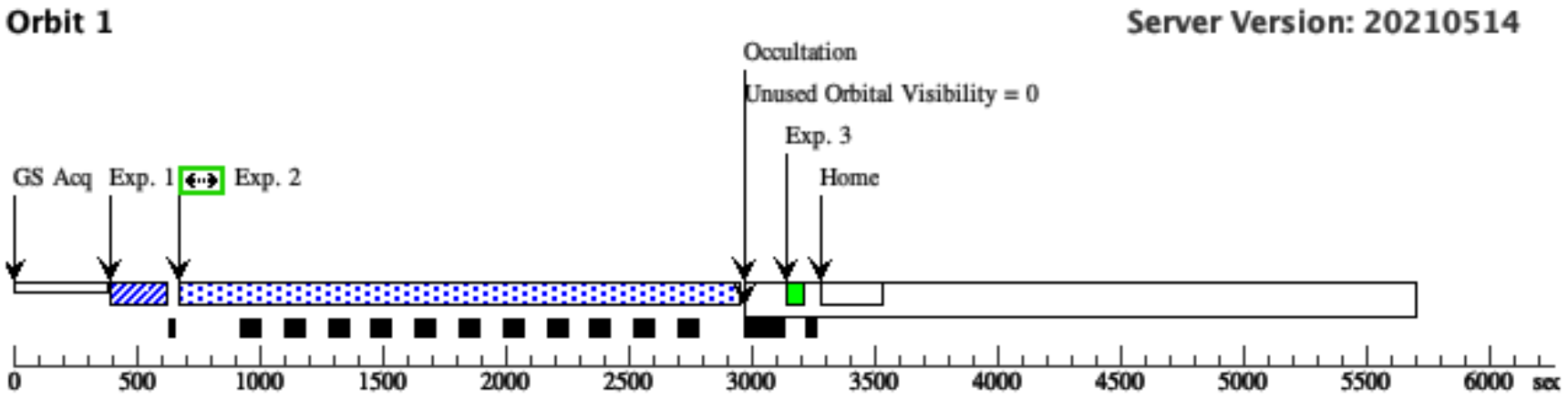
tstatus; SK-67D167; P/STIS approved for submission; S/ins not started; P/TS 09/07/20; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; SK-67D167, 'SK -67 167' ...
Other names include '[L72] LH 76-21'
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. updated?; NO
tcheck; Adopted SED compared to Observations?; Used a slightly modified SED ...
Provided SED slightly underestimated flux versus FUSE/IUE/HST FOS observations. Changed reddening from E(B-V)=0.06 to 0.08, and match is improved. New SED is saved as SK-67D167_newsed.fits Comparison plots of old and new SEDs to observations are saved as SK-67D167_oldsed.png and SK-67D167_newsed.png.
Category=EXT-STAR
Description=[SUPERGIANT O, OF]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1454681)	(2) SK-67D167	STIS/CCD, ACQ, F28X50LP	MIRROR				0.3 Secs (0.3 Secs) *[==>]*	*[1]*
2	E140M/1425 (STIS.sp.1454684)	(2) SK-67D167	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=178.0			2196 Secs (2196 Secs) *[==>]*	*[1]*
3	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[1]*

Comments: rn-max(WM-Basic(O4 I, Z=0.008, Teff=45709, log_lum=6.13, log_g=3.73) (extinction lmcavg=0.060), flux1360 +- 30.0A flux=1.6e-12 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305
From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv
Spectral type: O4 Inf+ --> O4 I
SED = SK-67D167_STIS_E140M_c1425_sed.fits
For exptime=2197.8 s, spectral region:
1200.0 +- 0.5 A achieves SNR=20.0/resel
global countrate (brightest segment): 8958.9 cts/s/segment
brightest pixel: 0.090 cts/s/pix at 1308.9 A
Calculation performed 2020-02-24T18:00:46, v0.4

Orbit Structure



Visit

Proposal 16364, SK-67D69-STIS (3S), failed Fri Oct 22 13:00:36 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: SCHED 100%

Comments: vstatus; 3S; SK-67D69; P/STIS approved for submission; P/TS 15/07/20 ; internal review complete ; P/DW 26/10/20
vcheck; Enter targ name & Inst. & Resp. Sci.; SK-67D69 ; STIS ; TS
vcheck; ETC numbers entered in APT?; Completed
vcheck; Any screening violations?; NO - 1 safe GSC2 stars which is the target itself
vcheck; S/N ETC calcs done & documented?; YES ...
ETC# STIS.sp.1454690 gives SNR~16.8, but SN plot (saved as E140M_SN.png) shows actual SNR is close to 20 at 1200 angstrom.
vcheck; Field images checked & saved?; YES - SK-67D69_DSS.png, SK-67D69_2MASS.png
vcheck; Selected ACQ strategy?; STIS CCD F28X50LP 0.5 sec gives SNR~100
vcheck; Possible ACQ or Sci spoilers?; NO
vcheck; Field BOT clear?; YES
vcheck; Visual BOT check for stars not in catalog?; Complete - no bright star found around target
vcheck; Orbit packing finalized?; YES - 2 orbits
vcheck; Buffer times optimized?; YES - 4/5 of ETC suggestion
vcheck; Verify visit grouping correct; N/A
vcheck; Is visit ready for int. review?; YES
Allocated STIS orbits = 2

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SK-67D69	RA: 05 14 20.0773 (78.5836554d)		V=13.09	Reference Frame: ICRS
	Alt Name1: SK-6769	Dec: -67 08 3.17 (-67.13421d)		SpT=O4 III(f); E(B-V)=0.12; B =12.9; V=13.1; F1160=1.00e-12	
	Alt Name2: SK-67-69	Equinox: J2000			

Comments: SK-67D69 : SK-67 69, Sk_-6769, SK -67 69
Previous name : SK-67 69
Input file: LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv
SIMBAD link (SK -67 69): https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SK+-67+69&submit=submit+id
SpT = O4 III(f)
COS/G130M/c1096 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
COS/G130M/c1291 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
COS/G160M/c1611 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
COS/G185M/c1921 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
COS/G185M/c1953 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
COS/G185M/c1986 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
STIS/E140M/c1425 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
STIS/E230M/c1978 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
STIS/E230M/c2707 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
Coordinate pedigree: Gaia
v sin i = 121
Calculation performed 2020-02-24T17:58:10, v0.4
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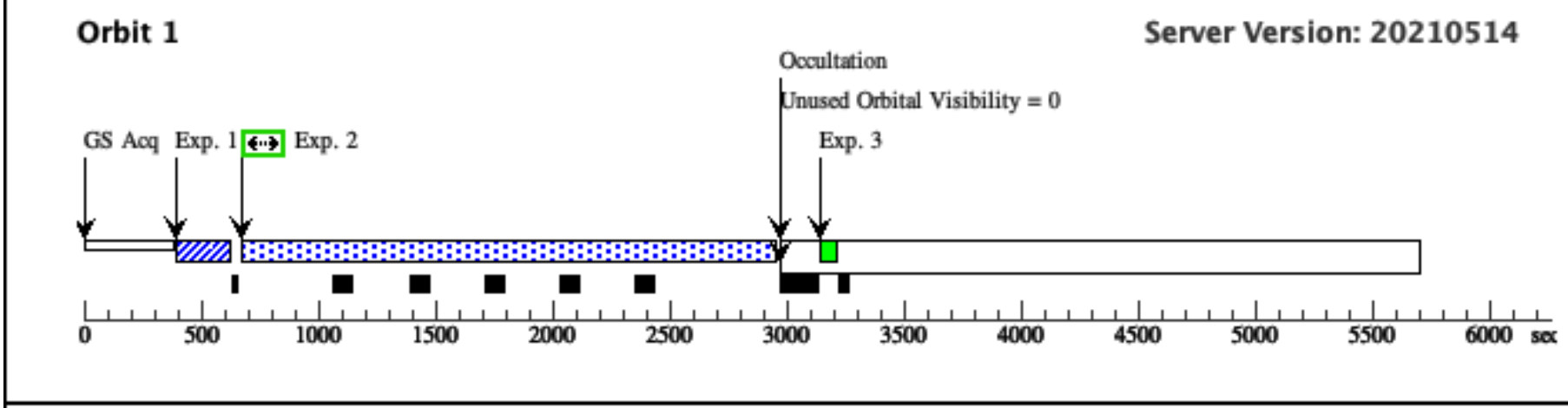
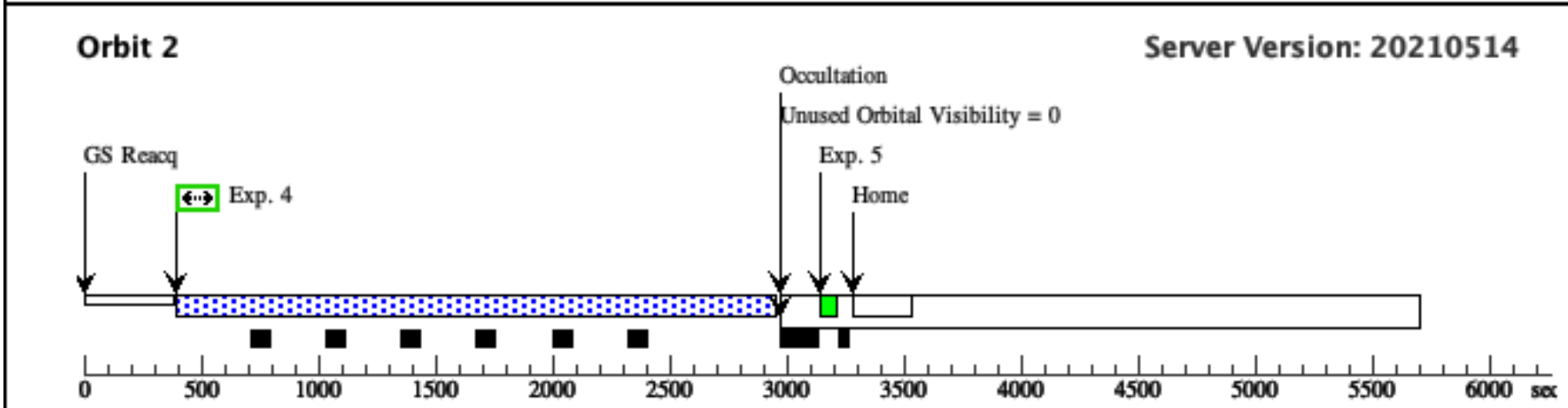
tstatus; SK-67D69; P/STIS approved for submission; S/ins not started; P/TS 09/07/20; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; SK-67D69, 'SK -67 69'
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. updated?; NO
tcheck; Adopted SED compared to Observations?; YES ...
Adopted SED seems to match the FUSE FUV data (which is the only available UV observations in the archive) very well
Category=EXT-STAR
Description=[GIANT O, OF]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1454688)	(3) SK-67D69	STIS/CCD, ACQ, F28X50LP	MIRROR				0.5 Secs (0.5 Secs) *[==>]*	***[1]***
2	E140M/1425 (STIS.sp.1454690)	(3) SK-67D69	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=321.0			2194 Secs (2194 Secs) *[==>]*	***[1]***
	Comments: rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4 III(f) --> O4 III* *SED = SK-67D69_STIS_E140M_c1425_sed.fits* *For exptime=4427.6 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 5021.2 cts/s/segment* *brightest pixel: 0.049 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T17:58:23, v0.4*									
3	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	***[1]***
4	E140M/1425 (STIS.sp.1454690)	(3) SK-67D69	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=321.0			2548 Secs (2548 Secs) *[==>]*	***[2]***
	Comments: rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4 III(f) --> O4 III* *SED = SK-67D69_STIS_E140M_c1425_sed.fits* *For exptime=4427.6 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 5021.2 cts/s/segment* *brightest pixel: 0.049 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T17:58:23, v0.4*									
5	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	***[2]***

Orbit Structure





Visit

Proposal 16364, SK-67D69-STIS (CS), completed Fri Oct 22 13:00:36 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: SCHED 100%

Comments: vstatus; 3S; SK-67D69; P/STIS approved for submission; P/TS 15/07/20 ; internal review complete ; P/DW 26/10/20
vcheck; Enter targ name & Inst. & Resp. Sci.; SK-67D69 ; STIS ; TS
vcheck; ETC numbers entered in APT?; Completed
vcheck; Any screening violations?; NO - 1 safe GSC2 stars which is the target itself
vcheck; S/N ETC calcs done & documented?; YES ...
ETC# STIS.sp.1454690 gives SNR~16.8, but SN plot (saved as E140M_SN.png) shows actual SNR is close to 20 at 1200 angstrom.
vcheck; Field images checked & saved?; YES - SK-67D69_DSS.png, SK-67D69_2MASS.png
vcheck; Selected ACQ strategy?; STIS CCD F28X50LP 0.5 sec gives SNR~100
vcheck; Possible ACQ or Sci spoilers?; NO
vcheck; Field BOT clear?; YES
vcheck; Visual BOT check for stars not in catalog?; Complete - no bright star found around target
vcheck; Orbit packing finalized?; YES - 2 orbits
vcheck; Buffer times optimized?; YES - 4/5 of ETC suggestion
vcheck; Verify visit grouping correct; N/A
vcheck; Is visit ready for int. review?; YES
Allocated STIS orbits = 2

Fixed Targets

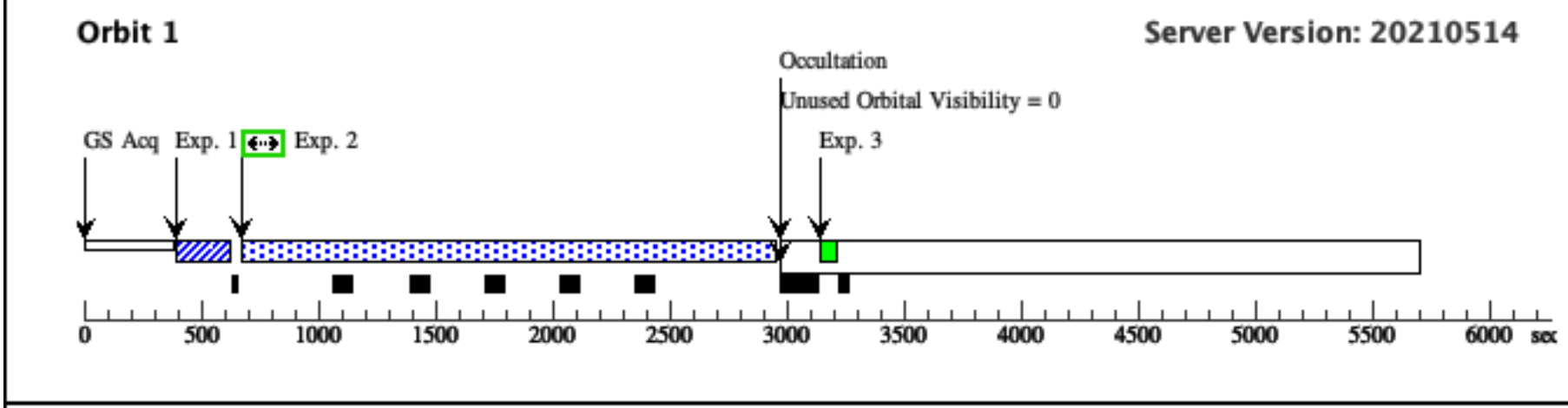
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SK-67D69	RA: 05 14 20.0773 (78.5836554d)		V=13.09	Reference Frame: ICRS
	Alt Name1: SK-6769	Dec: -67 08 3.17 (-67.13421d)		SpT=O4 III(f); E(B-V)=0.12; B =12.9; V=13.1; F1160=1.00e-12	
	Alt Name2: SK-67-69	Equinox: J2000			

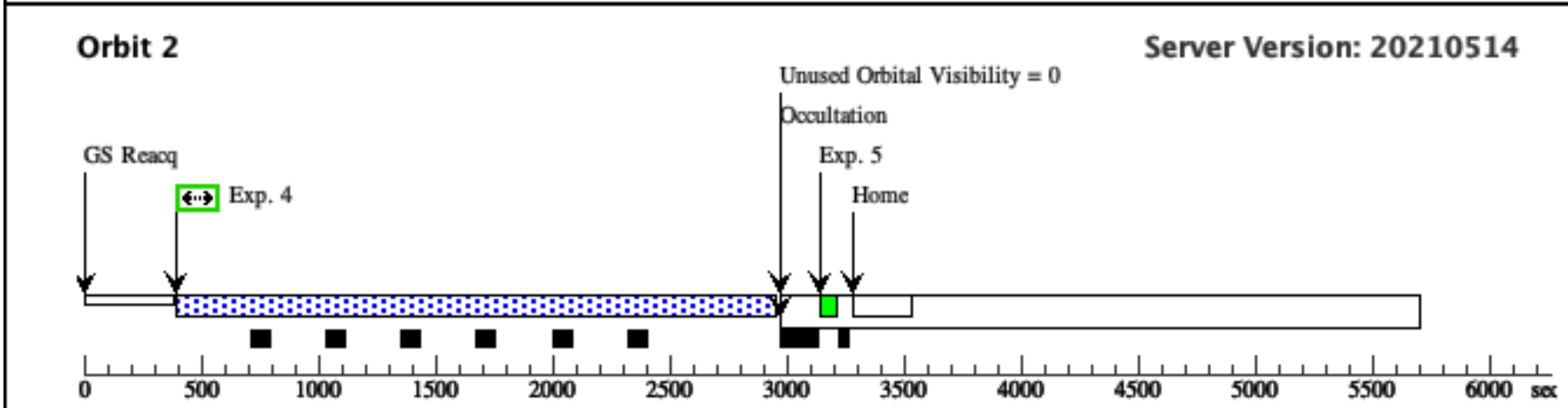
Comments: SK-67D69 : SK-67 69, Sk_-6769, SK -67 69
Previous name : SK-67 69
Input file: LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv
SIMBAD link (SK -67 69): https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SK+-67+69&submit=submit+id
SpT = O4 III(f)
COS/G130M/c1096 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
COS/G130M/c1291 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
COS/G160M/c1611 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
COS/G185M/c1921 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
COS/G185M/c1953 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
COS/G185M/c1986 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
STIS/E140M/c1425 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
STIS/E230M/c1978 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
STIS/E230M/c2707 : rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam)
Coordinate pedigree: Gaia
v sin i = 121
Calculation performed 2020-02-24T17:58:10, v0.4
---
tstatus; SK-67D69; P/STIS approved for submission; S/ins not started; P/TS 09/07/20; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; SK-67D69, 'SK -67 69'
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. updated?; NO
tcheck; Adopted SED compared to Observations?; YES ...
Adopted SED seems to match the FUSE FUV data (which is the only available UV observations in the archive) very well
Category=EXT-STAR
Description=[GIANT O, OF]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1454688)	(3) SK-67D69	STIS/CCD, ACQ, F28X50LP	MIRROR				0.5 Secs (0.5 Secs) *[==>]*	***[1]***
2	E140M/1425 (STIS.sp.1454690)	(3) SK-67D69	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=321.0			2194 Secs (2194 Secs) *[==>]*	***[1]***
	Comments: rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4 III(f) --> O4 III* *SED = SK-67D69_STIS_E140M_c1425_sed.fits* *For exptime=4427.6 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 5021.2 cts/s/segment* *brightest pixel: 0.049 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T17:58:23, v0.4*									
3	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	***[1]***
4	E140M/1425 (STIS.sp.1454690)	(3) SK-67D69	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=321.0			2548 Secs (2548 Secs) *[==>]*	***[2]***
	Comments: rn-max(WM-Basic(O4 III, Z=0.008, Teff=45709, log_lum=5.87, log_g=3.89) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=1e-12 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4 III(f) --> O4 III* *SED = SK-67D69_STIS_E140M_c1425_sed.fits* *For exptime=4427.6 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 5021.2 cts/s/segment* *brightest pixel: 0.049 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T17:58:23, v0.4*									
5	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	***[2]***

Orbit Structure





Visit

Proposal 16364, SK-70D60-STIS (4S), failed Fri Oct 22 13:00:37 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: SCHED 100%

Comments: vstatus; 4S; SK-70D60; P/STIS approved for submission; P/TS 15/07/20 ; internal review complete ; P/DW 26/10/20
vcheck; Enter targ name & Inst. & Resp. Sci.; SK-70D60 ; STIS; TS
vcheck; ETC numbers entered in APT?; Completed
vcheck; Any screening violations?; NO - 1 safe GALEX star which is the target itself
vcheck; S/N ETC calcs done & documented?; YES...
ETC# STIS.sp.1454698 gives SNR~16.4, but SN plot (saved as E140M_SN.png) shows actual SNR is close to ~20 at 1200 angstroms
vcheck; Field images checked & saved?; YES - SK-70D60_DSS.png, SK-70D60_2MASS.png
vcheck; Selected ACQ strategy?; STIS CCD F28X50LP 1 sec gives SNR~98
vcheck; Possible ACQ or Sci spoilers?; NO
vcheck; Field BOT clear?; YES
vcheck; Visual BOT check for stars not in catalog?; Complete - no bright star found around target
vcheck; Orbit packing finalized?; YES - 4 orbits, divided into 2 visits (2+2 orbits)
vcheck; Buffer times optimized?; YES - 4/5 of ETC suggestion
vcheck; Verify visit grouping correct; 2 visits, but grouping not done
vcheck; Is visit ready for int. review?; YES
Allocated STIS orbits = 4

Fixed Targets

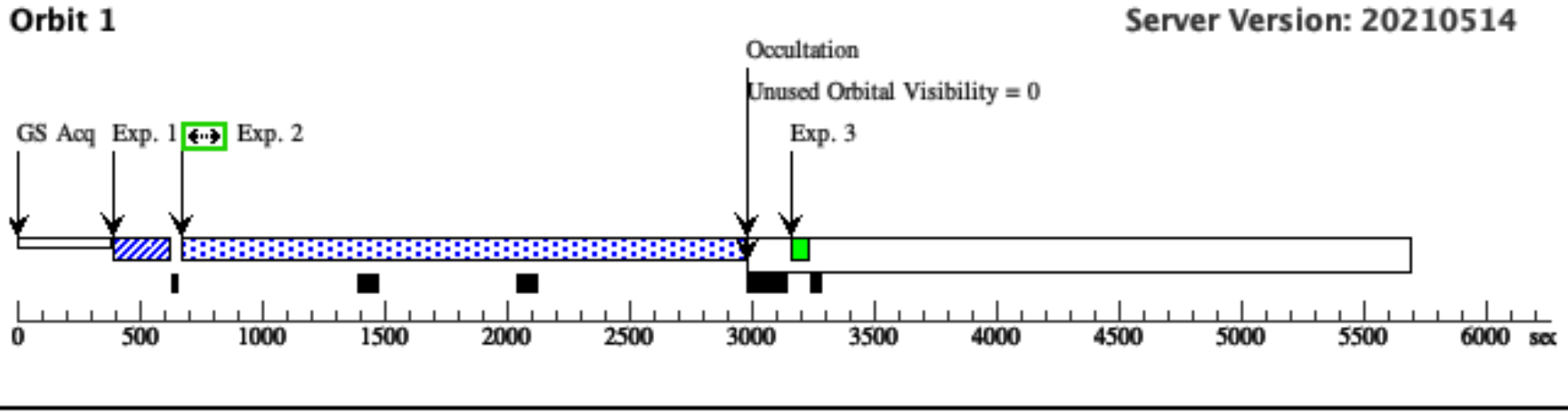
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	SK-70D60	RA: 05 04 40.7842 (76.1699342d)		V=13.88	Reference Frame: ICRS
	Alt Name1: SK-70-60	Dec: -70 15 34.50 (-70.25958d)		SpT=O4-5V:n; E(B-V)=0.12; U =12.6; B=13.7; V=13.9; F1160= 6.00e-13; F1360=4.20e-13	
	Alt Name2: M2002-64006	Equinox: J2000			

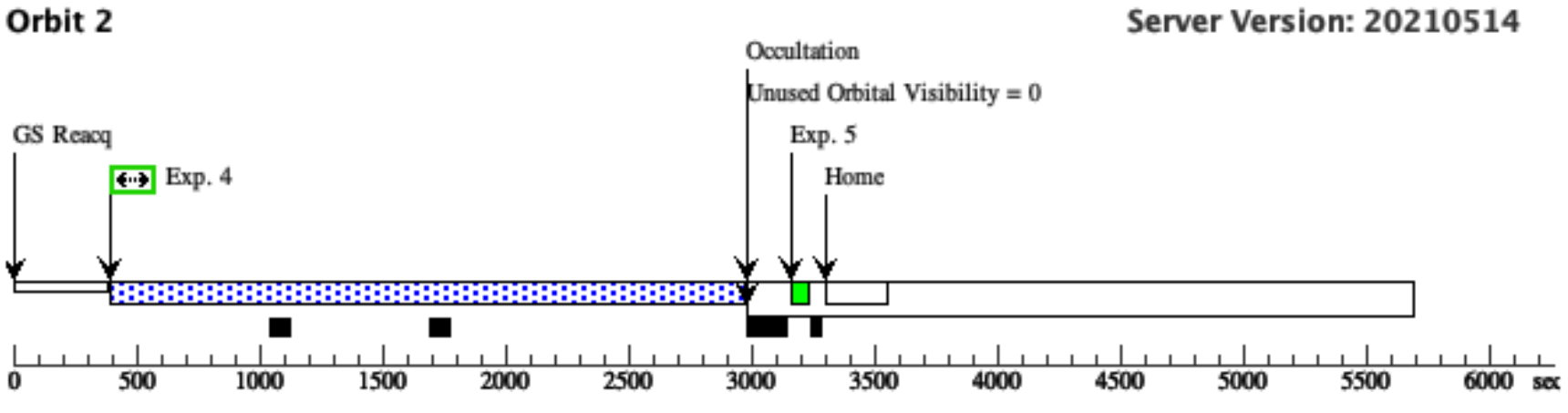
Comments: SK-70D60 : [M2002]_64006, Sk -70 60, SK -70 60
Previous name : Sk -70 60
Input file: LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv
SIMBAD link (SK -70 60): https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SK+-70+60&submit=submit+id
SpT = O4-5V:n
COS/G130M/c1096 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=6e-13 Flam)
COS/G130M/c1291 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G160M/c1611 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1921 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1953 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1986 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E140M/c1425 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E230M/c1978 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E230M/c2707 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
Coordinate pedigree: Gaia
v sin i = 256
Calculation performed 2020-02-24T17:59:50, v0.4
---
tstatus; SK-70D60; P/STIS approved for submission; S/ins not started; P/TS 09/07/20; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; SK-70D60, 'SK -70 60'
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. updated?; NO
tcheck; Adopted SED compared to Observations?; YES ...
Adopted SED provides an overall good match to the observations
Category=EXT-STAR
Description=[MAIN SEQUENCE O]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1454695)	(4) SK-70D60	STIS/CCD, ACQ, F28X50LP	MIRROR				1.0 Secs (1 Secs) *[==>]*	***[1]***
2	E140M/1425 (STIS.sp.1454698)	(4) SK-70D60	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=649.0			2211 Secs (2211 Secs) *[==>]*	***[1]***
	Comments: rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4-5V:n --> O4 V* *SED = SK-70D60_STIS_E140M_c1425_sed.fits* *For exptime=9359.5 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 2486.5 cts/s/segment* *brightest pixel: 0.024 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T18:00:03, v0.4*								
3	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	***[1]***
4	E140M/1425 (STIS.sp.1454698)	(4) SK-70D60	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=649.0			2567 Secs (2567 Secs) *[==>]*	***[2]***
	Comments: rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4-5V:n --> O4 V* *SED = SK-70D60_STIS_E140M_c1425_sed.fits* *For exptime=9359.5 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 2486.5 cts/s/segment* *brightest pixel: 0.024 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T18:00:03, v0.4*								
5	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	***[2]***

Orbit Structure





Visit

Proposal 16364, SK-70D60-STIS (DS), failed Fri Oct 22 13:00:37 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: SCHED 100%

Comments: vstatus; 4S; SK-70D60; P/STIS approved for submission; P/TS 15/07/20 ; internal review complete ; P/DW 26/10/20
vcheck; Enter targ name & Inst. & Resp. Sci.; SK-70D60 ; STIS; TS
vcheck; ETC numbers entered in APT?; Completed
vcheck; Any screening violations?; NO - 1 safe GALEX star which is the target itself
vcheck; S/N ETC calcs done & documented?; YES...
ETC# STIS.sp.1454698 gives SNR~16.4, but SN plot (saved as E140M_SN.png) shows actual SNR is close to ~20 at 1200 angstroms
vcheck; Field images checked & saved?; YES - SK-70D60_DSS.png, SK-70D60_2MASS.png
vcheck; Selected ACQ strategy?; STIS CCD F28X50LP 1 sec gives SNR~98
vcheck; Possible ACQ or Sci spoilers?; NO
vcheck; Field BOT clear?; YES
vcheck; Visual BOT check for stars not in catalog?; Complete - no bright star found around target
vcheck; Orbit packing finalized?; YES - 4 orbits, divided into 2 visits (2+2 orbits)
vcheck; Buffer times optimized?; YES - 4/5 of ETC suggestion
vcheck; Verify visit grouping correct; 2 visits, but grouping not done
vcheck; Is visit ready for int. review?; YES
Allocated STIS orbits = 4

Fixed Targets

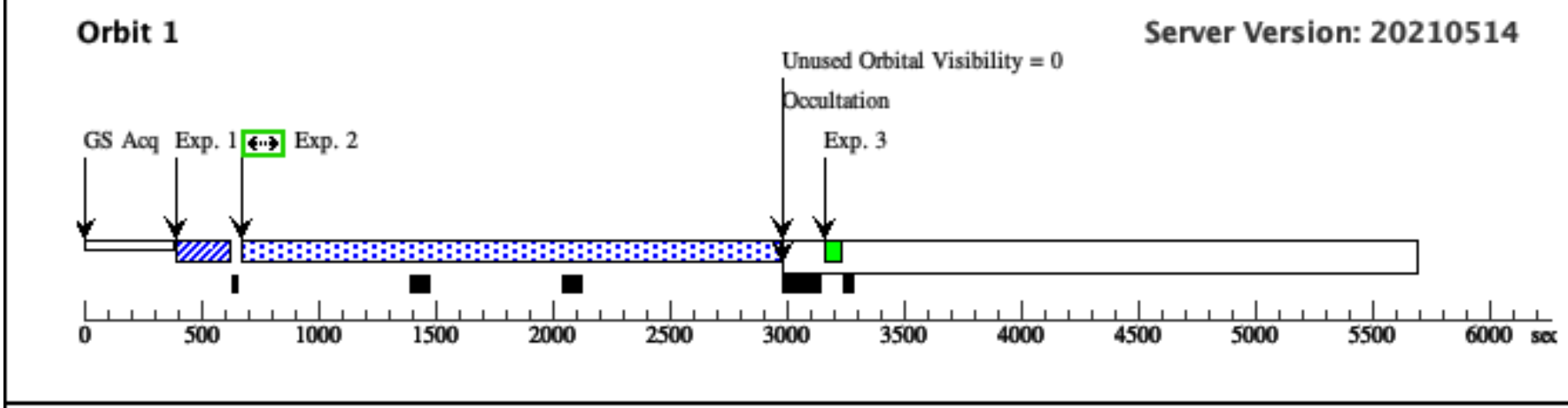
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	SK-70D60	RA: 05 04 40.7842 (76.1699342d)		V=13.88	Reference Frame: ICRS
	Alt Name1: SK-70-60	Dec: -70 15 34.50 (-70.25958d)		SpT=O4-5V:n; E(B-V)=0.12; U =12.6; B=13.7; V=13.9; F1160= 6.00e-13; F1360=4.20e-13	
	Alt Name2: M2002-64006	Equinox: J2000			

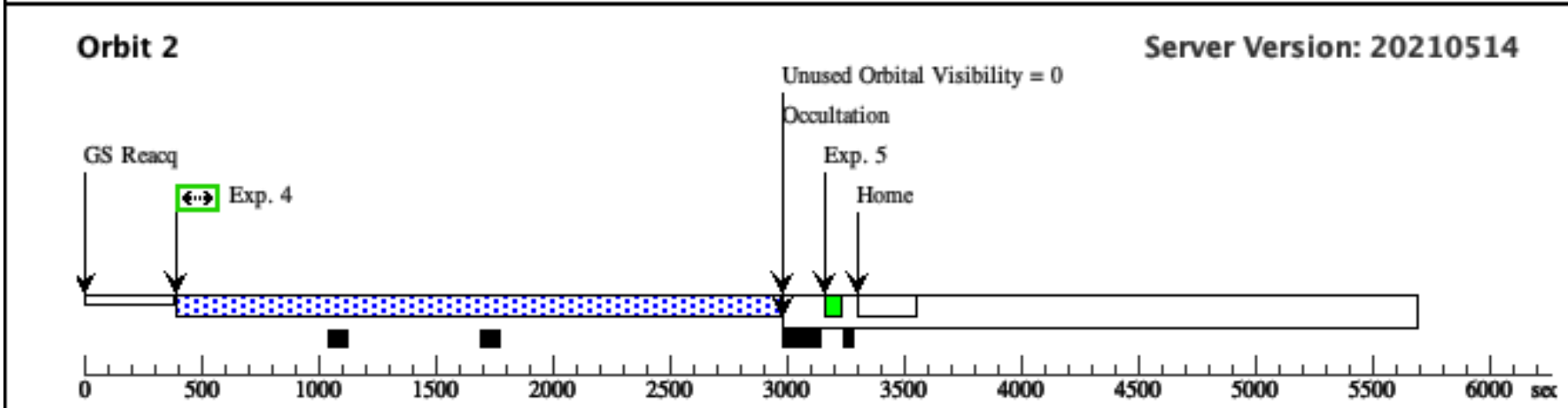
Comments: SK-70D60 : [M2002]_64006, Sk -70 60, SK -70 60
Previous name : Sk -70 60
Input file: LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv
SIMBAD link (SK -70 60): https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SK+-70+60&submit=submit+id
SpT = O4-5V:n
COS/G130M/c1096 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=6e-13 Flam)
COS/G130M/c1291 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G160M/c1611 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1921 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1953 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1986 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E140M/c1425 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E230M/c1978 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E230M/c2707 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
Coordinate pedigree: Gaia
v sin i = 256
Calculation performed 2020-02-24T17:59:50, v0.4
---
tstatus; SK-70D60; P/STIS approved for submission; S/ins not started; P/TS 09/07/20; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; SK-70D60, 'SK -70 60'
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. updated?; NO
tcheck; Adopted SED compared to Observations?; YES ...
Adopted SED provides an overall good match to the observations
Category=EXT-STAR
Description=[MAIN SEQUENCE O]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1454695)	(4) SK-70D60	STIS/CCD, ACQ, F28X50LP	MIRROR				1.0 Secs (1 Secs) *[==>]*	*[1]*
2	E140M/1425 (STIS.sp.1454698)	(4) SK-70D60	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=649.0			2211 Secs (2211 Secs) *[==>]*	*[1]*
	Comments: rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4-5V:n --> O4 V* *SED = SK-70D60_STIS_E140M_c1425_sed.fits* *For exptime=9359.5 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 2486.5 cts/s/segment* *brightest pixel: 0.024 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T18:00:03, v0.4*								
3	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[1]*
4	E140M/1425 (STIS.sp.1454698)	(4) SK-70D60	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=649.0			2567 Secs (2567 Secs) *[==>]*	*[2]*
	Comments: rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4-5V:n --> O4 V* *SED = SK-70D60_STIS_E140M_c1425_sed.fits* *For exptime=9359.5 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 2486.5 cts/s/segment* *brightest pixel: 0.024 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T18:00:03, v0.4*								
5	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[2]*

Orbit Structure





Visit

Proposal 16364, SK-70D60-STIS (IS) Fri Oct 22 13:00:37 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: SCHED 100%

Comments: vstatus; 4S; SK-70D60; P/STIS approved for submission; P/TS 15/07/20 ; internal review complete ; P/DW 26/10/20
vcheck; Enter targ name & Inst. & Resp. Sci.; SK-70D60 ; STIS; TS
vcheck; ETC numbers entered in APT?; Completed
vcheck; Any screening violations?; NO - 1 safe GALEX star which is the target itself
vcheck; S/N ETC calcs done & documented?; YES...
ETC# STIS.sp.1454698 gives SNR~16.4, but SN plot (saved as E140M_SN.png) shows actual SNR is close to ~20 at 1200 angstroms
vcheck; Field images checked & saved?; YES - SK-70D60_DSS.png, SK-70D60_2MASS.png
vcheck; Selected ACQ strategy?; STIS CCD F28X50LP 1 sec gives SNR~98
vcheck; Possible ACQ or Sci spoilers?; NO
vcheck; Field BOT clear?; YES
vcheck; Visual BOT check for stars not in catalog?; Complete - no bright star found around target
vcheck; Orbit packing finalized?; YES - 4 orbits, divided into 2 visits (2+2 orbits)
vcheck; Buffer times optimized?; YES - 4/5 of ETC suggestion
vcheck; Verify visit grouping correct; 2 visits, but grouping not done
vcheck; Is visit ready for int. review?; YES
Allocated STIS orbits = 4

IS is a repeat of failed visit DS

Fixed Targets

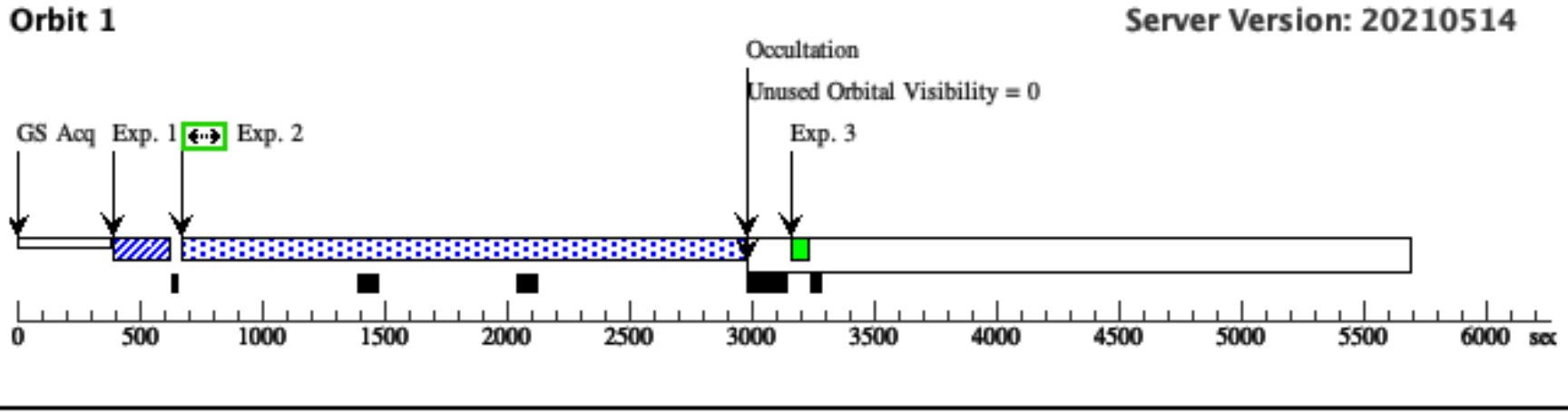
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	SK-70D60	RA: 05 04 40.7842 (76.1699342d)		V=13.88	Reference Frame: ICRS
	Alt Name1: SK-70-60	Dec: -70 15 34.50 (-70.25958d)		SpT=O4-5V:n; E(B-V)=0.12; U =12.6; B=13.7; V=13.9; F1160= 6.00e-13; F1360=4.20e-13	
	Alt Name2: M2002-64006	Equinox: J2000			

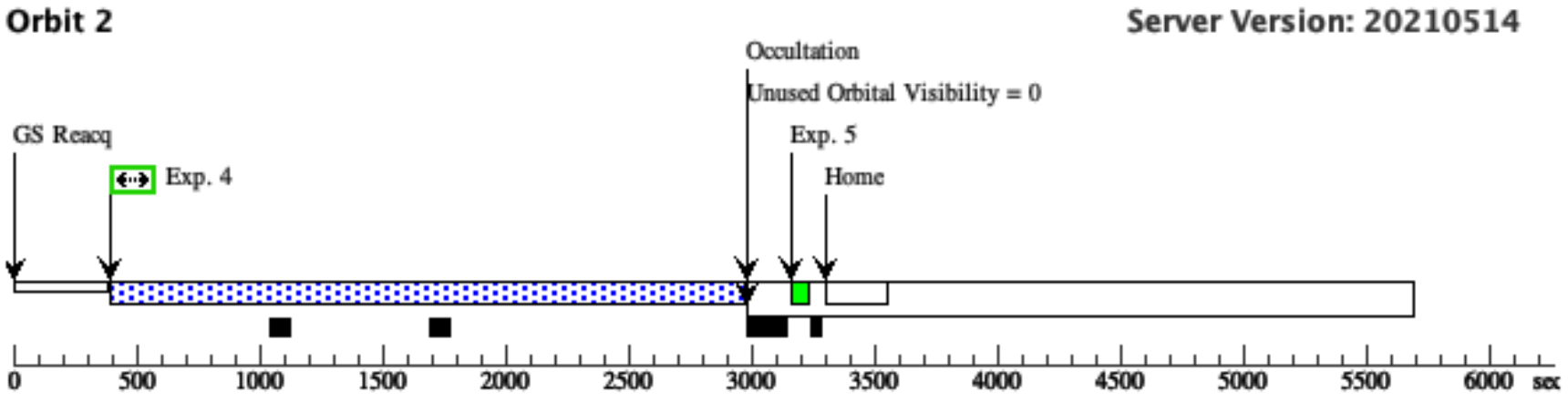
Comments: SK-70D60 : [M2002]_64006, Sk -70 60, SK -70 60
Previous name : Sk -70 60
Input file: LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv
SIMBAD link (SK -70 60): https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SK+-70+60&submit=submit+id
SpT = O4-5V:n
COS/G130M/c1096 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=6e-13 Flam)
COS/G130M/c1291 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G160M/c1611 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1921 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1953 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1986 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E140M/c1425 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E230M/c1978 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E230M/c2707 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
Coordinate pedigree: Gaia
v sin i = 256
Calculation performed 2020-02-24T17:59:50, v0.4
---
tstatus; SK-70D60; P/STIS approved for submission; S/ins not started; P/TS 09/07/20; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; SK-70D60, 'SK -70 60'
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. updated?; NO
tcheck; Adopted SED compared to Observations?; YES ...
Adopted SED provides an overall good match to the observations
Category=EXT-STAR
Description=[MAIN SEQUENCE O]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1454695)	(4) SK-70D60	STIS/CCD, ACQ, F28X50LP	MIRROR				1.0 Secs (1 Secs) *[==>]*	*[1]*
2	E140M/1425 (STIS.sp.1454698)	(4) SK-70D60	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=649.0			2211 Secs (2211 Secs) *[==>]*	*[1]*
	Comments: rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4-5V:n --> O4 V* *SED = SK-70D60_STIS_E140M_c1425_sed.fits* *For exptime=9359.5 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 2486.5 cts/s/segment* *brightest pixel: 0.024 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T18:00:03, v0.4*									
3	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[1]*
4	E140M/1425 (STIS.sp.1454698)	(4) SK-70D60	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=649.0			2567 Secs (2567 Secs) *[==>]*	*[2]*
	Comments: rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4-5V:n --> O4 V* *SED = SK-70D60_STIS_E140M_c1425_sed.fits* *For exptime=9359.5 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 2486.5 cts/s/segment* *brightest pixel: 0.024 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T18:00:03, v0.4*									
5	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[2]*

Orbit Structure





Visit

Proposal 16364, SK-70D60-STIS (4T), failed Fri Oct 22 13:00:37 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: SCHED 100%

Comments: vstatus; 4S; SK-70D60; P/STIS approved for submission; P/TS 15/07/20 ; internal review complete ; P/DW 26/10/20
vcheck; Enter targ name & Inst. & Resp. Sci.; SK-70D60 ; STIS; TS
vcheck; ETC numbers entered in APT?; Completed
vcheck; Any screening violations?; NO - 1 safe GALEX star which is the target itself
vcheck; S/N ETC calcs done & documented?; YES...
ETC# STIS.sp.1454698 gives SNR~16.4, but SN plot (saved as E140M_SN.png) shows actual SNR is close to ~20 at 1200 angstroms
vcheck; Field images checked & saved?; YES - SK-70D60_DSS.png, SK-70D60_2MASS.png
vcheck; Selected ACQ strategy?; STIS CCD F28X50LP 1 sec gives SNR~98
vcheck; Possible ACQ or Sci spoilers?; NO
vcheck; Field BOT clear?; YES
vcheck; Visual BOT check for stars not in catalog?; Complete - no bright star found around target
vcheck; Orbit packing finalized?; YES - 4 orbits, divided into 2 visits (2+2 orbits)
vcheck; Buffer times optimized?; YES - 4/5 of ETC suggestion
vcheck; Verify visit grouping correct; 2 visits, but grouping not done
vcheck; Is visit ready for int. review?; YES
Allocated STIS orbits = 4

Fixed Targets

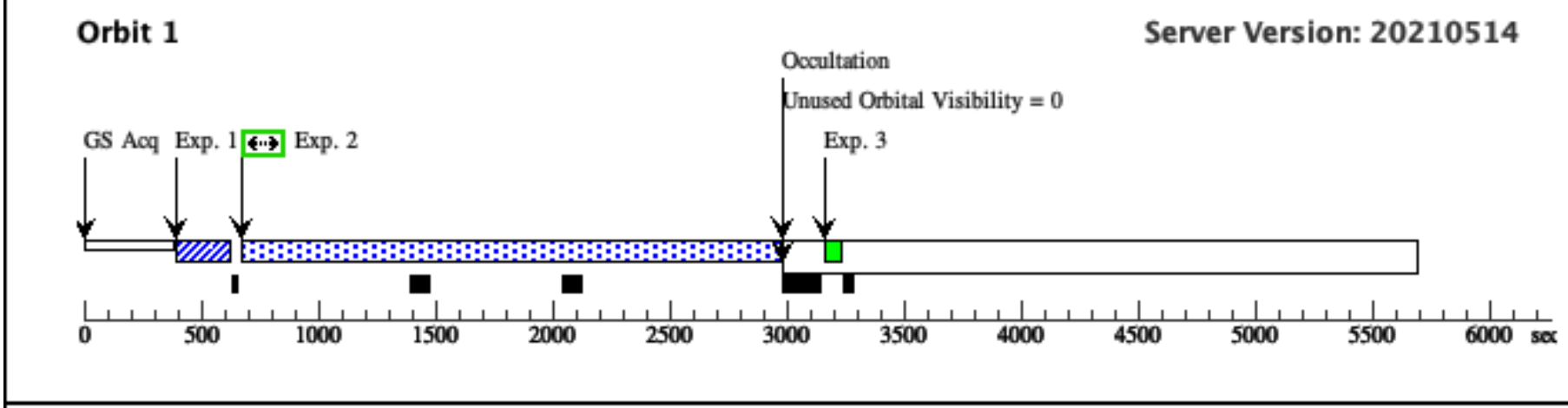
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	SK-70D60	RA: 05 04 40.7842 (76.1699342d)		V=13.88	Reference Frame: ICRS
	Alt Name1: SK-70-60	Dec: -70 15 34.50 (-70.25958d)		SpT=O4-5V:n; E(B-V)=0.12; U =12.6; B=13.7; V=13.9; F1160= 6.00e-13; F1360=4.20e-13	
	Alt Name2: M2002-64006	Equinox: J2000			

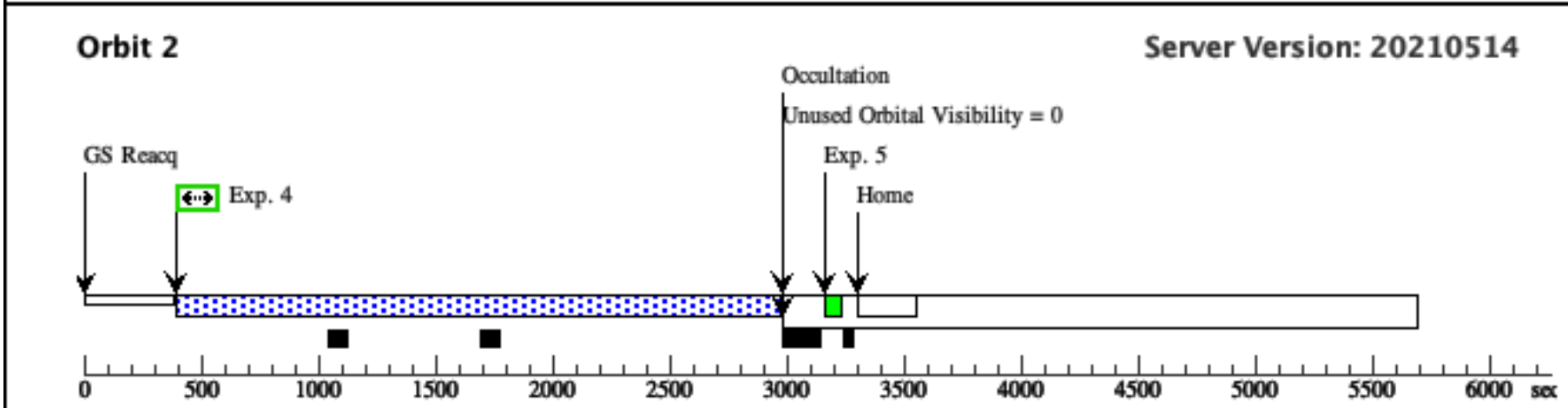
Comments: SK-70D60 : [M2002]_64006, Sk -70 60, SK -70 60
Previous name : Sk -70 60
Input file: LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv
SIMBAD link (SK -70 60): https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SK+-70+60&submit=submit+id
SpT = O4-5V:n
COS/G130M/c1096 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=6e-13 Flam)
COS/G130M/c1291 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G160M/c1611 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1921 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1953 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1986 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E140M/c1425 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E230M/c1978 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E230M/c2707 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
Coordinate pedigree: Gaia
v sin i = 256
Calculation performed 2020-02-24T17:59:50, v0.4
---
tstatus; SK-70D60; P/STIS approved for submission; S/ins not started; P/TS 09/07/20; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; SK-70D60, 'SK -70 60'
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. updated?; NO
tcheck; Adopted SED compared to Observations?; YES ...
Adopted SED provides an overall good match to the observations
Category=EXT-STAR
Description=[MAIN SEQUENCE O]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1454695)	(4) SK-70D60	STIS/CCD, ACQ, F28X50LP	MIRROR				1.0 Secs (1 Secs) *[==>]*	*[1]*
2	E140M/1425 (STIS.sp.1454698)	(4) SK-70D60	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=649.0			2211 Secs (2211 Secs) *[==>]*	*[1]*
	Comments: rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4-5V:n --> O4 V* *SED = SK-70D60_STIS_E140M_c1425_sed.fits* *For exptime=9359.5 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 2486.5 cts/s/segment* *brightest pixel: 0.024 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T18:00:03, v0.4*								
3	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[1]*
4	E140M/1425 (STIS.sp.1454698)	(4) SK-70D60	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=649.0			2567 Secs (2567 Secs) *[==>]*	*[2]*
	Comments: rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4-5V:n --> O4 V* *SED = SK-70D60_STIS_E140M_c1425_sed.fits* *For exptime=9359.5 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 2486.5 cts/s/segment* *brightest pixel: 0.024 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T18:00:03, v0.4*								
5	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[2]*

Orbit Structure





Visit

Proposal 16364, SK-70D60-STIS (DT) Fri Oct 22 13:00:37 GMT 2021

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/FUV-MAMA

Special Requirements: SCHED 100%

Comments: vstatus; 4S; SK-70D60; P/STIS approved for submission; P/TS 15/07/20 ; internal review complete ; P/DW 26/10/20
vcheck; Enter targ name & Inst. & Resp. Sci.; SK-70D60 ; STIS; TS
vcheck; ETC numbers entered in APT?; Completed
vcheck; Any screening violations?; NO - 1 safe GALEX star which is the target itself
vcheck; S/N ETC calcs done & documented?; YES...
ETC# STIS.sp.1454698 gives SNR~16.4, but SN plot (saved as E140M_SN.png) shows actual SNR is close to ~20 at 1200 angstroms
vcheck; Field images checked & saved?; YES - SK-70D60_DSS.png, SK-70D60_2MASS.png
vcheck; Selected ACQ strategy?; STIS CCD F28X50LP 1 sec gives SNR~98
vcheck; Possible ACQ or Sci spoilers?; NO
vcheck; Field BOT clear?; YES
vcheck; Visual BOT check for stars not in catalog?; Complete - no bright star found around target
vcheck; Orbit packing finalized?; YES - 4 orbits, divided into 2 visits (2+2 orbits)
vcheck; Buffer times optimized?; YES - 4/5 of ETC suggestion
vcheck; Verify visit grouping correct; 2 visits, but grouping not done
vcheck; Is visit ready for int. review?; YES
Allocated STIS orbits = 4

DT is a repeat of failed visit 4T

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	SK-70D60	RA: 05 04 40.7842 (76.1699342d)		V=13.88	Reference Frame: ICRS
	Alt Name1: SK-70-60	Dec: -70 15 34.50 (-70.25958d)		SpT=O4-5V:n; E(B-V)=0.12; U =12.6; B=13.7; V=13.9; F1160= 6.00e-13; F1360=4.20e-13	
	Alt Name2: M2002-64006	Equinox: J2000			

Comments: SK-70D60 : [M2002]_64006, Sk -70 60, SK -70 60
Previous name : Sk -70 60
Input file: LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv
SIMBAD link (SK -70 60): https://simbad.u-strasbg.fr/simbad/sim-id?Ident=SK+-70+60&submit=submit+id
SpT = O4-5V:n
COS/G130M/c1096 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1160 +- 30.0A flux=6e-13 Flam)
COS/G130M/c1291 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G160M/c1611 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1921 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1953 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
COS/G185M/c1986 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E140M/c1425 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E230M/c1978 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
STIS/E230M/c2707 : rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam)
Coordinate pedigree: Gaia
v sin i = 256
Calculation performed 2020-02-24T17:59:50, v0.4
---
tstatus; SK-70D60; P/STIS approved for submission; S/ins not started; P/TS 09/07/20; S/xx DD/MM/YY
tcheck; APT/SIMBAD target names: ; SK-70D60, 'SK -70 60'
tcheck; Target info verification status?; OK
tcheck; Coordinates & P.M. updated?; NO
tcheck; Adopted SED compared to Observations?; YES ...
Adopted SED provides an overall good match to the observations
Category=EXT-STAR
Description=[MAIN SEQUENCE O]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1454695)	(4) SK-70D60	STIS/CCD, ACQ, F28X50LP	MIRROR				1.0 Secs (1 Secs) *[==>]*	***[1]***
2	E140M/1425 (STIS.sp.1454698)	(4) SK-70D60	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=649.0			2211 Secs (2211 Secs) *[==>]*	***[1]***
	Comments: rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4-5V:n --> O4 V* *SED = SK-70D60_STIS_E140M_c1425_sed.fits* *For exptime=9359.5 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 2486.5 cts/s/segment* *brightest pixel: 0.024 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T18:00:03, v0.4*									
3	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	***[1]***
4	E140M/1425 (STIS.sp.1454698)	(4) SK-70D60	STIS/FUV-MAMA, TIME-TAG, 0.2X0.2	E140M 1425 A	WAVECAL=NO; BUFFER-TIME=649.0			2567 Secs (2567 Secs) *[==>]*	***[2]***
	Comments: rn-max(WM-Basic(O4 V, Z=0.008, Teff=45709, log_lum=5.60, log_g=4.00) (extinction lmcavg=0.120), flux1360 +- 30.0A flux=4.2e-13 Flam); stis,fuvmama,e140m,c1425,0.2x0.2,mjd#59305 *From file LMC_2020Feb20/input/LMC_all_do1_fixed_wr_NewCoords_pids.csv* *Spectral type: O4-5V:n --> O4 V* *SED = SK-70D60_STIS_E140M_c1425_sed.fits* *For exptime=9359.5 s, spectral region:* *1200.0 +- 0.5 A achieves SNR=20.0/resel* *global countrate (brightest segment): 2486.5 cts/s/segment* *brightest pixel: 0.024 cts/s/pix at 1308.9 A* *Calculation performed 2020-02-24T18:00:03, v0.4*									
5	E140M/1425 WAVECAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	***[2]***

Orbit Structure