#### **SEDmc**

Star Summary Report

### TIC159304532

11/02/2024

**Astrometry Data:** ID = TIC159304532; RA,DEC = (290.2632874, 44.5564051); Best Parallax (Simbad) = 0.8039 (+/-0.0235)

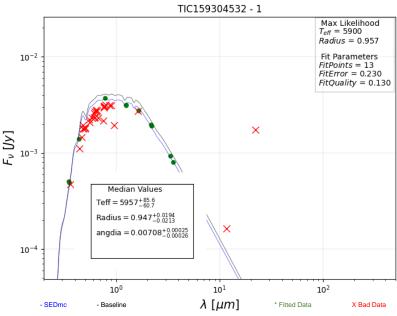
**Stellar Parameters:** Baseline Data Source = NASA

Data Type	Teff [K]	Rstar [Rsun]	Angular Diameter [arcsec]		
Baseline Values {SEDmc residuals}	5863 (+/-103.52) {1.6%}	1.05 (+/-0.28) {-9.8%}	0.0076 (+/-0.002) {-6.8%}		
SEDmc Results {fractional error}	5956 (+85, -60) {1.4%}	0.947 (+0.0194, -0.0213) {2.0%}	0,00708 (+0.00025, -0.00026)		

Sampling Parameters: Observed Data = New; Model = nextgen; # of Walkers = 50; # of Iterations = 5000; Burn In = 1000

Min Wavelength = 0.35; Max Wavelength = 4.6; # of Fit Points = 13; # of Bad Points = 31; Fit Error = 0.23

## SEDmc Observed Data & Best Fit Curve



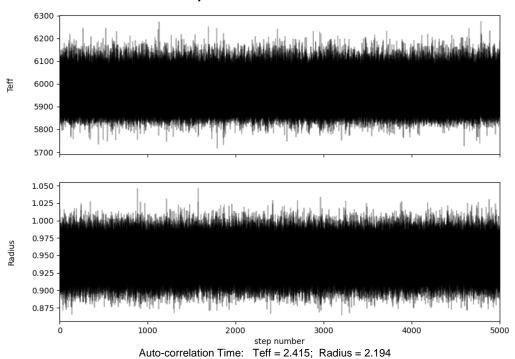
#### **Observed Data**

Good Data Points (Used in Sampler)

Bad Data Points (All not shown)

				•						,	
	wl	fl	efl	src	band		wl	fl	efl	arc	band
7	0.35	0.00	0.00	V360/syntphot	Cousins:U	0	0.36	0.00	0.00	J/AJ/144/24/kisdr2	INT/WFC:U
ī	0.35	0.00	0.00	V360/syntphot	SDSS:u	1	0.44	0.00	0.00	I/336/apass9	Johnson:B
2	0.44	0.00	0.00	V360/syntphot	Cousins:B	2	0.47	0.00	0.00	V305/out	POSS-II:J
3	0.78	0.00	0.00	V305/out	POSS-II:i	3	0.48	0.00	0.00	V343/gps1	PAN-STARRS/PS1:
7	1.24	0.00	0.00	V343/gps1	2MASS:J	4	0.48	0.00	0.00	J/AJ/144/24/kisdr2	INT/WFC:g
5	1.25	0.00	0.00	I/246/out	Johnson:J	5	0.48	0.00	0.00	V353/gsc242	SDSS:g
5	1.65	0.00	0.00	V317/sample	2MASS:H	6	0.50	0.00	0.00	V350/gaiaedr3	GAIA/GAIA3:Gbp
1	2.17	0.00	0.00	V322A/out	2MASS:Ks	7	0.50	0.00	0.00	V345/gaia2	GAIA/GAIA2:Gbp
3	2.19	0.00	0.00	I/246/out	Johnson:K	8	0.55	0.00	nan	V360/syntphot	Cousins:V
7	3.35	0.00	0.00	I/363/unwise	WISE:W1	9	0.55	0.00	0.00	I/336/apass9	Johnson:V
o	3.55	0.00	0.00	J/ApJS/254/11/spikes	Spitzer/IRAC:3.6	10	0.58	0.00	0.00	/350/gaiaedr3	GAIA/GAIA3:G
1	4.50	0.00	0.00	J/ApJS/254/11/spikes	Spitzer/IRAC:4.5	11	0.61	0.00	0.00	V343/gps1	PAN-STARRS/PS1
2	4.60	0.00	0.00	I/363/unwise	WISE:W2	12	0.62	0.00	0.00	J/AJ/144/24/kisdr2	INT/WFC:r
_					•	13	0.62	0.00	0.00	V345/gaia2	GAIA/GAIA2:G
						14	0.63	0.00	0.00	V353/gsc242	SDSS:r
						15	0.64	0.00	0.00	¥305/out	POSS-II:F
						16	0.65	0.00	nan	V360/syntphot	Cousins:R
						17	0.66	0.00	0.00	J/AJ/144/24/kisdr2	INT/WFC:Ha
						18	0.67	0.00	0.00	V339/hsoy	Gaia:G
						19	0.75	0.00	0.00	V343/gps1	AN-STARRS/PS1
						20	0.76	0.00	0.00	V350/gaiaedr3	GAIA/GAIA3:Grp
						21	0.76	0.00	0.00	V353/gsc242	SDSS:i
						22	0.77	0.00	0.00	J/AJ/144/24/kisdr2	INT/WFC:i
						23	0.77	0.00	0.00	V345/gaia2	GAIA/GAIA2:Grp
						24	0.79	0.00	nan	V360/syntphot	Cousins:I
						25	0.87	0.00	0.00	I/349/ps1	PAN-STARRS/PS1
_						26	0.90	0.00	0.00	V353/gsc242	SDSS:z
						27	0.96	0.00	0.00	V343/gps1	AN-STARRS/PS1
						28	1.63	0.00	0.00	I/246/out	Johnson:H
						29	11.57	0.00	nan	V353/gsc242	WISE:W3

#### **SEDmc Sampler Behavior - Markov Chain Plot**



# **SEDmc Posterior Spread - Corner Plot**

