

The Stars of Star Trek

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- The project:

Photograph all of the stars mentioned in the Star Trek universe accessible with the Stocker 24" telescope and learn about them and why they might have been picked for the show from an astrophysics standpoint.

- Inspiration for the project:

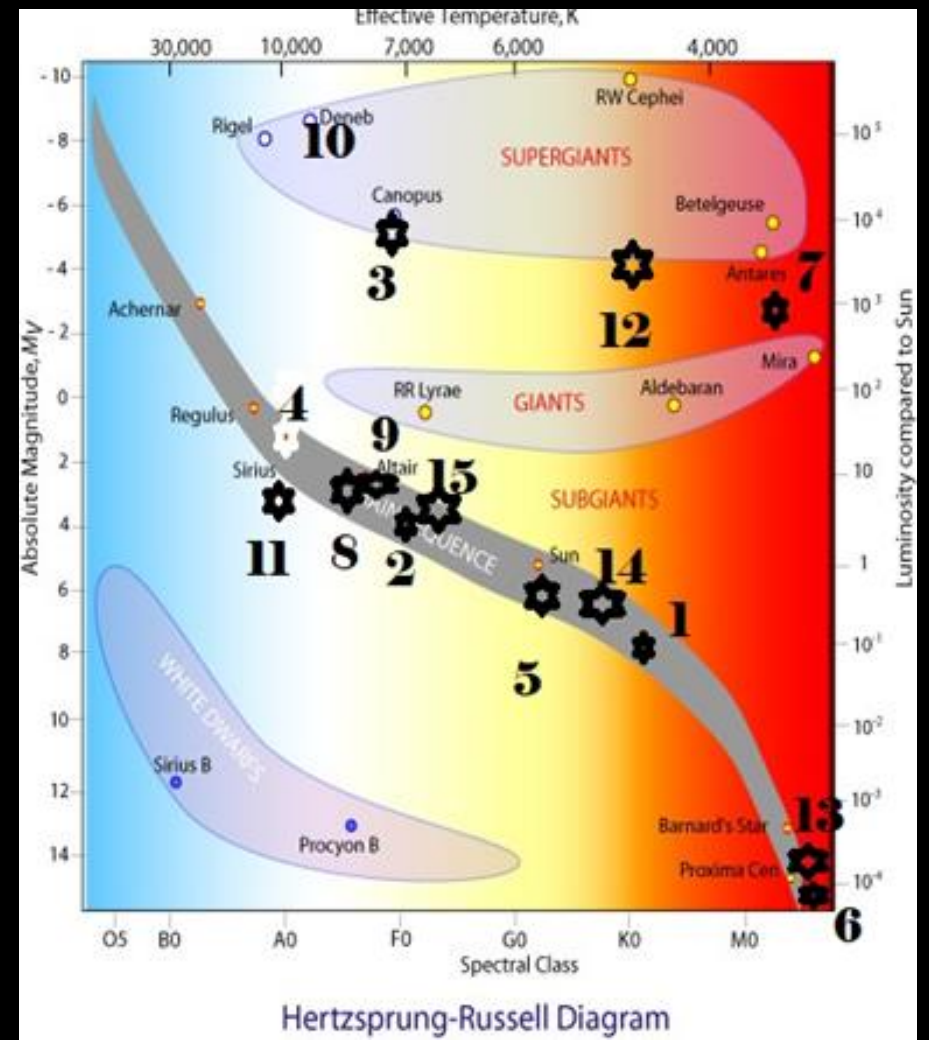
Growing up watching the original series and seeing the Astronomy magazine article "The Stars of Star Trek". MAY 2022

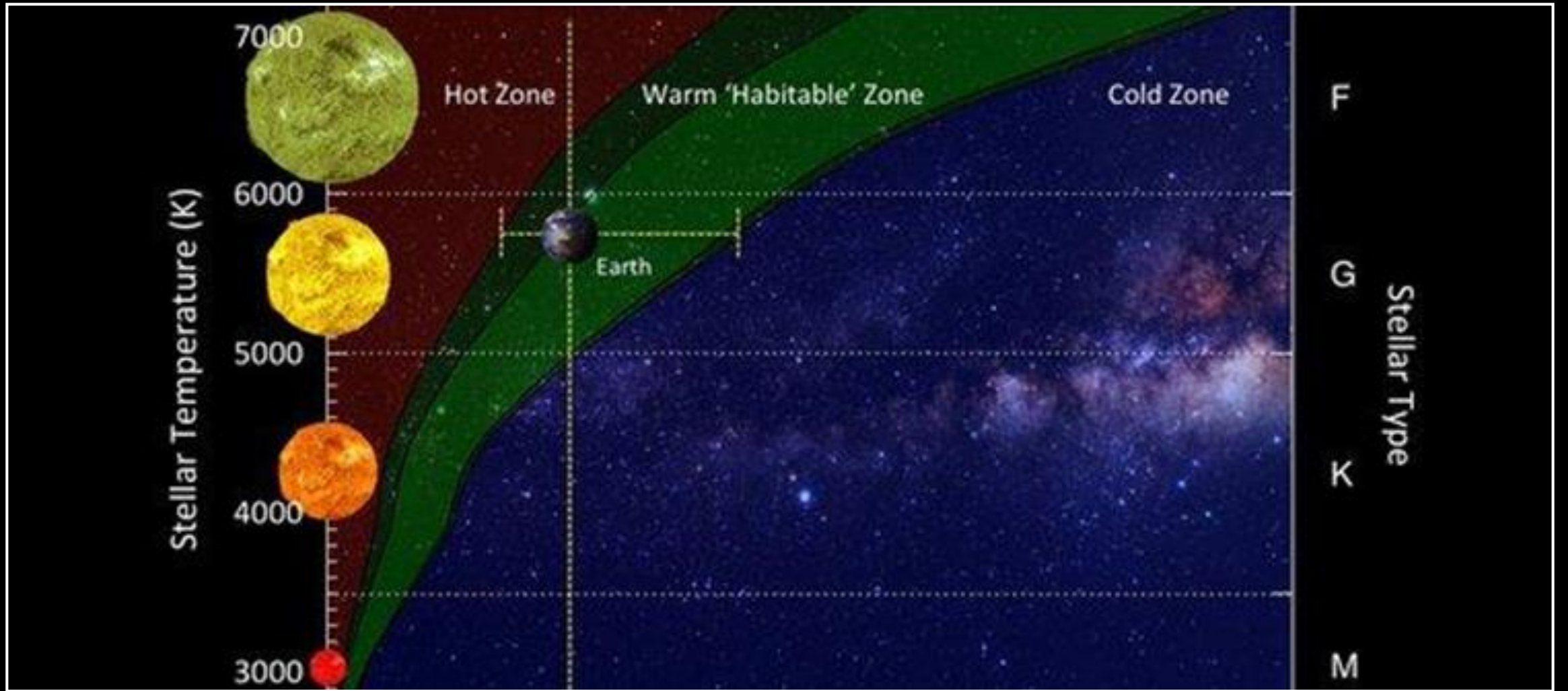


The Stars of Star Trek

Stars	Other names	Distance (LY)	Magnitude	Spectral type	RA	Dec	Planets?	Star Trek!	Date observed
ε Eridani		10.8	3.7	K2V	3 32 55.48	-09 27 29.73	Yes	Planet Vulcan star	10/25/22
Omicron Eridani	Keid	121.7	4.04	F0	04 11 51.94	-06 50 15.28	No	Planet Vulcan star	10/25/22
α Carina	Canopus	310	-0.7	A9 II	06 23 57.1	-52 41 44.4	No	(TOS) "The Ultimate Computer"	
α Canis Majoris	Sirius	8.7	-1.47	A0 V	06 45 9.0	-16 43 06	No	Host of inhabited planets such as Alpha IX	4/19/22
α Centauri		4.37	0.01	G2 V	14 39 36.49	-60 50 02.37	No*(3 star system)	Home to 22 planets!	
Wolf 424		14	13.2	dM6e/dM6e	12 33 17.38	9 01 15.8	No	Parent star of Babel (negotiation territory for United Federation of Planets)	7/9/22
HD 93131	WR 24	14,000	6.5	WN6ha-w	10 43 52.25	-60 07 04.0	No	-	
α Ceti	Menkar	249	2.53	M1.5 IIIa	03 02 16.77	04 05 23.0	No	Khan's planet	10/7/22
α Lyrae	Vega	25	0.26	A0 Va	18 36 56.33	38 47 01.28	Possible planets	"Mirror,mirror" episode	7/9/22
α Aquilae	Altair	16.73	0.76	A7 V	19 50 46.99	08 52 05.96	No	(TOS) "Amok Time" episode	7/9/22
α Cygni	Deneb	2,615	1.25	A2 Ia	20 41 25.9	45 16 49	No	1st Next Generation episode	7/9/22
γ Trianguli		112.3	4.1	A1 V	02 17 18.86	33 50 48.8	No	(TOS) "The Apple" episode, Gamma Trianguli VI planet controlled by Vall.	10/7/22
Iota Geminorum		120.4	3.8	G9 III	07 47 53.1	27 47 53.1	No	Tribbles home planet, Iota Geminorum IV (TOS S2 episode 15)	4/10/22, 5/6/22
Wolf 359		81	13.5	M6 V	10 56 28.99	07 00 52.0	Yes	(Next Gen) "Best of Both Worlds" episode	5/6/22
61 Ursa Majoris		31.24	5.3	G8 V	11 41 03.01	-34 12 05.88	No	First Earth like planet discovered orbiting this star. (Enterprise)	5/6/22
Iota Bootis		84.8	4.8	A7 V	14 16 09.9	51 22 02.02	No	Home planet of Chief Medical Officer, Dr. Phlox. (Enterprise)	7/8/22

What types of star did they choose?





What are we looking for in stars that can sustain life?

- Distance: 121.7
- Magnitude: 4.04
- Spectral Type: F0

- Distance: 10.8
- Magnitude: 3.7
- Spectral Type: K2V



Omicron Eridani



Epsilon Eridani

-
- Distance: 81
 - Magnitude: 13.5
 - Spectral Type: M6V

- Distance: 8.7
- Magnitude: -1.47
- Spectral Type: A0V



Wolf 359



Sirius

-
- Distance: 249
 - Magnitude: 2.43
 - Spectral Type: M1.5 IIIa

- Distance: 14
- Magnitude: 13.2
- Spectral Type: dM6e/dM6e



Alpha Ceti



Wolf 424

-
- Distance: 16.73
 - Magnitude: 0.76
 - Spectral Type: A7V

- Distance: 25
- Magnitude: 0.26
- Spectral Type: A0Va





-
- Distance: 120.4
 - Magnitude: 3.8
 - Spectral Type: G9 III

- Distance: 31.24
- Magnitude: 5.3
- Spectral Type: G8 V

- Distance: 112.3
- Magnitude: 4.1
- Spectral Type: A1 V

-
- Distance: 2,615
 - Magnitude: 1.25
 - Spectral Type: A2 Ia

- Distance: 84.8
- Magnitude: 4.8
- Spectral Type: A7 V



Deneb



Iota Bootis

High Proper motion
star (moves fast across
the sky). Wolf 359



- **Wolf 359 5/6/2022**
- **From FIU Stocker astroscience center**



Conclusions

- Writers failed to consider even the most rudimentary astrophysics when choosing stars to use in the Star trek universe.
- They could have chosen main sequence stars but instead randomly chose stars, some of which have evolved off the main sequence destroying any habitable planets that may have been orbiting them.
- Other stars they chose like Wolf 454 and Wolf 359, are flare stars that would sterilize any planets orbiting around them with high energy flares.
- Oh well, its science fiction, but really cool fiction.