

HR Diagrams of Star Clusters

AA 651, April 2021

Experiment: 1

April 5, 2021

Student's name: MANISH KUMAR SINGH

Star Cluster: M 44

1 HR Diagram from stored data:

Hi. How are you?

2 HR Diagram from recorded data:

again how're you?

Table 1: Parameters from

	Stored data	Recorded data
ZAMS fitting		
E(B-V)	+0.04	+0.02
V-M _v	+6.21	+5.55
D (pc)	174.58	128.82
Isochrone fitting		
Age (Gyr)	0.063	0.063
Adjust (B-V)	+0.01	-0.01
Metallicity Y	0.273	0.273
Metallicity Z	0.019	0.019

Acknowledgement

We thank the Department of Physics, Gettysburg College for the virtual observatory software VIREO which has been used in producing the diagrams shown in this report.

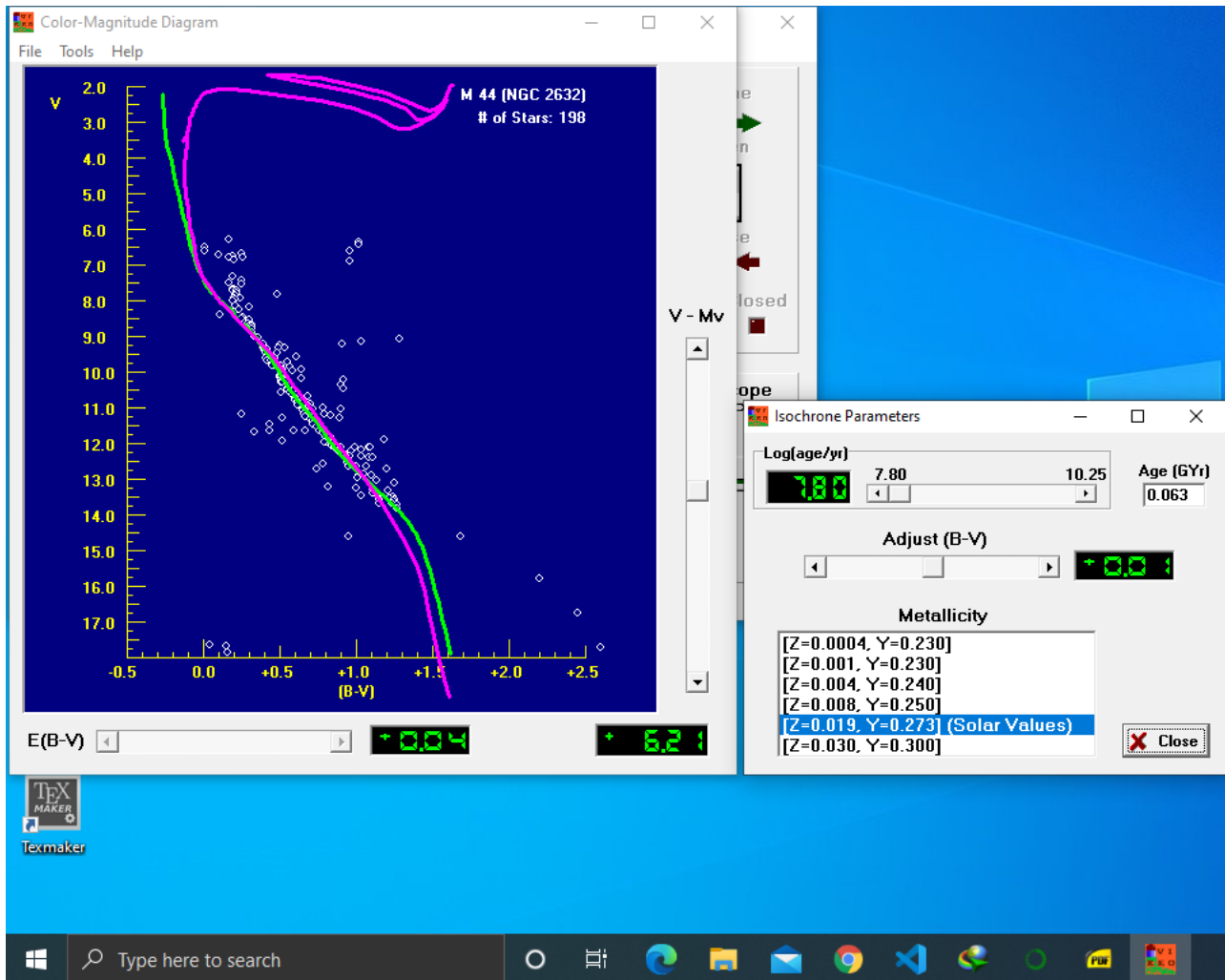


Figure 1: HR diagram of star cluster Pleiades star cluster from the data stored in VIREO software. The pink and blue curves show the fitted Zero-Age-Main-Sequence and isochrone respectively.

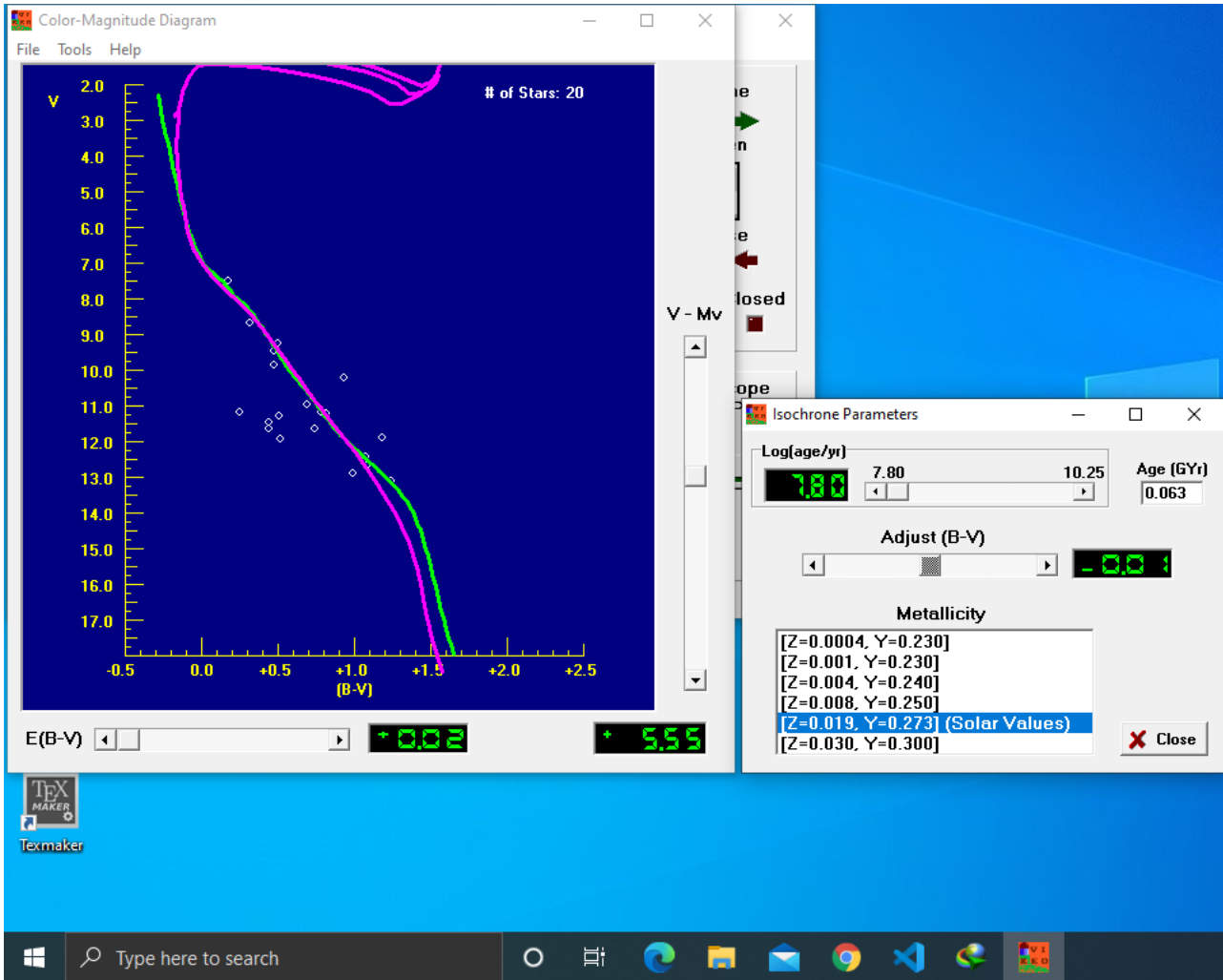


Figure 2: HR diagram of star cluster Pleiades star cluster from the data recorded from VIREO software. The pink and blue curves show the fitted Zero-Age-Main-Sequence and isochrone respectively.