

Data Sheet: Hubble Redshift Distance Relation

Galaxy Field Name	Abs Mag M	Photon Count	App Mag m	Dist in pc	Dist in Mpc	λ _{Kmeasured}	λ _{Hmeasured}	Δλ _H	Δλ _K	Velocity H	Velocity K	Velocity AVG
	-22											
	-22											
	-22											
	-22											
	-22											

Using the Graph: Average Value of H = _____ km/sec/Mpc

Useful Equations and Quantities

$$M = m + 5 - 5 \cdot \log D$$

$$v_K = c \cdot \frac{\Delta \lambda_K}{\lambda_K}$$

1 light year = .306 pc

Wavelength of the K Line:
λ_K = 3933.67

$$\log D = \frac{m - M + 5}{5}$$

$$\Delta \lambda_H = \lambda_{Hmeasured} - \lambda_H$$

1 Mpc = 1 x 10⁶ pc

Wavelength of the H Line:
λ_H = 3968.47

$$v_H = c \cdot \frac{\Delta \lambda_H}{\lambda_H}$$

$$\Delta \lambda_K = \lambda_{Kmeasured} - \lambda_K$$

1 pc = 3.26 light years

c = 3 x 10⁵ km/sec