

Data Sheet: Hubble Redshift Distance Reoation

Galaxy Field Name	Abs Mag M	Photon Count	App Mag m	Dist in pc	Dist in Mpc	$\lambda_{\text{Kmeasured}}$	$\lambda_{\text{Hmeasured}}$	$\Delta\lambda_{\text{H}}$	$\Delta\lambda_{\text{K}}$	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

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

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

$$1 \text{ light year} = .306 \text{ pc}$$

$$\text{Wavelength of the K Line: } \\ \lambda_K = 3933.67$$

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

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

$$1 \text{ Mpc} = 1 \times 10^6 \text{ pc}$$

$$\text{Wavelength of the H Line: } \\ \lambda_H = 3968.47$$

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

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

$$1 \text{ pc} = 3.26 \text{ light years}$$

$$c = 3 \times 10^5 \text{ km/sec}$$