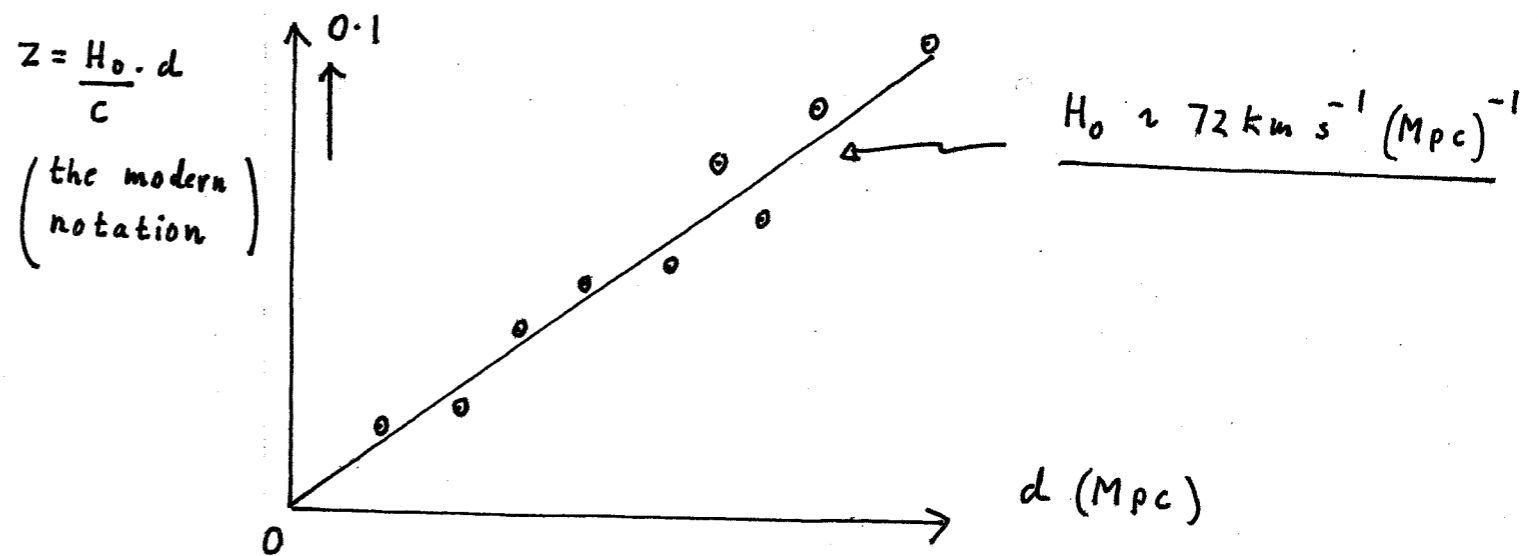


Red shift, $Z, = \left(\frac{v}{c}\right)$	d (Mpc)
0.01	40
0.02	95
0.03	115
0.04	170
0.05	220
0.06	240
0.07	300
0.08	330
0.09	375
0.1	415

Supplement to Hubble and the redshifts of galaxies

In the late 1920's, when many astronomical measurements were much harder to perform than they are now, only a few galaxies had their redshifts measured. Nonetheless, as Hubble followed up his determination of the distance of M31 with various other galactic distance measurements, he was able to compare distances with redshifts for a growing sample. By 1929, using a sample of twenty-four galaxies, he had the first convincing evidence of a linear relationship between redshift and distance.



The last twenty years saw a significant improvement in the calibration scale, with the result that astronomers are now able to measure ^{distances} to remote galaxies (> 100 Mpc) with an uncertainty of about 15%.

Note that for $Z > 0.1$, relativistic effects have to be considered: the calculations become much more complicated. Until recently, the scatter showed a value for H_0 between 79 and 65 $\text{km s}^{-1} (\text{Mpc})^{-1}$.