

### Supernova Data for Dark energy discovery

Supernova, Redshift (with Log Redshift), Luminosity Distance, and Distance data. (The Distances are derived from the Luminosity Distances, using the equation given in the Exploration Section in main lesson plan. The entries in yellow are the nearby supernovae.

Supernova	Redshift	log(redshift)	luminosity distance	Distance (MegaParsec)
1995D	0.008	-2.10	32.79	36.14
1995E	0.012	-1.92	33.73	55.72
1992al	0.014	-1.85	34.13	66.99
1995bd	0.016	-1.80	34.00	63.10
1996C	0.028	-1.55	35.82	145.88
1992bh	0.045	-1.35	36.87	236.59
1990af	0.050	-1.30	36.67	215.77
1993O	0.052	-1.28	37.31	289.73
1992bs	0.064	-1.19	37.63	335.74
1992bp	0.080	-1.10	37.96	390.84
1992aq	0.101	-1.00	38.33	463.45
1996ab	0.124	-0.91	39.10	660.69
1996J	0.300	-0.52	40.99	1577.61
1996K	0.380	-0.42	42.21	2766.94
1996E	0.430	-0.37	42.03	2546.83
1996U	0.430	-0.37	42.34	2937.65
1997ce	0.440	-0.36	42.26	2831.39
1995K	0.480	-0.32	42.49	3147.75
1997cj	0.500	-0.30	42.70	3467.37
1996I	0.570	-0.24	42.83	3681.29
1996H	0.620	-0.21	43.01	3999.45
1997ck	0.970	-0.01	44.30	7244.36

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Supernova, Redshift (with Log Redshift) and Distance data.

The entries in yellow are the nearby supernovae.

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1995D	0.008	-2.10	36.14
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1992al	0.014	-1.85	66.99
1995bd	0.016	-1.80	63.10
1996C	0.028	-1.55	145.88
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### Sample Distance versus Redshift plot

This plot goes along with the data on Sheets 1 and 2.



### Supernova Data for Dark energy discovery

Supernova, Redshift, and Luminosity Distance data. The entries in yellow are the nearby supernovae.

Supernova	Redshift	log(redshift)	luminosity distance
1995D	0.008	-2.10	32.79
1995E	0.012	-1.92	33.73
1992al	0.014	-1.85	34.13
1995bd	0.016	-1.80	34.00
1996C	0.028	-1.55	35.82
1992bh	0.045	-1.35	36.87
1990af	0.050	-1.30	36.67
1993O	0.052	-1.28	37.31
1992bs	0.064	-1.19	37.63
1992bp	0.080	-1.10	37.96
1992aq	0.101	-1.00	38.33
1996ab	0.124	-0.91	39.10
1996J	0.300	-0.52	40.99
1996K	0.380	-0.42	42.21
1996E	0.430	-0.37	42.03
1996U	0.430	-0.37	42.34
1997ce	0.440	-0.36	42.26
1995K	0.480	-0.32	42.49
1997cj	0.500	-0.30	42.70
1996I	0.570	-0.24	42.83
1996H	0.620	-0.21	43.01
1997ck	0.970	-0.01	44.30

### Sample Distance versus Redshift plot

Sample plots of the “Luminosity Distances vs Redshift” to accompany the data in Sheet 4. The top plot is linear, and the bottom plot is semi-log. Both show the linear relationship for redshifts below 0.3 and the deviation from that line for points above redshift = 0.3.

