Data Type	Possible values	Example usage	Level of measurement	Distribution	Scale of relative differences	Permissible statistics	Regression analysis
binary	0, 1 (arbitrary labels)	binary outcome ("yes/no", "true/false", "success/failure", etc.)	nominal scale	Bernoulli	incomparable	mode, Chi-squared	logistic, probit
categorical	1, 2, ..., K (arbitrary labels)	categorical outcome (specific blood type, political party, word, etc.)		categorical			multinomial logit, multinomial probit
ordinal	integer or real number (arbitrary scale)	relative score, significant only for creating a ranking	ordinal scale	categorical	relative comparison		ordinal regression (ordered logit, ordered probit)
binomial	0, 1, ..., N	number of successes (e.g. yes votes) out of *N* possible	interval scale	binomial, beta-binomial, etc.	additive	mean, median, mode, standard deviation, correlation	binomial regression (logistic, probit)
count	nonnegative integers (0, 1, ...)	number of items (telephone calls, people, molecules, births, deaths, etc.) in given interval/area/volume	ratio scale	Poisson, negative binomial, etc.	multiplicative	All statistics permitted for interval scales plus the following: geometric mean, harmonic mean, coefficient of variation	Poisson, negative binomial regression
real-valued additive	real number	temperature in degree Celsius or degree Fahrenheit, relative distance, location parameter, etc. (or approximately, anything not varying over a large scale)	interval scale	normal, etc. (usually symmetric about the mean)	additive	mean, median, mode, standard deviation, correlation	standard linear regression
real-valued multiplicative	positive real number	temperature in kelvin, price, income, size, scale parameter, etc. (especially when varying over a large scale)	ratio scale	log-normal, gamma, exponential, etc. (usually a skewed distribution)	multiplicative	All statistics permitted for interval scales plus the following: geometric mean, harmonic mean, coefficient of variation	generalized linear model with logarithmic link