Explanation of the columns in flat files

Flat file contains a variety of metrics to characterize the source, path, and site properties, from which the most important ones are listed below.

Acronym	Full name and description
Source metrics	
evid	Geonet earthquake Public ID
Mag, mag_unc and mag_type	Magnitude value, its uncertainty and type
ev_lat, ev_lon, ev_depth	Event location: latitude, longitude, and depth
tect_class	Tectonic classification
domain_no, domain_type	Tectonic domain number and type
strike, dip, rake	moment tensor solutions
f_{length} and f_{width}	Fault length and width [m]
z_{tor} and z_{bor}	depth to top and bottom of fault rupture [m]

Acronym	**Full name and description**
Site information	
net, sta, loc, chan	network code, station code, location code, channel code
sta_lat, sta_lon	Station latitude and longitude
V_{S30}	time-averaged shear-wave velocity in the uppermost 30 m [m/s]
f_0	the fundamental frequency of resonance
$Z_{1.0}$	depth to a V_S of 1000 m/s [m]
$Z_{2.5}$	depth to a V_S of 2500 m/s [km]
soil_class	the NZS1170.5 site subsoil class

Acronym	Full name and description
Source-to-site distances	
gmid	ground-motion identification number = evid_sta
R_{epi}	epicentral distance [km]
R_{hypo}	hypocentral distance [km]
R_{rup}	shortest distance to rupture plane [km]
R_{JB}	Joyner–Boore distance [km]
R_X	distance measured perpendicular to the fault strike from the surface projection of the up-dip edge of the fault plane [km]
R_{Y0}	distance measured parallel to the fault strike from the end of the surface projection of the rupture surface [km]
R_{TVZ}	the decimal fraction of RJB which crossed the Taupo Volcanic zone (TVZ, see *Figure 1*)
R_{XVF}	the Euclidean distance from the station to the TVZ [km]

Acronym	Full name and description
Ground motion parameters	
CAV	RotD50 of cumulative absolute velocity [m/s]
Arias	RotD50 of arias intensity [m/s]
D575	RotD50 of 5to75 duration [s]
D595	RotD50 of 5to95 duration [s]
fmin	Minimum usable frequency (SNR>3)
fmax	Maximum usable frequency (SNR>3)
FAS	Fourier Amplitude Spectrum [m/s] between 0.1-50 Hz
EAS	Effective Amplitude Spectrum [m/s] between 0.1-50 Hz