

Bulletin title block

Bulletin title

Event title block

Event identification number Geographic region

Origin block

Date epicenter date (yyyy/mm/dd)
Time epicenter time (hh:mm:ss.ss)
 fixed flag ('f') appended if fixed origin time solution
Err origin time error (seconds) if not fixed origin time
RMS root mean square of time residuals (seconds)
Latitude latitude (negative for South)
Longitude longitude (negative for West)
 fixed flag ('f') appended if fixed epicenter solution
Smaj semi-major axis of 90% ellipse or its estimate (km) if not fixed epicen
ter
Smin semi-minor axis of 90% ellipse or its estimate (km) if not fixed epicen
ter
Az strike (0<=x<=360) of error ellipse clockwise from North (degrees)
Depth depth (km)
 fixed flag ('f') appended if fixed depth solution
Err depth error 90% (km) if not fixed depth
Ndef number of defining phases
Nsta number of defining stations
Gap gap in azimuth coverage (degrees)
mdist distance to closest station (degrees)
Mdist distance to furthest station (degrees)
Qual analyst type: (a=automatic, m=manual, g=guess)
 location method: (i=inversion, p=pattern recognition, g=ground truth, o
=other)
 event type: uk=unknown
 ke=known earthquake
 se=suspected earthquake
 kr=known rockburst
 sr=suspected rockburst
 ki=known induced event
 si=suspected induced event
 km=known mine explosion
 sm=suspected mine explosion
 kx=known experimental explosion
 sx=suspected experimental explosion
 kn=known nuclear explosion
 sn=suspected nuclear explosion
 ls=landslide
Author author of the origin
OrigID origin identification

Magnitude sub block

Magnitude magnitude type (mb, Ms, ML, mbmle, msmle)
 magnitude value
Err standard magnitude error
Nsta number of stations used to calculate magnitude
Author author of the origin
OrigID origin identification

Comment sub block

(Any comment)

Phase block

Sta station code
Dist station-to-event distance (degrees)
EvAz event-to-station azimuth (degrees)
Phase phase code
Time arrival time (hh:mm:ss.sss)
TRes time residual (seconds)
Azim observed azimuth (degrees)

AzRes	azimuth residual (degrees)
Slow	observed slowness (seconds/degree)
SRes	slowness residual (seconds/degree)
Def	defining flags (T=time, A=azimuth, S=slowness)
SNR	signal-to-noise ratio
Amp	amplitude (nanometers)
Per	period (seconds)
Qual	type of pick (a=automatic, m=manual) direction of short period motion (c=compression, d=dilatation) onset quality (i=impulsive, e=emergent, q=questionable)
Magnitude	magnitude type (mb, Ms, ML, mbmle, msmle) magnitude value