Nath S. K., Thingbaijam K. K. S., Ghosh S. K. (2010). Earthquake Catalogue of South Asia - a Generic M_W Scale Framework

The catalogue is prepared with sixteen columns as described below:

1. The first three columns represent the date: YEAR, MONTH, DAY
2. Origin Time (in UTC) is given in the next three columns: HH, MM, SS
3. The epicentral coordinate is given in next two columns: LAT, LON
4. Focal depth and associated error (standard deviation) are listed under columns: DEPTH, D_ERR
5. The next three columns present the native magnitude type, its value and associated error: NM_TYPE, NMAG, NM_ERR
6. The next two columns list the equivalent moment magnitude, and its associated error: MW, MW_ERR
7. The next column is provided for the native data source: SOURCE
8. The last column is provided to indicate the likely type of shock: SHOCK

In case of non-availability of particular field value, the value of '-1' is inserted in the catalogue.

The codes assigned to the different sources are as given below:

ASC2009a	Amateur Seismic Centre, 2009. *http://www.asc-india.org*, Pune, India (last accessed April 2009).
AM2000a	Ambraseys, N., 2000. Reappraisal of north-Indian earthquakes at the turn of the 20th century, *Current Sci.*, **79,** 101–114.
AB2003a	Ambraseys, N. & Bilham, R., 2003. Earthquakes in Afghanistan, *Seism. Res. Lett.,***74**, 107–123.
AD2004a	Ambraseys, N. & Douglas, J.J., 2004. Magnitude calibration of north Indian earthquakes, *Geophys. J. Int.*, **159**, 165–206.
AJ2003a	Ambraseys, N. & Jackson, D., 2003. A note on early earthquakes in northern India and southern Tibet, *Current Sci*., **84**, 570–582.
B1992a	Byrne, D.E., L.R. Sykes, and D.M. Davis (1992) Great thrust earthquakes and aseismic slip along the plate boundary of Makran subduction zone, *J. Geophys. Res*., **97**, 449-478.
B1995a	Bilham, R., 1995. Location and magnitude of the 1833 Nepal earthquake and its relation to the rupture zones of contiguous great Himalayan earthquakes, *Current Sci.*, **69**, 155–187.
B1999a	Bilham, R., 1999. Slip parameters for the Rann of Kachchh, India, 16 June 1819 earthquake quantified from contemporary accounts. In Stewart, I.S., Vita-Finzi, C. (Eds.), *Coastal Tectonics*, Geological Society London, 146, 295–318.
BE2001a	Bilham, R., England, P., 2001. Plateau 'pop up' in the great 1897 Assam earthquake. *Nature*, **410**, 806–809.
B2005a	Bilham, R., Engdahl, E.R., Feldl, N. & Satyabala, S.P., 2005. Partial and complete rupture of the Indo-Andaman plate boundary 1847-2004, *Seism. Res. Lett.*, **76**, 299–311.
BA2005a	Bilham, R., and N. Ambraseys (2005). Apparent Himalayan slip deficit from the summation of seismic moments for Himalayan earthquakes, 1500–2000, *Curr. Sci.* **88**, 1658 -1663.
CG1995a	Chung, W.-Y., Gao H., 1995. Source parameters of the Anjar earthquake of July 21, 1956, India, and its seismotectonic implications for the Kutch rift basin. *Tectonophysics*, **242**, 281–292.
EHB	International Seismological Centre (2009). *EHB Bulletin*, http://www.isc.ac.uk, Internatl. Seis. Cent., Thatcham, United Kingdom (last accessed April 2009).
GSI	Geological Survey of India.
GCMT	Global Centroid Moment Tensor database.
NGDC	National Geophysical Data Center, http://www.ngdc.noaa.gov, (last accessed April 2009).

IMD	India Metrological Department, http://www.imd.ernet.in, (last accessed April 2009).
ISC	International Seismological Center, http://www.isc.ac.uk, (last accessed April 2009).
JS2004a	Jaiswal, K. & Sinha, R., 2004. *Web portal on earthquake disaster awareness in India,* www.earthquakeinfo.org, (last accessed April 2009).
J1993a	Johnston, A.C., 1993.*Report TR-102261*, Chap. 3, Electric Power Research Institute.
LEE1976a	Lee, W.H.K., Wu, F.T. & Jackson, C., 1976. A catalog of historical earthquakes in China, *Bull. Seism. Soc. Am.*, **66**, 2003–2016.
M2004a	Mandal, P., Rastogi, B.K., Satyanarayana, H.V.S., & Kousalya, M., 2004. Results from Local Earthquake Velocity Tomography: Implications toward the Source Process Involved in Generating the 2001 Bhuj Earthquake in the Lower Crust beneath Kachchh (India), *Bull. Seism. Soc. Am.*, **94**, 633–649.
MD1984a	Molnar, P., and Q. Deng (1984) Faulting associated with large earthquakes and the average rate of deformation in central and eastern Asia, *J. Geophys. Res.* **89**, 6203-6227.
PS1992a	Pacheco, J.F. & Sykes, L.R., 1992. Seismic moment catalog of large shallow earthquakes, 1900 to 1989. *Bull. Seism. Soc. Am.*, **82**, 1306–1349.
RR2000a	Rao, B.R., 2000, Historical seismicity and deformation rates in the Indian Peninsular Shield, Jour. Seism., **4**, 247–258.
SG1980a	Singh, D.D. & Gupta H.K., 1980. Source dynamics of two great earthquakes of the Indian Subcontinent: the Bihar-Nepal earthquake of January 15, 1934 and the Quetta earthquake of May 30, 1935, *Bull. Seism. Soc. Am*., **70**, 757–773.
T2008a	Thingbaijam, K.K.S., Nath, S.K., Yadav, A., Raj, A., Walling, M.Y., & Mohanty, W.K., 2008. Recent seismicity in northeast India and its adjoining region, *Jour. Seism.*, **12**, 107–123.
UL2006a	Ulomov V.I., Danilova, T.I., Medvedeva, N.S. & Polyakova, T.P., 2006. Seismogeodynamics of lineament structures in the mountainous regions bordering the Scythian-Turan Plate, *Izvestiya Phys. Solid Earth*, **42**, 551–566
USGS	http://earthquake.usgs.gov/earthquakes/eqarchives/epic/
W2005a	Wallace, K., Bilham, R., Blum, F., Gaur, V.K. & Gahalaut, V., 2005. Surface deformation in the region of the 1905 Kangra Mw = 7.8 Earthquake in the period 1846–2001, *Geophys. Res. Lett.*, **32**, L15307, doi: 10.1029/2005GL022906

Caveat on the pre-instrumental catalogue:

The data on the historical earthquake has several shortcomings: (1) inhomogeneity cannot be ruled out; magnitude scale (M_W) may not be the same across different studies; (2) deemed highly incomplete as well having large uncertainties; and (3) appropriate treatment on the associated uncertainties and incompleteness is required.