



**Table E.5-2 Historical Earthquakes in Northwestern Nebraska in Proximity to the Chadron and Cambridge Arches (1884 – 2009)**

Date	Location	Latitude	Longitude	Depth (km) <sup>a</sup>	Richter Magnitude <sup>b</sup>	Modified Mercalli Intensity <sup>b</sup>	Source
2/20/1993	14 miles SE of Merriman, NE	42 49 48 00 N	101 27 44 36 W	5 (3.21 miles)	3.5	II–III	C
1/25/1994	5 miles ESE of Wood Lake, NE	42 37 36 39 N	100 08 25 90 W	5 (3.21 miles)	3.3	II	C
2/06/1996	1 mile N of Wausa, NE	42 30 47 42 N	97 32 35 99 W	5 (3.21 miles)	3.6	III	C
8/09/1997	5.5 miles NW of Chadron, NE	41 47 43 66 N	98 11 08 76 W	5 (3.21 miles)	3.4	II	C
6/18/1998	21 miles SE of Crawford, NE	42 37 23 70 N	103 00 16 58 W	5 (3.21 miles)	3.4	II	C
6/20/2002	5 miles NE of Scotia, NE	41 30 35 65 N	98 37 15 12 W	5 (3.21 miles)	3.5	II–III	C
11/03/2002	4 miles NW of Bassett, NE	42 46 02 38 N	98 54 10 63 W	5 (3.21 miles)	4.0	IV	C
2/14/2003	8 miles SE of Cambridge, NE	40 14 39 46 N	100 01 14 97 W	5 (3.21 miles)	2.9	I	C
2/01/2006	4 miles NE of Bassett, NE	42 36 55 52 N	99 28 23 72 W	5 (3.21 miles)	2.9	I	C
9/07/2006	16 miles SE of Whiteclay, NE	42 58 32 63 N	102 14 15 90 W	5 (3.21 miles)	3.1	II	C
4/16/2007	61 miles SE of Ogallala	40 36 40 42 N	100 44 50 99 W	5 (3.21 miles)	3.0	II	C
4/24/2007	25 miles SE of Crawford, NE	40 35 04 82 N	102 56 13 78 W	5 (3.21 miles)	2.7	I	C
12/16/2009	7 miles E of Johnson, NE	40 24 N	95.857 W	5 (3.21 miles)	3.5	II–III	D

Source: A Docekal 1970 (Note: Locations [latitude and longitude] based on USGS Google Earth Files for USGS/NEIC Catalog, so locations are approximate.)

Source: B National Earthquake Information Center

Source: C USGS 2009.

Source: D USGE 2009.

<sup>a</sup> Depth where the earthquake begins to rupture (default values used).

<sup>b</sup> Ratings as per Table E.5-1.