

Ed Boue

diapiric

diapir =  
piercement (2) fold

diapiric

Diapir = piercement fold

"Meteor Mountain" - Colorado City, TX

Meteorite Crater - Colorado City, Texas

The structure here described briefly is very obvious and widely known. My reason for reporting on it is the hope that a number of qualified persons will give it some detailed attention and endeavor to arouse some fruitful investigations and discussions leading to a satisfactory explanation of its origin and mode of formation.

It was first brought to my attention in 1960 by Mr. Will I. Scott, formerly of Ft. Worth but then in La Brea Calif. I have talked to several geologists about it. The classical attitude seems to be to regard it as a sink or solution slump formation, but I have not located any definite pronouncements or seen a paper treating it. I do not feel it should be dismissed lightly. There are elements of uniqueness and peculiarities that point first to one theory and then another.

The "Crater" (I use the word in a neutral sense as to origin) is about 1/4 mile SW of Colorado City, Mitchell County, Texas just E of State Highway 163 between the drainage of Horse Creek & Bull's Creek. This is about 4 miles SW of the settlement of Spots. It is on the Resuburb Ranch, to whom owner Jessie Elwood Chappell & manager O F Jones are indebted for permission to visit the site on two reconnaissance trips. They have for some 40 years referred to it as "Meteor Mountain".

The coordinates are about  $101^{\circ} 1'$  long  $32^{\circ} 13'$  north W of off the edge of the Spots Ranch quadrangle issued by the Geological Survey in 1959. The crater was shown on the next sheet published to the west, and feeling that field work was in progress on this area I have specifically called the crater to the attention of the Geological Survey staff both in Washington and at the Astrogeology office.



0.3 mile in diameter

The crater is roughly circular but closer attention to photographs shows it is slightly elongated along a NE-SW axis. It is shown on U.S. maps of Algonquian photographs CRI -28 -177 + 178 which I am here exhibiting. A proper combination of these yields an excellent stereoscopic effect. Photographs from the ground are not too impressive except

those taken from a hill a ridge <sup>120 ft higher up</sup> about 0.5 mi to the NE, a high plain "outlier" of <sup>locally known as Elphinstone but not on the top map</sup> Torontonian formations. Photos taken from a plane by Mr. Sam Bishop of Midland are thin but oblique. I have <sup>been</sup> credited to him for much time and discussion <sup>and he accompanied me to the crater</sup> about the formation, but statements or opinions expressed herein are not necessarily his views. Under favorable conditions the crater can <sup>usually</sup> be seen <sup>at 4000 ft</sup> from commercial air lines on the <sup>Wood-Allen-</sup> Midland flight as the plane normally goes over Colorado City.

The crater is a beautiful <sup>feature of the landscape</sup>

The surface geology in <sup>outcrop</sup> that occurs on or <sup>step</sup> Pennsylvanian formations in view to the South or <sup>Central</sup> <sup>part</sup> of red Triassic sandstone

4222ST



this <sup>is a</sup> <sup>Triassic</sup> <sup>region</sup> <sup>is</sup> <sup>fairly</sup> <sup>narrow</sup> <sup>roughly</sup> <sup>N-S</sup> <sup>leg</sup> <sup>shortly</sup> <sup>to</sup> <sup>the</sup> <sup>E</sup>, <sup>and</sup> <sup>hills</sup>. The crater is a beautiful <sup>feature</sup> <sup>of</sup> <sup>the</sup> <sup>landscape</sup> <sup>and</sup> <sup>the</sup> <sup>topping</sup> <sup>sandstone</sup> <sup>ledge</sup>