

Interactive comment on “In plain sight: the Chesapeake Bay crater ejecta blanket” by D. L. Griscom

Anonymous Referee #1

Received and published: 28 March 2012

The claim seems to be that many of the near surface units are some kind of impactite blanket, as an alternative interpretation (the traditional view is marginal sediments reworked by streams during isostatic uplift of the Appalachian margin). The makeup of these units doesn't make me hopeful - most of what he's showing are quartzose sediments with relatively coarse and well-rounded quartz pebbles and cobbles, not at all the kind of material you'd expect to find near the VA coast in the impact zone. I didn't see evidence that he's found shock features in the quartz, or the development of coesite, which would be classic indicators of impact origins. It's also not clear from this that he's tried to integrate his ideas into the other geologic processes that were clearly going on at the time (i.e., uplift, marginal sedimentation). And the fact that Pleistocene glaciation would have dumped a lot of pebbly-cobbly material where streams could transport it into the Bay points to the real potential for confusing what he would argue are older

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deposits with reworked glacial stuff.

Interactive comment on Solid Earth Discuss., 4, 363, 2012.