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The comment of Pinter and Ishman not only questions several aspects of our work, but also some fundamental scientific concepts already well established in the literature. The first is our inference that splashes of Fe>Cr>Ni metal onto concoidally fractured grains, marine microfossils, and impact glasses are probably derived from a vaporized impactor. There are two well-known cases of impact condensates with a high content of Ni but with Fe>Cr>Ni. The first is from the Ries impact crater, in which veinlets of Fe>Cr>Ni metal a few microns in diameter were found and interpreted as vaporized impactor (El Goresy and Chao, 1976). The second is from the Barberton greenstone belt, in which 3.24 Ga impact spherules have Fe>Cr> Ni (Krull-Davatzes et al., 2006). Cr isotopes done on the impact spherules indicate that the Cr is derived from the impactor (Kyte et al., 2003). Also, most Archean impact ejecta have Cr>Ni and are inferred to be from oceanic crust (Glikson, 2005). Modeling suggests that the Cr contents of impact condensates increase under conditions equivalent to “impactor dominated vapor and/or a basaltic ocean-crust target”(Ebel and Grossman, 2005). Thus, impacts can produce Ni-rich ejecta in which Cr is enriched relative to Ni.

Pinter and Ishman also believe that our observation of fused metals on marine microfossils is wrong because $CaCO_3$ decomposes at ~500°C while the melting points of iron, nickel and chrome are >1400°C . However, Ozinski et al. (2005) found that $CaCO_3$ melts in the Haughton impact crater co-exist with silicate melt. In addition, intact, well-preserved carbonate microfossils are found encased in silicate melt from Chixculub (Salge, 2007). Recent experiments have replicated grasses found intact within silicate impact melts in South America (Harris and Schultz, 2007). If the grasses are exposed to silicate melt around ~1200°C, the grasses burn. If they are exposed to silicate melt at ~1600°C, they are preserved. As no Holocene igneous rocks have liquidus temperatures >1600°C, these results imply that only impacts can produce either grass or marine microfossils encased in silicate melt.

Pinter and Ishman also claimed that chevron dunes in Madagascar and on Long Island are aeolian in origin. We visited both locations and found many features that seem incompatible with an aeolian origin. First, parts of the chevrons in both locations contain fist-sized rocks. These rocks are too large to be transported by the wind. Second, the orientations of the chevrons do not match the current direction of the prevailing wind. In both areas, some of the thicker sand deposits are being reworked into classic windblown dunes. The direction of movement of these dunes differs 8 to 22 degrees from the long axis of the chevrons. Third, the degree of roundness of the grains in the chevrons is not characteristic of wind transport over long distances. On both Long Island and in Madagascar, the sand grains on the distal ends of the chevrons are not well sorted or well rounded. Sand moved by the wind obtains an aeolian size and sorting distribution after only 10-12 km of saltation transport (Sharp, 1966). However, at Ampalaza in Madagascar, the chevron is over 40 km long, and rises to 63 meters above sea level. At its distal end, the chevron is 7.2 km in a direct line from the coast and contains unbroken, unabraded marine microfossils and concoidally fractured sand grains. It is impossible to transport unabraded marine microfossils to this location via wind-generated saltation. The site is too far above sea level for storm waves and there is no local agricultural activity. The chevron must have been formed by a tsunami.

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