

## ORAL PRESENTATION

### ALLEGED UNCONFORMITY AT THE HUEYATLACO ARCHAEOLOGICAL SITE (PUEBLA, MEXICO) ADVOCATED BY THE CENTER FOR THE STUDY OF THE FIRST AMERICANS IS NEGATED BY 37 LINES OF DIATOM CORRELATION

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No other archaeological site in the world is known to be associated with such a vast variety of age and paleoecologically diagnostic diatom fossils as Hueyatlaco: 37 lines of correlation demonstrate this. In the present work, 33 additional lines of diatom correlation are added to the four previously published by the author, all of which discredit this alleged unconformity: 7 of these lines pass directly through and the remaining 26 pass within 3 m of the supposed unconformity at the Hueyatlaco site. No proof of the postulated unconformity has been presented, because it is a vacant hypothesis: it cannot be proven, since the so called evidence has been destroyed (eroded away). At no other location in the world would one be likely to find any non-marine diatomaceous sequence with as many as 22 distinct beds with a total thickness < 30 m which would result in so many lines of correlation between samples based on the six criteria (i.e., taxonomic percentage correlation, pennate to centric ratios, extinct taxa, earliest known first occurrences, paleoecology, and dominance/subdominance associations of taxa) for diatom correlation within a spherical area with a diameter of < 3 m. All but 2 of the 37 lines of correlation link to samples within the artifact-bearing B, C, E, and I Units of C. Irwin-Williams. And all of these 35 lines of correlation corroborate a minimum age of Last Interglacial (Sangamonian) for all of the artifact beds connected with them. In the 37 lines of correlation, total diatom taxa extinct at the end of the Sangamonian range from 5 in lines 9 and 36 to 17 in lines 1 and 30. Six of the lines of correlation have the *Cocconeis-Navicula-Synedra* generic dominance/subdominance association which is otherwise known in the fossil record only from the Last Interglacial of Europe and in the Western Hemisphere only in the six correlation lines (4 of which pass directly through the "unconformity"). Line 4 (which passes straight through the supposed unconformity) links two samples (in the centric paucity zone) both of which have the *Cocconeis-Navicula-Nitzschia-Synedra* dominance/subdominance association, the only such occurrence of this association known in the Western Hemisphere.