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Letters

Unseen Uranus?

Jonathan Eberhart delivered a very informative account of the Voyager 2 encounter with Uranus ("Voyager 2's Uranus: Totally different," SN: 2/1/86, p. 72), but he erred significantly in stating that the blue-green planet is "invisible to the naked eye."

Visibility is determined by size and brilliance. As seen from earth throughout 1986, the disk of Uranus will subtend an arc of 3.85 seconds, which is well above the limit of resolution for observers having 20/20 eyesight. With an albedo of 0.51, Uranus ties with Jupiter as the second most reflective planet in the solar system; its visual magnitude is actually +5.5. This means that during clear weather at a site unspoiled by light pollution, Uranus is several times brighter than the dimmest visible stars. Unaided sightings are made almost

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Cover: Contemporary artist Richard Diebenkorn's "Ocean Park" paintings (No. 126 is shown) were the subject of a recent attempt to write a computer "grammar" for painting. This scheme of 42 rules was remarkably successful in reproducing some aspects of the artist's work. Such grammars may eventually lead to a deeper understanding of what an artist does and to advances in image processing by computers. (Painting from private collection. Courtesy: M. Knoedler & Co., Inc., New York)



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routinely under these conditions.

An ideal time at which to verify the naked-eye visibility of Uranus will be March 13 of this year, when the planet will be conveniently located a mere 0.3° south of Mars. Coincidentally, that evening will mark the 205th anniversary of the gaseous giant's discovery by Sir William Herschel.

Robert Paul Stalzer
Editor, THE OBSERVER
Newsletter of the Chicago Astronomical
Society
Chicago, Ill.

Regarding "Extinction Wars" (SN: 2/1/86, p. 75), I have always assumed that volcanic activity usually followed large impacts on bodies having molten cores. What I really found interesting was the report of Voyager 2's encounter with Uranus in the same issue. With Uranus's

strange rotation being blamed on the "possible" impact of an earth-sized object, my mind wants to tie everything into one neat package.

Could that same earth-sized object, after impacting Uranus and probably splintering, continue into the inner planets?

Could a large chunk and/or many smaller chunks strike the earth, causing volcanic activity?

Could that object, and maybe pieces of Uranus itself, still be orbiting the sun?

Could that orbit be such that every 30 million years it passes through the asteroid belt?

Could that object be the missing 10th planet?

It will take someone with a larger computer than mine to check whether the orbits and time frames will fit.

C. C. Keiser
Laurys Station, Pa.

MARCH 1, 1986

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