

The cosmic trail of reduced Nitrogen towards Earth

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We will report on the finding that ^{15}N -enrichments of hotspots in several meteoritic IOMs are reduced by hydrothermal conditions and that the extent of those reductions correlates with the ^{15}N values of the ammonia released by the treatment. Because the presence of reduced nitrogen on the early Earth is a required element in origins of life theories, the data aid significantly towards understanding the prebiotic molecular inventory of our nascent planet as well as inform our estimates of the possible habitability of other planetary systems.