UV spectroscopy of the Mercurian atmosphere

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In other words, we identify only 5 elements, H, He, Na, K, Ca up to now. (The latter 3 elements were identified by ground-based observations.)

In the 1960s, many scientists expected to proceed the discussion on the evolution and origin of the Mercurian atmosphere based on the Mariner-10 results. Helium and Argon in the atmosphere are produced by the radioactive decay of K, Th, U in the interior, and are supposed to be supplied from the interior depending on the internal activity. On the other hand, Neon is not created from radioactive decay, therefore, its origin is supposed to be either/both solar wind or/and ancient atmosphere. Such information is important to discuss the evolution of the Mercury atmosphere.

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