PRELIMINARY DESCRIPTION OF DOUBLE DRIVE TUBE 79002/79001.
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The 79002/79001 double drive tube core was collected at Station 9, about 70 m south of Van Serg Crater, a 90 m crater just south of the North Massif and the Sculptured Hills in the Taurus-Littrow Valley [1,2]. The sample was taken in a rocky area adjacent to the trench where soils 79220 and 79260 were collected. The trench, which was dug in the outer flank of Van Serg Crater, exposed a 10 cm layer of light gray material (79260) overlain by a 7 cm layer of darker gray surface material (79220) [2]. The upper segment, 79002, exhibited this same characteristic. A dark/light boundary was observed about 9.5 cm from the top.

The double drive tube core was collected on December 13, 1972 and remained in the core tubes until the extrusion of 79002 and 79001 on June 10 and December 4, 1986, respectively. The length of 79002 was 17.4 cm after extrusion while 79001 was 29.3 cm after extrusion, for a total length of 46.7 cm.

Core 79002 has two distinct layers. The upper 9 cm is dark gray (10YR 3/1 on the Munsell Color Scale) and loosely packed. Soil breccias and soil clods are the dominant types in all size ranges. A few dark matrix breccias are also present. Glass occurs on both types of breccias. Basalt and glass (including agglutinates) also occur as large particles but are more prevalent in the smaller size ranges. Fragments greater than 1 cm are abundant; they account for nearly 20% of the total mass of 79002. Unusual glass particles included several 1 cm hollow balls. One had two small hair-like strands of glass protruding from its surface. Another somewhat dusty oval-shaped object exhibited areas that appear to have a metallic luster. About 6 oval to spherical objects from 1 to 5 mm in diameter were excavated. The large fragments extend to the boundary at about 9.5 cm.

The lower end of core 79002 (9.5-17.4 cm) is lighter gray in color (10YR 4/1 - 5/1 on the Munsell Color Scale) and more compacted. There are fewer >1 cm fragments and the proportion of 1 - 2 mm particles is greater than in the upper layer. Basalt and lighter colored fragments (plagioclase, anorthosite, etc.) are more abundant in this section of the core.

The first dissection pass of 79001 has been completed and the lower segment of the core does not show a distinct layering. It is a uniform gray (10YR 4/1 on the Munsell Color Scale) throughout most of the length of the core. A lighter gray section occurs from 13 to 17 cm. It's boundaries are indistinct but the lightness seems to be more concentrated in a circular area at 14 to 16.5 cm. The light gray color is due to a greater abundance of light gray to white particles in this zone. In the 1 - 2 mm fraction the white particles make up 14% of the total population compared to 9% and 6% above and below. The percentages of the other particles remains relatively constant throughout. A concentration of glass particles occurred between 21.5 and 24 cm with 32% of the 1 - 2 mm particles being glass,

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agglutinates, or breccia fragments with glass, some as large as a cm. Overlapping this zone, from 23.5 to 26 cm, is a concentration of particles, several mm to 1 cm in size, which are composed of fine-grained light and dark minerals, with occasional 1 mm-sized or greater greenish/yellow phenocrysts (olivine or pyroxene). More data on 79001 will be available after the second and third passes are completed.

[1] Muehlberger, W. R., et. al. (1973), in Apollo 17 Preliminary Science Report, p. 6-1 to 6-91.
[2] LSPET (1973), in Apollo 17 Preliminary Science Report, p. 7-1 to 7-45.