An airborne Nd:YAG (532 nm) lidar was operated by the NASA Langley Research Center about a year following the June 1991 eruption of Pinatubo in the Philippines. The lidar system and analysis methods are described in Winker and Osborn [1992a, 1992b]. The May 1992 mission consisted of 6 legs staged over three days between Ames Research Center, CA and Tahiti including a southward survey trip out of Tahiti and return. These stages are shown listed in Table 1. The lidar provided nearly continuous observations of the vertical and horizontal distribution of the volcanic material. A volcanic enhancement of stratospheric aerosol was found at all latitudes with the optically densest layer laying between 20 and 24 km notably between 30°N and 30°S.

TABLE 1. May 1992 Pinatubo Survey Legs

Date	*Leg*	*Latitude Range*
5/21	1	27.4°N to 36.6°N
5/24	2	1.0°N to 27.0°N
5/24	3	-17.8°S to 5.0°N
5/24	4	-52.1°S to 7.4°N
5/24	5	-52.1°S to 2.1°N
5/26	6	-16.8°S to 36.8°N

Winker, D. M., and M. Osborn (1992), Airborne lidar observations of the Pinatubo volcanic plume, Geophysical Research Letters, 19(2), 167-170.

Winker, D. M., and M. Osborn (1992), Preliminary analysis of observations of tile Pinatubo volcanic plume with a polarization-sensitive lidar, Geophysical Research Letters, 19(2), 171-174.