1 Overview
The PICO-NARE station was established in July 2001. Measurements to date have demonstrated that the station
is in the path of a persistent Global Antarctic Mixed Layer (GAML) station. This provides an opportunity to
monitor interannual variability and interannual variability at this station.

2 Station Location
Pico Island is located in the Azorean central island group.

3 Flow Characterization: Uplift Flow
An analysis of the occurrence of upwind flow at Pico Island was provided in poster A501-116. We find that:
- ﬂow is more often observed in the summer.
- U.K. ITOP aircraft observed large plumes of CO, NOy, and black carbon.
- Wind directions and wind speeds were measured at the station.
- Station measurements are consistent with the aircraft soundings and indicated sampled.

4 Flow Characterization: Transport pathways
We have conducted trajectory analyses of 15-day backward trajectories ending at the station during the
summer of 2004. Results show:
- Large enhancements in CO were observed.
- There was a clear upslope ﬂow event during the fall-sampling period.

5 Measurements and data availability
- Current measurements:
  - NO, NO2, NOx, CO, O3, CO2, CH4, C2H6, C3H8, C4H10, N2O, CH3CHO, HCHO, O3
  - Potential T (C), Potential P (hPa), Zt
  - U.S. export
  - NOy (ppbv), Potential T (C)

6 Seasonal distributions
Seasonal distributions for the four major sites are shown in the figure. The seasonal distributions are
obtained from the average of all available data for each month. The data are binned into 10 day intervals.

7 Example time series
The figure shows the time series of a sampling event during 2004 in the summer. The data are from the station.

8 Final Remarks
- This study is currently underway and the results will be presented at the 2005 WMO meeting.

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References
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Past measurements (2001–2005) and future plans