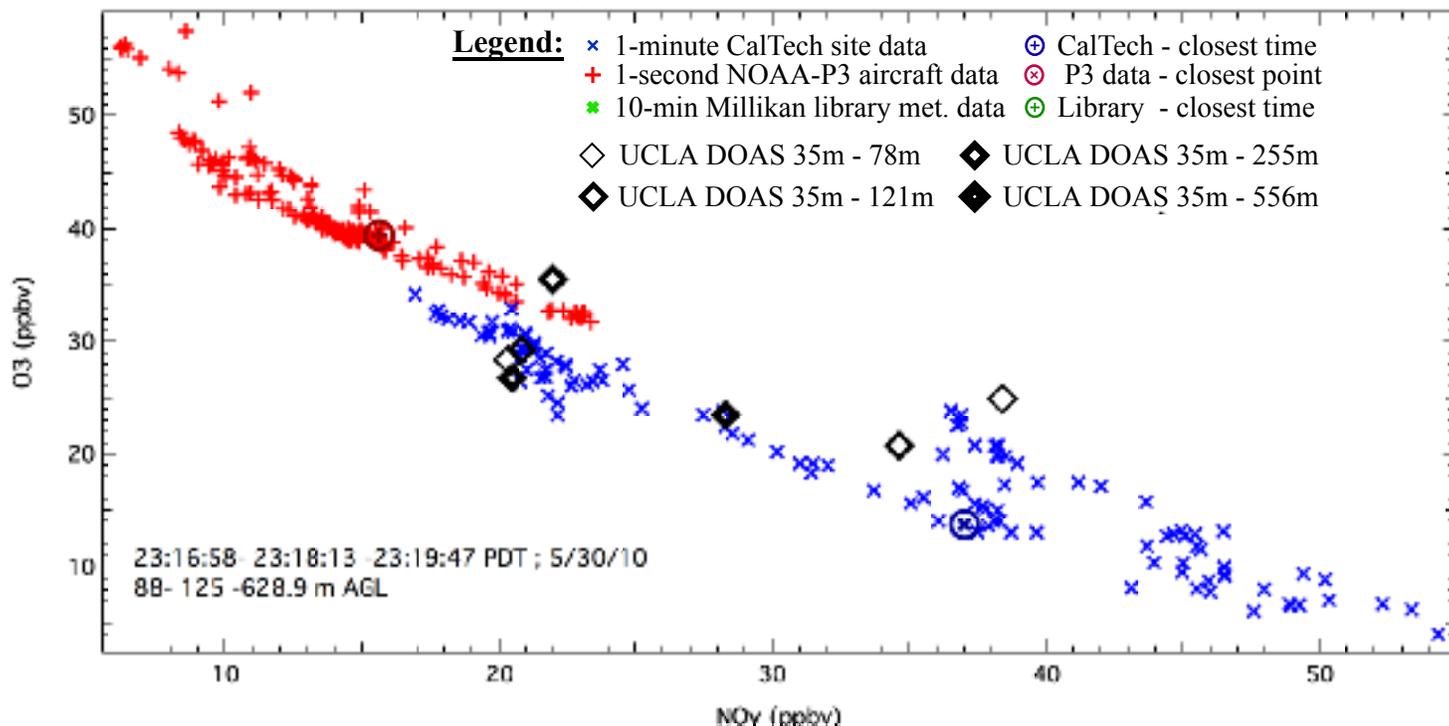


Explanation of Plots



During the 5/15/10 to 6/15/10 period of the CalNex-2010 field campaign, 27 NOAA P3 flight segments were within 15km of the CalTech super-site. Correlation plots for 7 of these segments showing reasonable overlap between correlations of CO versus NO_y from the two platforms are given here. The minimum and maximum times and altitudes of the P3 transects are listed in each figure, along with the time and altitude of closest approach.

Correlation plots contain CalTech surface data within one hour of the P3 aircraft's closest approach, and aircraft data collected within 15km of the closest approach. Surface data are typically one minute averages, aircraft data are typically one second data. For species measured at lower time resolutions, appropriate averaging is performed. For O₃, CH₂O and SO₂, The UCLA DOAS measurements from the CalTech Millikan library, and within 1 hour of closest approach are also shown for the 4 different height ranges. Water vapor and derived virtual potential temperature from 10-minute average measurements collected on top of the CalTech Millikan library are also plotted against concurrent super-site data.

Data Sources:

	Surface	Aircraft
O ₃	UofH (Rappenglueck)	NOAA (Pollack/Ryerson)
NO ₂	NOAA before 5/27, UofH after	NOAA (Pollack/Ryerson)
NO _x	UofH (Rappenglueck)	NOAA (Pollack/Ryerson)
NO _y	UofH (Rappenglueck)	NOAA (Pollack/Ryerson)
CO	NOAA (Holloway)	NOAA (Holloway)
CO ₂	NOAA (Peischl)	NOAA (Peischl)
CH ₂ O	UofH (Rappenglueck)	NOAA-PTRMS (Warneke)
SO ₂	UofH (Rappenglueck)	NOAA (Holloway)
PAN	NOAA (Roberts)	NOAA (Roberts)
HNO ₃	NOAA (Neuman)	NOAA (Veres)
rBC (refractory black carbon)	UofManchester SP2 (Allen)	NOAA SP2 (Perring/Schwartz)
ORGA/SO ₄ A/NO ₃ A/NH ₄ A	CU AMS-PM1 (Jimenez)	NOAA AMS (Bahreini/Middlebrook)
Qv/T	NOAA(de Gouw)/CalTech(Newman)	NOAA AOC (Aikin/ESRL)