

Concentration of Atmospheric Carbon Dioxide at 500 and 700 Millibars¹

CHARLES D. KEELING

*Scripps Institution of Oceanography, University of California at San Diego
La Jolla, California 92037*

THOMAS B. HARRIS² AND EUGENE M. WILKINS³

U. S. Weather Bureau, La Jolla, California 92037

- Weather reconnaissance flights over North Pacific and Arctic from 1958 to 1961
- More than 1000 valid CO₂ measurements from flasks
- Planes flew along constant pressure surfaces of 500 or 700 mb.

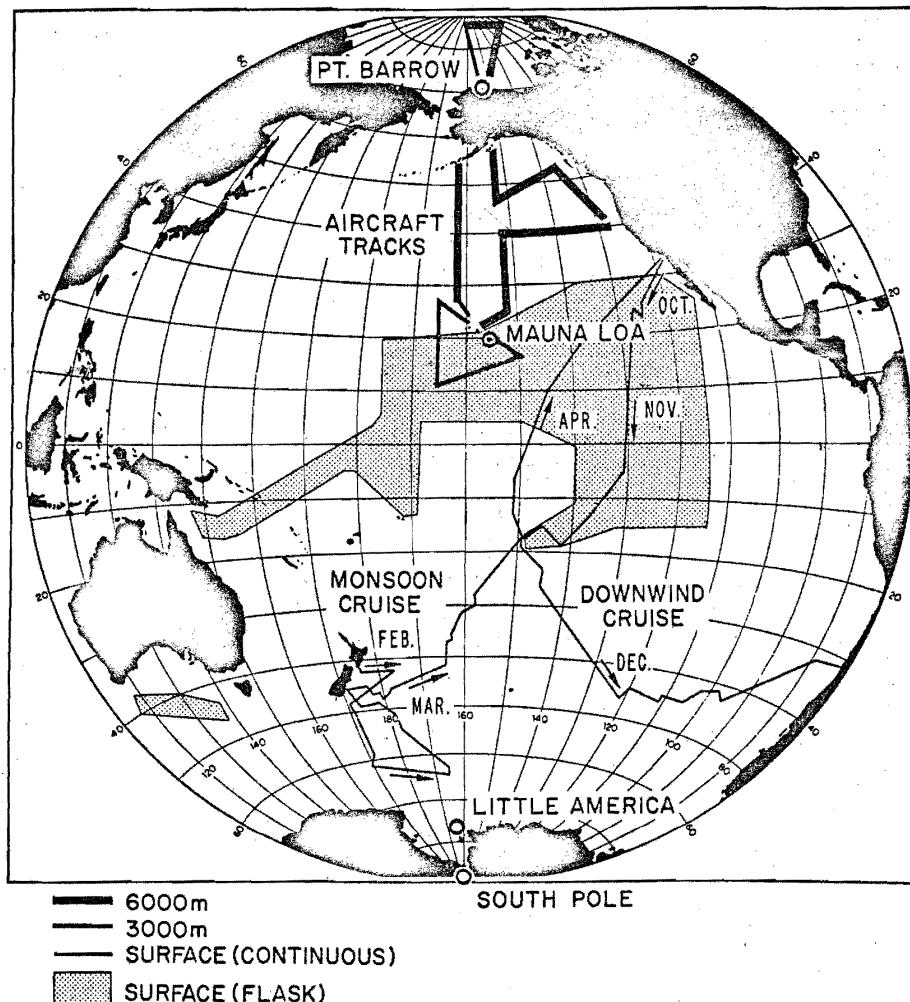
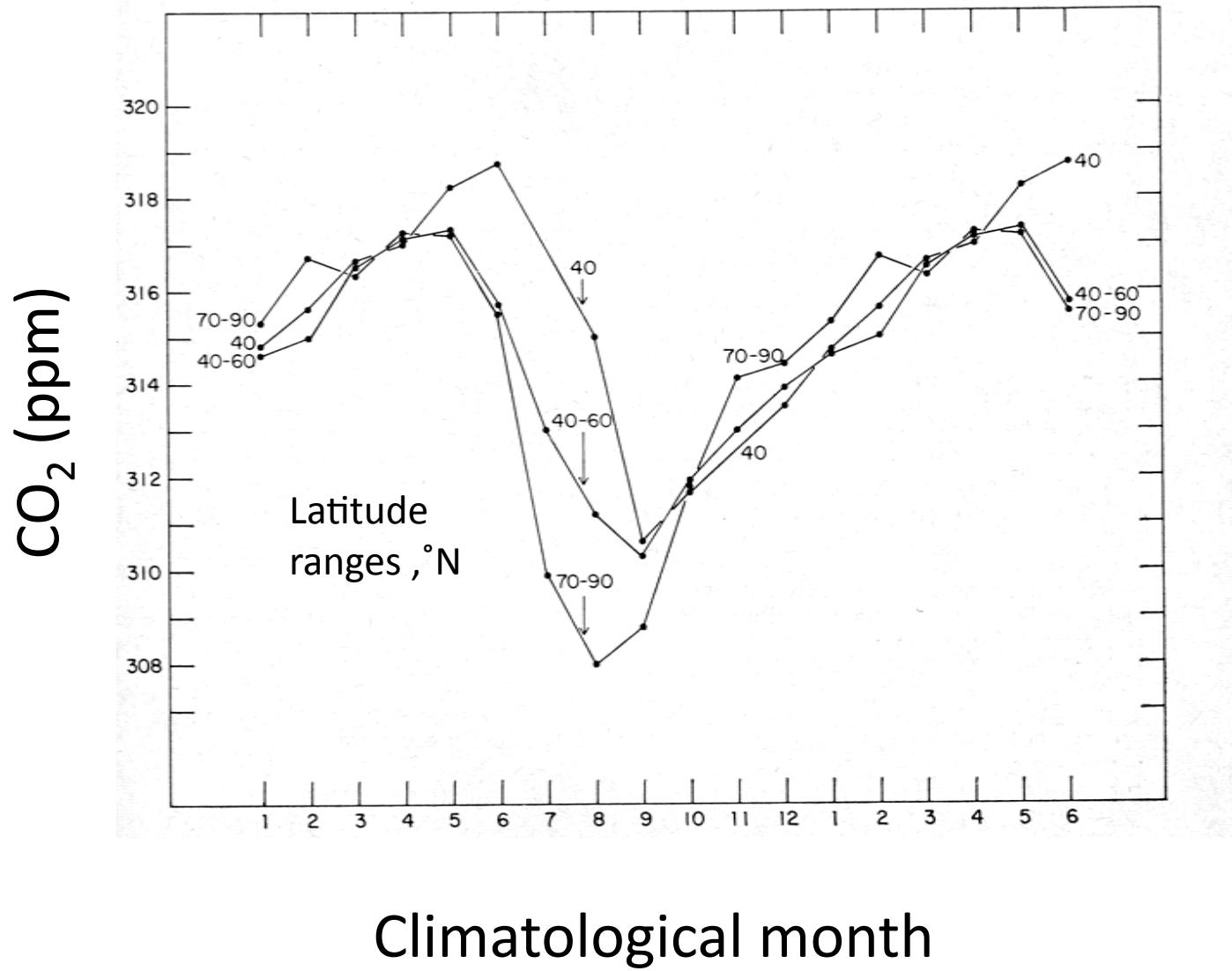
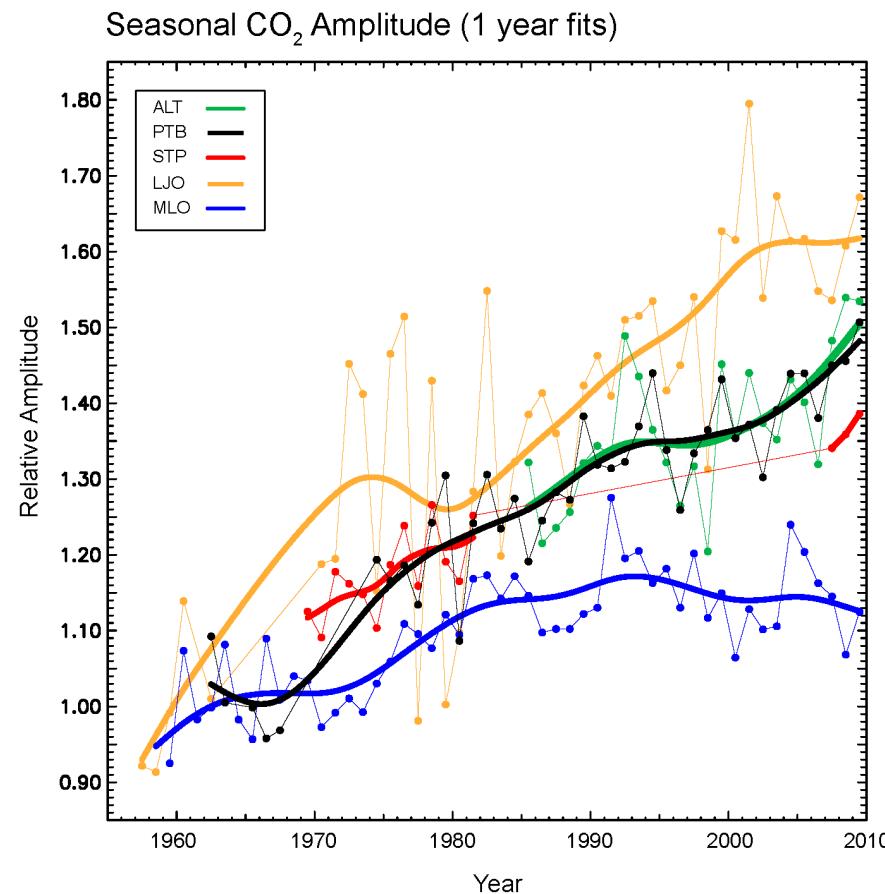


Fig. 1. Location of stations and tracks for sampling atmospheric CO₂. Location for surface flask sampling, except Downwind and Monsoon cruises, is highly generalized. Indian Ocean is not shown.

Coverage adequate for resolving average seasonal cycles



Goal: Use IGY/HIPPO comparison to resolve change seasonal CO₂ amplitude over 50 years



Unclear if large increases seen at Barrow and La Jolla are
"representative"