Keeling Analyse

It is important to recognise that the model described by equations (1)– (3) involves two basic assumptions. First, we assume that a simple mixing of only two gas components is considered (a source S and the bulk background B). Second, we assume that the isotope ratio of these two components does not change over the course of the observation. It is rare for these two assumptions to hold true in a strict sense under natural field conditions. Rather, researchers have found appropriate points in time and space for which these assumptions are acceptable. Below we outline recommendations for minimizing error in the use of the Keeling plot for assessing the carbon isotope composition of respiration.

*The application and interpretation of Keeling plots in terrestrial carbon cycle research D. E. Pataki,1*

<https://reader.elsevier.com/reader/sd/pii/0016703758900334?token=0DBC685A3EE6237763F578EBF74EA09416F76D95982C2F26584893ED72DF7286314090AE33BF9CDFDD8A25F98C5C4152&originRegion=eu-west-1&originCreation=20230215125755>

**continuous flow Isotopic Ratio Mass Spectrometer (IRMS)**

**CHIMERE**

CHIMERE is a three-dimensional Eulerian limitedarea chemistry-transport model for the simulation of regional atmospheric concentrations of gas-phase and aerosol species.