

Line 13 U.S.. –eliminate second period

Line 78: Results: Estimation of  $x_i^0$  and  $C_{burn}$  (use proper super and subscripts)

Line 139: In a later part of the campaign, the DC-8 sampled in Northern Canada (Simpson et al., 2011); we excluded these plumes as representing different , more boreal, forest burn conditions. (space before comma)

Table 1: Prefer to not use “ in table

Line 364: needs a period. They and the non-plume points suggest air-mass changes in  $CO_2 + CO$

Table 2: Periods sometimes in “signifies” descriptor, sometimes not. Make consistent.

Table 2:

expansion and rise. may be assumed, to be of the estimated as  $\hat{x}_i^0$  or casually as  $x_i^0$ . This is not necessarily air surrounding the plume sample.!

Caps on “May”. Not sure I understand the sentence that begins with “May”. Eliminate exclamation point at end.

Table 2 continued:

or	Background concentration of tracer $j$ . Typically estimated as a minimum value from observed probability density function for samples in a particular flight intensive, especially non-plume samples without signals of stratospheric air.
----	---

or? (must be missing something here)

What does this mean? (Table 2):

An early approximation to implied from normalized and scaling, not required by algorithm but a convenient check

Table 2: - font change mid sentence

$y_{ij}^0$	$y$ intercept implied by $x_i, y_{ij}$ and the estimated slopes $a_j$ for $j$
------------	---

Line 736: 6.3. Summary of the MERET algorithm and notes – not consistent with table of contents. (6.3. Summary of the MERET method)

Line 923: 8.1 Table of several significant emissions (repeat of 8.1 should be labeled 8.2)