Interactive comment on “Multi-species inversion of CH$_4$, CO and H$_2$ emissions from surface measurements” by I. Pison et al.

I. Pison et al.

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Technical comments

Here is a list of comments as a guideline for the authors to improve the presentation of their study.

P20689, L20: Place 'HCHO' between brackets or write '(CH$_4$, CO, HCHO (formaldehyde), and H$_2$)'
P20690, L17: Replace 'space' by 'spatial'.
P20690, L18: Write out '3-D' at first occurrence.
P20691, L10: 'LMDZ' is sometimes written with lowercase 'z' and sometimes with capital 'Z'. Be consistent.
P20692, L16-18: 'Wet lands' should be 'Wetlands'. Also, remove 'the' before the source S11726
names. Also, anaerobic processes do not take place in all of those sources.
P20692, L25-27: What is 'combustion of fossil energies'?  
P20693, L10: Remove 'de'.  
P20694, L27: Replace 'location' by 'locations'.  
P20695, L6: What is 'or the NOAA'?  
P20695, L9: 'data' should be 'datum' (or 'measurement').  
P20696, L4: Add 'much' between 'accumulate' and 'in'.  
P20697, L11: Remove comma after 'inversion'.  
P20698, L19 and 22: Replace 'increase of' by 'increase by'.  
P20700, L10: Replace 'After the mono-species inversion' by something like 'In the CO mono-species inversion'.  

All these changes will be made in the text.

P20700, L19-21: What are 'points'?  

They are 'percentage points', this will be modified.

P20702, L5-6: 'tri' should be 'three'. Or use '3-D', once this abbreviation has been introduced earlier in the text.  
P20702, L21-22: Replace 'RMS' by 'RMSs' or 'RMS values'.  
P20702, L26: Start new sentence at 'we'.  
P20704, L6: Replace 'lay' by 'lie'.  
P20704, L11: Replace 'measures' by 'measurements'.  

Table 1: Add semicolons between different emission sources on one line.  
Table 2: Use consistently two digits for correlations.  
Table 3: Don't remove the last digit if it is a zero (3 cases).  
Table 4: Bousquet et al. was published in 2006 instead of 2005.  
Table 4: Again, don't remove the last digit if it is a zero.  

Fig. 4, caption: Replace 'as functions of' by 'compared with'.  
Fig. 4, caption: Replace last sentence by: 'Slopes a and correlation coefficients r of linear regressions [mod]=a[obs]+b are also indicated'.

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Fig. 5c: Do not use grey in the color scale.
Fig. 5, caption: Add 'for CO and CH4' in first sentence.
All these changes will be made in the text.
Fig. 9, figure and caption: 'rms' should be capitalized.
This Figure has been modified.

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 20687, 2008.