CO concentrations over megafires in Australia, Siberia and Canada were studied using TIR and SWIR sounders.

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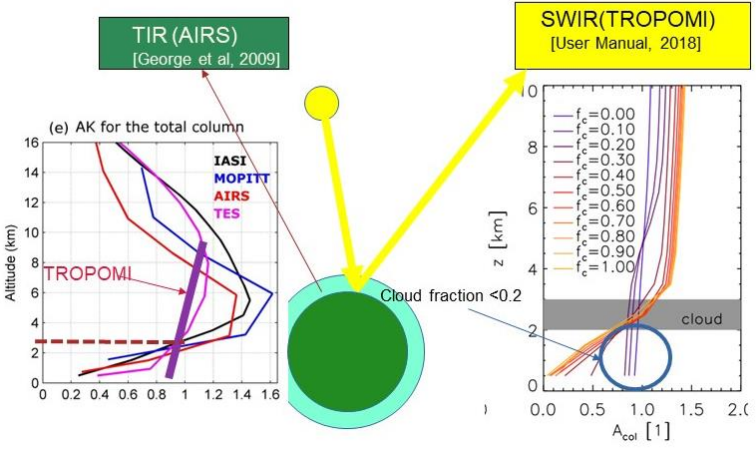
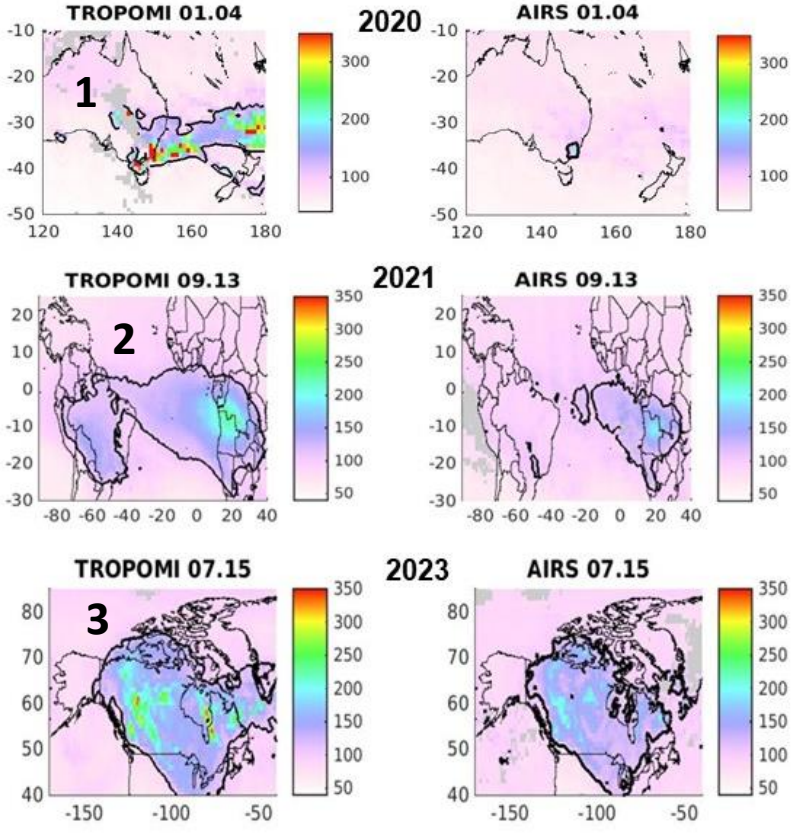
Satellite CO data obtained by two different sounders, AIRS and TROPOMI, over fires are analyzed. Different sensitivities of these two instruments to the lowest troposphere allows obtaining information about anthropogenic and/or pyrogenic contamination of the boundary layer.

AVERAGING KERNELS





Daily Xco (column mean mixing ratio) in ppb as measured by two sounders over Australia (1), S.America and Africa (2), Canada (3). Low temperature combustion took place in Australia, high temperature wood burning was in Canada. The S. American and African cases need a special analysis.

Animations for these (+ Siberia) fires are available by a link.

A link for References