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Atmospheric Measurement Techniques Discussions
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Interactive comment on "New and improved infrared absorption cross sections for chlorodifluoromethane (HCFC-22)" *by* J. J. Harrison

Anonymous Referee #2

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The manuscript presents mid-IR absorption cross-sections of HCFC-22, the most abundant HCFC in the atmosphere. It is a well-structured and complete paper relevant to the atmospheric community. I recommend this manuscript for publication after a few minor corrections.

Line 7-8: The title may be polished. The adjectives "new and improved" do not provide useful information.

Line 151: Define PT as "Pressure-Temperature".

Line 240: Precise that the systematic error of 1.5% (1\sigma) is the error on the integrated band strength from this work and not the PNNL error.

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Line 243: “but in reality is likely closer to 0.0001 cm-1”. Could that assumption be developed/explained?

Line 262: The calculated value for the systematic error contribution does not fit equation 3. The author should also precise if his final error is at 1\sigma or 2\sigma.

Line 268-270: This point is irrelevant without better supporting evidence.

Line 300: Avoid colloquialism. The standard deviation of Varanasi integrated band strengths versus the one from this work would be more useful.

Line 342: Once again, the author must precise if the error is at 1 \sigma or 2\sigma.

Figure 1: The details of the bands are difficult to see at this scale. A focus on the most important areas would increase the pertinence of the plot.

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