Appendix J

Criteria Pollutant Plots for the 4 km Grid for the 2022 Future Year Modeling

1.0. INTRODUCTION

In Section 4.5.3 of the Air Quality Technical Support Document, we presented the CAMx modeling results for Criteria Air Pollutants (CAPs) in the 4 km modeling domain. The results shown in Section 4.5.3 are two year averages over the 2005 and 2006 meteorological years. The two year averages are presented as an approximation to the form of the NAAQS, many of which are defined in terms of a multi-year averaging period. In Appendix J, we present plots of the CAPs for both the 2005 and 2006 meteorological years separately in order to show the year-to-year variability of the CAPs results.

Figure J-1. CAMx model results for 1-hour NO_2. Left and center panels: 2008 and 2022 absolute model results for 1-hour NO_2 from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in 1-hour NO_2. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

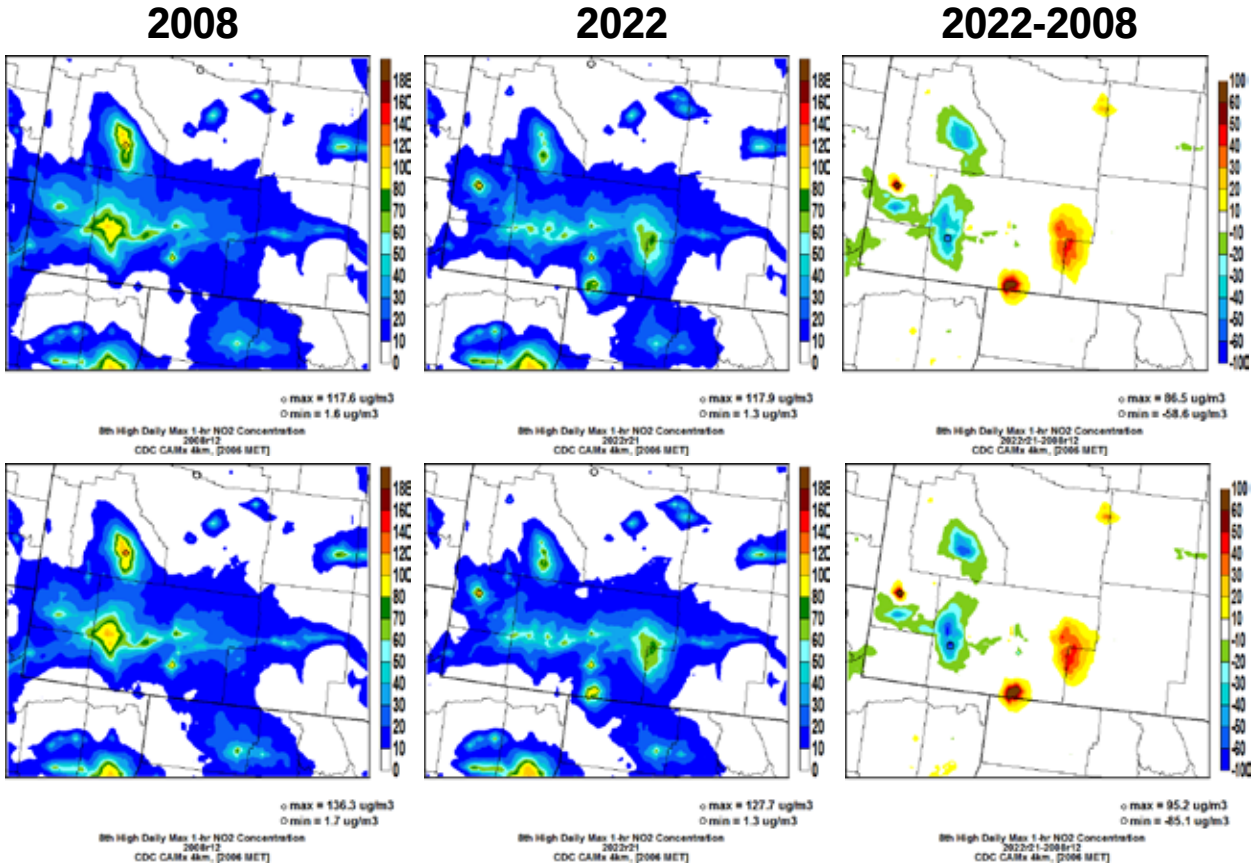

Figure J-2. 2022: CD-C Contribution to 1-Hour Average NO_x.

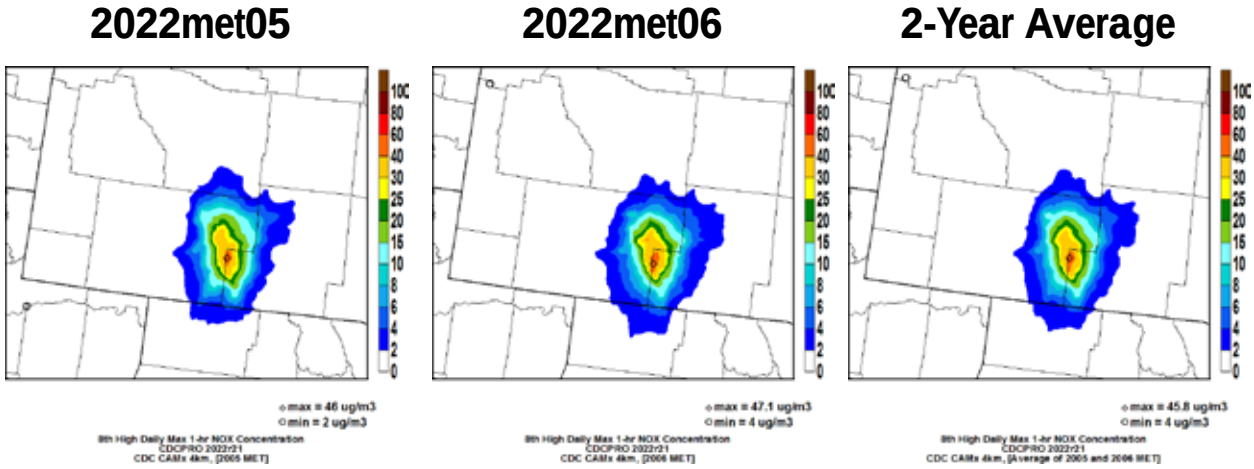

Figure J-3. CAMx model results for annual average NO_2. Left and center panels: 2008 and 2022 absolute model results for annual average NO_2 from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in annual average NO_2. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

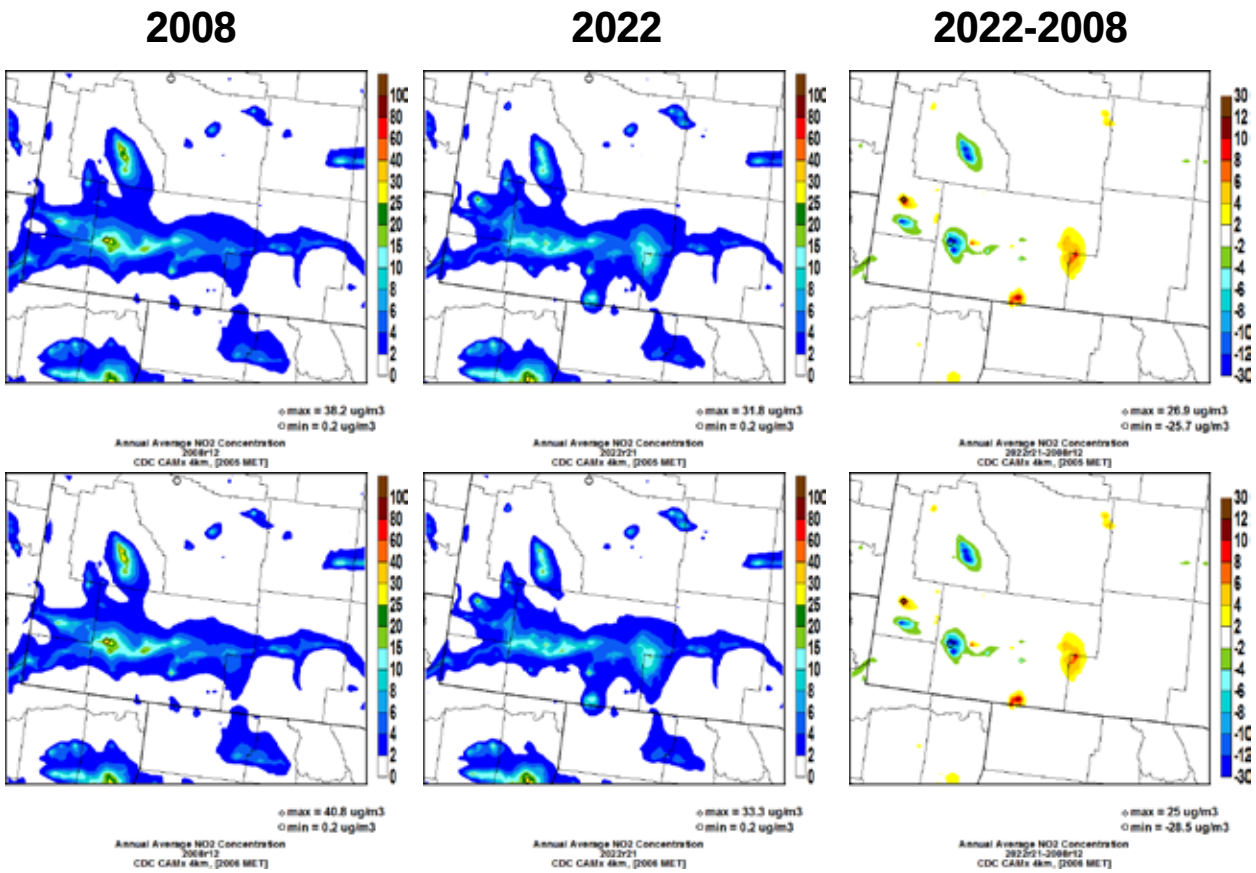

Figure J-4. 2022: CD-C Contribution to annual average NO_x.

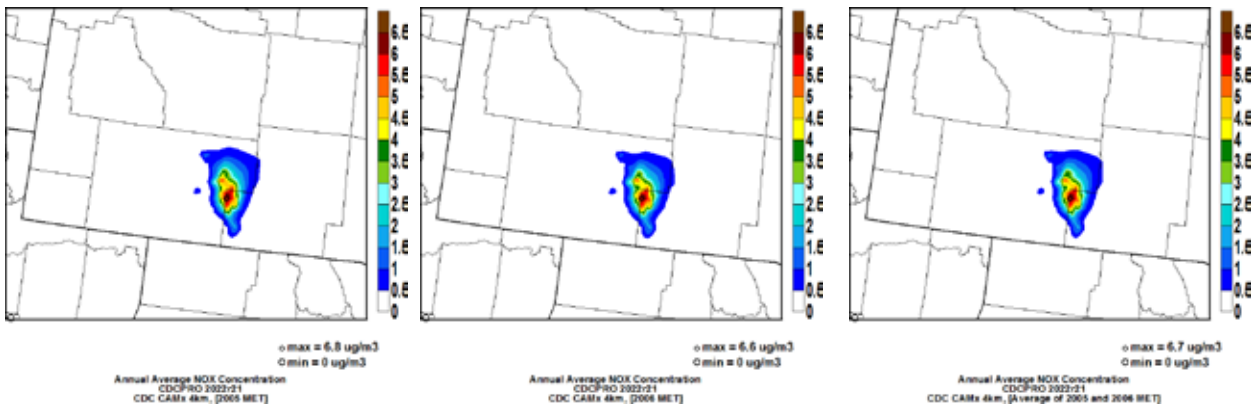

Figure J-5. CAMx model results for 1-hour SO_2. Left and center panels: 2008 and 2022 absolute model results for 1-hour SO_2 from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in 1-hour SO_2. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

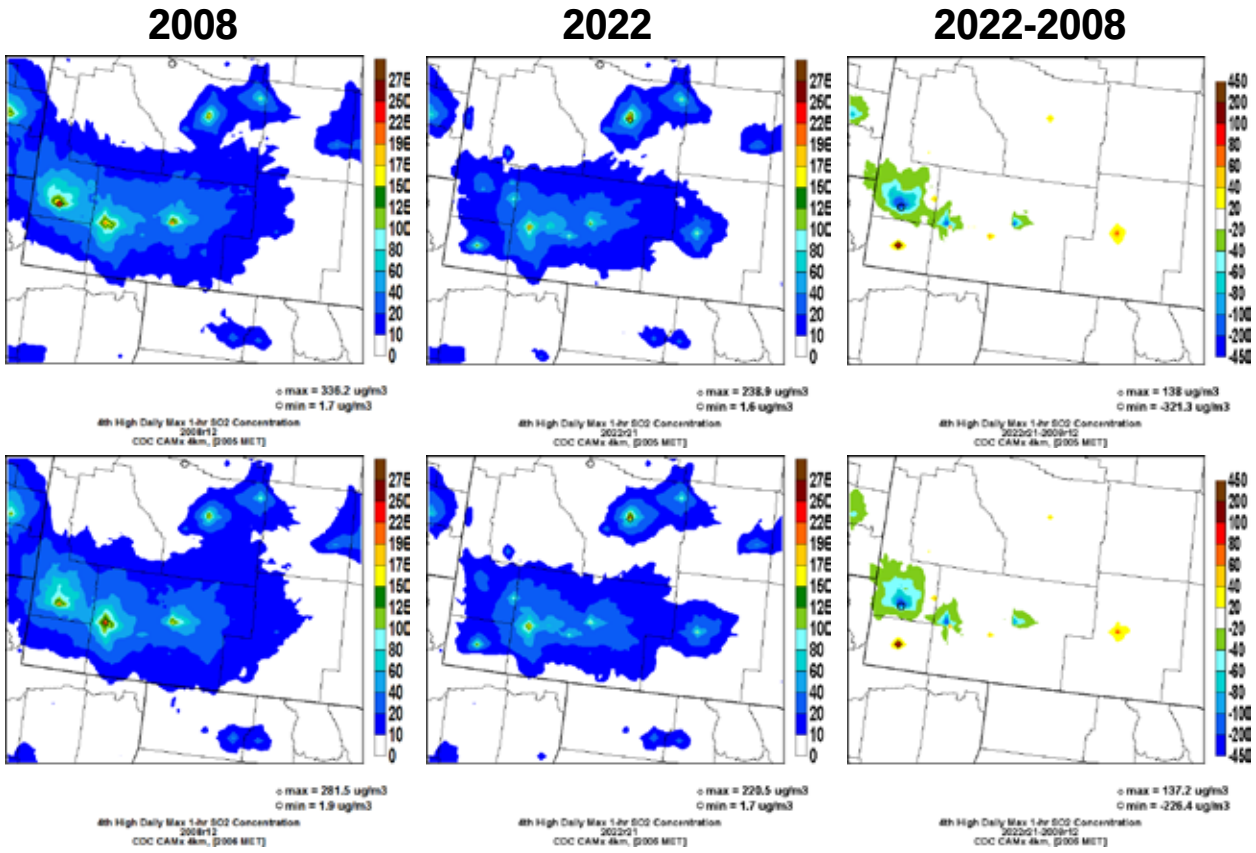

Figure J-6. 2022: CD-C Contribution to 1-Hour Average SO_2.

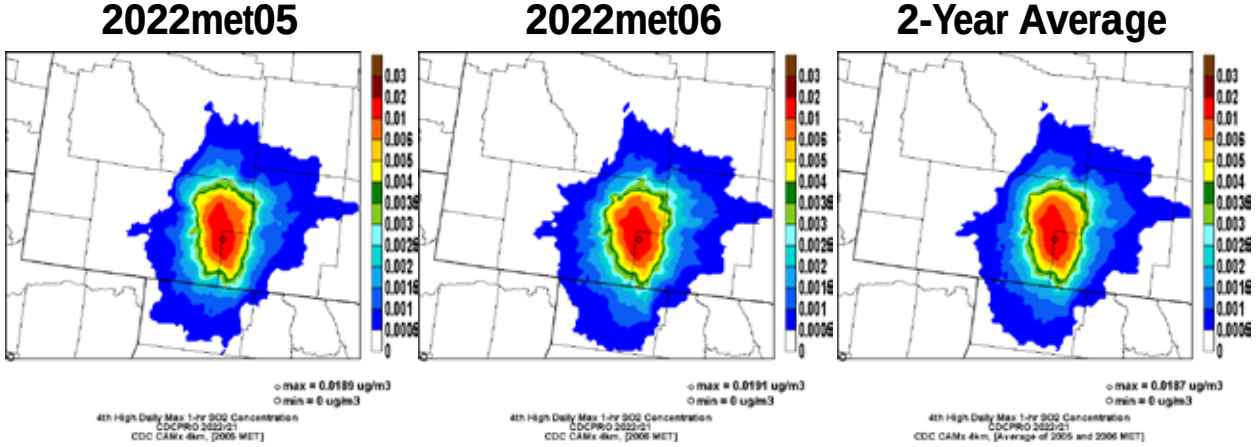

Figure J-7. CAMx model results for 3-hour SO_2. Left and center panels: 2008 and 2022 absolute model results for 3-hour SO_2 from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in 3-hour SO_2. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

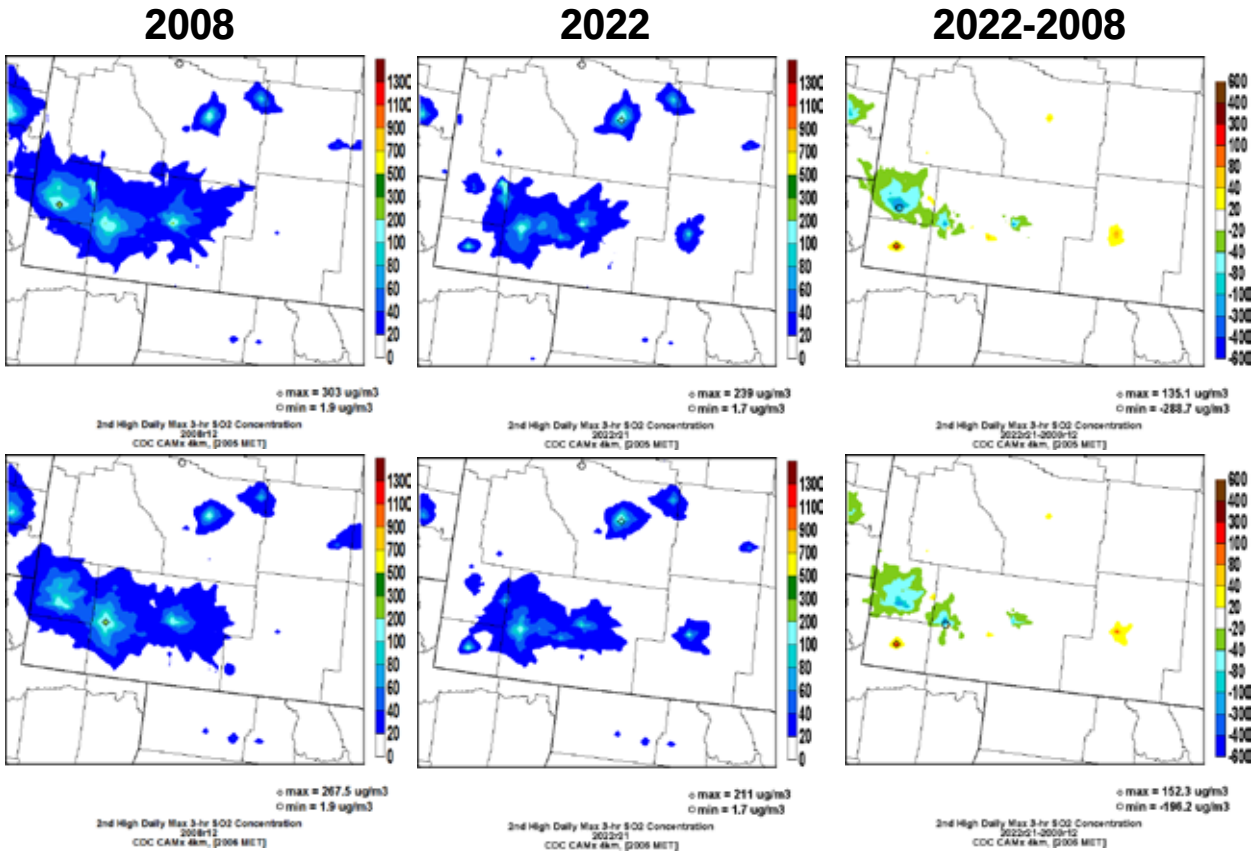

Figure J-8. 2022: CD-C Contribution to 3-Hour Average SO_2.

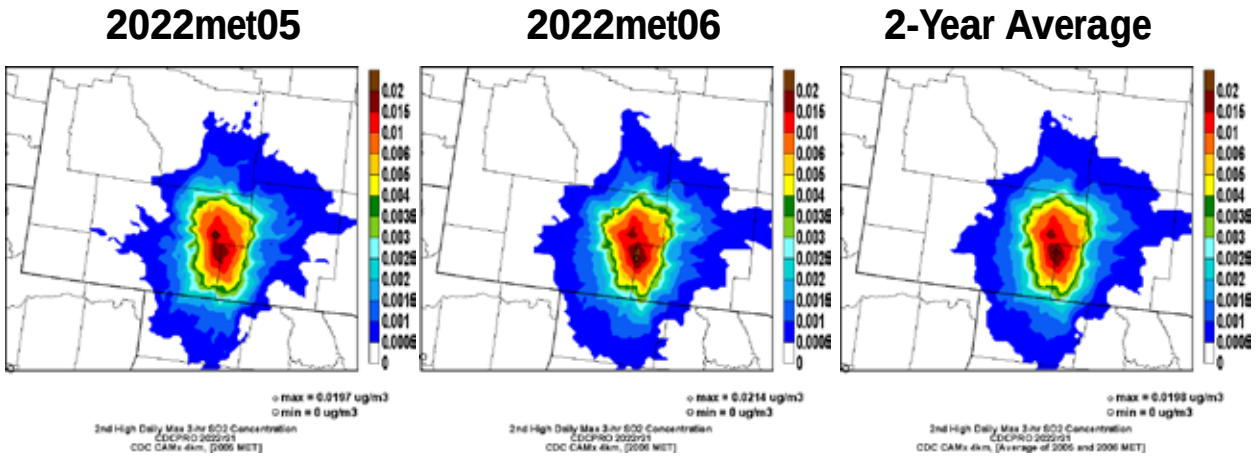

Figure J-9. CAMx model results for 24-hour SO_2. Left and center panels: 2008 and 2022 absolute model results for 24-hour SO_2 from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in 24-hour SO_2. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

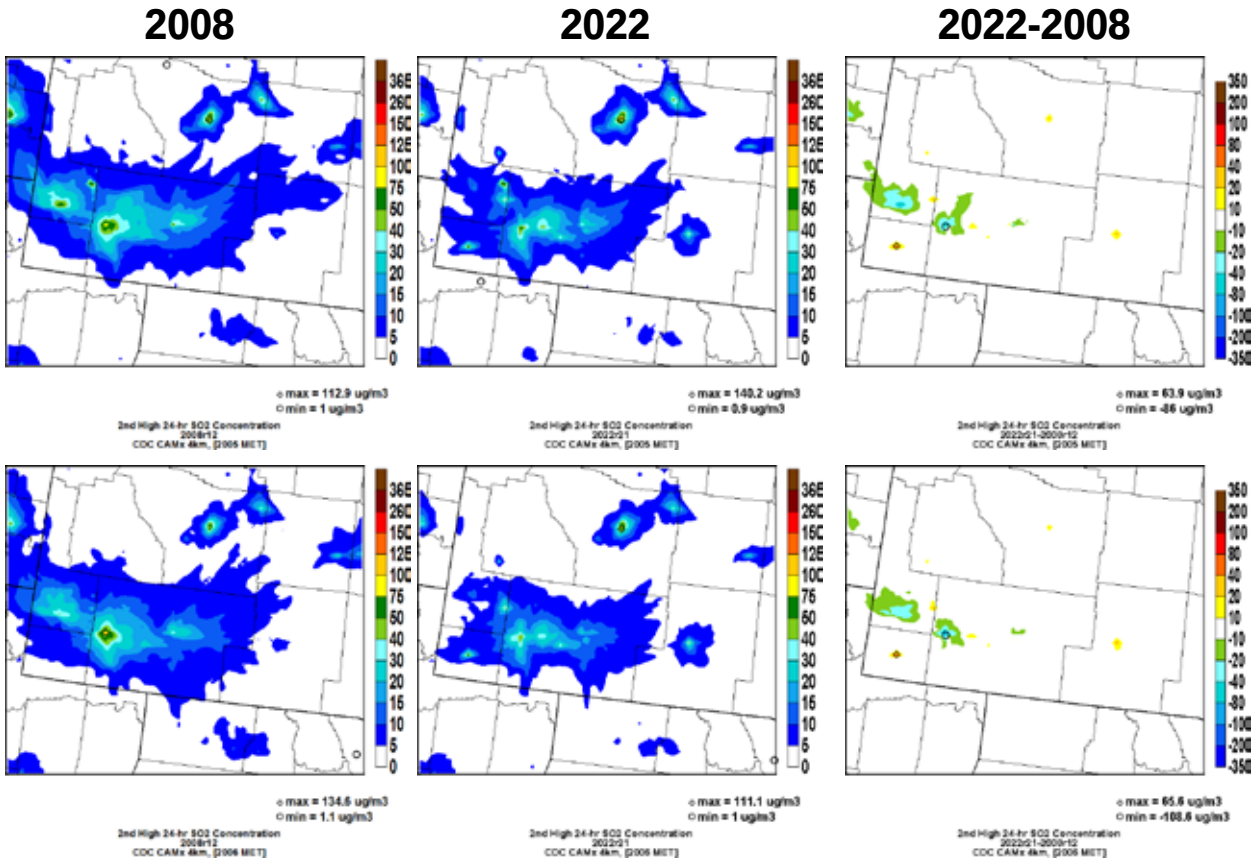

Figure J-10. 2022: CD-C Contribution to 24-Hour Average SO_2.

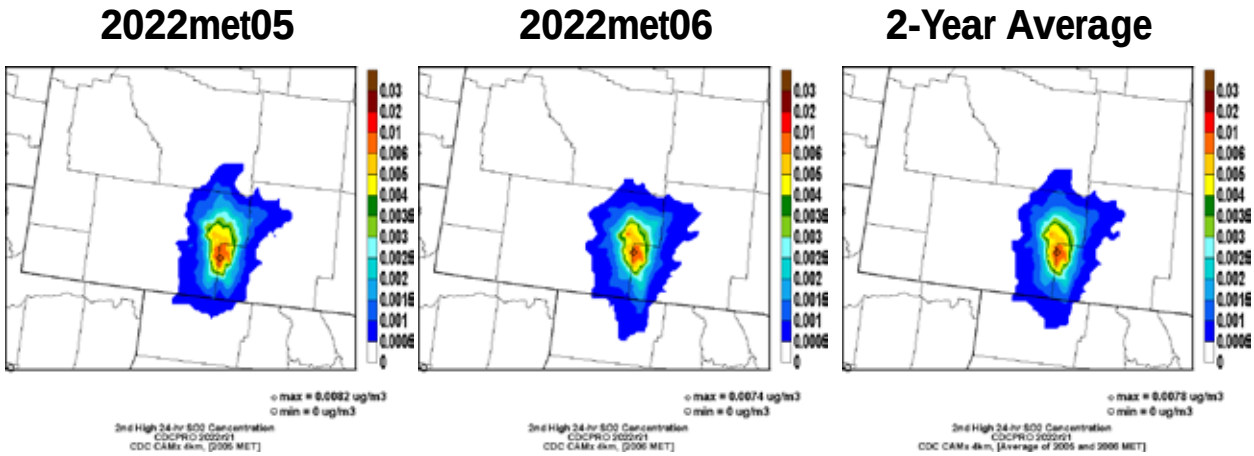

Figure J-11. CAMx model results for annual average SO_2. Left and center panels: 2008 and 2022 absolute model results for annual average SO_2 from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in annual average SO_2. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

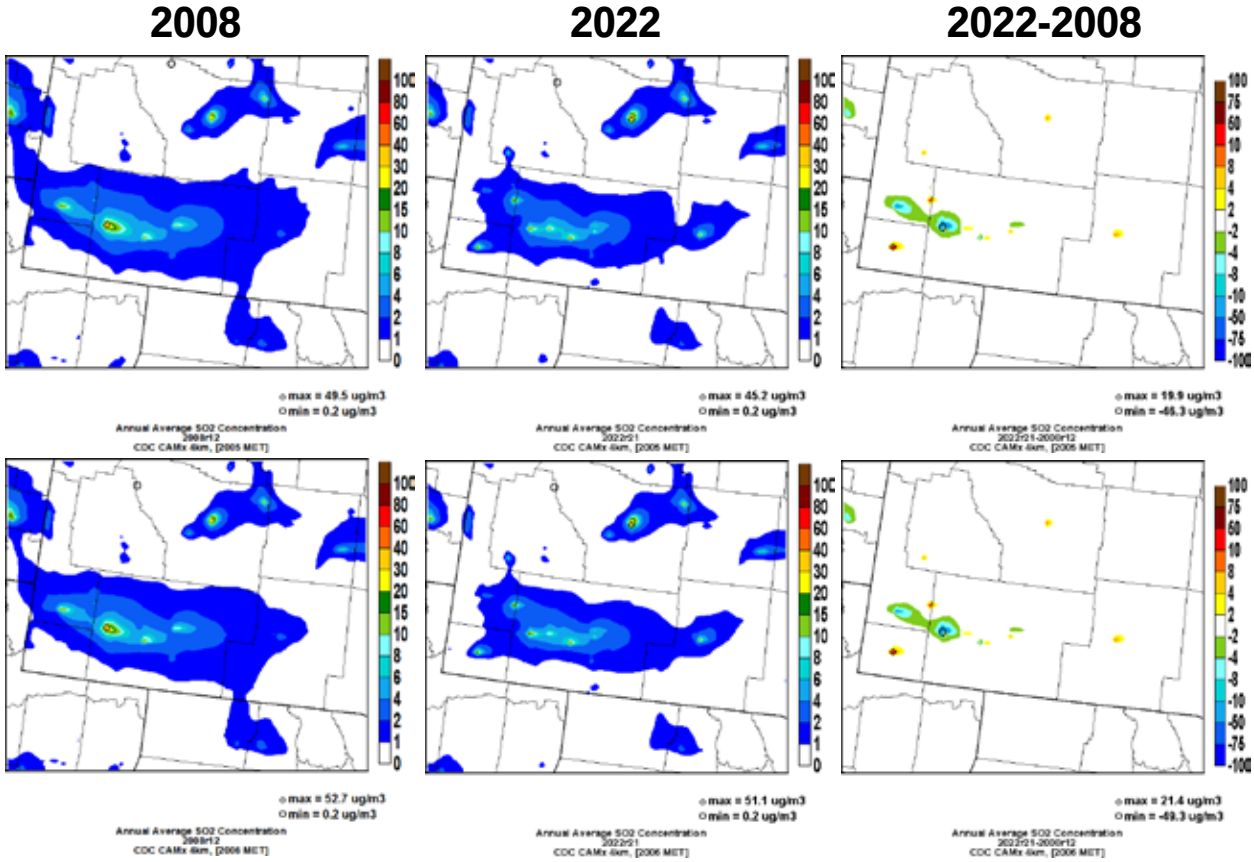

Figure J-12. 2022: CD-C Contribution to annual average SO_2.

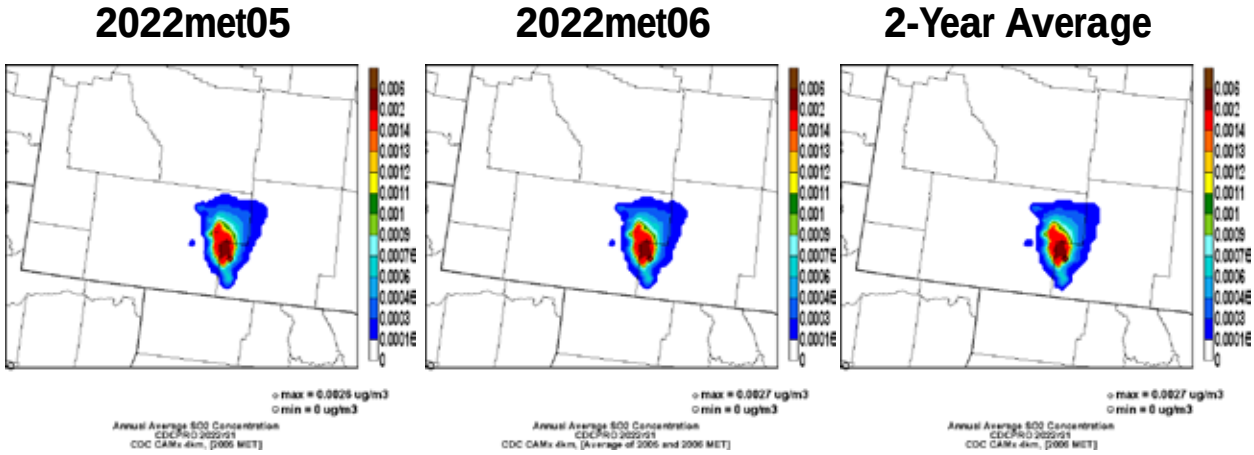

Figure J-13. CAMx model results for 98th Percentile 24-Hour Average $PM_{2.5}$. Left and center panels: 2008 and 2022 absolute model results for 98th Percentile 24-Hour Average $PM_{2.5}$ from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in 98th Percentile 24-Hour Average $PM_{2.5}$. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

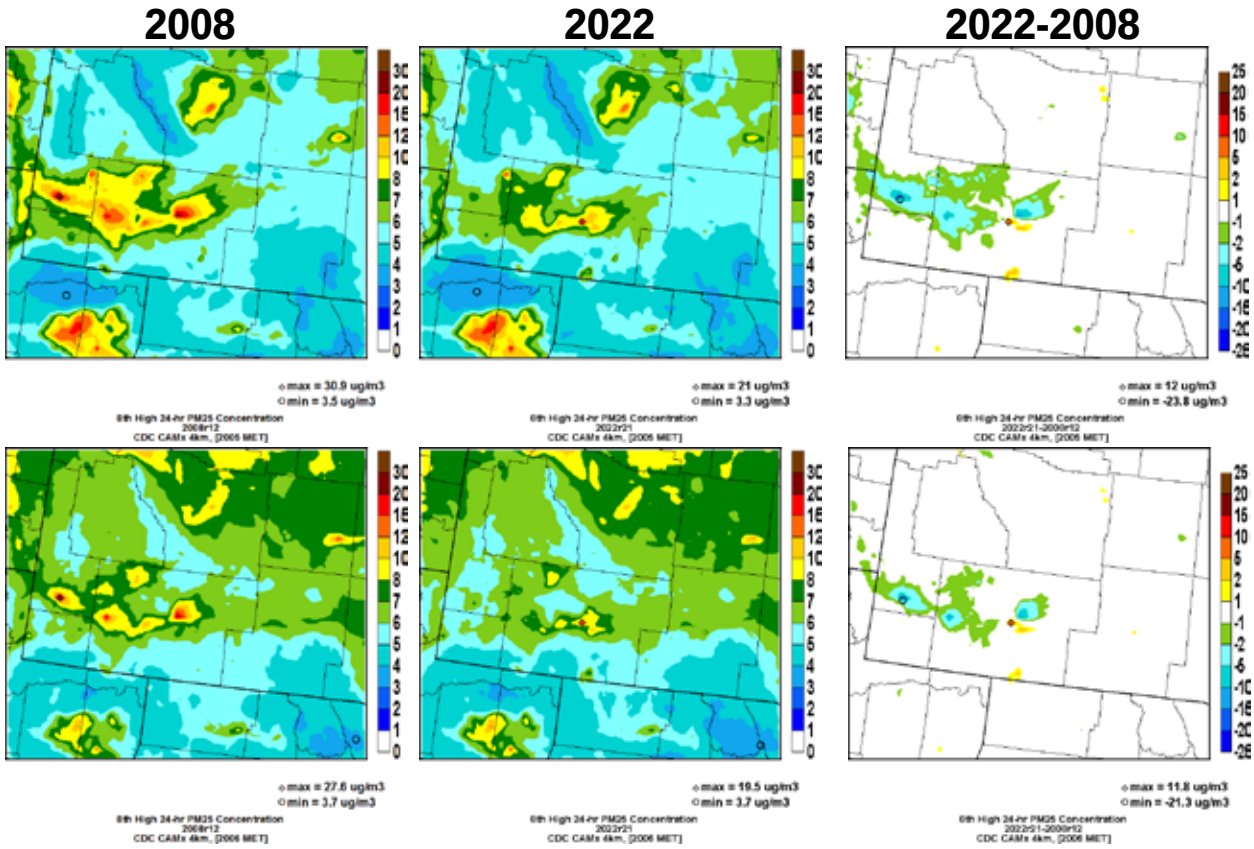

Figure J-14. 2022: CD-C Contribution to 98th Percentile 24-Hour Average $PM_{2.5}$

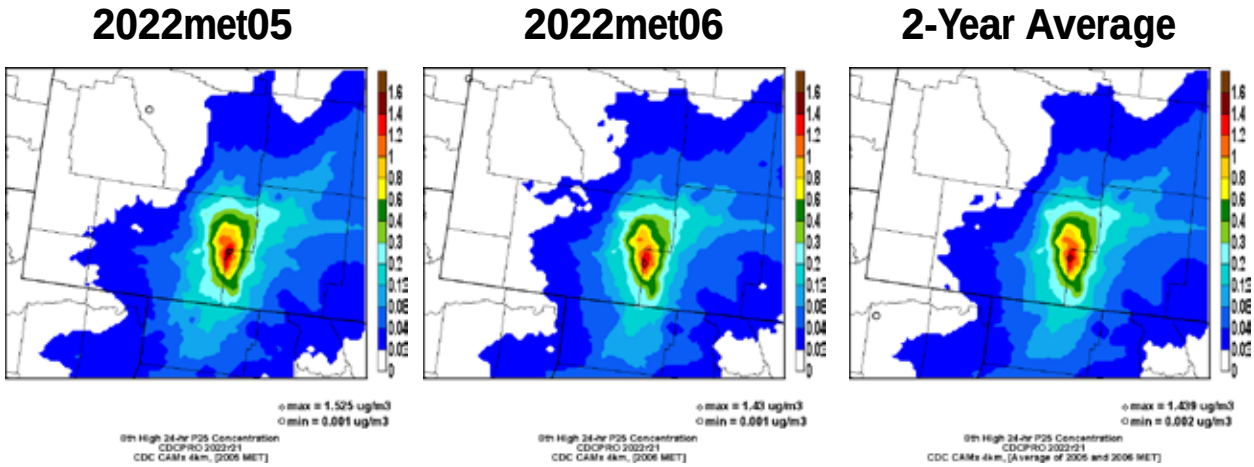

Figure J-15. CAMx model results for Highest 24-Hour Average $PM_{2.5}$. Left and center panels: 2008 and 2022 absolute model results for Highest 24-Hour Average $PM_{2.5\ 5}$ from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in Highest 24-Hour Average $PM_{2.5}$. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

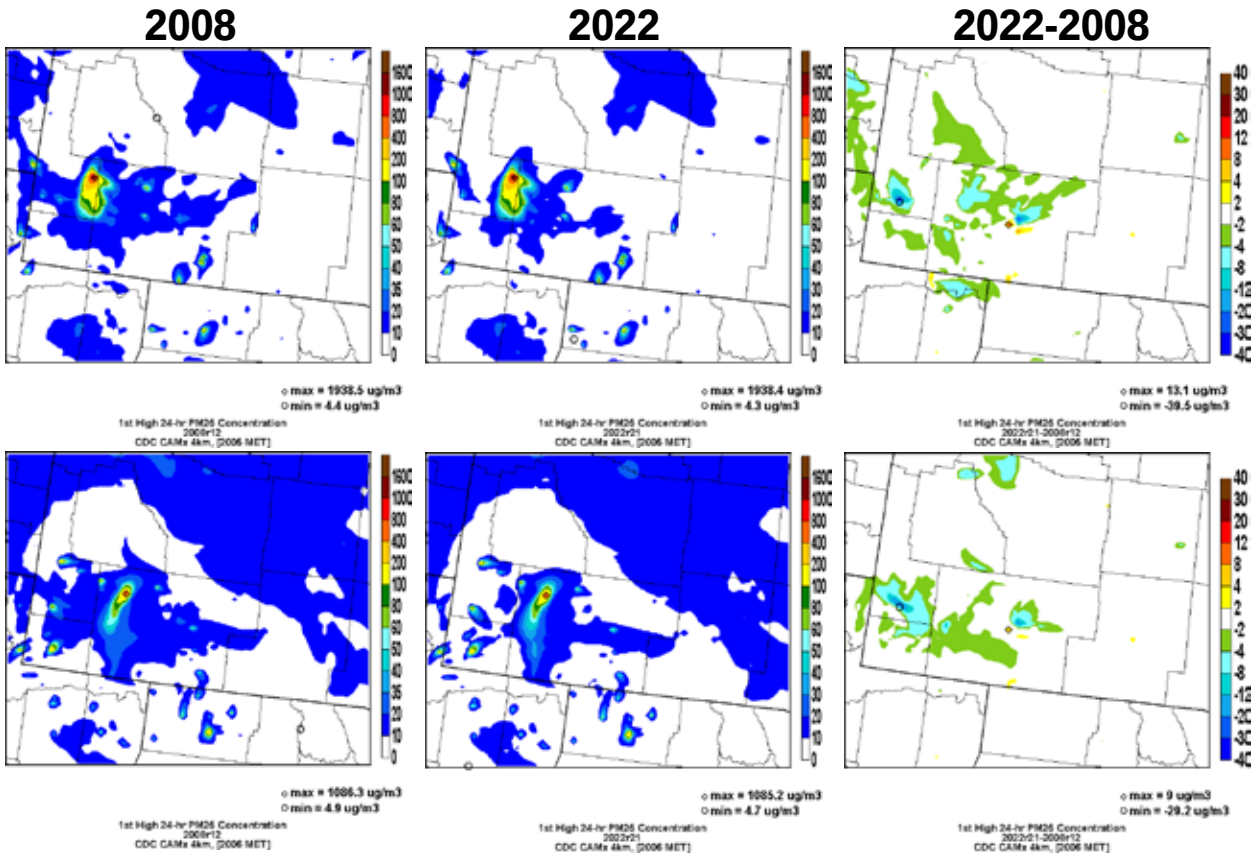

Figure J-16. 2022: CD-C Contribution to Highest 24-Hour Average $PM_{2.5}$

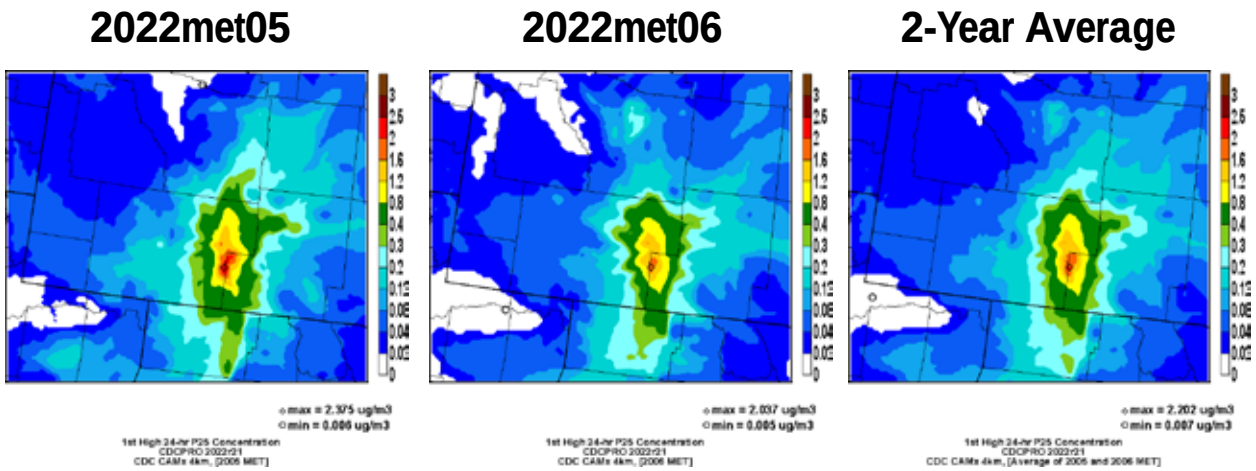

Figure J-17. CAMx model results for Annual Average $PM_{2.5}$. Left and center panels: 2008 and 2022 absolute model results for Annual Average $PM_{2.5}$ from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in Annual Average $PM_{2.5}$. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

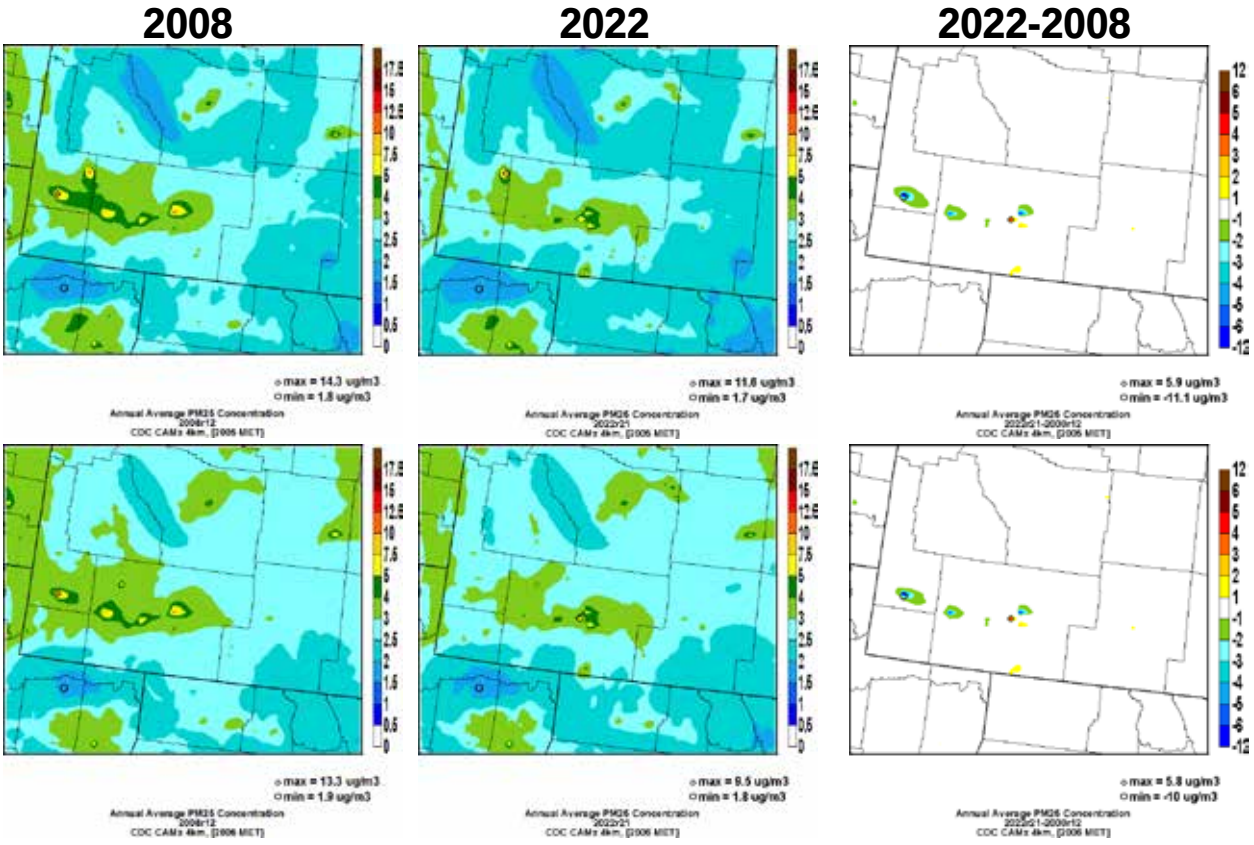

Figure J-18. 2022: CD-C Contribution to Annual Average $PM_{2.5}$

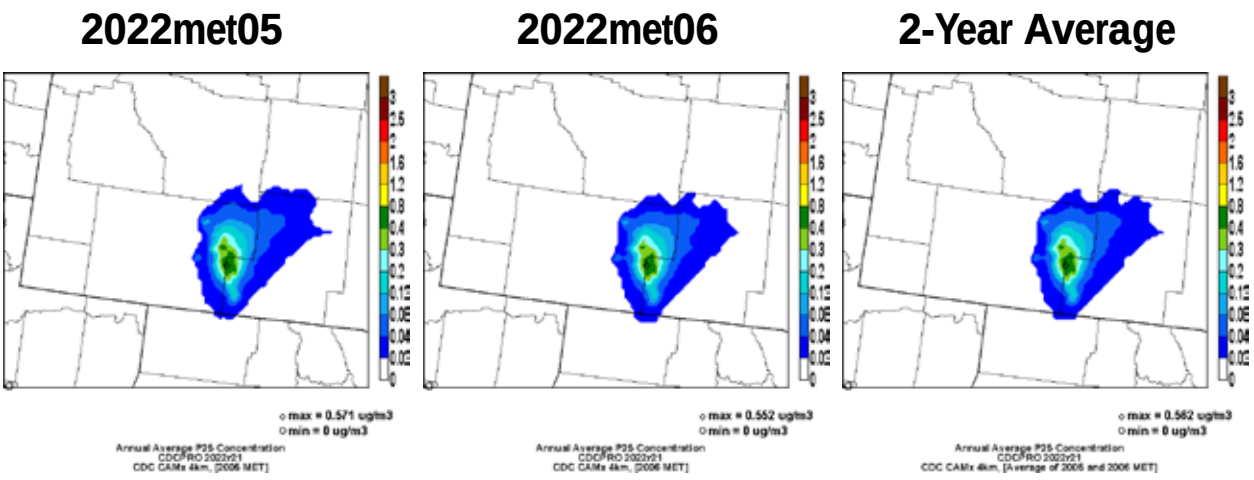

Figure J-19. CAMx model results for 24-Hour Average PM_{10}. Left and center panels: 2008 and 2022 absolute model results for 24-Hour Average PM_{10} from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in 24-Hour Average PM_{10}. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

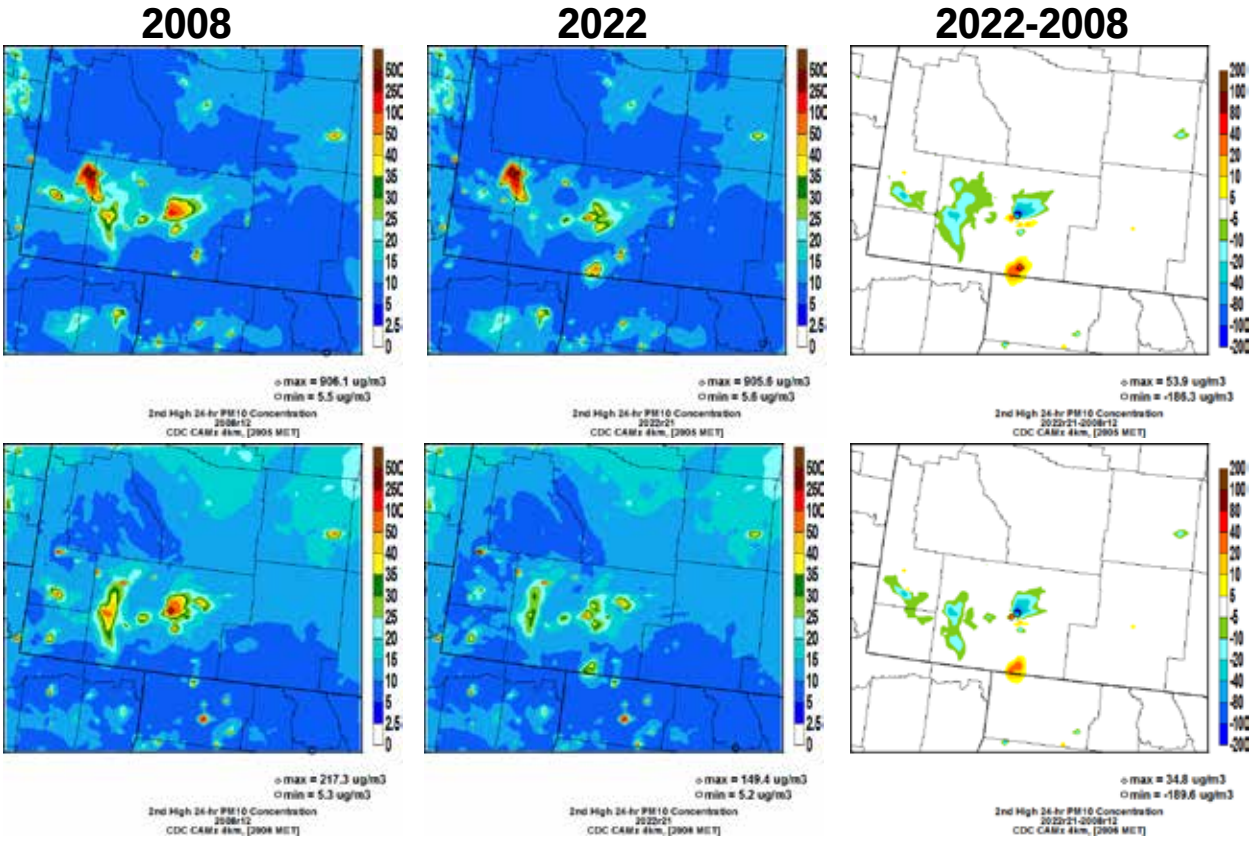

Figure J-20. 2022: CD-C Contribution to 24-Hour Average PM_{10}

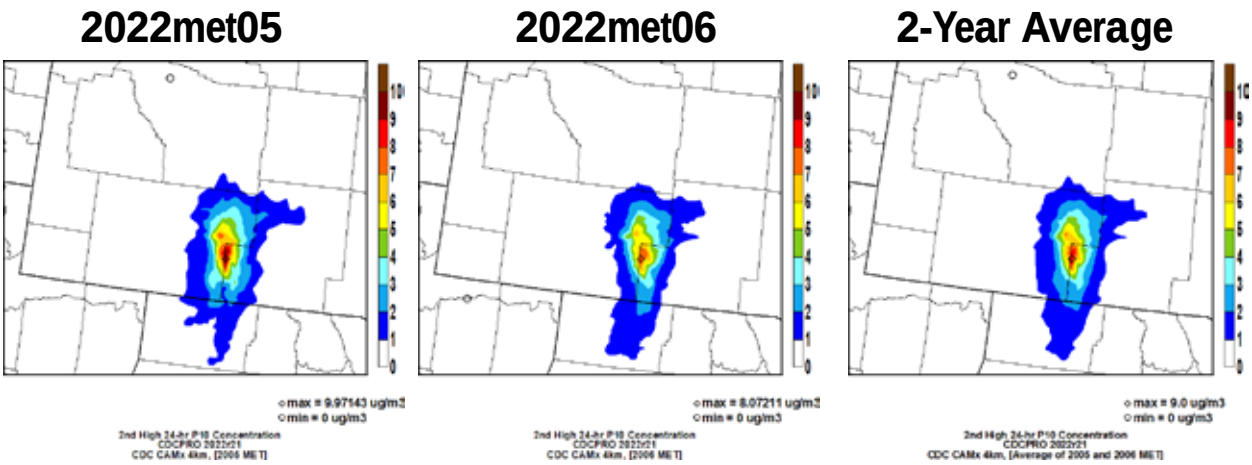

Figure J-21 CAMx model results for Annual Average PM_{10}. Left and center panels: 2008 and 2022 absolute model results for Annual Average PM_{10} from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in Annual Average PM_{10}. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

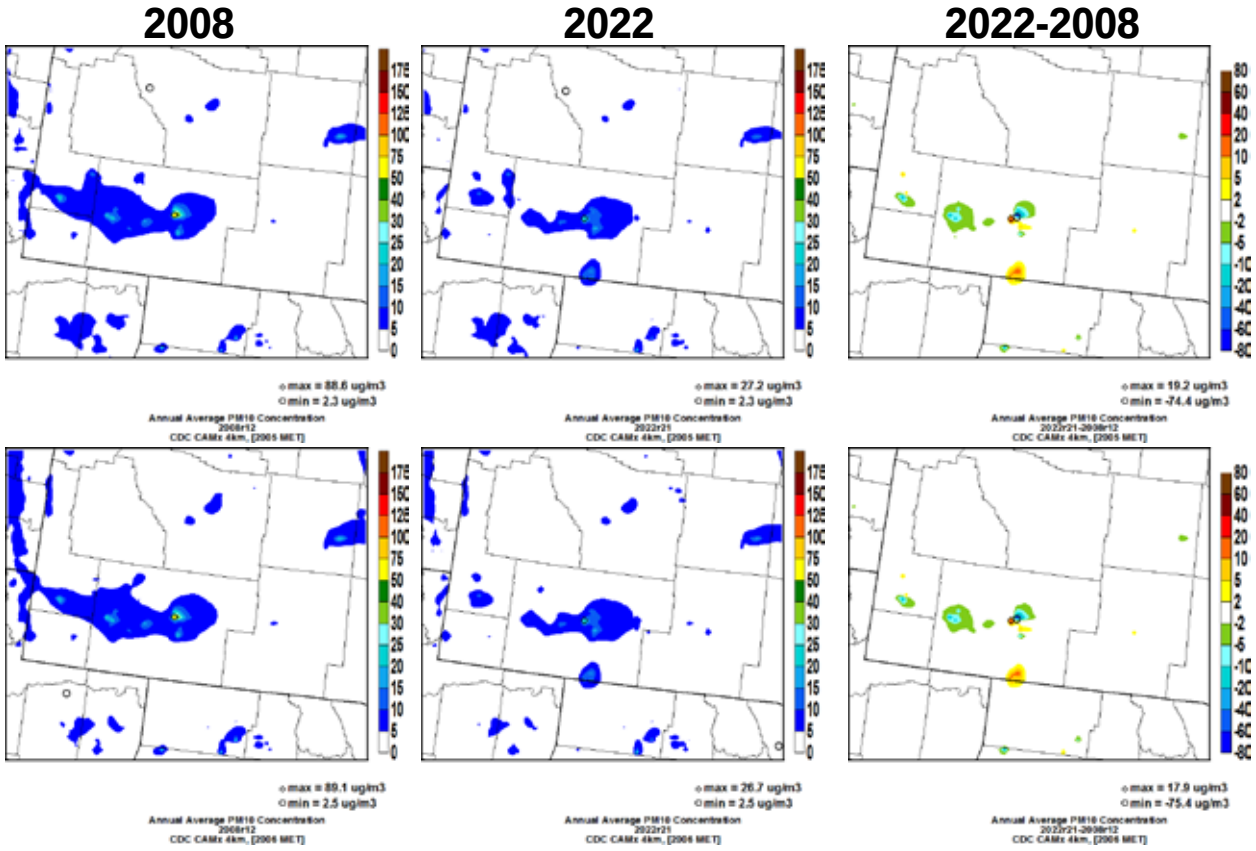

Figure J-22. 2022: CD-C Contribution to Annual Average PM_{10}

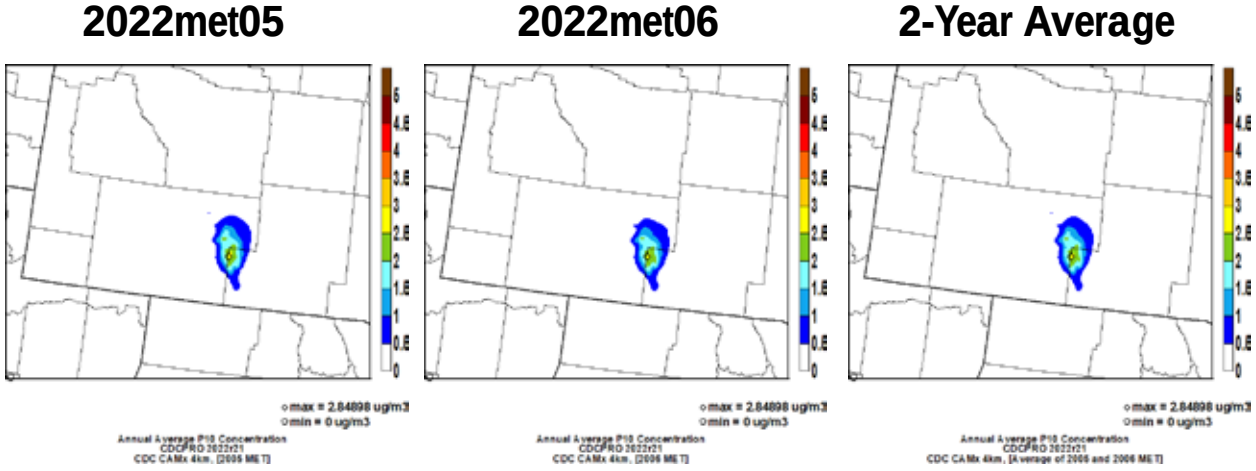

Figure J-23. CAMx model results for 1-hour CO. Left and center panels: 2008 and 2022 absolute model results for 1-hour CO from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in 1-hour CO. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.

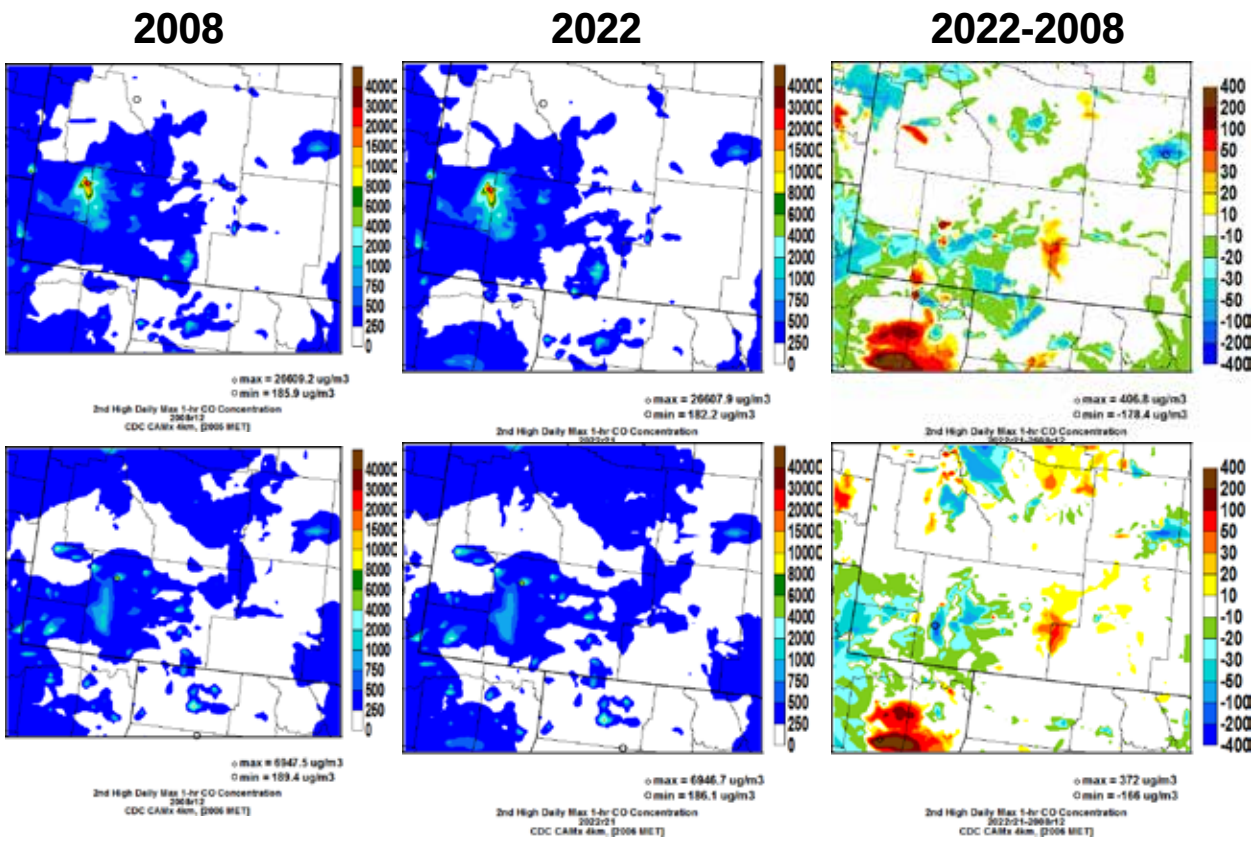

Figure J-24. CAMx model results for 8-hour CO. Left and center panels: 2008 and 2022 absolute model results for 8-hour CO from all regional emissions sources, including CD-C Project. Right panel: 2022-2008 difference in 8-hour CO. Upper panels show 2005 meteorological year. Lower panels show 2006 meteorological year.