SWIR Carbon Observation Retrieval Model Intercomparison Project (SCORE-MIP)

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Objective:

- To intercompare radiative transfer codes and retrieval methods used for GOSAT SWIR spectra
- To identify and characterize difference and provide guidance for retrieval algorithm improvements

Tasks:

1) Radiative transfer intercomparisons
    a) Comparisons of scalar and vector RT codes using synchronized layer properties (optical depth, single scattering albedo, scattering matrix)
    b) Comparisons of layer property calculation for given atmospheres
    c) Comparisons of scalar and vector RT codes for given atmospheres
2) Synthetic retrieval intercomparisons for trial ensemble
    a) Blind retrieval test for known aerosol types
    b) Blind test for unknown aerosol types
3) Retrievals of set of GOSAT spectra (TCCON overpasses)
    a) Retrievals using given aerosol setup
    b) Retrievals using independent aerosol approach