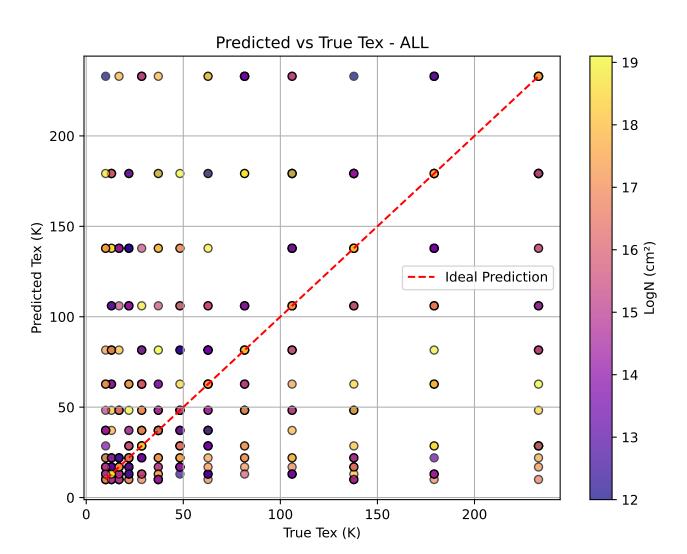
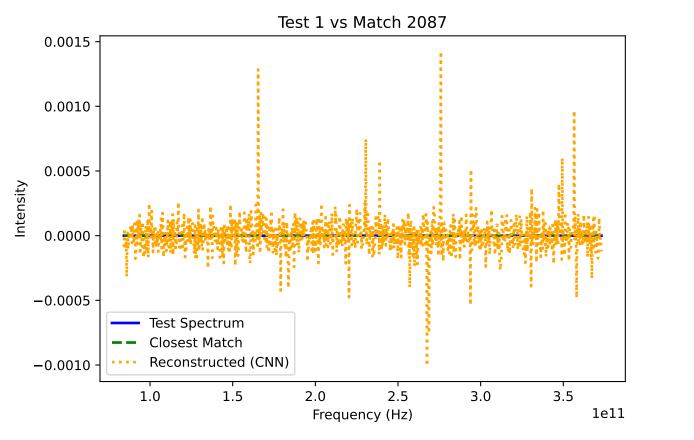
Predicted vs True LogN - ALL **Ideal Prediction** - 200 17 -Predicted LogN (cm<sup>2</sup>) - 125 🔾 英 - 100 - 75 - 50 

True LogN (cm<sup>2</sup>)

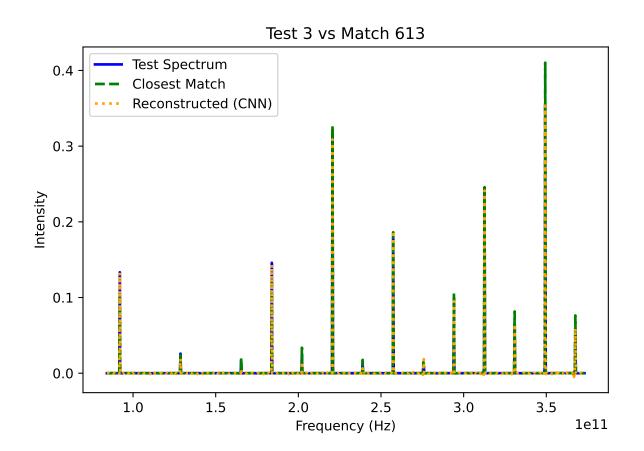
- 25





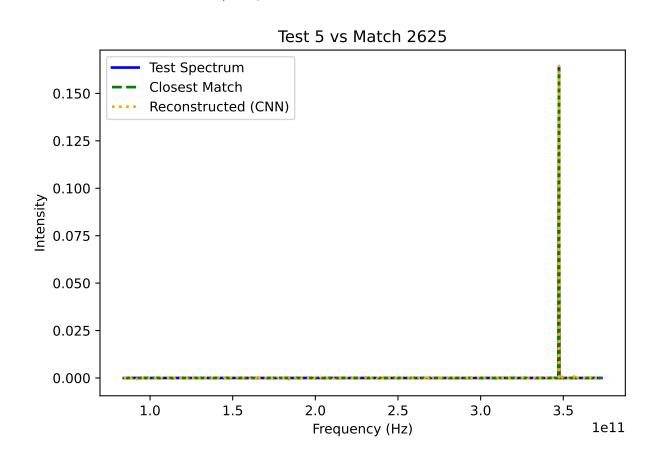
Test File: file\_JPL\_CO\_T16.90000000000002\_N12.99999999999996\_simulate\_generate Header: //molecules='CO|1' logn=13.0 tex=16.9 velo=250.0 fwhm=50.0 sourcesize=10.0

Match: file JPL CO T10 N13.099999999999 simulate generate Header:  $//molecules='CO|\bar{1}' logn=\bar{1}3.1 tex=10.0 velo=250.0 fwhm=50.0 sourcesize=10.0$ 



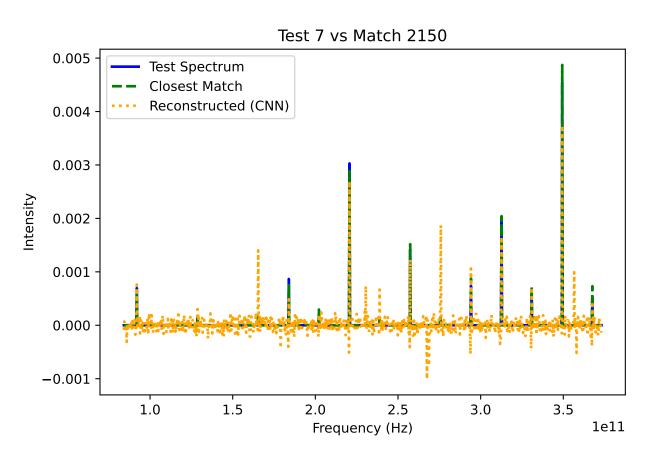
Test File: file JPL CH3CN T106.04499373000004 N16.4999999999993\_simulate\_generate Header: //molecules='CH3CN|1' logn=16.5 tex=106.04499 velo=250.0 fwhm=50.0 sourcesize=10.0

Match: file JPL CH3CN T137.85849184900007\_N16.49999999999993\_simulate\_generate Header: //molecules='CH3CN|1' logn=16.5 tex=137.85849 velo=250.0 fwhm=50.0 sourcesize=10.0



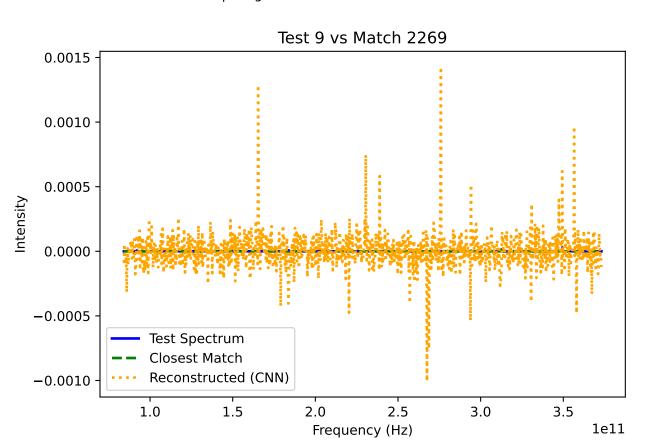
 $Test \ File: file\_JPL\_SiO\_T81.57307210000003\_N18.60000000000023\_simulate\_generate$ Header: //molecules='SIO|1' logn=18.6 tex=81.573074 velo=250.0 fwhm=50.0 sourcesize=10.0

Match: file\_JPL\_SiO\_T179.2160394037001\_N18.60000000000023\_simulate\_generate Header: //molecules='SIO|1' logn=18.6 tex=179.21603 velo=250.0 fwhm=50.0 sourcesize=10.0



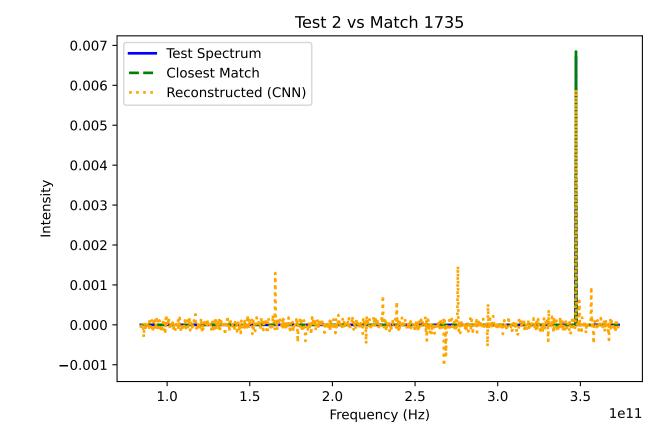
Test File: file\_JPL\_CH3CN\_T137.85849184900007\_N14.29999999999992\_simulate\_generate Header: //molecules='CH3CN|1' logn=14.3 tex=137.85849 velo=250.0 fwhm=50.0 sourcesize=10.0

Match: file JPL CH3CN T179.2160394037001 N14.3999999999999999 simulate generate Header: //molecules='CH3CN|1' logn=14.4 tex=179.21603 velo=250.0 fwhm=50.0 sourcesize=10.0



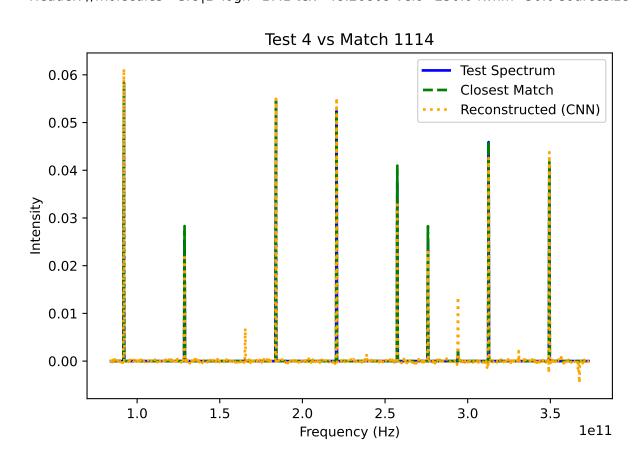
Test File: file JPL CH3CN T106.04499373000004 N12.1 simulate generate Header: //molecules='CH3CN|1' logn=12.1 tex=106.04499 velo=250.0 fwhm=50.0 sourcesize=10.0

Match: file JPL CH3CN T137.85849184900007 N12.1 simulate generate



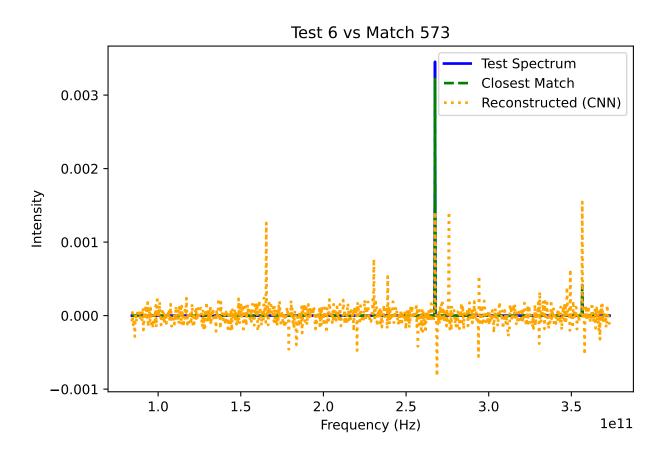
Test File: file\_JPL\_SiO\_T137.85849184900007\_N17.1\_simulate\_generate Header: //molecules='SIO|1' | logn=17.1 tex=137.85849 velo=250.0 fwhm=50.0 sourcesize=10.0

 $\label{lem:match:match:match:pllsio_T48.26809000000015_N17.1_simulate\_generate \\ Header: //molecules='SIO|1' logn=17.1 tex=48.26809 velo=250.0 fwhm=50.0 sourcesize=10.0 \\ \label{lem:match:match:match:pllsion}$ 



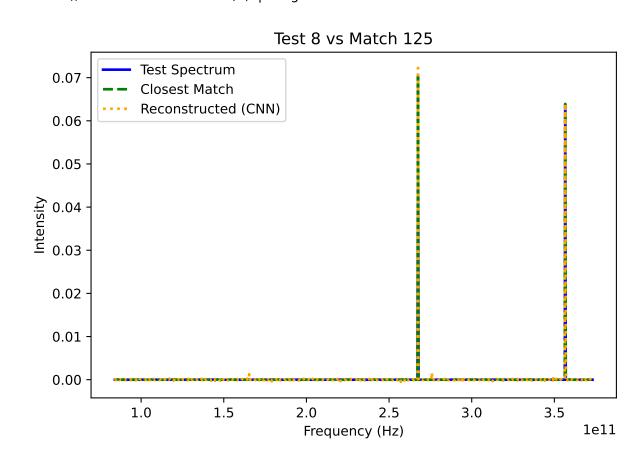
Test File: file\_JPL\_CH3CN\_T16.900000000000002\_N18.3000000000002\_simulate\_generate Header: //molecules='CH3CN|1' logn=18.3 tex=16.9 velo=250.0 fwhm=50.0 sourcesize=10.0

Match: file JPL CH3CN T16.9000000000000 N18.4000000000000 simulate generate Header: //molecules='CH3CN|1' logn=18.4 tex=16.9 velo=250.0 fwhm=50.0 sourcesize=10.0



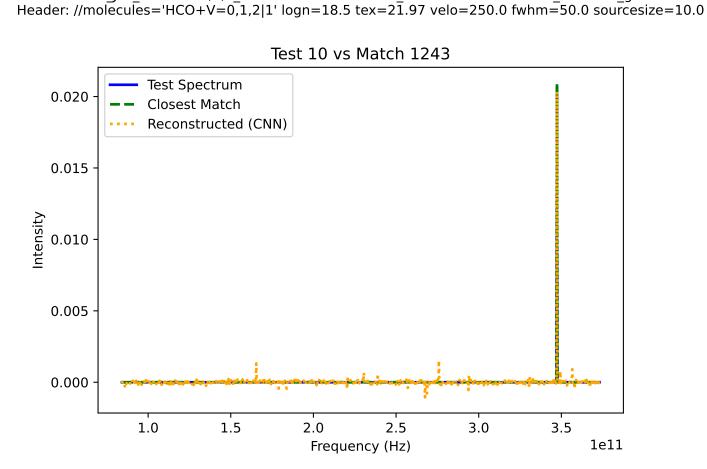
Test File: file\_JPL\_HCO+v=0,1,2\_T10\_N13.9999999999993\_simulate\_generate Header:  $\frac{1}{100}$  //molecules= $\frac{1}{100}$  //molecul

Match: file\_JPL\_HCO+v=0,1,2\_T13.0\_N13.79999999999994\_simulate\_generate Header: //molecules='HCO+V=0,1,2|1'|logn=13.8|tex=13.0|velo=250.0|fwhm=50.0|sourcesize=10.0|



Test File: file\_JPL\_HCO+v=0,1,2\_T21.97000000000002\_N19.000000000003\_simulate\_generate Header: //molecules='HCO+V=0,1,2|1' logn=19.0 tex=21.97 velo=250.0 fwhm=50.0 sourcesize=10.0

Match: file\_JPL\_HCO+v=0,1,2\_T21.97000000000002\_N18.5000000000002\_simulate\_generate

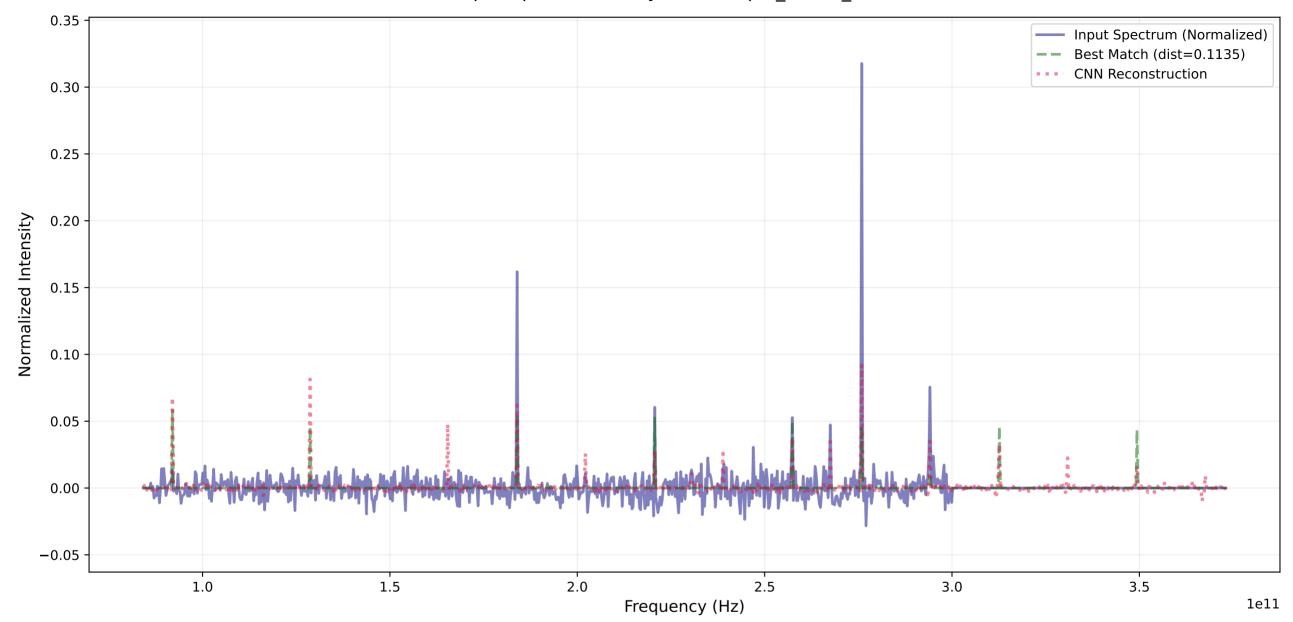


Test File: file JPL SiO T48.26809000000015 N17.6000000000001 simulate generate Header: //molecules='SIO|1' logn=17.6 tex=48.26809 velo=250.0 fwhm=50.0 sourcesize=10.0

Match: file JPL SiO T137.85849184900007 N17.6000000000001 simulate generate Header: //molecules='SIO|1' logn=17.6 tex=137.85849 velo=250.0 fwhm=50.0 sourcesize=10.0

Header: //molecules='CH3CN|1' logn=12.1 tex=137.85849 velo=250.0 fwhm=50.0 sourcesize=10.0

## Input Spectrum Analysis: example\_4mols\_format



## INPUT FILE:

\_\_\_\_\_

Filename: example\_4mols\_format
Header: //!xValues(GHz)[yValues(K)

## BEST MATCH:

\_\_\_\_\_

• File: file\_JPL\_CH3CN\_T16.900000000000002\_N19.1000000000003\_simulate\_generate

• Distance: 0.113487

• Parameters: //molecules='CH3CN|1' logn=19.1 tex=16.9 velo=250.0 fwhm=50.0 sourcesize=10.0