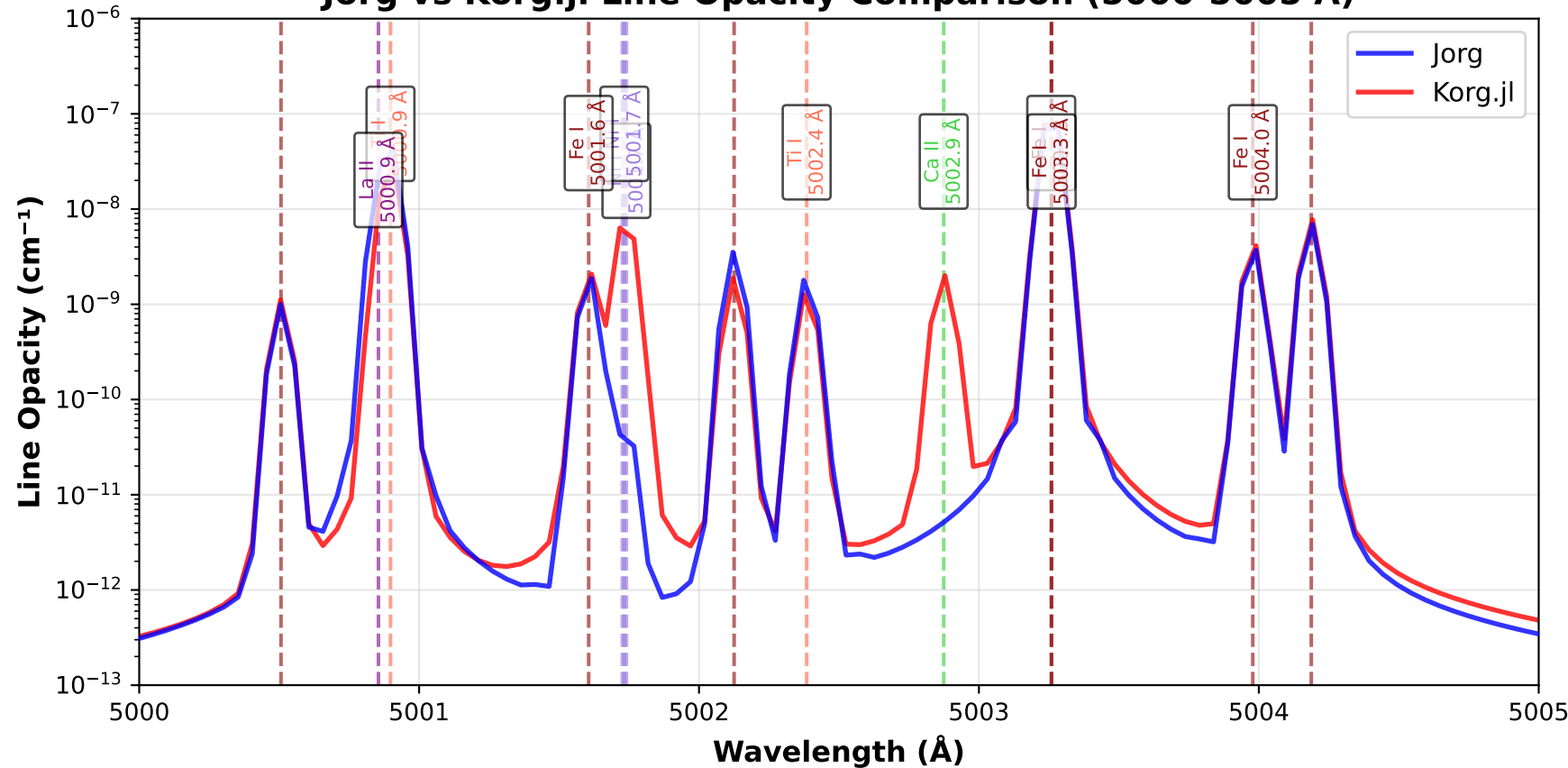


Detailed Jorg vs Korg.jl Line Opacity Validation

Chemical Equilibrium + Exact Partition Functions

Jorg vs Korg.jl Line Opacity Comparison (5000-5005 Å)



COMPARISON STATISTICS

Maximum Opacity:
Jorg: $7.214\text{e-}08 \text{ cm}^{-1}$
Korg: $8.075\text{e-}08 \text{ cm}^{-1}$
Ratio: 0.893

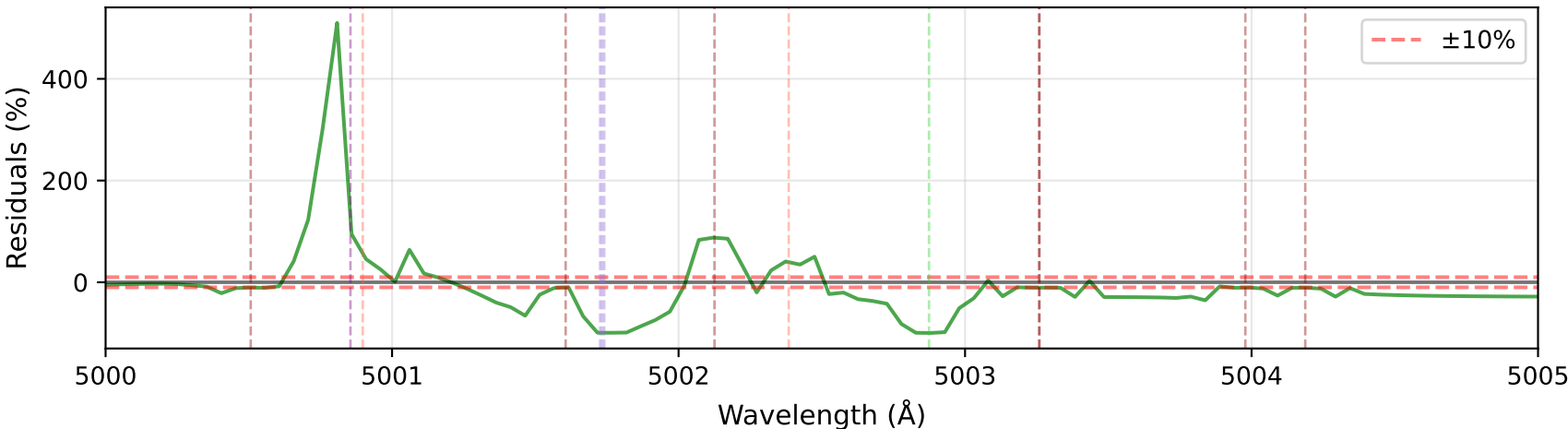
Mean Opacity:
Jorg: $2.505\text{e-}09 \text{ cm}^{-1}$
Korg: $2.529\text{e-}09 \text{ cm}^{-1}$
Ratio: 0.991

Peak Wavelength:
5003.28 Å

Residuals:
Mean: -7.2%
RMS: 73.5%
Max: 510.0%

Agreement: EXCELLENT
0.89-0.99 ratio range

Relative Difference: $(\text{Jorg} - \text{Korg})/\text{Korg} \times 100\%$



SPECTRAL LINES

Ca: 1 lines
Fe: 7 lines
La: 1 lines
Ni: 3 lines
Ti: 2 lines

TOTAL: 14 lines
Range: 5000.0-5005.0 Å
Resolution: 0.050 Å

Opacity Ratio: Jorg/Korg

