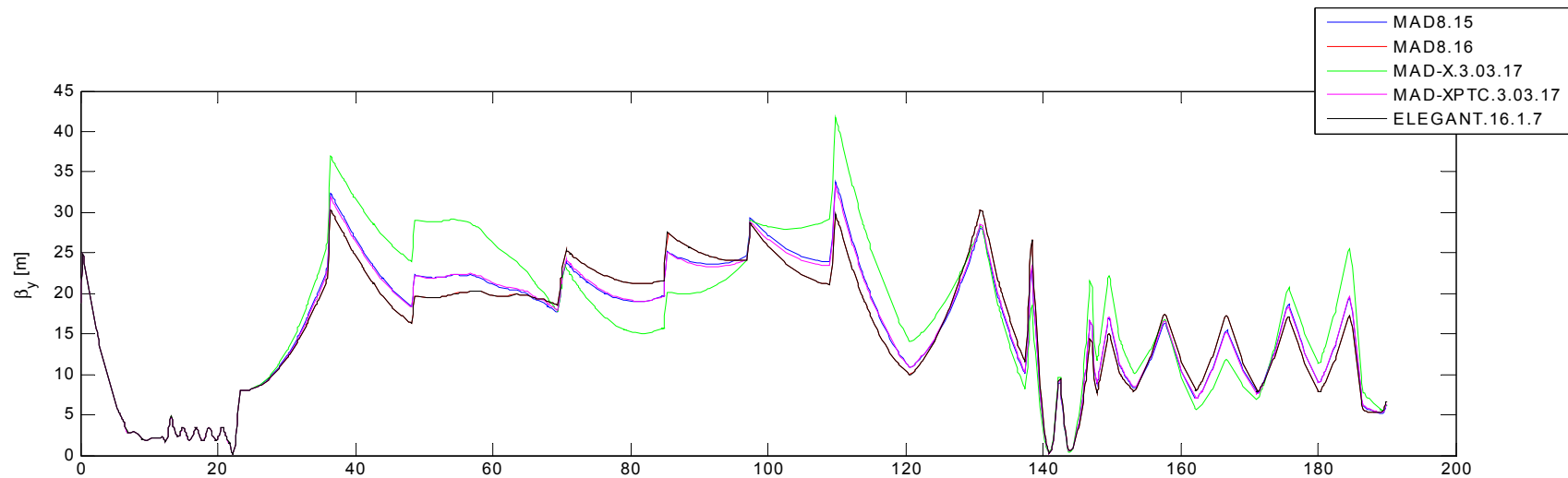
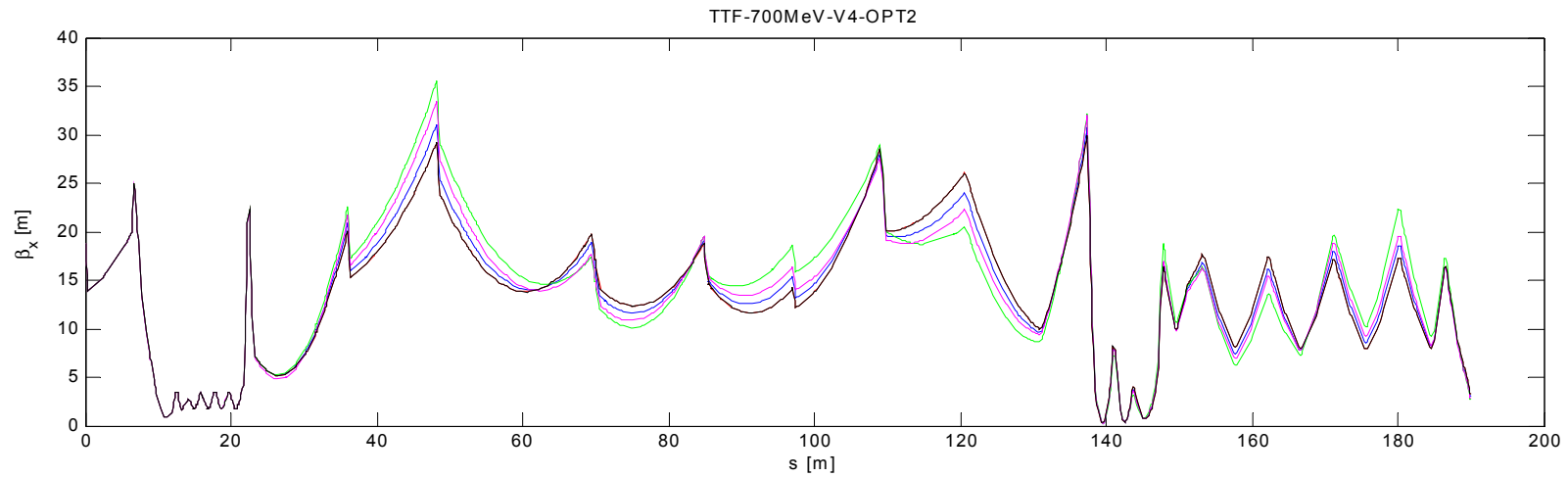
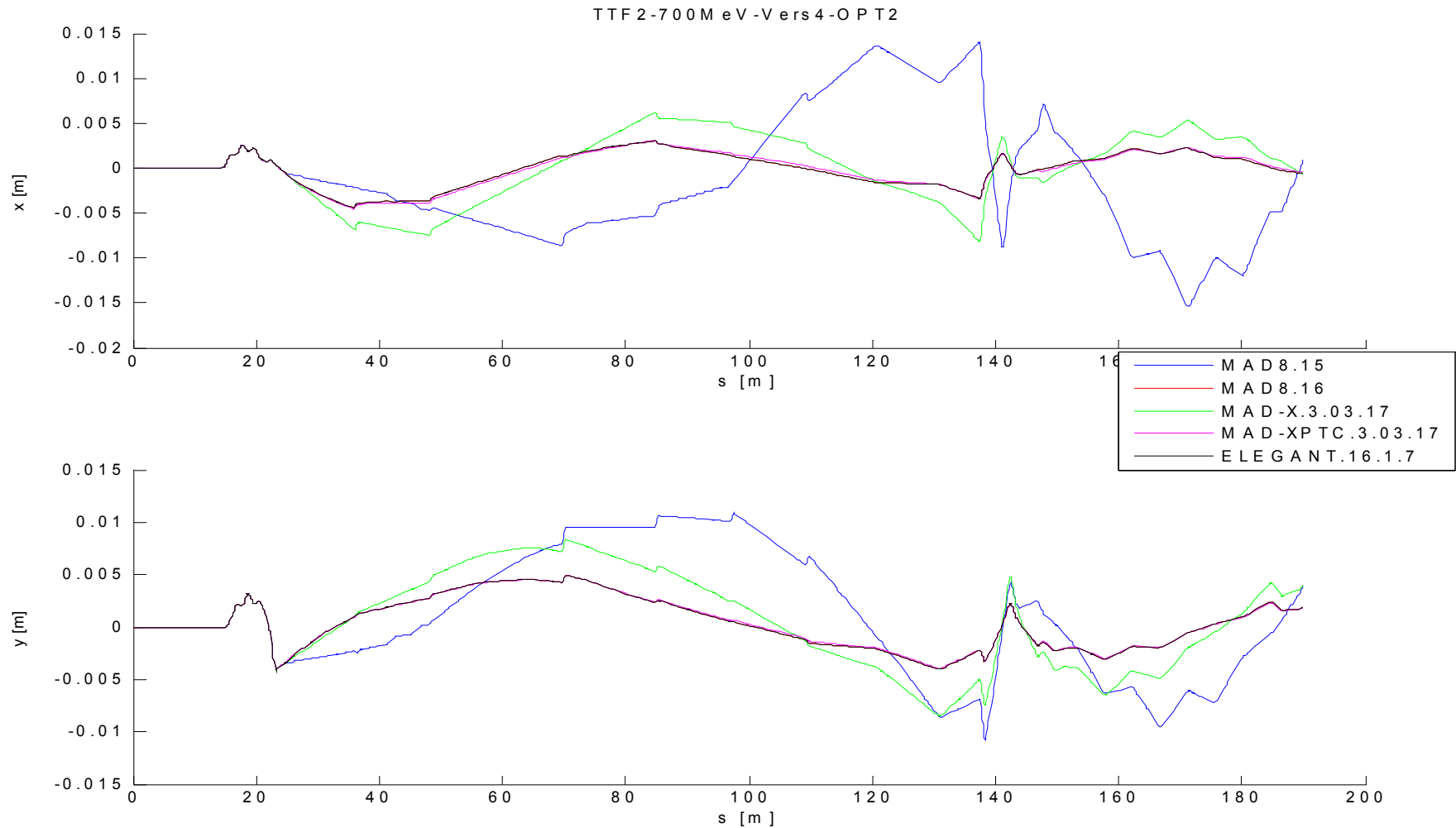




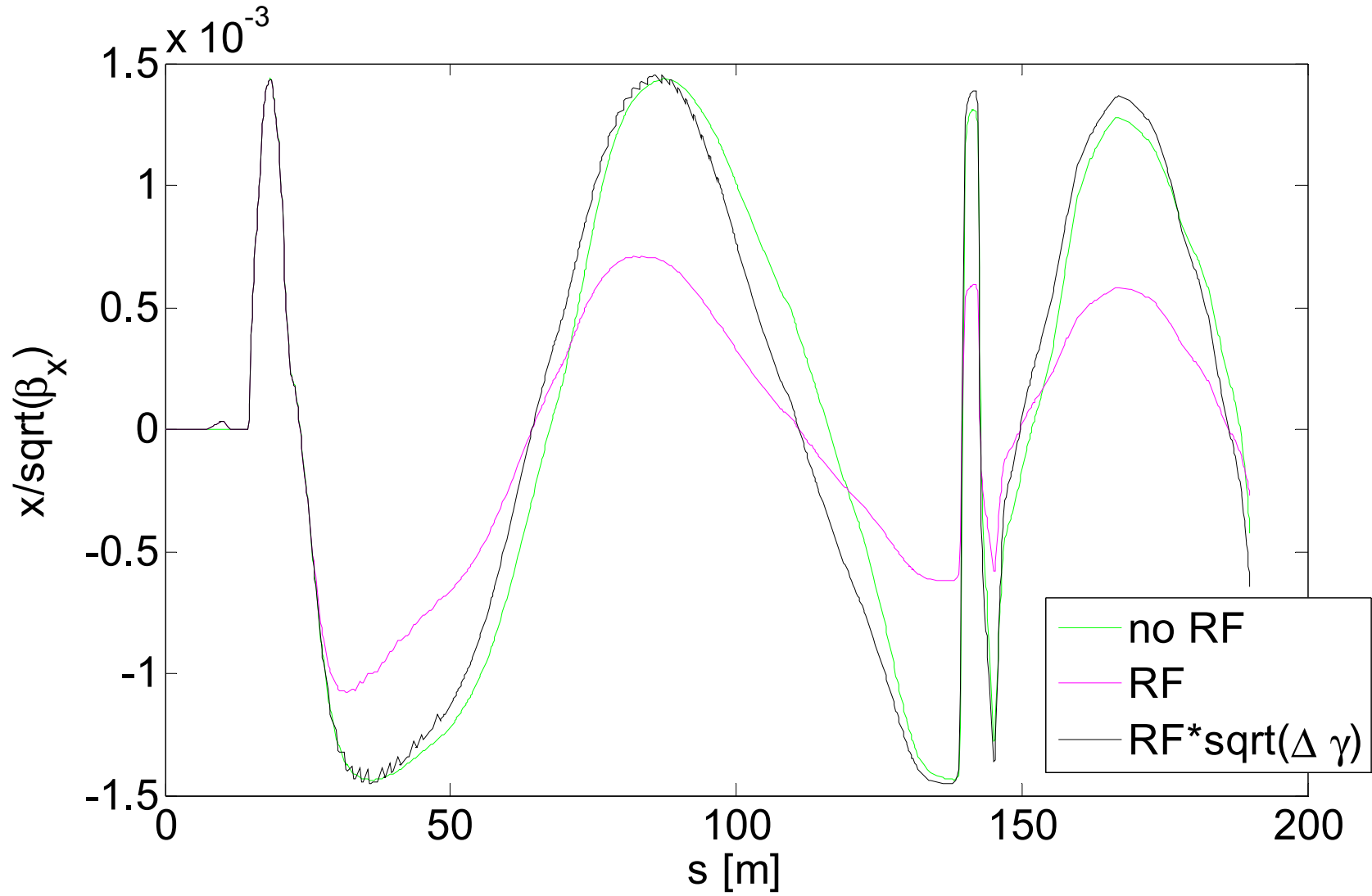
- MAD8.15: traveling wave – simplified SRS
- MAD8.16: standing wave – exact SRS
- MADX: no cavity
- MADX-PTC: traveling wave
- ELEGANT: standing wave



- difference between MAD8.15 and MAD-XPTC becomes smaller with increased accuracy in MAD-XPTC



- trajectory is treated wrong in MAD8.15
- difference between cases with/without RF are due to adiabatic damping



- MAD8.16 and ELEGANT agree in optics and trajectory treatment including standing wave cavities
- MAD-XPTC has qualitative agreement
- RF focusing has almost no effect for energies above 130 MeV
- Acceleration is needed for adiabatic damping of the trajectory