

## Appendix F

The figures given in this section presents spectra of low pressure  $\text{NH}_3$ . The spectra cover the region from 4060 to 6800  $\text{cm}^{-1}$ . The following table lists the experimental conditions of the laboratory runs used to generate the observed spectra. The observed spectra were obtained with the Fourier transform spectrometer located in the McMath solar facility at the Kitt Peak National Observatory. The spectra were fitted by a method of non-linear-least-squares and these results are included in the figures. The fitted spectra overlay the observed spectra and above each two spectra are residual plots giving percent differences between the observed and fitted spectra.

Run	spectral resolutions ( $\text{cm}^{-1}$ )	$\text{NH}_3$ Pressure (Torr)	Path (m)
J99.1.12	0.011	5.42	0.25
J99.1.16	0.011	1.89	16.4

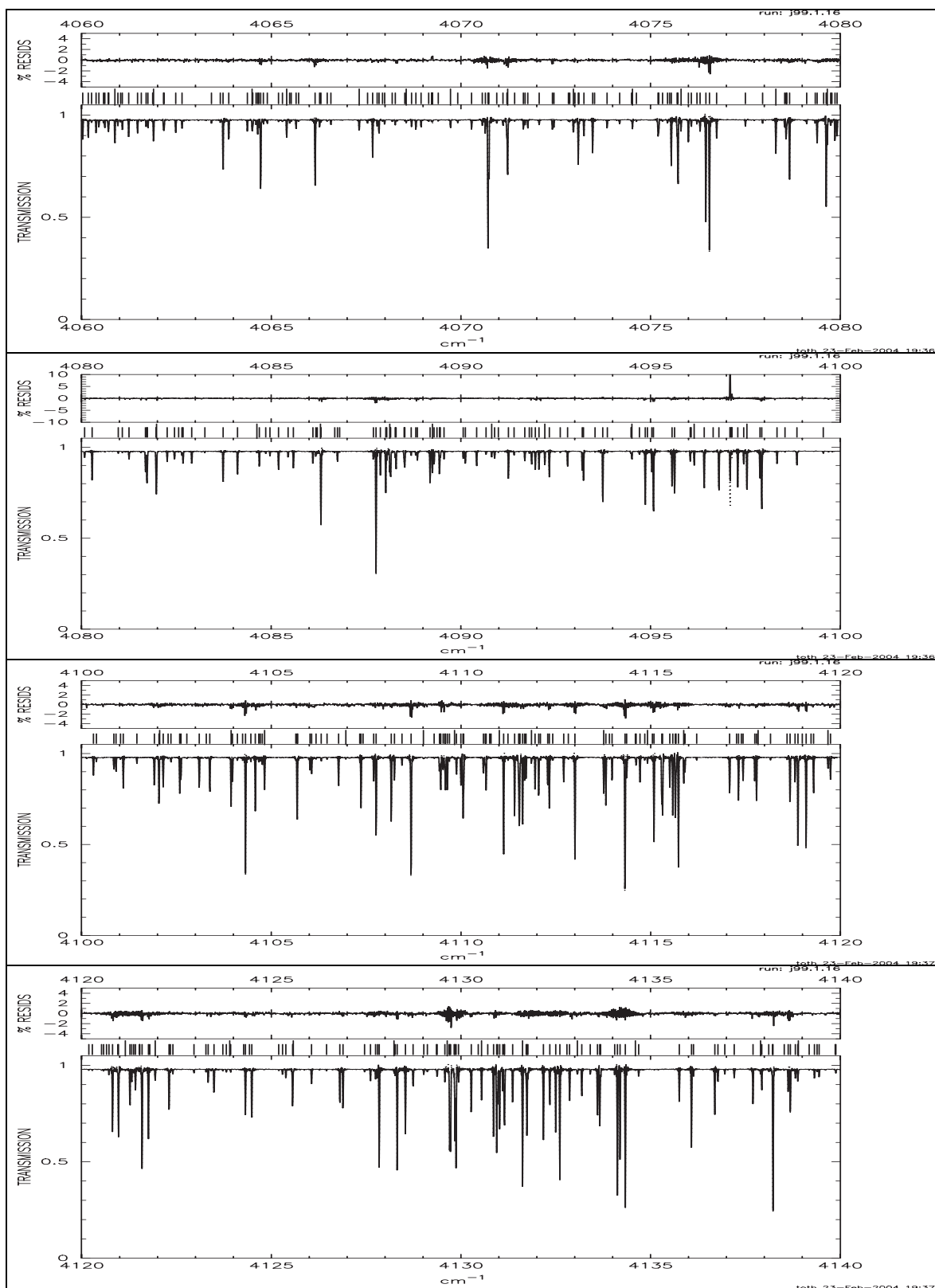


Figure F1. Observed and fitted spectra of  $\text{NH}_3$ . Observed spectra from run J99.1.16

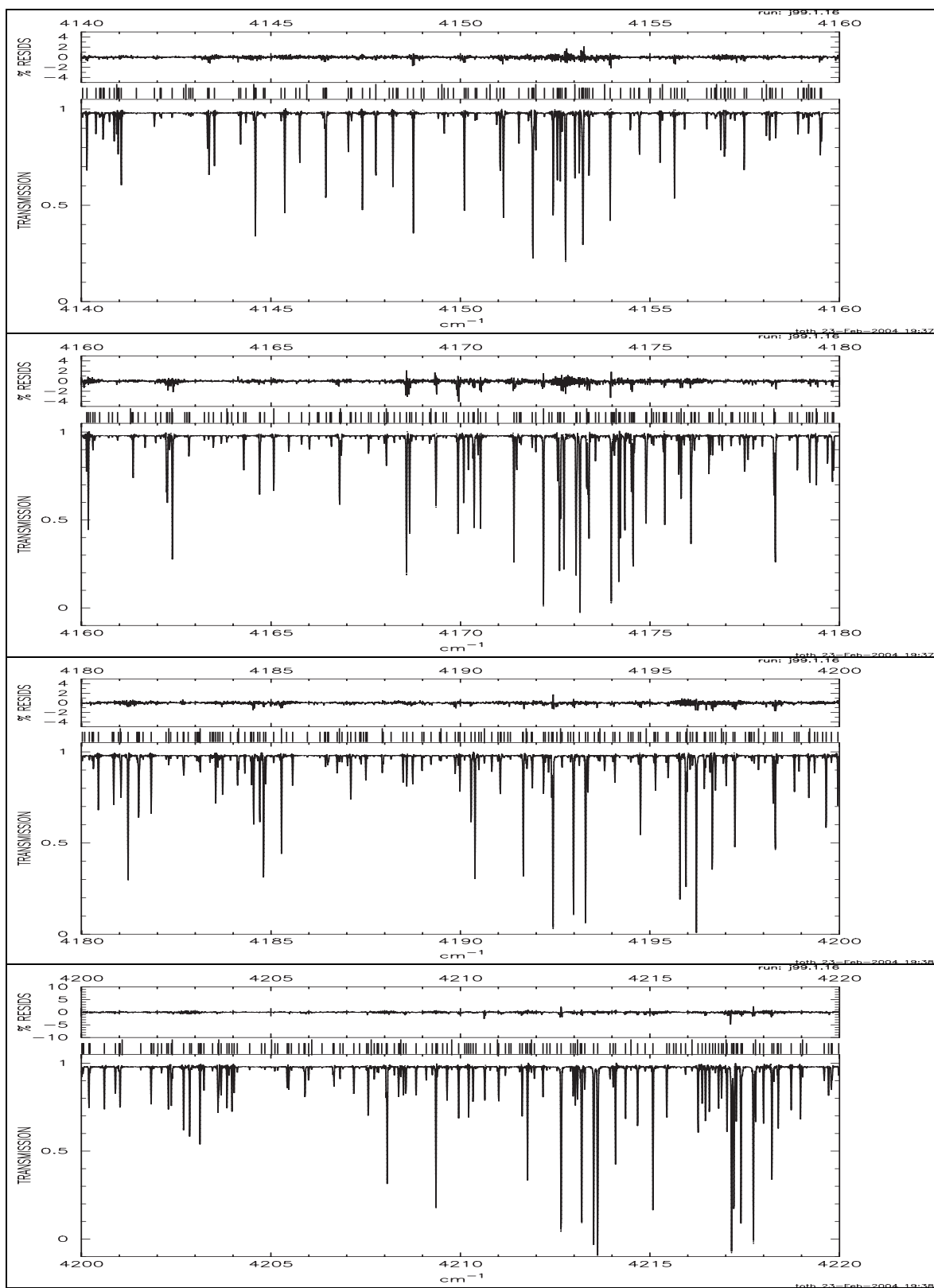


Figure F2. Observed and fitted spectra of NH<sub>3</sub>. Observed spectra from run J99.1.16

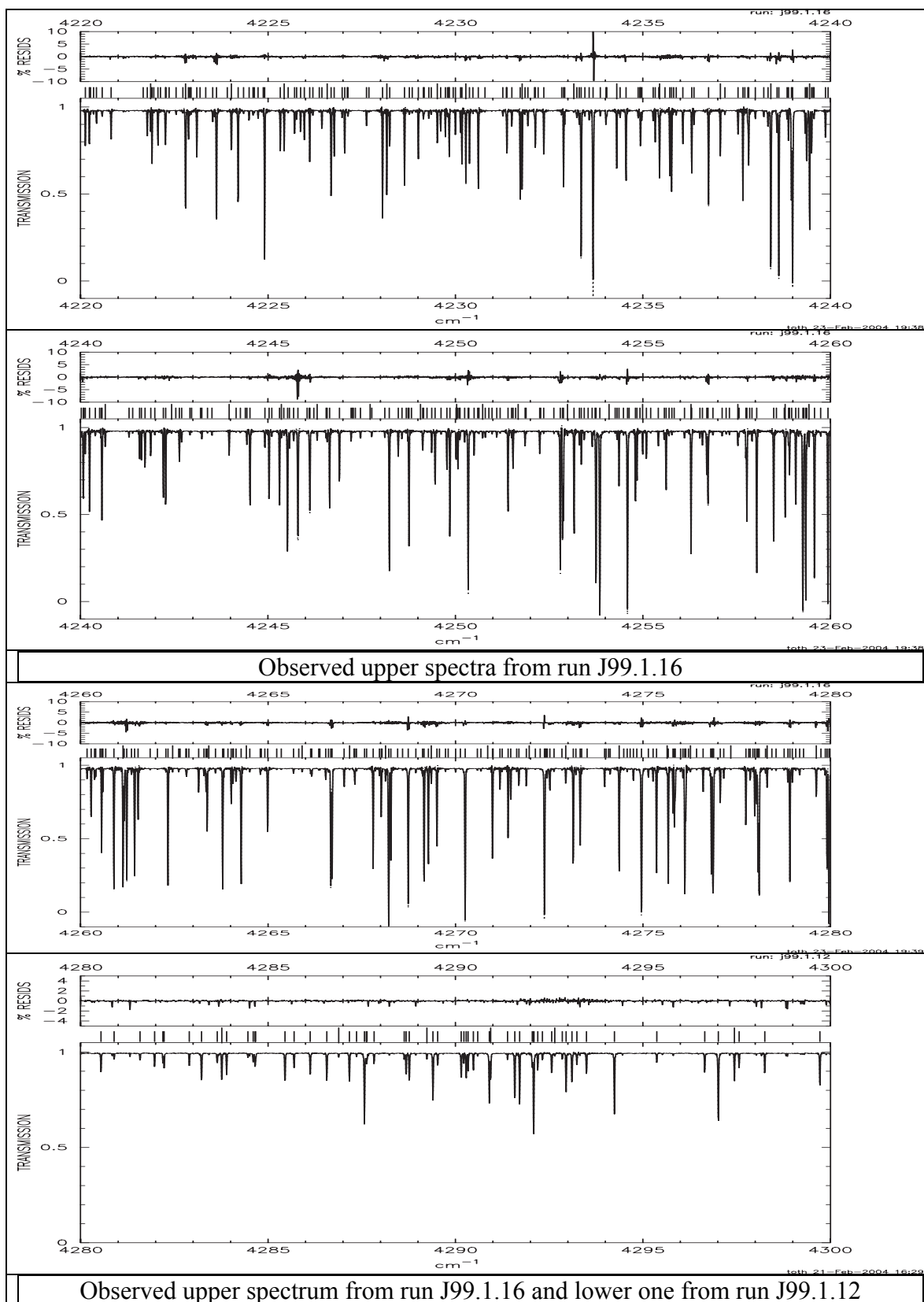


Figure F3. Observed and fitted spectra of  $\text{NH}_3$

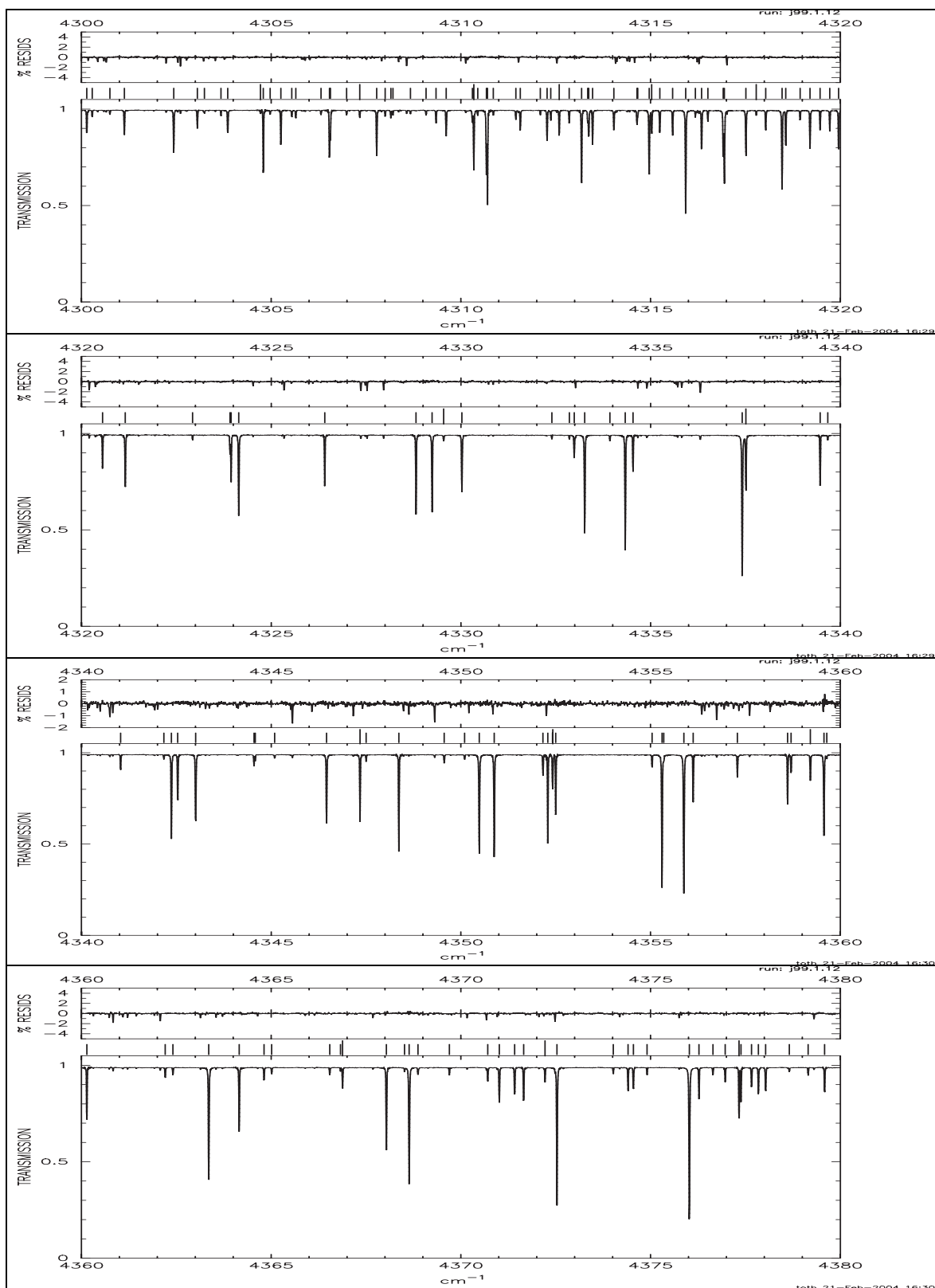


Figure F4. Observed and fitted spectra of  $\text{NH}_3$ . Observed spectra from run J99.1.12

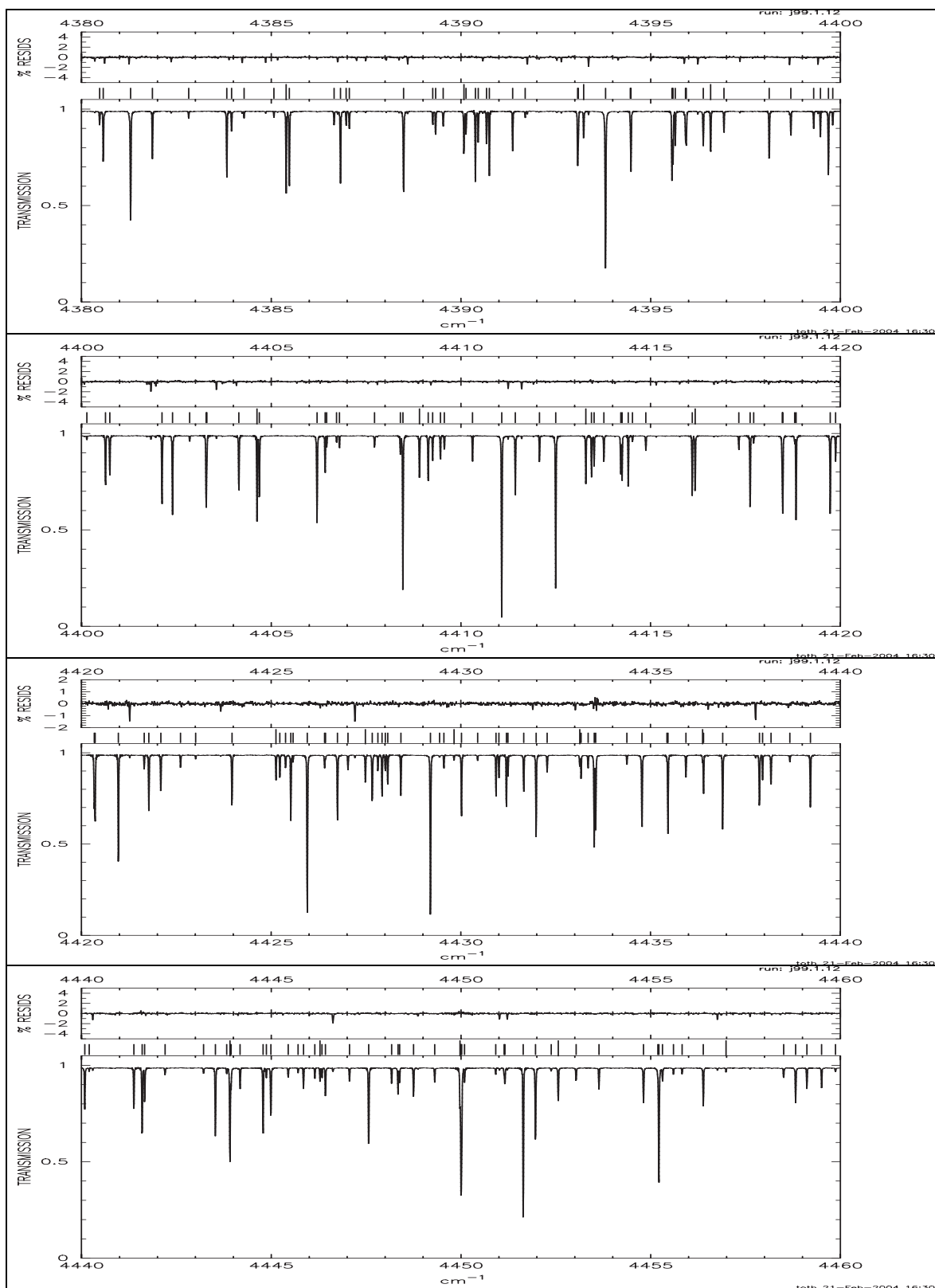


Figure F5. Observed and fitted spectra of  $\text{NH}_3$ . Observed spectra from run J99.1.12

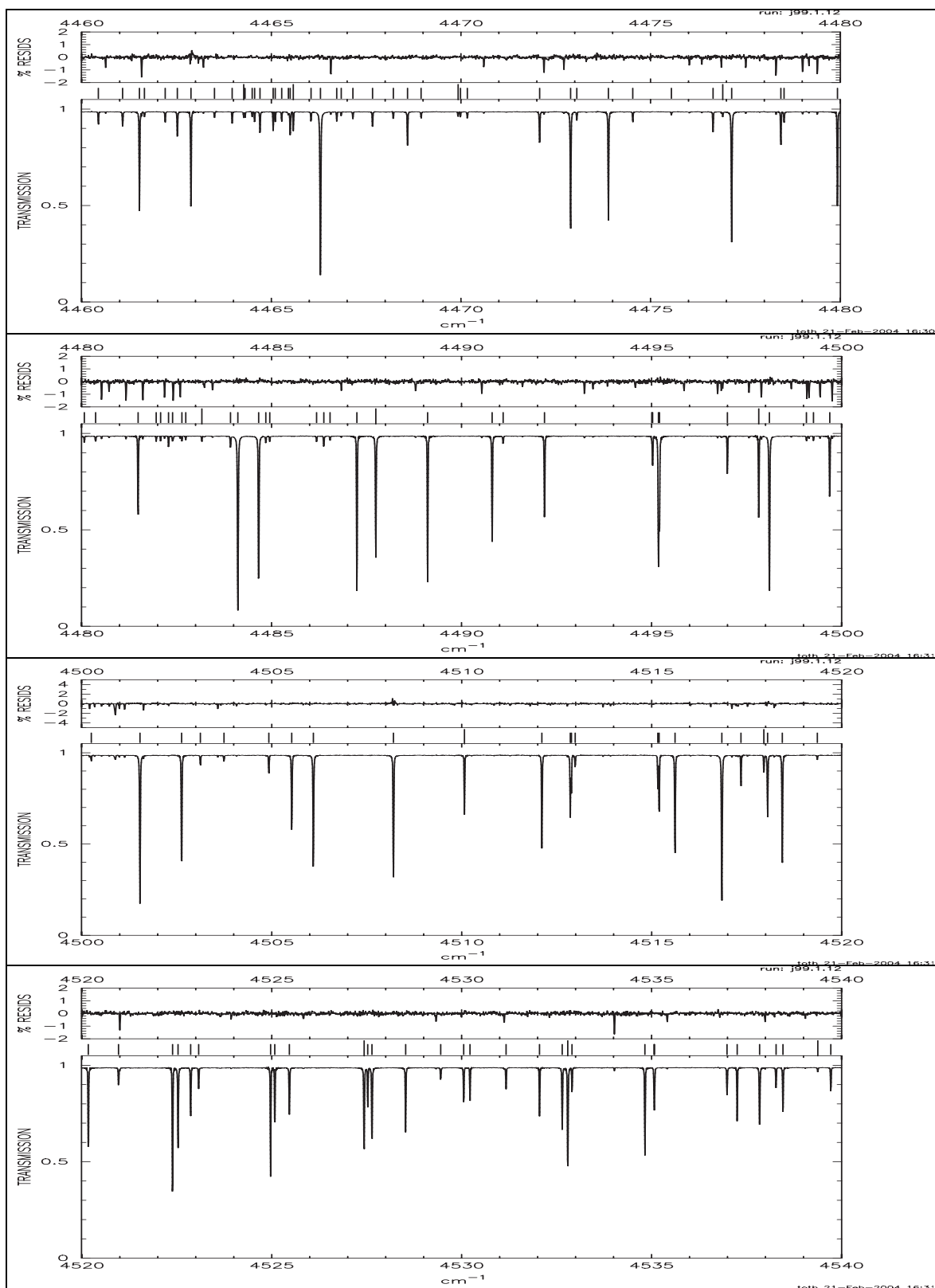


Figure F6. Observed and fitted spectra of  $\text{NH}_3$ . Observed spectra from run J99.1.12

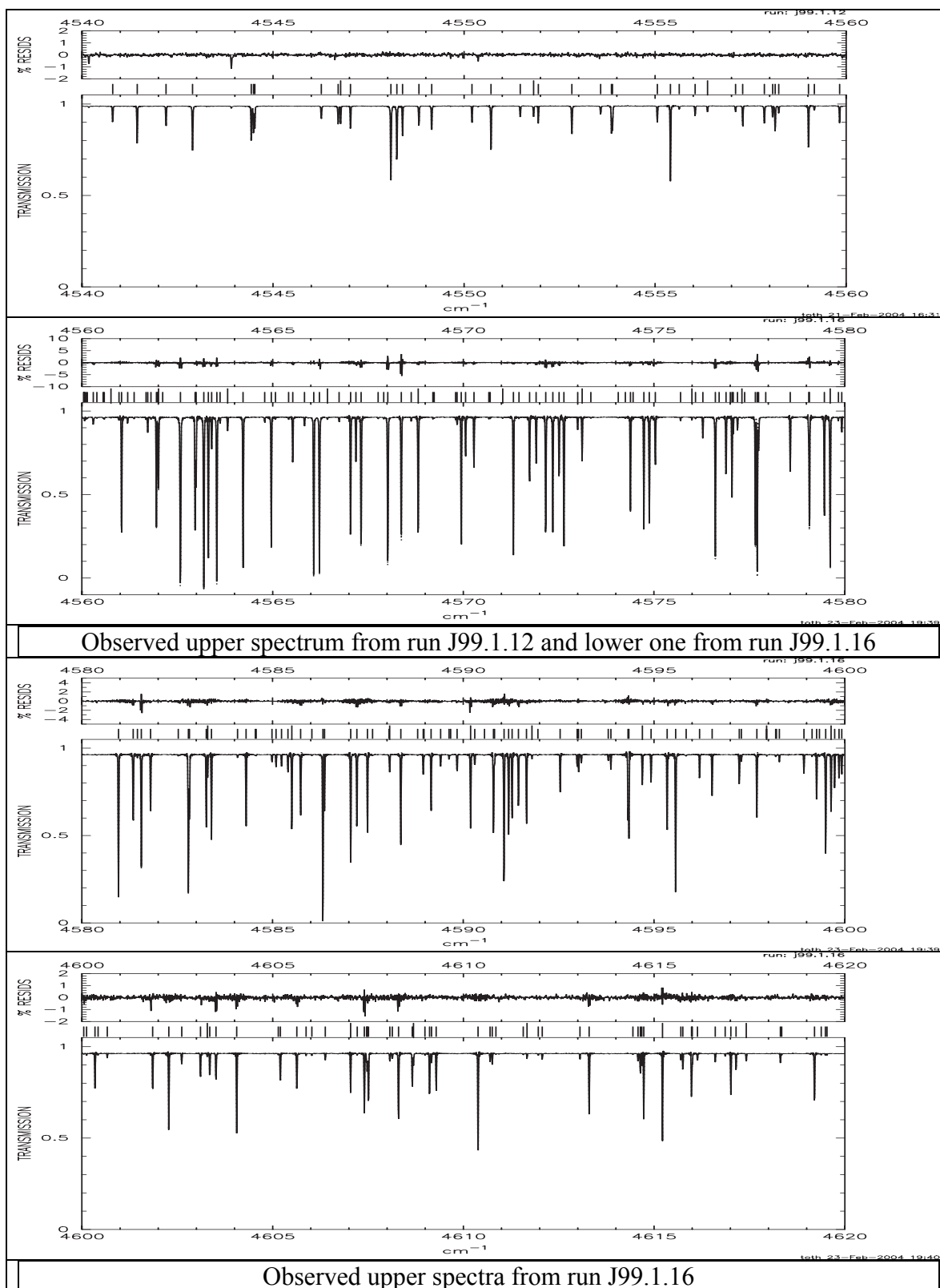


Figure F7. Observed and fitted spectra of  $\text{NH}_3$



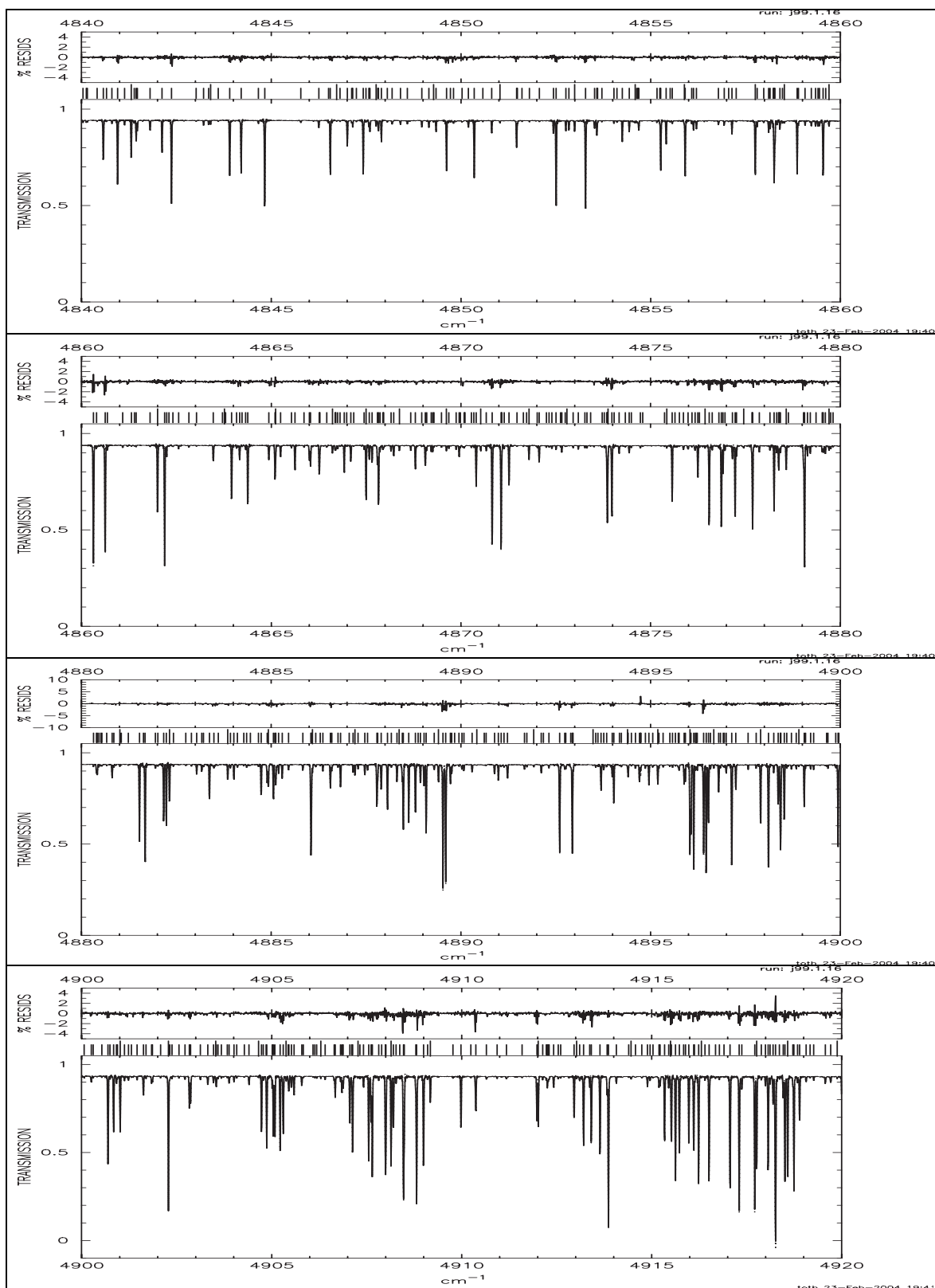


Figure F8. Observed and fitted spectra of NH<sub>3</sub>. Observed spectra from run J99.1.16

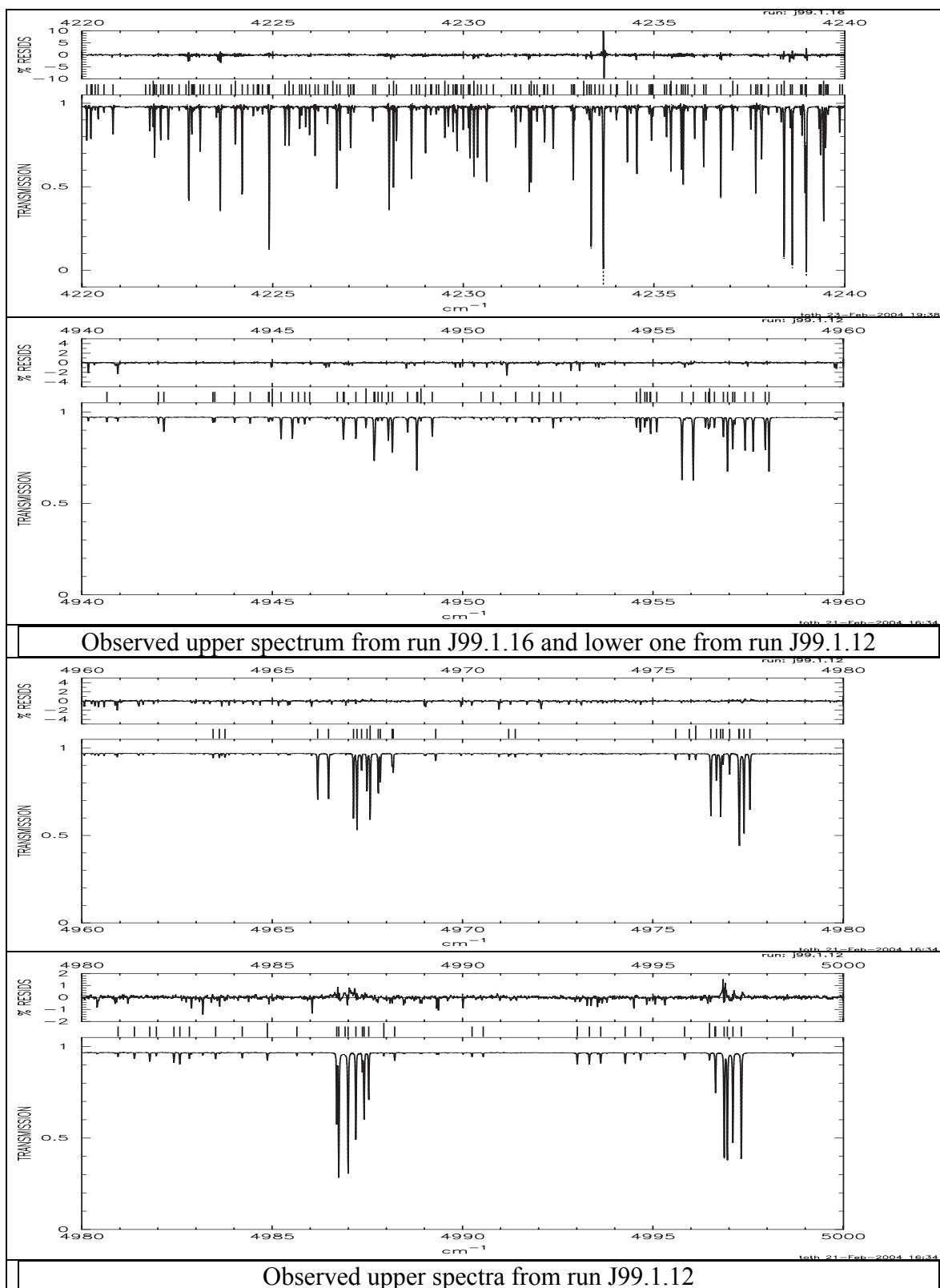


Figure F9. Observed and fitted spectra of  $\text{NH}_3$

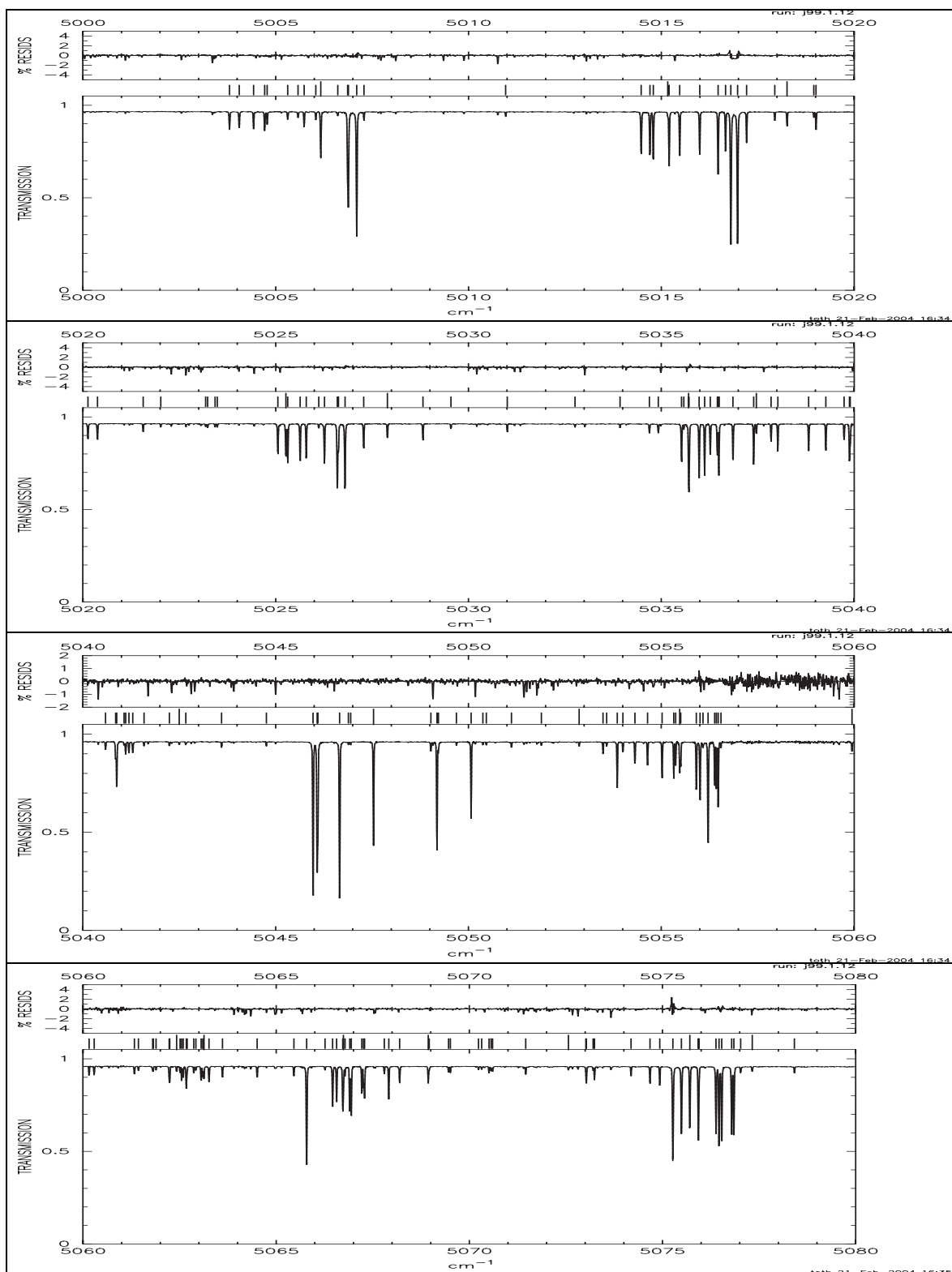


Figure F10. Observed and fitted spectra of NH<sub>3</sub>. Observed spectra from run J99.1.12

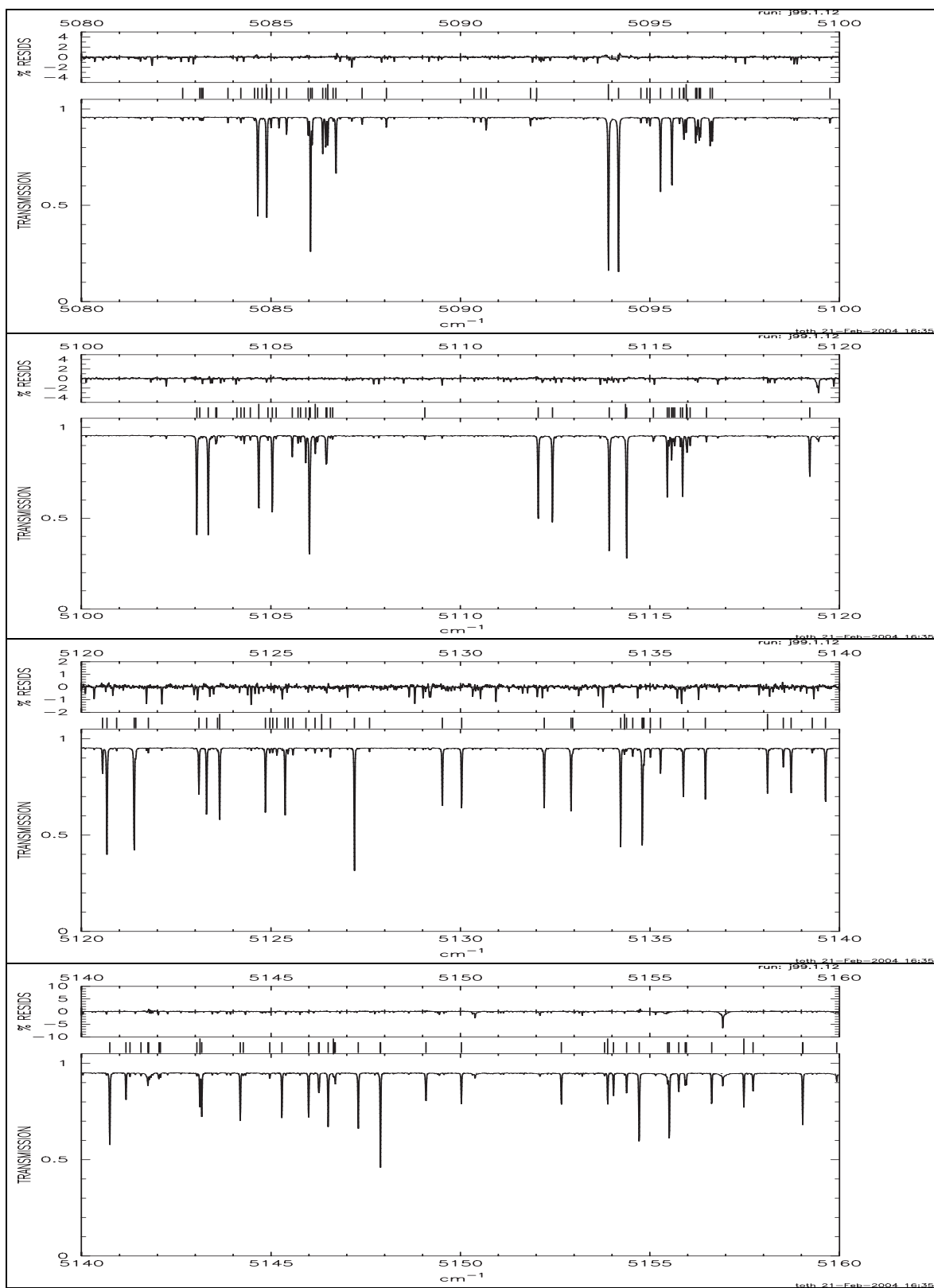


Figure F11. Observed and fitted spectra of  $\text{NH}_3$ . Observed spectra from run J99.1.12

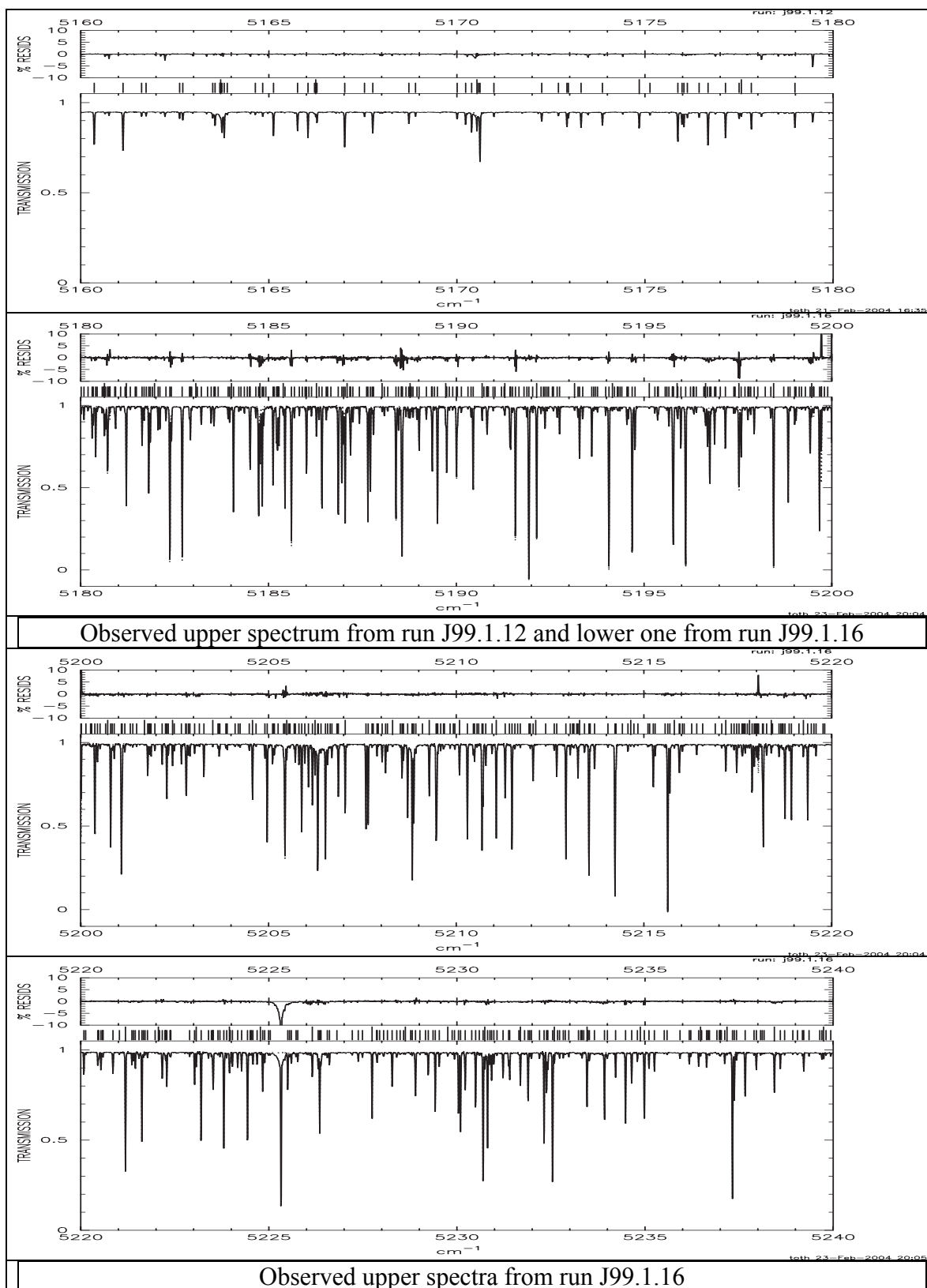


Figure F12. Observed and fitted spectra of  $\text{NH}_3$

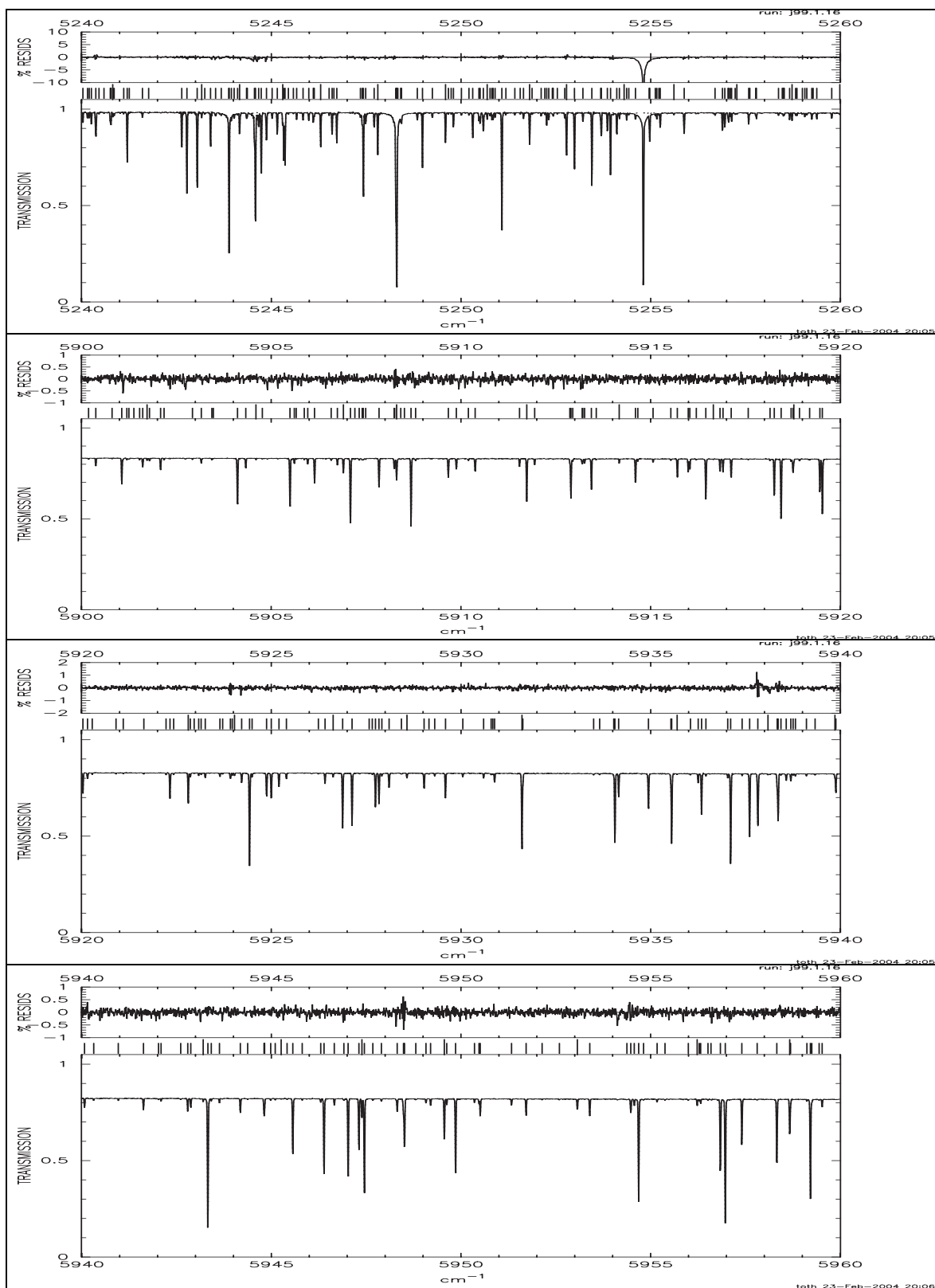


Figure F13. Observed and fitted spectra of  $\text{NH}_3$ . Observed spectra from run J99.1.16

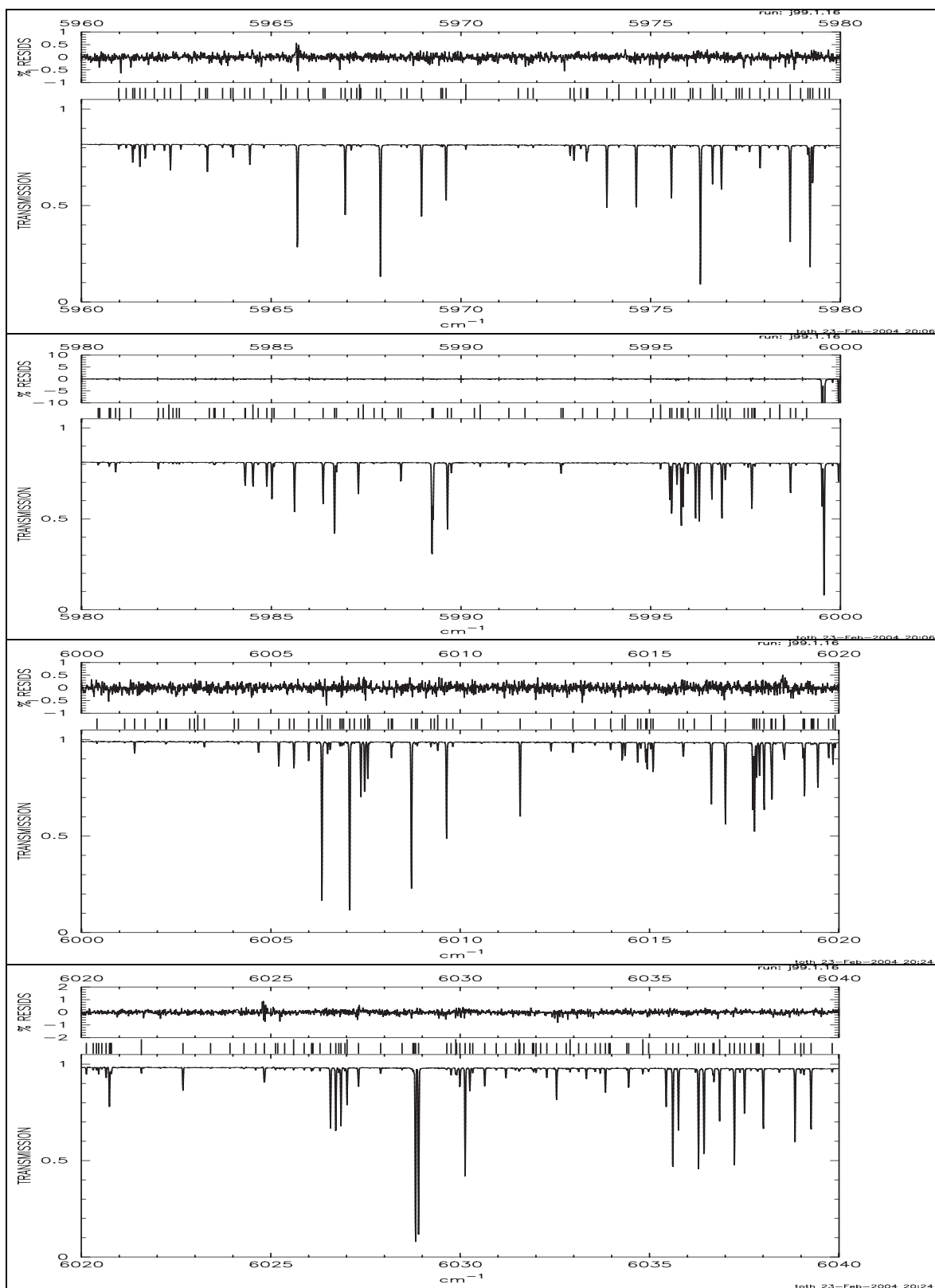


Figure F14. Observed and fitted spectra of NH<sub>3</sub>. Observed spectra from run J99.1.16

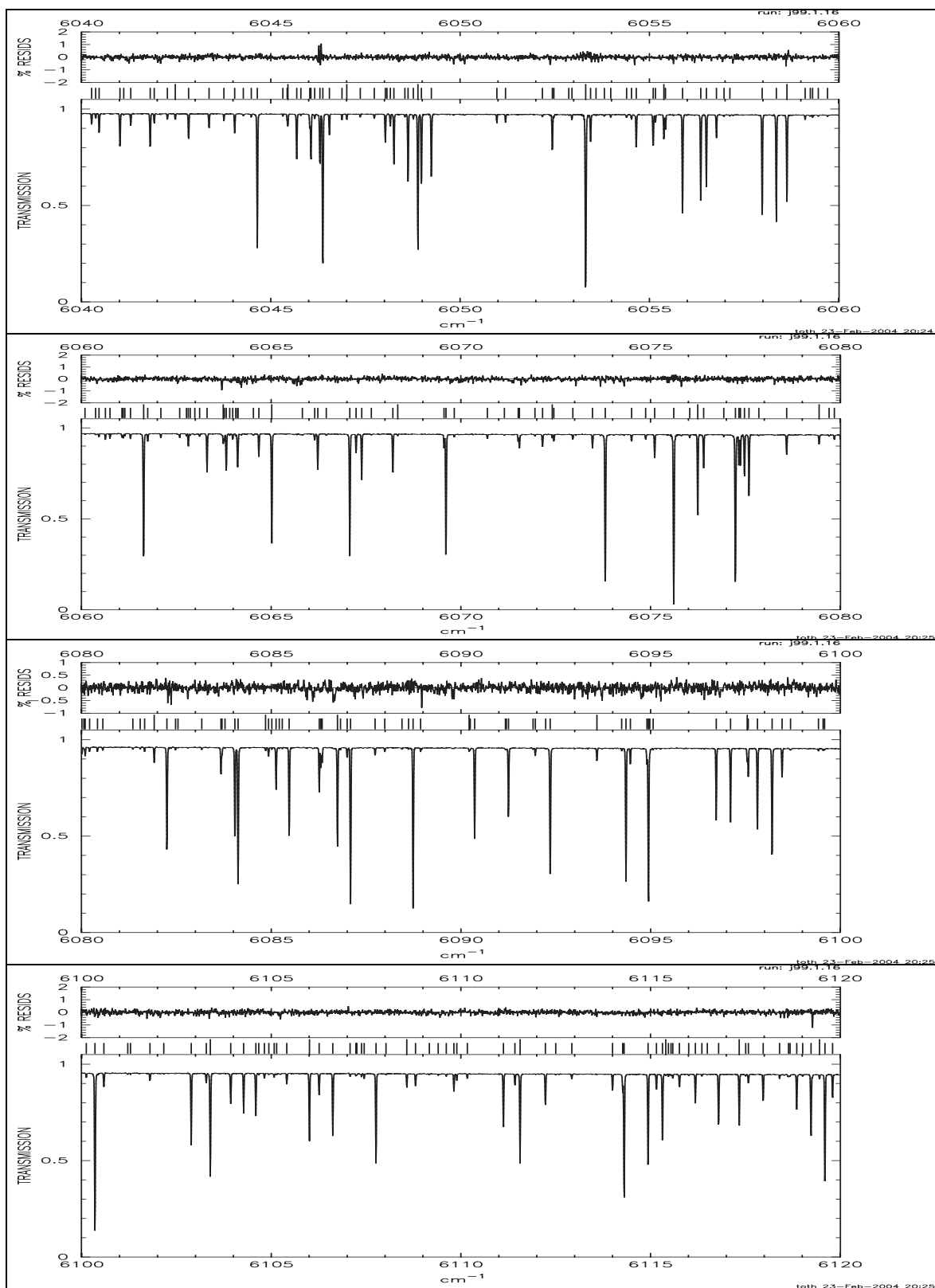


Figure F15. Observed and fitted spectra of  $\text{NH}_3$ . Observed spectra from run J99.1.16



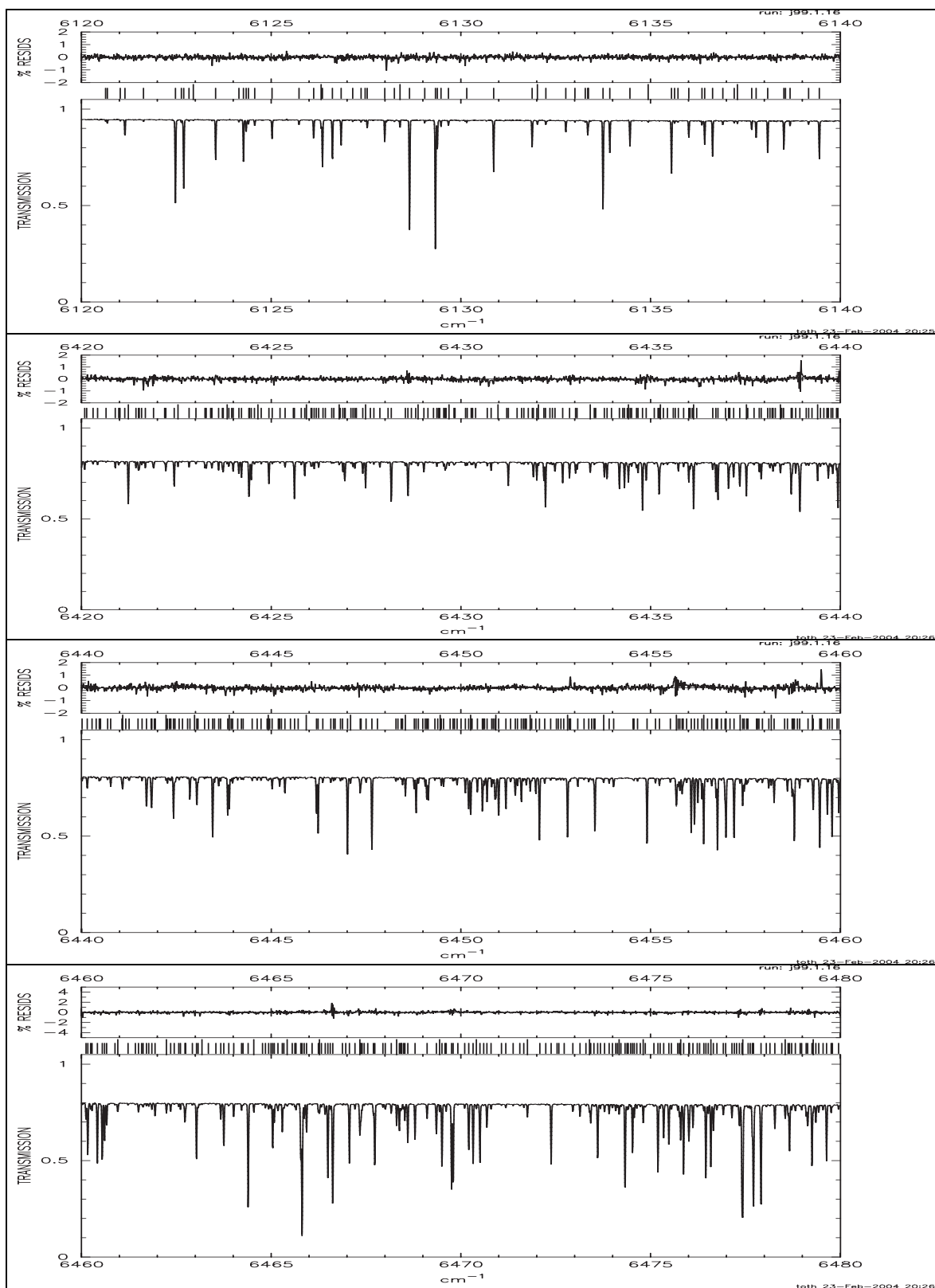


Figure F16. Observed and fitted spectra of NH<sub>3</sub>. Observed spectra from run J99.1.16

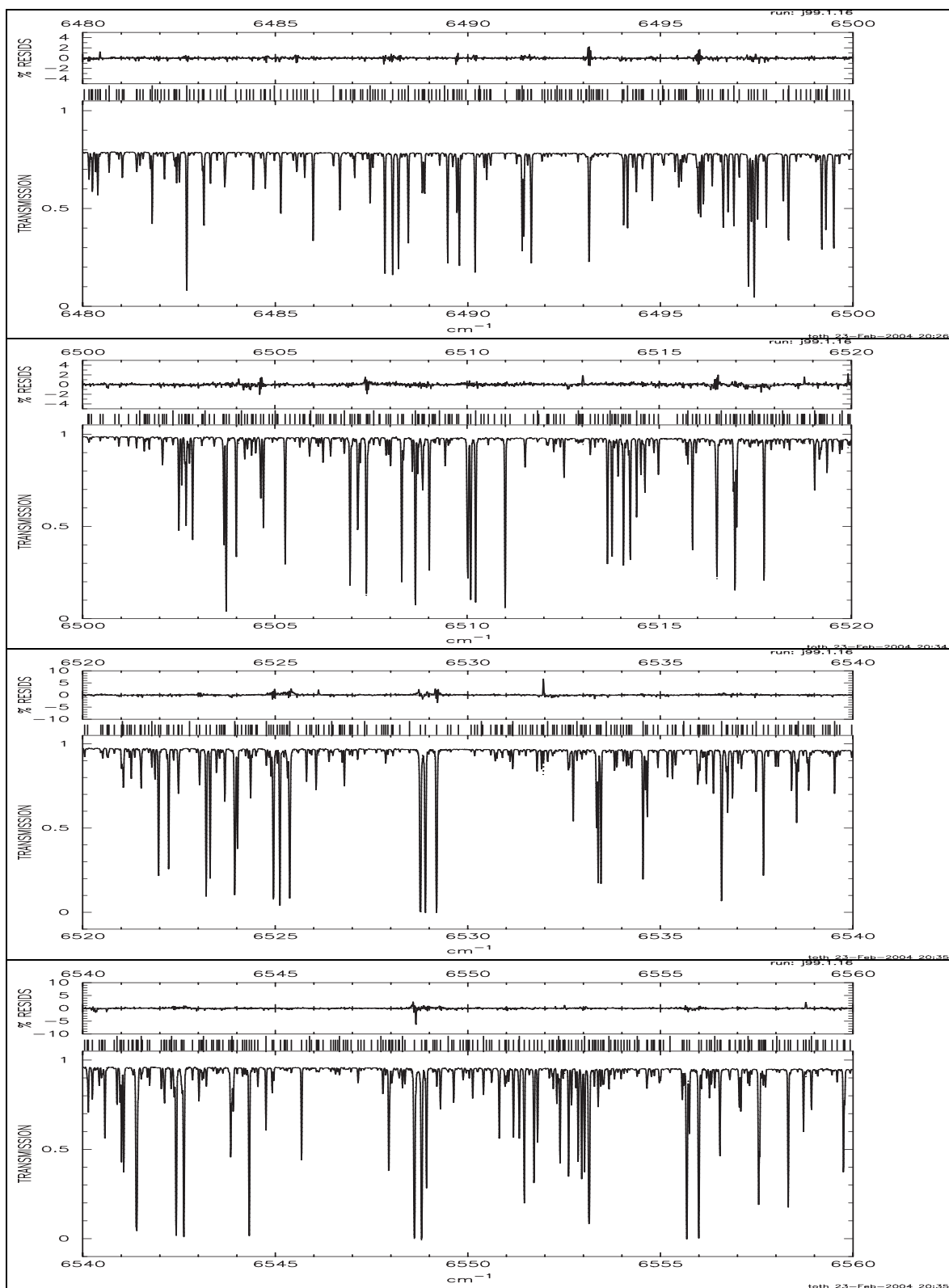


Figure F17. Observed and fitted spectra of  $\text{NH}_3$ . Observed spectra from run J99.1.16

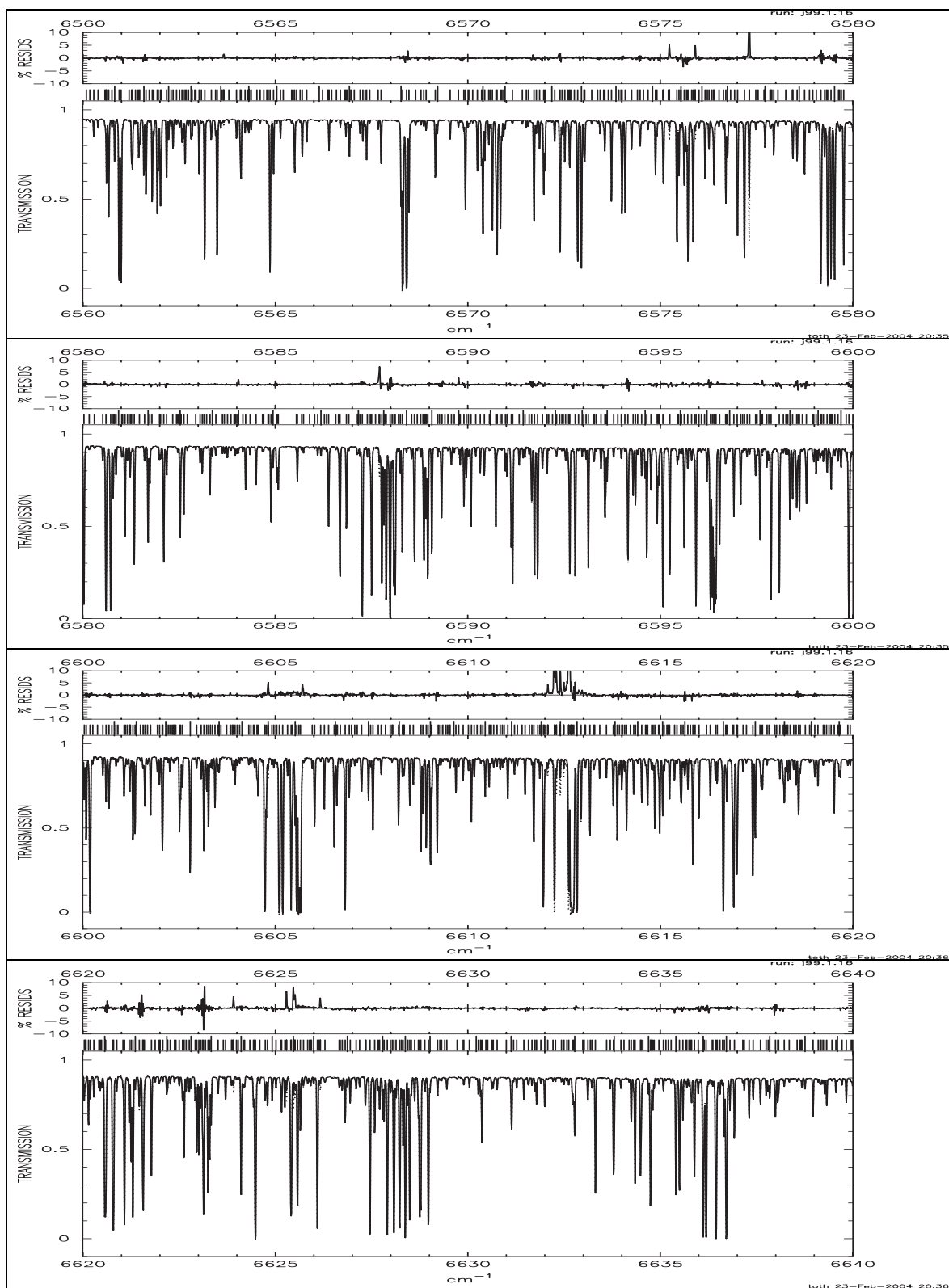


Figure F18. Observed and fitted spectra of NH<sub>3</sub>. Observed spectra from run J99.1.16

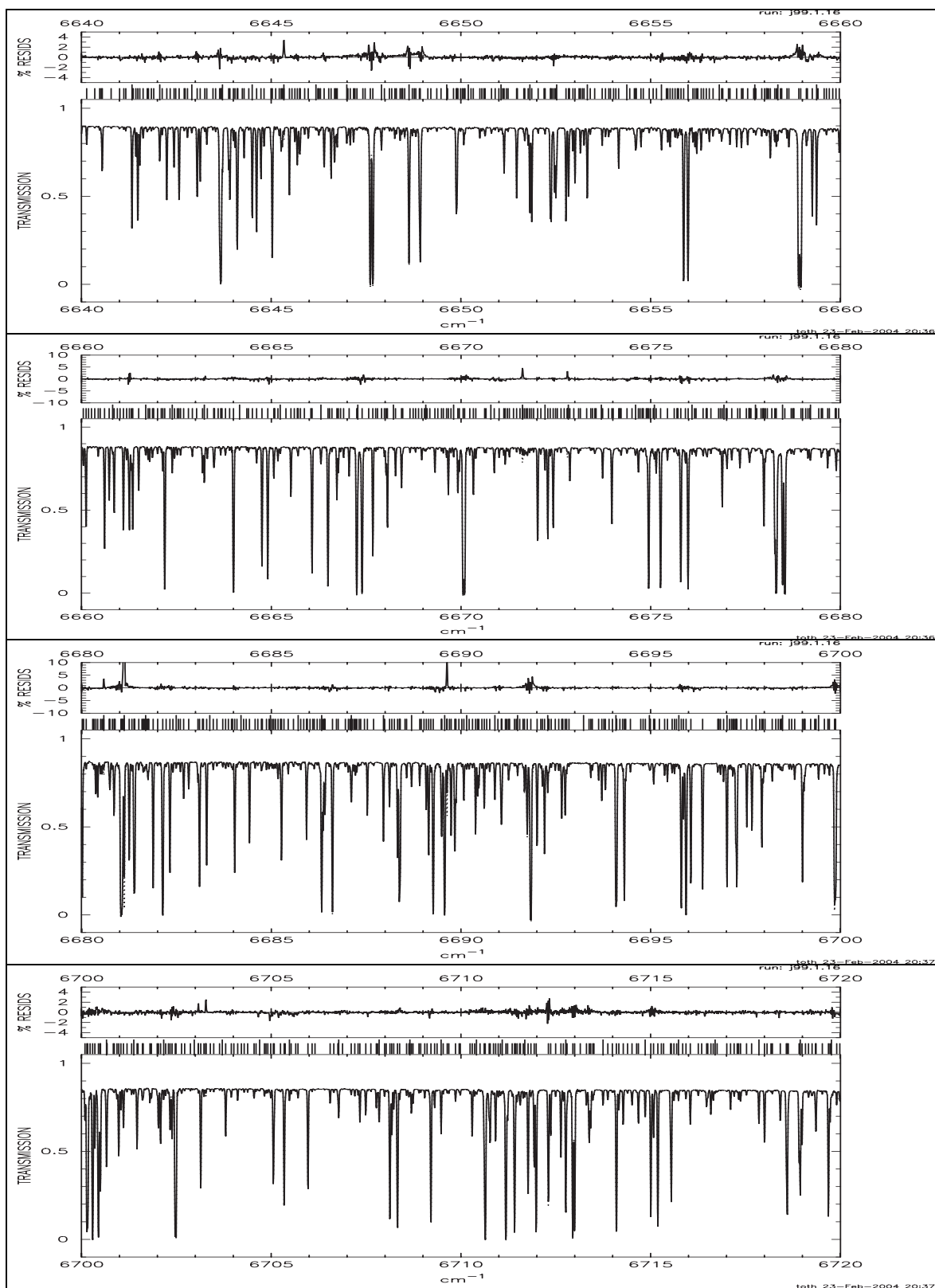


Figure F19. Observed and fitted spectra of NH<sub>3</sub>. Observed spectra from run J99.1.16

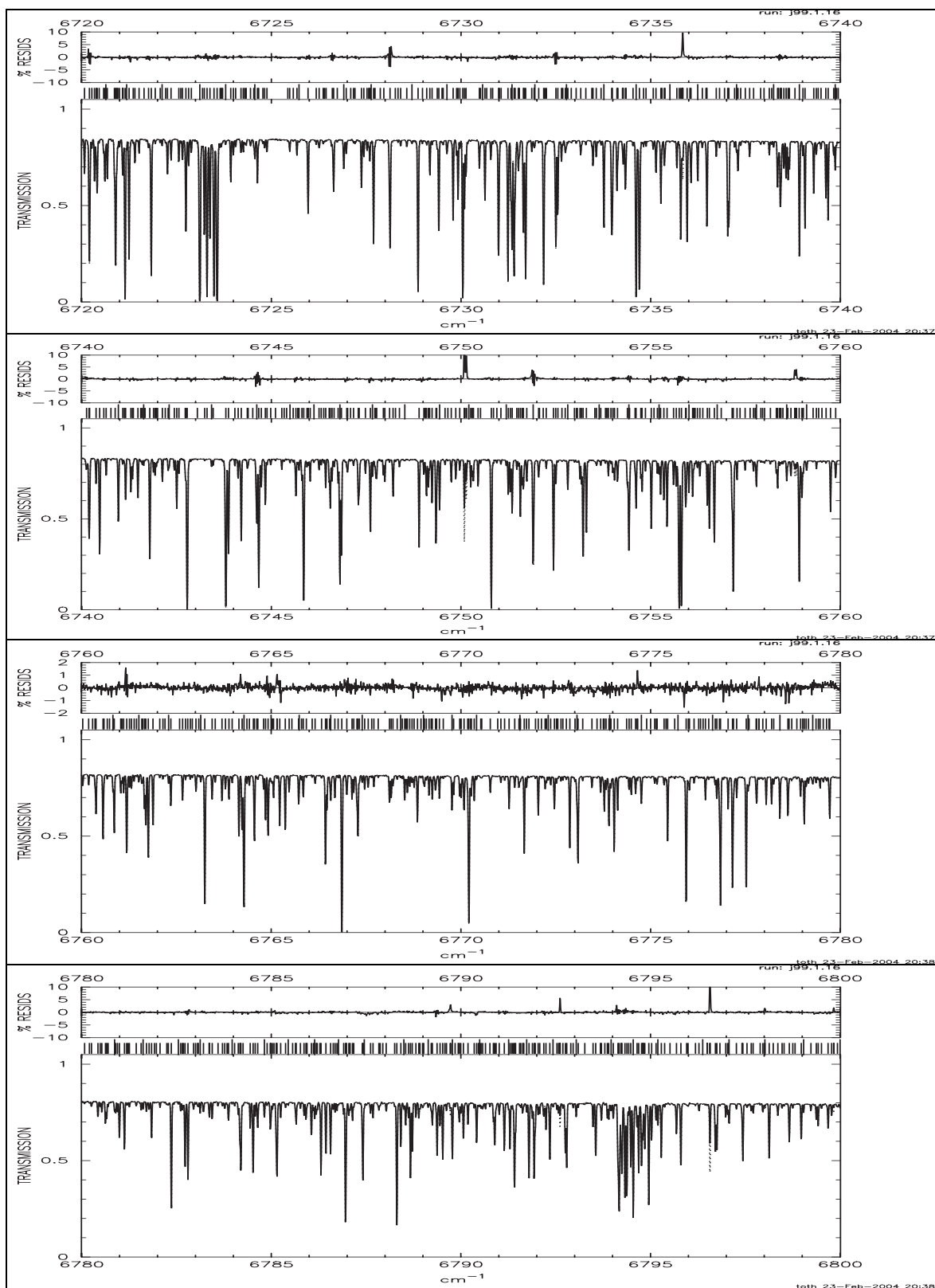


Figure F20. Observed and fitted spectra of NH<sub>3</sub>. Observed spectra from run J99.1.16