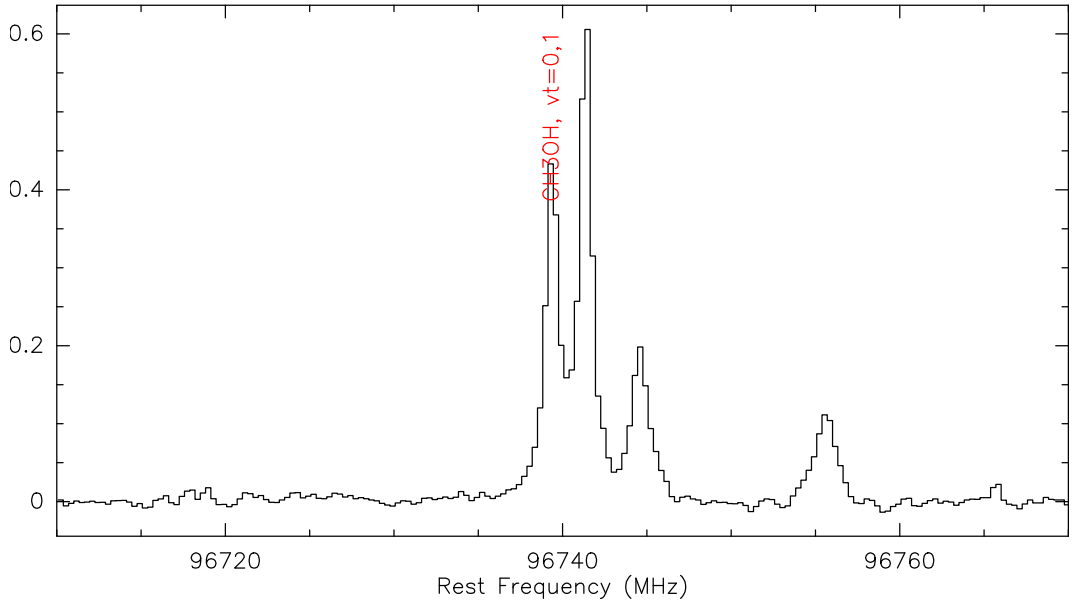
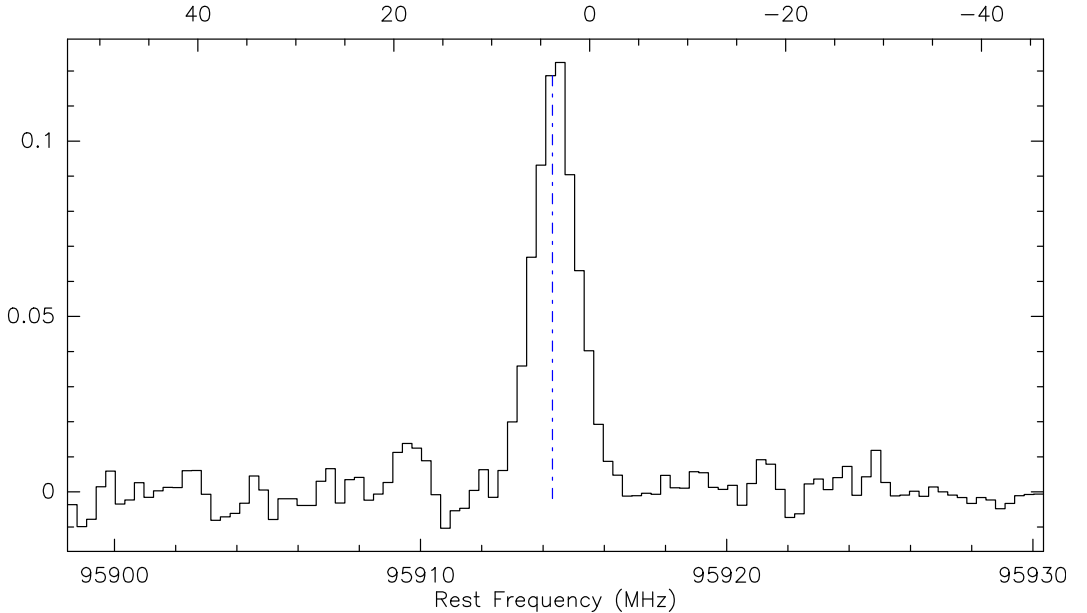


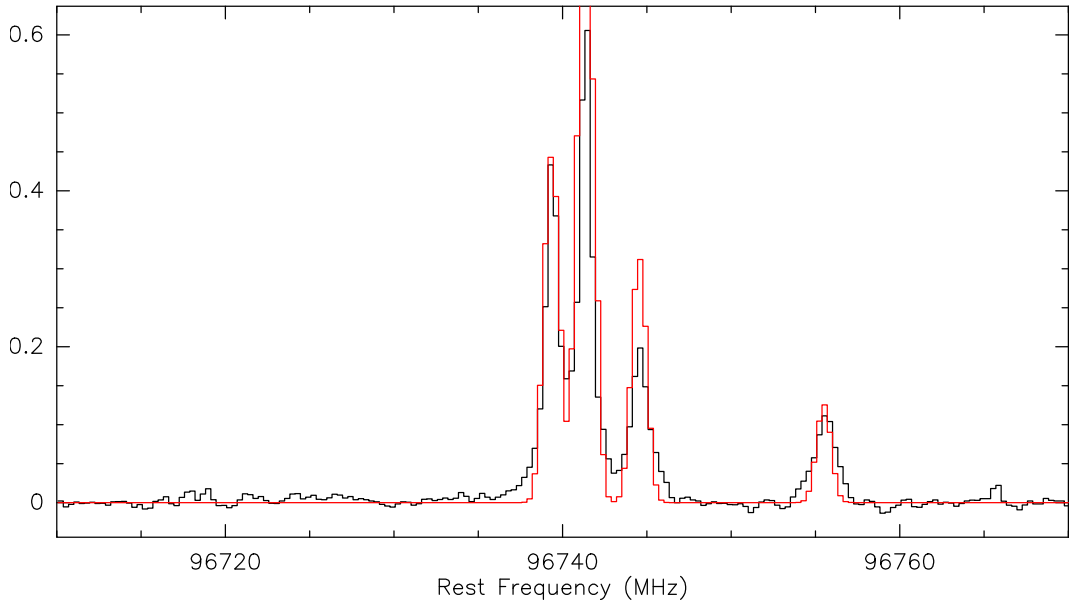
1;1 IRAS16293 Unknown 30M-V01- O:12-DEC-2013 R:12-DEC-2013
RA: 16:32:22.59 DEC: -24:28:33.0 Eq 2000.0 Rad. 0.0° Offs: +0.0 +0.0
Unknown tau: 0.075 Tsys: 146. Time: 115.8hr El: 0.0
N: 194 I0: -52667.6 V0: 3.800 Dv: -1.167 LSR
F0: 80250.0000 Df: 0.3125 Fi: 83246.0159



1;1 IRAS16293 Unknown 30M-V01- O:12-DEC-2013 R:12-DEC-2013
RA: 16:32:22.59 DEC: -24:28:33.0 Eq 2000.0 Rad. 0.0° Offs: +0.0 +0.0
Unknown tau: 0.075 Tsys: 146. Time: 115.8hr El: 0.0
N: 102 I0: 51.1950 V0: 3.800 Dv: -0.9768 LSR
F0: 95914.3090 Df: 0.3125 Fi: 67581.7069



1;1 IRAS16293 Unknown 30M-V01- O:12-DEC-2013 R:12-DEC-2013
RA: 16:32:22.59 DEC: -24:28:33.0 Eq 2000.0 Rad. 0.0° Offs: +0.0 +0.0
Unknown tau: 0.075 Tsys: 146. Time: 115.8hr El: 0.0
N: 32000 I0: -31196.6 V0: 3.800 Dv: -1.167 LSR
F0: 80250.0000 Df: 0.3125 Fi: 83246.0159





$$T_{\rm B}(\nu) = J_\nu(T_{\rm ex})(1 - e^{-\tau_\nu}) + T_{{\rm cont},\,\nu} e^{-\tau_\nu} + J_\nu(T_{\rm cmb}) e^{-\tau_\nu} - J_\nu(T_{\rm cmb}) \ ,$$







$$J_\nu(T) = \frac{h\nu/k}{e^{h\nu/kT}-1}$$

h

k

$$T_{\mathrm{B}}(\nu) = T_{\mathrm{cont},\,\nu} + \left(J_\nu(T_{\mathrm{ex}}) - J_\nu(T_{\mathrm{cmb}}) - T_{\mathrm{cont},\,\nu}\right)\left(1 - e^{-\tau_\nu}\right)$$

$$T_{\mathrm{B}}(\nu) = T_{\mathrm{cont},\,\nu} + \eta \left(J_\nu(T_{\mathrm{ex}}) - J_\nu(T_{\mathrm{cmb}}) - T_{\mathrm{cont},\,\nu} \right) \left(1 - e^{-\tau_\nu} \right)$$

$$T_{\mathrm{B}}^{\mathrm{mg}}(\nu) = T_{\mathrm{cont},\,\nu} + \sum_{i=1}^{N_1} \eta_i \left(J_\nu(T_{\mathrm{ex},i}) - J_\nu(T_{\mathrm{cmb}}) - T_{\mathrm{cont},\,\nu} \right) \left(1 - e^{-\tau_{\nu,i}} \right)$$

N_2

$$T_{\mathrm{B}}^{j}(\nu) = T_{\mathrm{B}}^{j-1}(\nu) e^{-\tau_{\nu,j}} + \eta_j \left(J_\nu(T_{\mathrm{ex},j}) - J_\nu(T_{\mathrm{cmb}}) \right) \left(1 - e^{-\tau_{\nu,j}} \right)$$

$$T_{\mathrm{B}}^{0}(\nu) = T_{\mathrm{B}}^{\mathrm{mg}}(\nu)$$

η_j

$$T_{\mathrm{B}}(\nu) = T_{\mathrm{B}}^{N_2}(\nu) - T_{\mathrm{cont},\,\nu}$$

$$T_{\rm B}(\nu) = T_{\rm B}^{\rm mg}(\nu) - T_{{\rm cont},\,\nu}$$

$$T_{\mathrm{B}}(\nu) = T_{\mathrm{B}}^{N_2}(\nu)$$

$$T_{\mathrm{B}}(\nu) = T_{\mathrm{B}}^{\mathrm{mg}}(\nu)$$