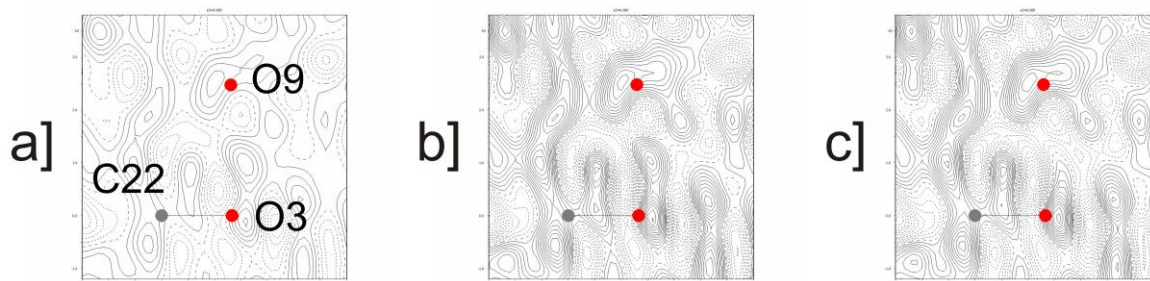


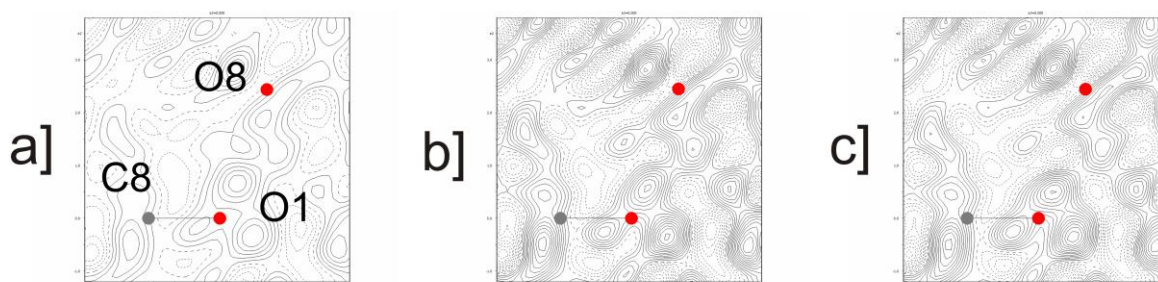
Deposited material S1

The sections of the difference electron density maps in the regions of the hydrogen-bonded atoms in the title structures. (The structures are indicated by the refcodes

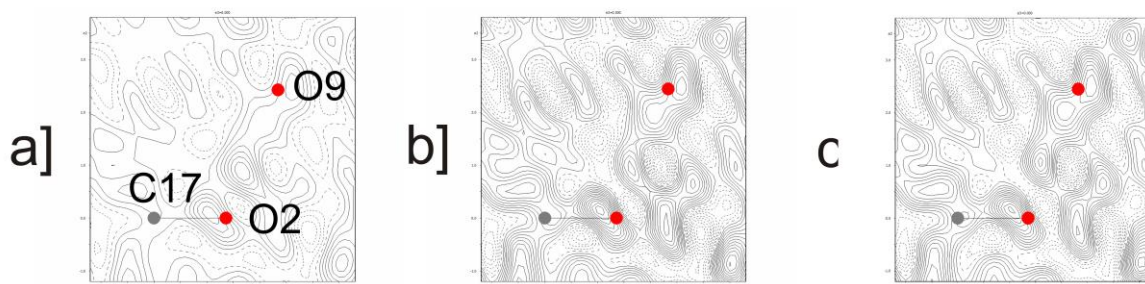
DUJZAK, the atom H3b



DUJZAK, the atom H1aa

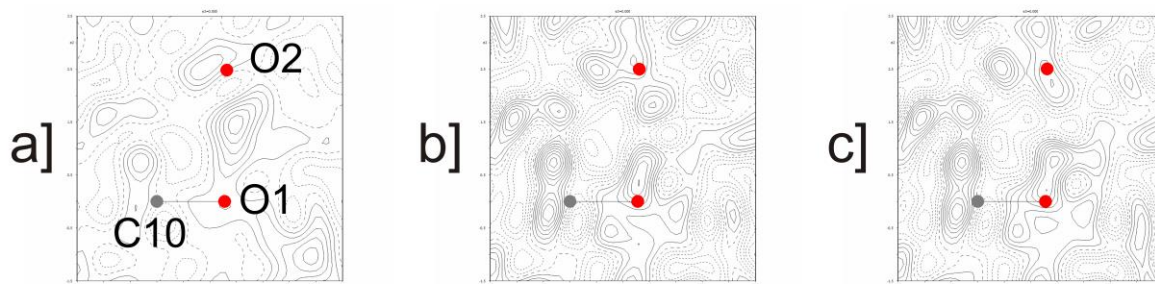


DUJZAK, the atom H2aa

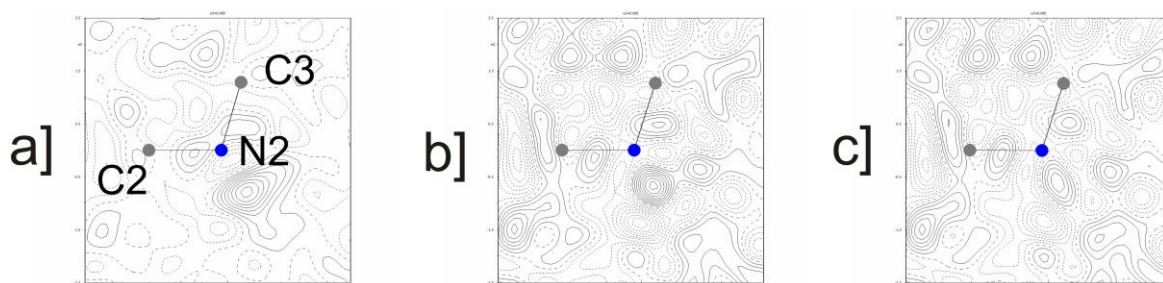


a) The difference electron-density maps without the bridging hydrogen H3b as well as the hydrogens H1aa and H2aa. b), c) The residual electron-density maps with the electron density belonging to the respective hydrogens. In Figs. b), the hydrogens were refined with the fixed positional parameters and while their displacement parameters were refined freely. In Figs. c), the positional parameters of the bridging hydrogens were refined freely while their displacement parameters were refined applying the constraint $U_{\text{iso}}(\text{H})=1.5 U_{\text{eq}}(\text{O}_{\text{carrier}})$. For a) and b), c), the contours are in 0.05 and 0.02 $\text{e}\text{\AA}^{-3}$ increments, respectively; positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (JANA2006; Petříček *et al.*, 2014).

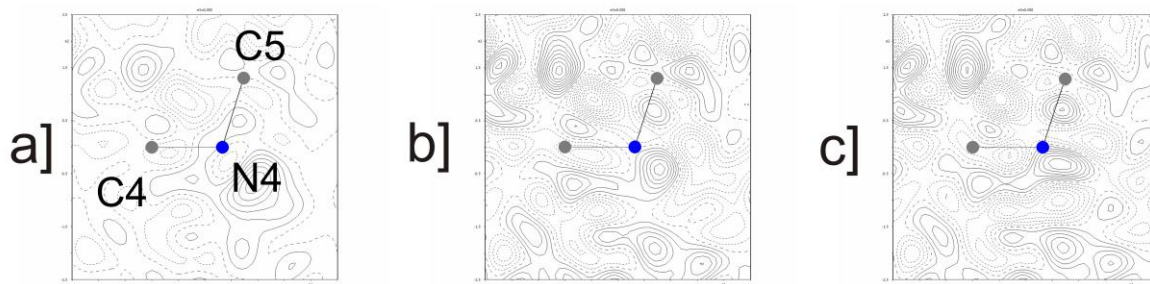
JEVNAA, the atom H1a



JEVNAA, the atom H2a

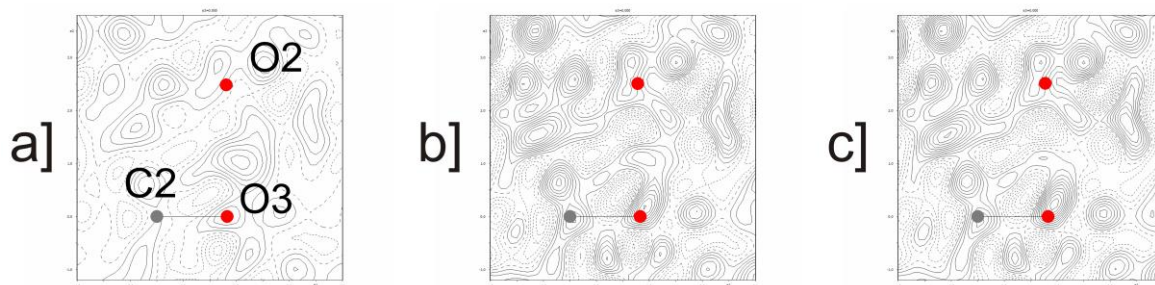


JEVNAA, the atom H4a

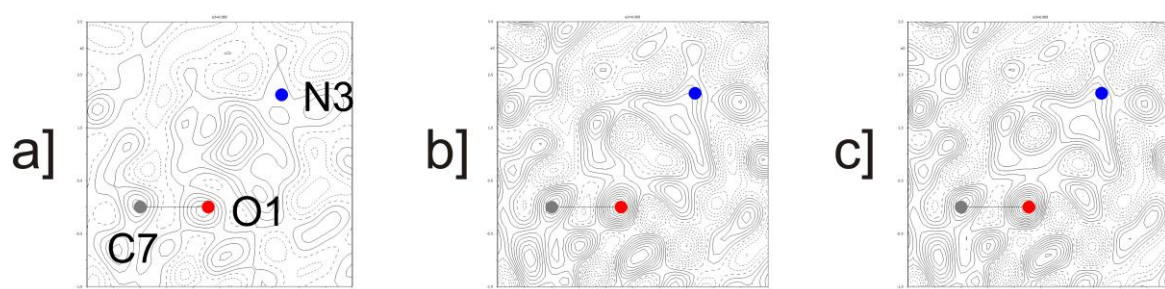


a) The difference electron-density maps without the bridging hydrogen H1a and the secondary amine hydrogens H2a and H4a. b), c) The residual electron-density maps with the electron density belonging to the respective hydrogens. In Figs. b), the hydrogens were refined with the fixed positional parameters while their displacement parameters were refined freely. In Figs. c), the positional parameters of the bridging hydrogens were refined freely while their displacement parameters were refined applying the constraints $U_{\text{iso}}(\text{H})=1.5 U_{\text{eq}}(\text{O}_{\text{carrier}})$ or $U_{\text{iso}}(\text{H})=1.2 U_{\text{eq}}(\text{N}_{\text{carrier}})$. For a) and b), c), the contours are in 0.05 and 0.02 $\text{e}\text{\AA}^{-3}$ increments, respectively; positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (*JANA2006*; Petříček *et al.*, 2014).

LUDFUL, the atom H3a

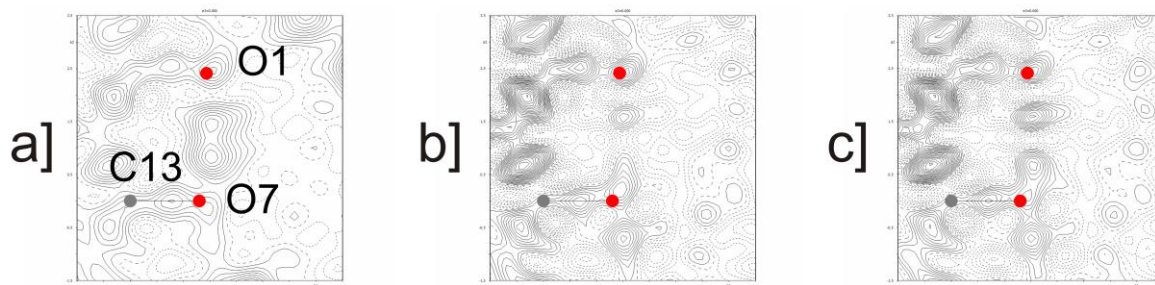


LUDFUL, the atom H1a

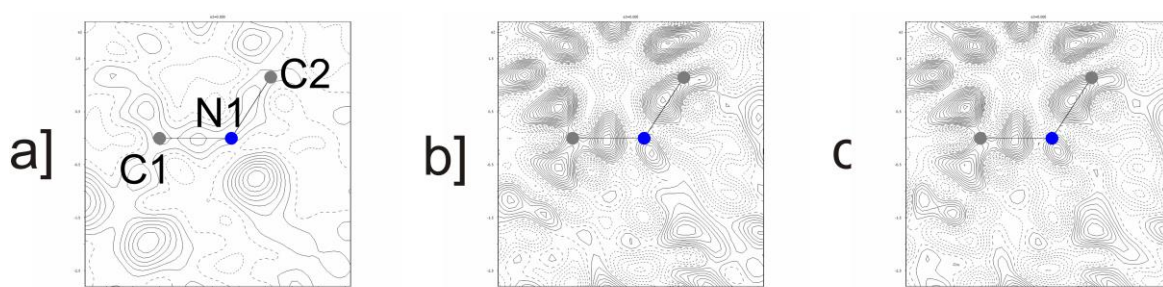


a) The difference electron-density maps without the bridging hydrogen H3a and the hydrogen H1a. b), c) The residual electron-density maps with the electron density belonging to the respective hydrogens. In Figs. b), the bridging hydrogens were refined with the fixed positional parameters while their displacement parameters were refined. In Figs. c), the positional parameters of the bridging hydrogens were refined freely while their displacement parameters were refined applying the constraints $U_{\text{iso}}(\text{H3a})=1.5 U_{\text{eq}}(\text{O3})$ and $U_{\text{iso}}(\text{H1a})=1.5 U_{\text{eq}}(\text{O1})$. For a) and b), c), the contours are in 0.05 and 0.02 $\text{e}\text{\AA}^{-3}$ increments, respectively; positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (*JANA2006*; Petříček *et al.*, 2014).

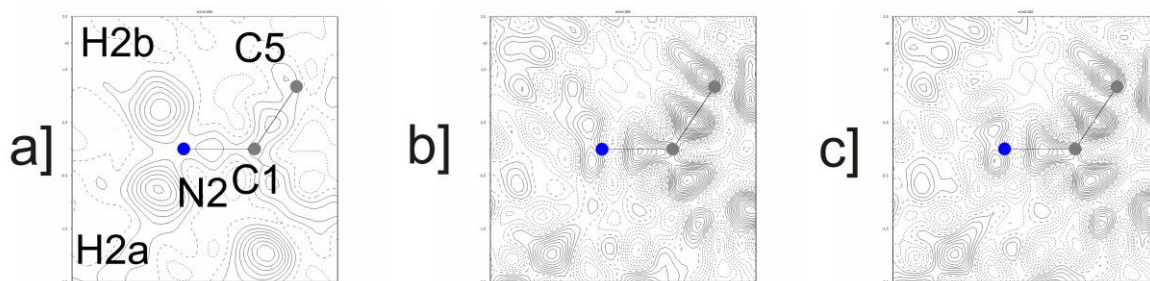
NUQVEB, the atoms H1O1-H1O7



NUQVEB, the atom H1

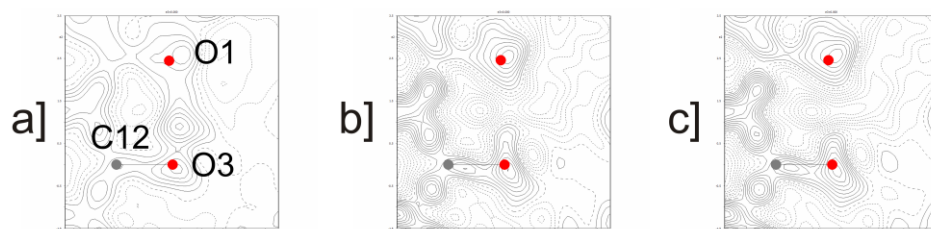


NUQVEB, the atoms H2a and H2b

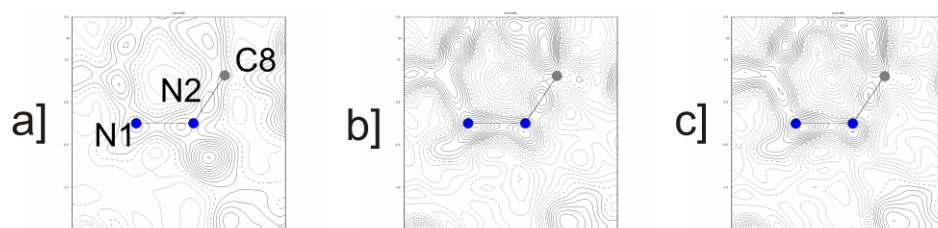


a) The difference electron-density maps without the bridging hydrogens H1O1, H1O7, the secondary amine hydrogen H1 and the primary amine hydrogens H2a and H2b. b), c) The residual electron-density maps with the electron density belonging to the respective hydrogens. In Figs. b), the hydrogens were refined with the fixed positional parameters while their displacement parameters were refined freely. In Fig. c), the positional parameters of the hydrogens were refined freely while their respective displacement parameters were constrained: $U_{\text{iso}}(\text{H})=1.5 U_{\text{eq}}(\text{O}_{\text{carrier}})$ or $U_{\text{iso}}(\text{H})=1.2 U_{\text{eq}}(\text{N}_{\text{carrier}})$. For the atoms H1O1, H1O7, the contours are in 0.05 and 0.02 $\text{e}\text{\AA}^{-3}$ increments in Figures a) and b), c), respectively; for the atoms H1 and H2a, H2b, the contours are in 0.10 and 0.02 $\text{e}\text{\AA}^{-3}$ increments in Figures a) and b), c), respectively. Positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (JANA2006; Petříček *et al.*, 2014).

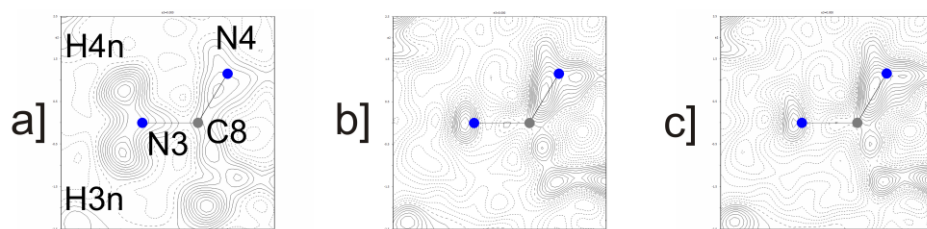
QIQJAD, the atom H3o



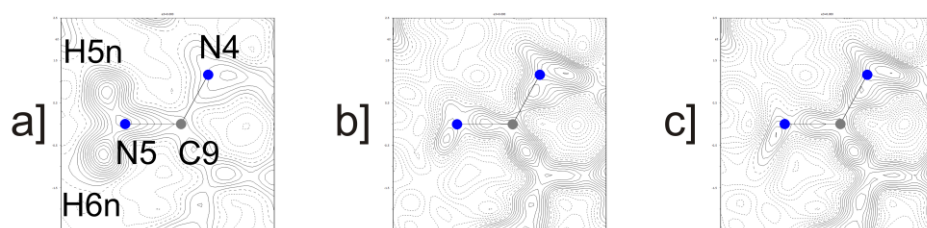
QIQJAD, the atom H2n



QIQJAD, the atoms H3n and H4n

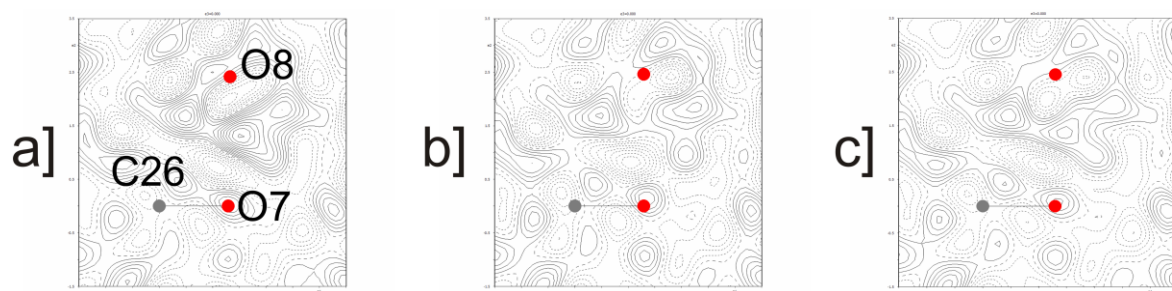


QIQJAD, the atoms H5n and H6n



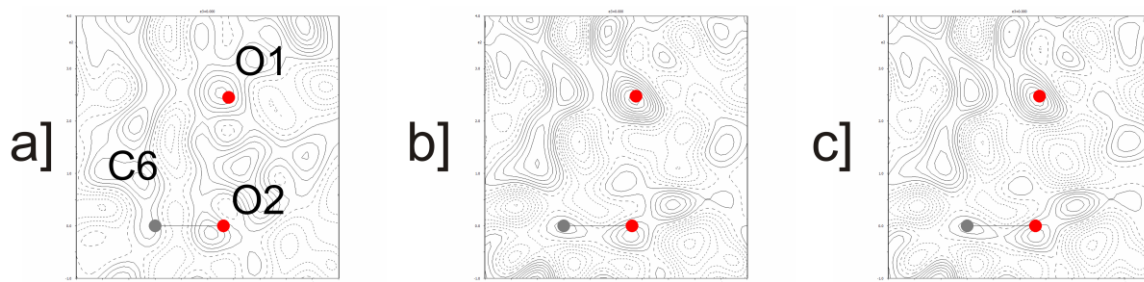
a) The difference electron-density maps without the bridging hydrogen H3o, the secondary amine hydrogen H2n and the primary hydrogens H3n, H4n, H5n and H6n. b), c] The residual electron-density maps with the electron density belonging to the respective hydrogens. In Figs. b), the hydrogens were refined with the fixed positional parameters while their displacement parameters were refined freely. In Figs. c], the positional parameters of the bridging hydrogens were refined freely while their displacement parameters were refined applying the constraints $U_{\text{iso}}(\text{H})=1.5 U_{\text{eq}}(\text{O}_{\text{carrier}})$ or $U_{\text{iso}}(\text{H})=1.2 U_{\text{eq}}(\text{N}_{\text{carrier}})$. For Figures a] and b), c], the contours are in 0.05 and $0.02 \text{ e}\text{\AA}^{-3}$ increments, respectively. Positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (JANA2006; Petříček et al., 2014).

SAFGUD, the atom H7

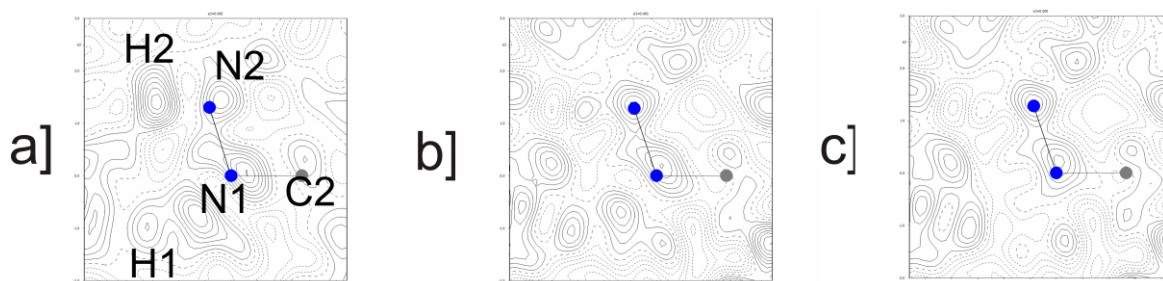


a] The difference electron-density map without the bridging hydrogen H7. The residual electron-density map with the electron density belonging to the respective bridging hydrogen. In Fig. b], the bridging hydrogen was refined with the fixed positional parameters while its displacement parameter was refined freely. In Fig. c], the positional parameters of the bridging hydrogen were refined freely while its displacement parameter was constrained as $U_{\text{iso}}(\text{H7})=1.5 U_{\text{eq}}(\text{O7})$. For a] and b], c], the contours are in 0.05 increments; positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (*JANA2006*; Petříček *et al.*, 2014).

SEDKET, the atom H2a

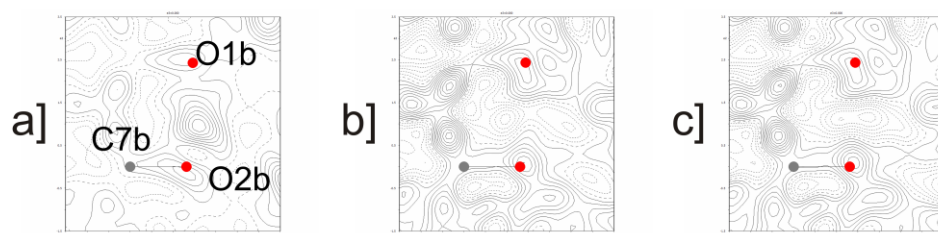


SEDKET, the atoms H1 and H2

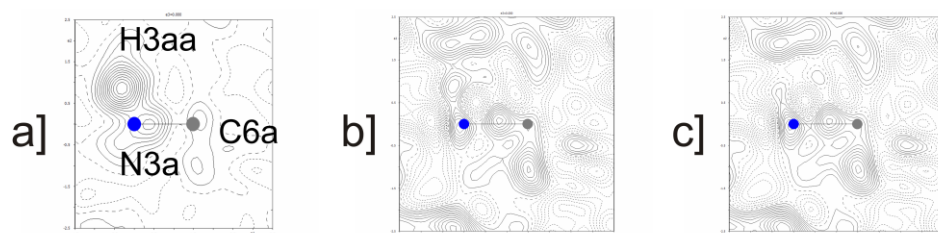


a) The difference electron-density maps without the bridging hydrogen (H2a) and the secondary amine hydrogens H1 and H2. b), c) The residual electron-density maps with the respective hydrogens included into the model. In Figs. b), the positional parameters of the hydrogens were fixed while their displacement parameters were refined freely. In Figs. c), the positional parameters of the hydrogens were refined freely while their displacement parameters were constrained: $U_{\text{iso}}(\text{H})=1.5 U_{\text{eq}}(\text{O}_{\text{carrier}})$ or $U_{\text{iso}}(\text{H})=1.2 U_{\text{eq}}(\text{N}_{\text{carrier}})$. For Figures a) and b), c) the contours are in 0.02 and 0.01 $\text{e}\text{\AA}^{-3}$ increments, respectively. Positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (JANA2006; Petříček *et al.*, 2014).

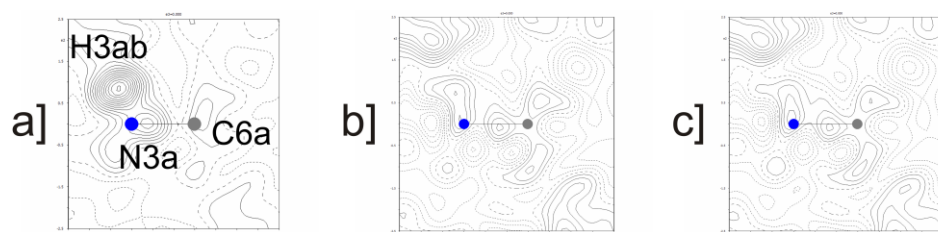
TIYZIM, the atom H2b



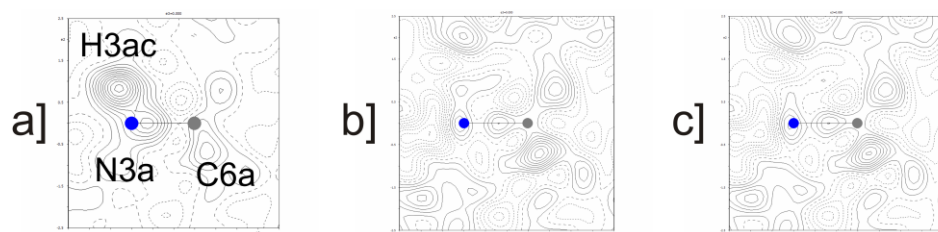
TIYZIM, the atom H3aa



TIYZIM, the atom H3ab

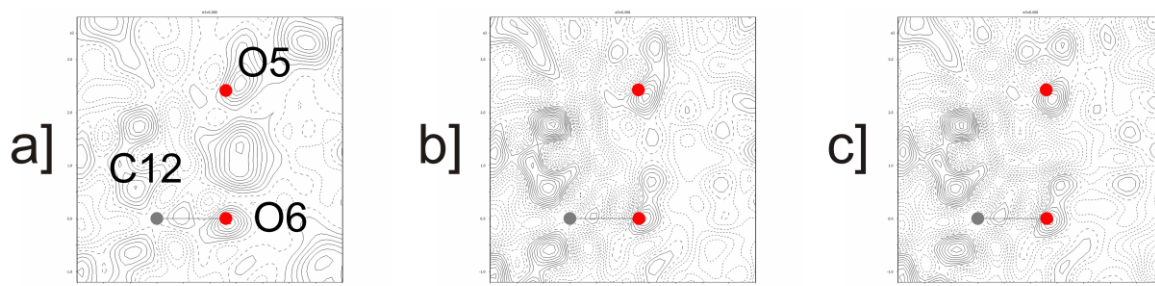


TIYZIM, the atom H3ac

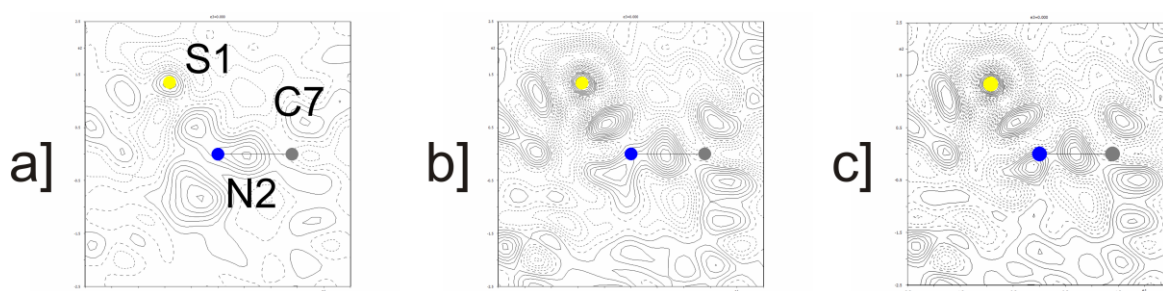


a) The difference electron-density maps without the bridging hydrogen H2b and the ammonium hydrogens (H3aa, H3ab and H3ac). b), c) The residual electron-density maps with the respective hydrogens included into the model. In Figs. b), the positional parameters of the hydrogens were fixed while their displacement parameters were refined freely. c) In Figs. c), the positional parameters of the hydrogens were refined freely while their displacement parameters were constrained: $U_{\text{iso}}(\text{H})=1.5 U_{\text{eq}}(\text{O}_{\text{carrier}})$ or $U_{\text{iso}}(\text{H})=1.2 U_{\text{eq}}(\text{N}_{\text{carrier}})$. For Figs. a), the contours are in $0.05 \text{ e}\text{\AA}^{-3}$ increments. For Figs. b) and c) the contours are in 0.02 increments for the atoms H2b, H3ab as well as for H3ac and in $0.01 \text{ e}\text{\AA}^{-3}$ increments for the atoms H3aa. Positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (JANA2006; Petříček *et al.*, 2014).

TUJPEV, the atom H6a

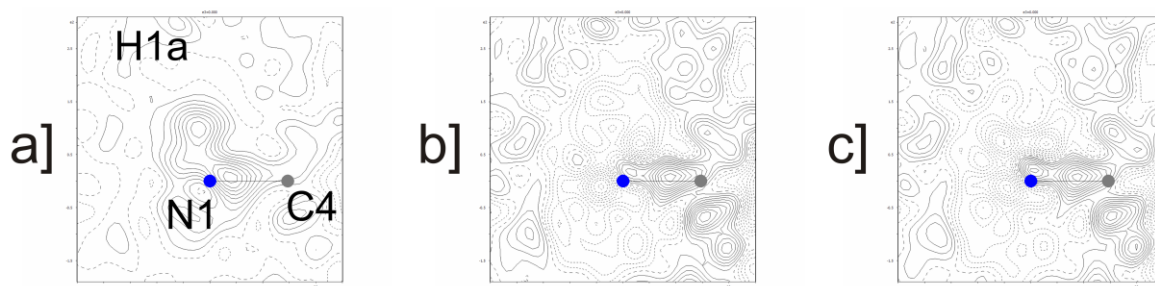


TUJPEV, the atom H2a

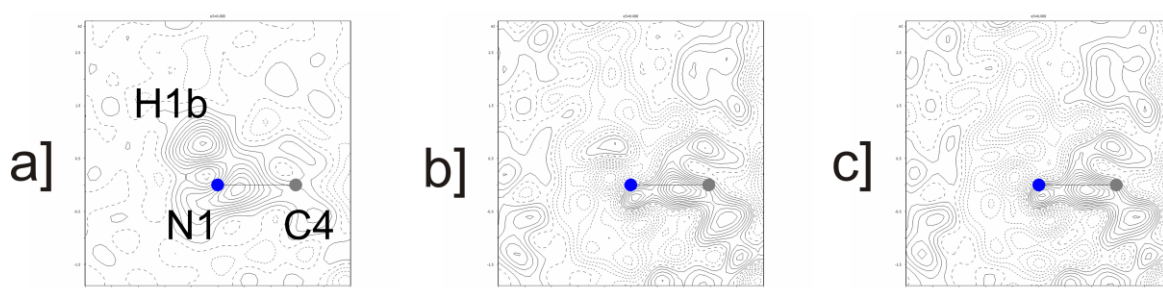


a) The difference electron-density maps without the electron density belonging to the bridging hydrogen H6a and the secondary amine hydrogen H2a. b), c) The residual electron-density maps with the respective hydrogens included into the model. In Figs. b), the positional parameters of the hydrogens were fixed while their displacement parameters were refined freely. c) The positional parameters of the hydrogens were refined freely while their displacement parameters were constrained: $U_{\text{iso}}(\text{H})=1.5 U_{\text{eq}}(\text{O}_{\text{carrier}})$ or $U_{\text{iso}}(\text{H})=1.2 U_{\text{eq}}(\text{N}_{\text{carrier}})$. For Figures a), the contours are in 0.04 and 0.05 $\text{e}\text{\AA}^{-3}$ increments for the regions with the atoms H6a and H2a, respectively. For the Figures b), c), the contours are in 0.02 $\text{e}\text{\AA}^{-3}$ increments; positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (*JANA2006*; Petříček *et al.*, 2014).

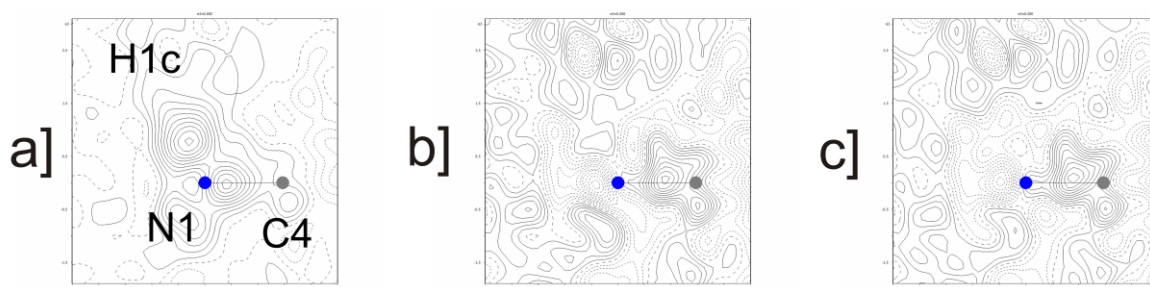
TUJPEV, the atom H1a



TUJPEV, the atom H1b

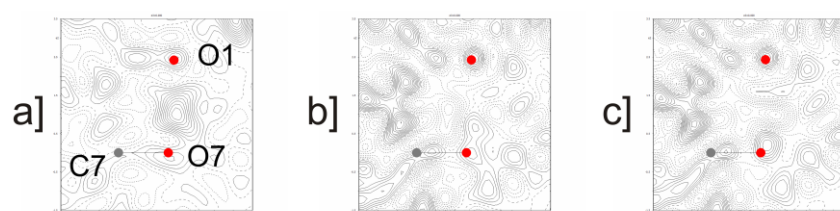


TUJPEV, the atom H1c

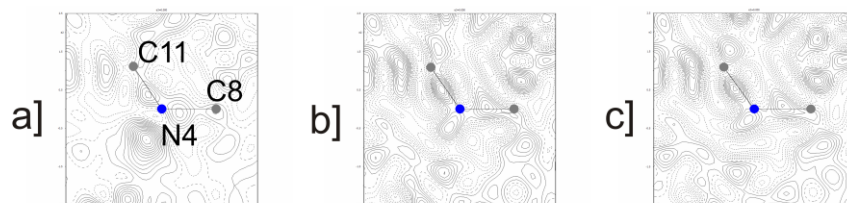


a) The difference electron-density maps without the electron density belonging to the ammonium hydrogens H1a, H1b and H1c. b), c) The residual electron-density maps with the respective hydrogens included into the model. In Figs. b), the positional parameters of the hydrogens were fixed while their displacement parameters were refined freely. c) The positional parameters of the hydrogens were refined freely while their displacement parameters were constrained: $U_{\text{iso}}(\text{H})=1.2 U_{\text{eq}}(\text{N}_{\text{carrier}})$. In Figures a) and b), c), the contours are in 0.05 and 0.02 $\text{e}\text{\AA}^{-3}$ increments; positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (*JANA2006*; Petříček *et al.*, 2014).

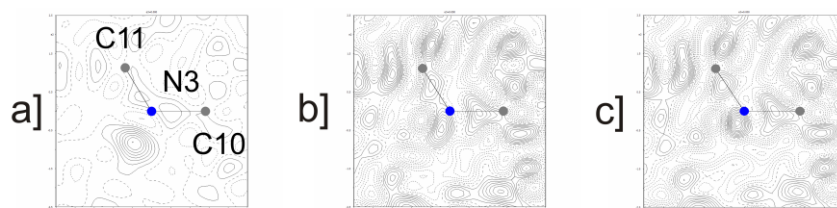
VABZIJ, the atom H7



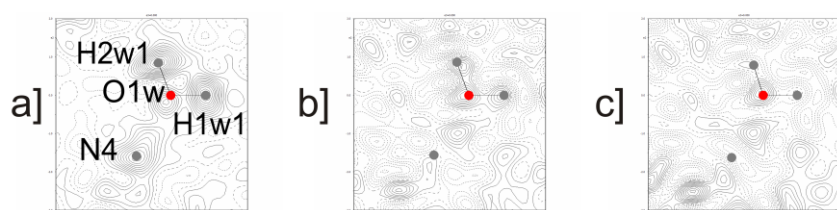
VABZIJ, the atom H1n4



VABZIJ, the atom H1n3

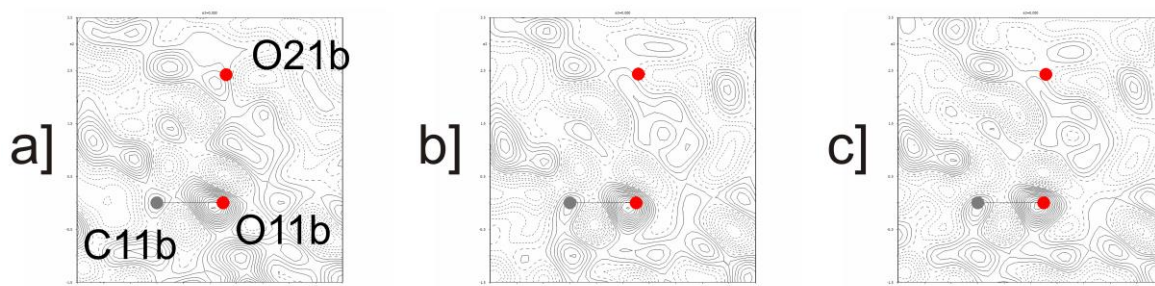


VABZIJ, the atoms H1w1 and H2w1

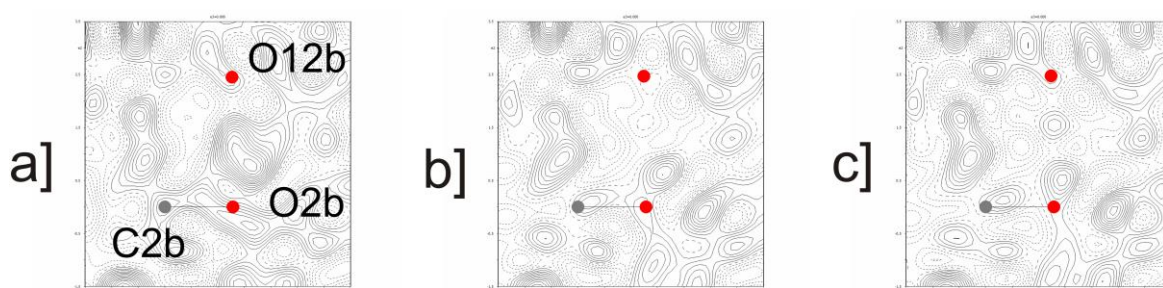


a) The difference electron-density maps without the electron density belonging to the bridging hydrogen H7, the secondary amine hydrogens H1n3, H1n4 and the water hydrogens H1w1 and H2w1. b), c) The residual electron-density maps with the respective hydrogens included into the model. In Figs. b), the positional parameters of the hydrogens were fixed while the displacement parameters were refined freely. In Figs. c), the positional parameters of the hydrogens were refined freely while their displacement parameters were constrained: $U_{\text{iso}}(\text{H})=1.5 U_{\text{eq}}(\text{O}_{\text{carrier}})$ or $U_{\text{iso}}(\text{H})=1.2 U_{\text{eq}}(\text{N}_{\text{carrier}})$. In Figure a), the contours are in $0.05 \text{ e}\text{\AA}^{-3}$ increments for the atoms H7, H1n4, H1w1 and H2w1 and in $0.1 \text{ e}\text{\AA}^{-3}$ increments for the atoms H1n3. In Figs. b), c), the contours are in $0.02 \text{ e}\text{\AA}^{-3}$ increments; positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (JANA2006; Petříček et al., 2014). (JANA2006; Petříček et al., 2014).

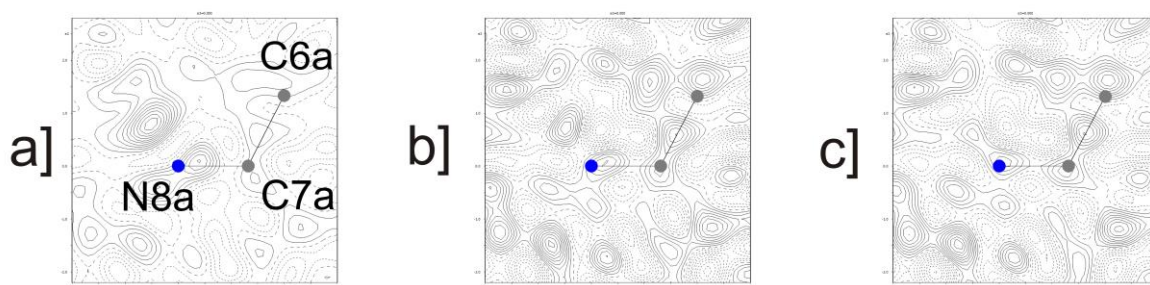
WADXOR, the atom H21b



WADXOR, the atom H2b

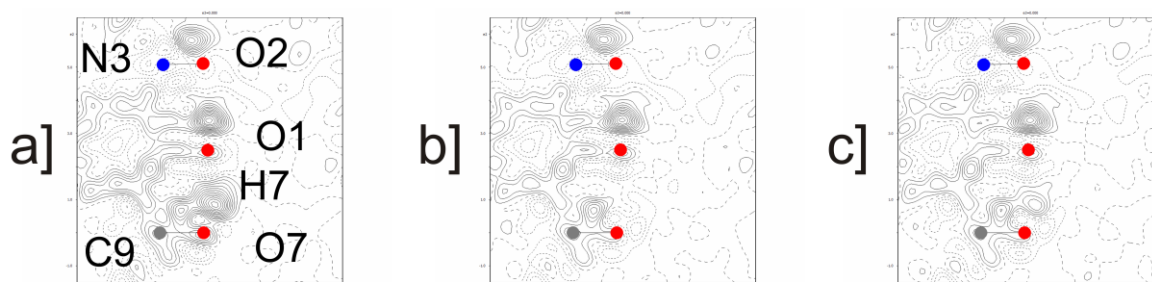


WADXOR, the atom H8a

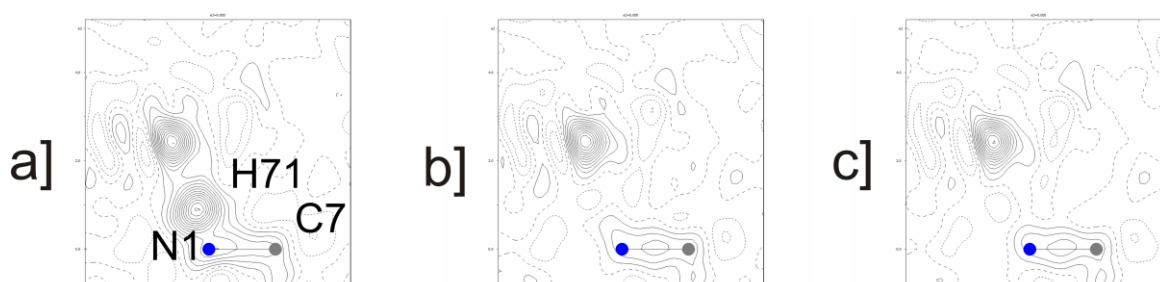


a) The difference electron-density maps without the electron density belonging to the bridging hydrogens H21b and H2b and to the secondary amine hydrogen H8a. b), c) The residual electron density maps with the respective hydrogens included into the model. In Figs. b), the positional parameters of the hydrogens were fixed while their displacement parameters were refined freely. In Figs. c), the positional parameters of the hydrogens were refined freely while their displacement parameters were constrained: $U_{\text{iso}}(\text{H})=1.5 U_{\text{eq}}(\text{O}_{\text{carrier}})$ or $U_{\text{iso}}(\text{H})=1.2 U_{\text{eq}}(\text{N}_{\text{carrier}})$. In Figures a), the contours are in $0.02 \text{ e}\text{\AA}^{-3}$ increments for the atoms H21b and H2b while the contours are in $0.05 \text{ e}\text{\AA}^{-3}$ increments for the atom H8a. In Figs. b) and c), the contours are in $0.02 \text{ e}\text{\AA}^{-3}$ increments; positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. (*JANA2006*; Petříček *et al.*, 2014).

YAXPOE, the atom H7



YAXPOE, the atom H71



a) The difference electron-density maps without the electron density belonging to the bridging hydrogen H7 and the amine hydrogen H71. b), c) The residual electron-density maps with the respective hydrogens are included into the model. In Figs. b), the positional parameters of the hydrogens were fixed while their displacement parameters were refined. In Figs. c), the positional parameters of the hydrogens were refined freely while their displacement parameters were constrained: $U_{\text{iso}}(\text{H})=1.5 U_{\text{eq}}(\text{O}_{\text{carrier}})$ or $U_{\text{iso}}(\text{H})=1.2 U_{\text{eq}}(\text{N}_{\text{carrier}})$. In Figures a), b) and c), the contours are in $0.05 \text{ e}\text{\AA}^{-3}$ increments; positive, zero and negative electron densities are indicated by continuous, dotted and dashed lines, respectively. Note: There are present peaks of the electron density which are difficult to interpret. (JANA2006; Petříček *et al.*, 2014).