

TABLE 1. MONOPOLE POPULATIONS, RADIAL PARAMETERS AND NET ATOMIC CHARGES.

ATOM	Pval	KAPPA	P00	KAPPA'	NET CHARGE
I (1)	7.909	0.939	0.000	1.337	-0.908
NA (1)	0.200	1.000	0.000	1.011	+0.800
O (1W)	6.065	0.995	0.000	0.935	-0.065
O (2W)	6.074	0.995	0.000	0.935	-0.073
H (2WB)	0.897	1.200	0.000	1.200	+0.102
H (2WA)	0.934	1.200	0.000	1.200	+0.065
H (1WB)	0.952	1.200	0.000	1.200	+0.047
H (1WA)	0.968	1.200	0.000	1.200	+0.031

TABLE 2. DIPOLE POPULATION PARAMETERS.

ATOM	D11+	D11-	D10	KAPPA'
I (1)	0.042 ( 32)	0.008 ( 33)	-0.078 ( 30)	1.337
NA (1)	0.691 (330)	0.318 (265)	-0.652 (229)	1.011
O (1W)	0.052 ( 21)	-0.060 ( 22)	-0.081 ( 24)	0.935
O (2W)	0.007 ( 21)	0.004 ( 21)	-0.026 ( 22)	0.935
H (2WB)	0.000	0.000	0.175 ( 44)	1.200
H (2WA)	0.000	0.000	0.290 ( 56)	1.200
H (1WB)	0.000	0.000	0.191 ( 52)	1.200
H (1WA)	0.000	0.000	0.199 ( 43)	1.200

TABLE 3. QUADRUPOLE POPULATION PARAMETERS.

ATOM	Q20	Q21+	Q21-	Q22+	Q22-	KAPPA'
I (1)	0.640 ( 229)	0.606 ( 330)	-0.081 ( 265)	0.149 ( 0)	-0.032 ( 0)	1.337
NA (1)	-0.351 ( 248)	0.307 ( 188)	0.414 ( 219)	-0.033 ( 194)	0.136 ( 251)	1.011
O (1W)	-0.021 ( 172)	-0.009 ( 161)	0.024 ( 151)	0.104 ( 150)	0.037 ( 175)	0.935
O (2W)	-0.012 ( 0)	-0.051 ( 0)	-0.028 ( 0)	0.017 ( 0)	0.002 ( 0)	0.935
H (2WB)	0.000	0.000	0.000	0.000	0.000	1.200
H (2WA)	0.000	0.000	0.000	0.000	0.000	1.200
H (1WB)	0.000	0.000	0.000	0.000	0.000	1.200
H (1WA)	0.000	0.000	0.000	0.000	0.000	1.200

TABLE 4. OCTUPOLE POPULATION PARAMETERS.

ATOM	O30	O31+	O31-	O32+	O32-	O33+	O33-	KAPPA'
I (1)	-0.080 ( 24)	0.015 ( 23)	-0.008 ( 23)	-0.007 ( 23)	0.019 ( 23)	0.051 ( 23)	0.023 ( 23)	1.337
NA (1)	0.110 ( 172)	-0.288 ( 161)	0.251 ( 151)	-0.217 ( 150)	-0.350 ( 175)	0.059 ( 161)	-0.017 ( 149)	1.011
O (1W)	0.078 ( 29)	-0.015 ( 26)	0.003 ( 25)	-0.004 ( 26)	-0.004 ( 27)	-0.001 ( 26)	-0.057 ( 26)	0.935
O (2W)	0.061 ( 28)	-0.009 ( 26)	-0.019 ( 25)	0.039 ( 26)	-0.033 ( 26)	-0.026 ( 26)	-0.038 ( 27)	0.935
H (2WB)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.200
H (2WA)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.200
H (1WB)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.200
H (1WA)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.200

TABLE 5. HEXADECAPOLE POPULATION PARAMETERS.

ATOM	H40	H41+	H41-	H42+	H42-	H43+	H43-	H44+	H44
I (1)	-0.328 ( 39)	0.391 ( 35)	-0.253 ( 36)	-0.281 ( 36)	-0.029 ( 37)	-0.093 ( 37)	0.065 ( 37)	0.062 ( 35)	-0.127 ( 35)
NA (1)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
O (1W)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
O (2W)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
H (2WB)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
H (2WA)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
H (1WB)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
H (1WA)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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I(1)      Na(1)      Z      I(1)      O(1W)      Y
Na(1)     O(1W)      Z      Na(1)     H(1WA)     Y
O(1W)     H(1WA)     Z      O(1W)     H(1WB)     Y
O(2W)     H(2WA)     Z      O(2W)     H(2WB)     Y
H(2WB)    O(2W)      Z      H(2WB)    H(2WA)     Y
H(2WA)    O(2W)      Z      H(2WA)    H(2WB)     Y
H(1WB)    O(1W)      Z      H(1WB)    H(1WA)     Y
H(1WA)    O(1W)      Z      H(1WA)    H(1WB)     Y

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I(1)      1.13489(3)    0.87695(3)    0.22314(2)    1.0000  0.015
NA(1)     0.81829(8)    0.64202(7)    0.48137(6)    1.0000  0.017
O(1W)     0.3822(1)     0.5121(1)     0.2877(1)     1.0000  0.019
O(2W)     0.2152(1)     0.7205(1)     0.7113(1)     1.0000  0.018
H(2WB)    0.38099        0.85051        0.73065        1.0000  0.028
H(2WA)    0.20380        0.74658        0.85253        1.0000  0.050
H(1WB)    0.27349        0.37841        0.15078        1.0000  0.045
H(1WA)    0.34881        0.63408        0.28214        1.0000  0.033

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  _atom_site_aniso_U_13
  _atom_site_aniso_U_23
I(1)      0.01457(5)    0.01223(4)    0.01187(4)    0.00611(4)    0.00502(4)    0.00526(4)
NA(1)     0.0127(1)     0.0144(1)     0.0154(1)     0.0069(1)     0.0053(1)     0.0073(1)
O(1W)     0.0148(2)     0.0171(2)     0.0157(1)     0.0081(1)     0.0039(1)     0.0078(1)
O(2W)     0.0134(1)     0.0155(1)     0.0141(1)     0.0055(1)     0.0053(1)     0.0048(1)

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data_FFT
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  _refine_diff_density_min    -0.422
  _refine_diff_density_rms    0.047

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The residual electron density map in the plane formed by O(1W), Na(1) and I(1) atoms. Contours are drawn with  $0.1 \text{ e}\text{\AA}^{-3}$  step, the negative ones are dashed, the zero contour is drawn by a red dot line.