

Table 1. Comparison of ISORROPIA II box model results with those from ISORROPIA and AIM of Zaveri et al. (2008) under four conditions from Zaveri et al. (2008)^a

	Case 1			Case 2			Case 8			Case 9		
	AIM ^b	ISO ^b	ISO II ^b	AIM	ISO	ISO II	AIM	ISO	ISO II	AIM	ISO	ISO II
NH ₃	~ 220	275.7	275.7	~ 410	488.2	477.5	~ 420	549.8	505.8	~ 320	481.0	440.1
HNO ₃	~ 340	348.2	348.2	~ 190	274.4	259.9	~ 140	236.0	164.1	~ 180	281.8	244.1
HCl	~ 4	4.1	4.1	~ 300	292.4	296.3	~ 310	330.9	358.9	~ 240	275.0	271.8
SO ₄ ²⁻					0.6	1.9	~ 26	12.0	78.9	~ 32	3.7	10.2
NH ₄ ⁺					3.3	18.1	~ 350	113.9	361.9	~ 250	16.0	56.8
NO ₃ ⁻					3.6	19.9	~ 240	76.5	148.3	~ 206	13.2	50.9
Cl ⁻					0.07	0.3	~ 68	13.5	55.8	~ 40	1.2	4.3
Na ⁺					1.5	5.8				~ 70	5.7	18.7
(NH ₄) ₂ SO ₄ (s)	~ 120	118.4	118.4				~ 105	126.8	59.9	~ 6.8	1.3	1.3
NH ₄ Cl(s)					8.9	4.8	~ 105	146.3	76.0			
NH ₄ NO ₃ (s)	~ 50	28.8	28.8	~ 400	317.3	317.3		96.5	96.5		113.9	113.9
NaNO ₃ (s)				~ 17	18.0	16.3						
Na ₂ SO ₄ (s)				~ 40	40.2	39.0				~ 60	90.7	90.6
H ₂ O					3.7	15.3	~ 700	210.4	730.0	~ 600	24.1	83.5

^a The unit is nmol m⁻³ for all values.

^bISO – ISORROPIA, ISO II – ISORROPIA II. AIM results are based on Zaveri et al. (2008). ISO results are based on ISORROPIA version 1.7 (3/15/06), which is very similar to ISORROPIA version 1.7 (03/26/07) used in Zaveri et al. (2008). ISO II results are based on the ISORROPIA II module used in our work.