

Table 6. Conversion Rates of SO₂ in Urban Plumes

Source	SO ₂ Oxidation Rate (% h ⁻¹)	Comments
Benarie et al. (1972)	6 to 25	-Rouen (49°N) -wintertime results -aerosol catalysis important; acid formation increases as temperature decreases
Robert and Friedlander (1975)	1.2 to 13	-Los Angeles (34°N) -July, October
Mezaros et al. (1977)	30	-Budapest (48°N) -mainly June to September
Alkezweeny and Powell (1977)	10 to 14	-St. Louis (38°N) -August
Alkezweeny (1978)	8 to 12	-St. Louis (38°N) -summertime
Breeding et al. (1976)	5 to 32	-St. Louis (38°N) -October, April
Alkezweeny (1980)	1 to 5	-Chicago, Gary (42°N) -summertime -conversion dominated by photochemical reactions
Forrest et al. (1979b), Chang (1979)	4	-St. Louis (38°N) -Flight Da Vinci II, June
Alkezweeny (1980)	0, 6.8	-Milwaukee (44°N) -measurements on two days in August
Elshout et al. (1978)	0.6 to 4.4	-Arnhem, Amsterdam (52°N) -January to March
Prahm et al. (1976)	1.1	-Faroe Island and British Isles (50 to 60°N) -February
Smith and Jeffrey (1975)	0 to 3	-British Isles (52 to 56°N) -mainly September to November -relative humidity is important
Lavery et al. (1979)	0.7	-Ohio Valley (40°N) -August