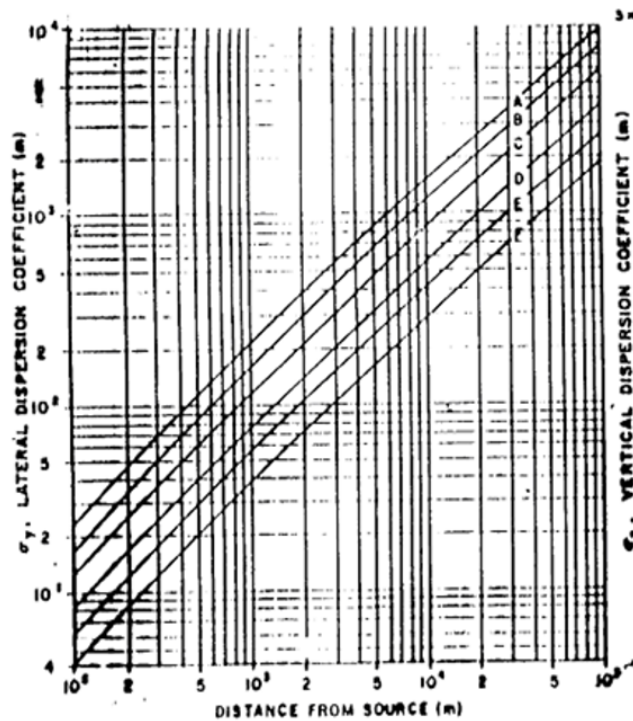


Insolation	Cloud cover	<div> <div>Surface</div> <div>Wind</div> <div>Speed</div> </div>				
		<2	2 to 3	3 to 5	5 to 6	>6
Day	Strong sun	A	A-B	B	C	C
	Mod. Sun	A-B	B	B-C	C-D	D
	Slight sun	B	C	C	D	D
Day or Night	Overcast	D	D	D	D	D
Night	≥ 0.5 cloud cover		E	D	D	D
	≤ 0.4 cloud cover		F	E	D	D

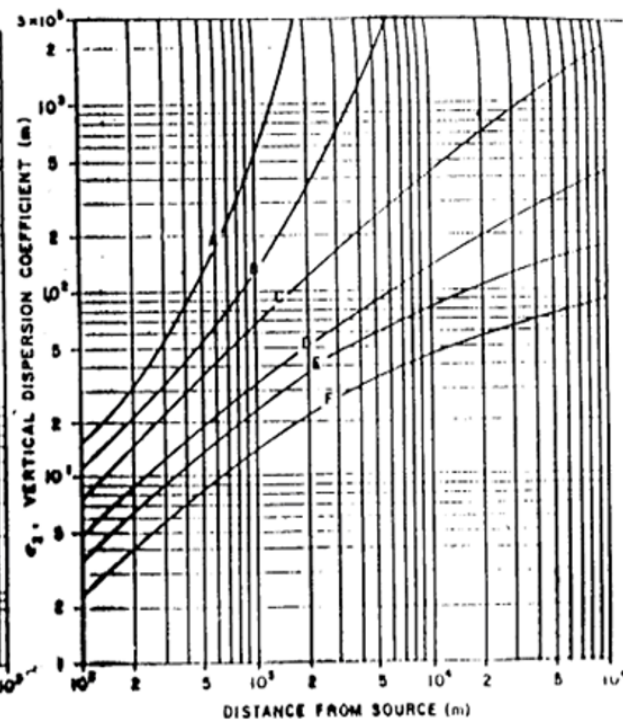
TABLE 18.2 Coefficients in Gaussian Plume Dispersion Parameter Correlations<sup>a</sup>

			<div> <math>\sigma_y(x) = R_y x^{r_y}</math>  <math>\sigma_y(x) = \exp[I_y + J_y \ln x + K_y (\ln x)^2]</math> </div>					
			<div> <math>\sigma_z(x) = R_z x^{r_z}</math>  <math>\sigma_z(x) = \exp[I_z + J_z \ln x + K_z (\ln x)^2]</math> </div>					
Source	Averaging Time (min)	Coefficient	Stability Class					
			A	B	C	D	E	F
Pasquill-Gifford (Turner, 1969; Martin, 1976)	10	$R_y$	0.443	0.324	0.216	0.141	0.105	0.071
		$r_y$	0.894	0.894	0.894	0.894	0.894	0.894
ASME (1973)	60	$R_y$	0.40	0.36		0.32		0.31
		$r_y$	0.91	0.86		0.78		0.71
		$R_z$	0.40	0.33		0.22		0.06
		$r_z$	0.91	0.86		0.78		0.71
Klug (1969)	10	$R_y$	0.469	0.306	0.230	0.219	0.237	0.273
		$r_y$	0.903	0.885	0.855	0.764	0.691	0.594
		$R_z$	0.017	0.072	0.076	0.140	0.217	0.262
		$r_z$	1.380	1.021	0.879	0.727	0.610	0.500
Pasquill-Gifford (Turner, 1969)	10	$I_y$	-1.104	-1.634	-2.054	-2.555	-2.754	-3.143
		$J_y$	0.9878	1.0350	1.0231	1.0423	1.0106	1.0148
		$K_y$	-0.0076	-0.0096	-0.0076	-0.0087	-0.0064	-0.0070
		$I_z$	4.679	-1.999	-2.341	-3.186	-3.783	-4.490
		$J_z$	-1.7172	0.8752	0.9477	1.1737	1.3010	1.4024
		$K_z$	0.2770	0.0136	-0.0020	-0.0316	-0.0450	-0.0540

<sup>a</sup>Application restricted to downwind distances not exceeding 10 km (Hanna et al., 1982).



(a)



(b)