



CLIMATE

Simple Earth Climate Model

Data Sheet

Earth	radius, r_e	6.37×10^6 m	[4]
	mean distance to Sun, r_{se}	1.50×10^{11} m	[4]
	mean surface temperature, T_e	287.5 K	[13]
	albedo	0.3	[9]
	emissivity	0.9	[2]
Venus	radius, r_v	6.06×10^6 m	[4]
	mean distance to Sun, r_{sv}	1.08×10^{11} m	[4]
	mean surface temperature, T_v	735 K	[13]
	albedo	0.65	[10]
	emissivity	0.845	[11]
Mercury	radius, r_e	2.43×10^6 m	[4]
	mean distance to Sun, r_{se}	5.79×10^{10} m	[4]
	mean surface temperature, T_e	90-700* K	[13]
Sun	radius, r_s	7.00×10^8 m	[4]
	mean surface temperature, T_s	5780 K	[13]
	total solar power, P_s	3.9×10^{26} W	
Constants	Stefan-Boltzmann constant, σ	5.67×10^{-8} W/(m ² · K ⁴)	[5]
	Wien's Displacement Constant, b	2.90×10^{-3} m · K	[8]
Albedo (reflectance of solar radiation)	surface of glacial ice (average value)	0.8	[6]
Emissivity (for 300 K radiation)	aluminum	0.10	[1]
	concrete	0.65	[12]
	skin	0.95	[3]
BSA	normal body surface area	1.7 m ²	[7]

* the temperature of Mercury changes drastically over the course of a single day.

References

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