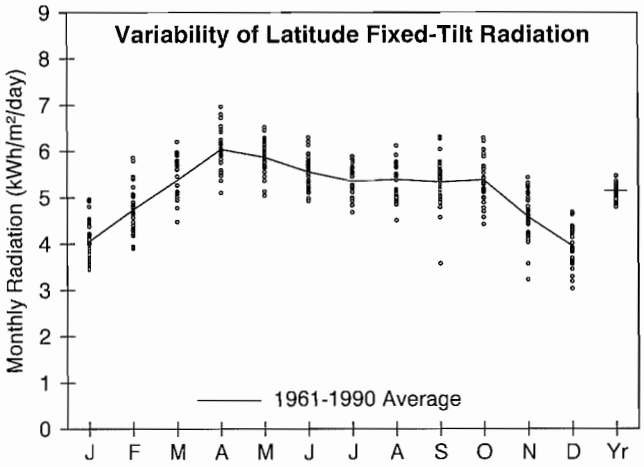
Tallahassee, FL

WBAN NO. 93805

LATITUDE: 30.38° N
LONGITUDE: 84.37° W
ELEVATION: 21 meters
MEAN PRESSURE: 1016 millibars

STATION TYPE: Primary



Solar Radiation for Flat-Plate Collectors Facing South at a Fixed Tilt (kWh/m²/day), Uncertainty ±9%

Tilt (°)		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
0	Average	2.9	3.7	4.7	5.9	6.3	6.1	5.8	5.5	4.9	4.3	3.3	2.7	4.7
	Min/Max	2.5/3.4	3.1/4.4	4.0/5.3	5.1/6.7	5.5/6.9	5.4/7.0	5.2/6.4	4.6/6.2	3.5/5.7	3.7/5.0	2.6/3.8	2.3/3.1	4.4/5.0
Latitude -15	Average	3.6	4.3	5.2	6.1	6.2	6.0	5.7	5.6	5.3	5.0	4.1	3.4	5.0
	Min/Max	3.1/4.3	3.6/5.3	4.3/5.9	5.2/7.1	5.3/6.9	5.3/6.8	5.0/6.3	4.7/6.3	3.6/6.2	4.2/5.8	3.0/4.7	2.7/4.0	4.7/5.4
Latitude	Average	4.0	4.7	5.4	6.0	5.9	5.6	5.4	5.4	5.3	5.4	4.6	4.0	5.1
	Min/Max	3.5/5.0	3.9/5.9	4.5/6.2	5.1/7.0	5.0/6.5	4.9/6.3	4.7/5.9	4.5/6.1	3.6/6.3	4.4/6.3	3.2/5.4	3.0/4.7	4.8/5.5
Latitude +15	Average	4.3	4.9	5.3	5.6	5.2	4.9	4.7	4.9	5.1	5.5	4.8	4.2	5.0
	Min/Max	3.6/5.3	4.0/6.1	4.3/6.1	4.7/6.5	4.5/5.8	4.3/5.5	4.2/5.2	4.1/5.6	3.4/6.1	4.4/6.4	3.3/5.8	3.2/5.1	4.6/5.3
90	Average	3.6	3.7	3.4	2.9	2.2	1.9	2.0	2.4	3.1	4.0	4.0	3.7	3.1
	Min/Max	3.0/4.7	3.1/4.8	2.8/4.0	2.5/3.2	1.9/2.4	1.7/2.0	1.8/2.1	2.1/2.5	2.0/3.6	3.2/4.7	2.6/4.9	2.7/4.5	2.9/3.3

Solar Radiation for 1-Axis Tracking Flat-Plate Collectors with a North-South Axis (kWh/m²/day), Uncertainty ±9%

Axis Tilt (°)		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
0	Average	3.9	5.0	6.2	7.7	7.9	7.5	7.1	6.8	6.2	5.9	4.5	3.7	6.0
	Min/Max	3.3/4.9	4.0/6.3	5.0/7.2	6.3/9.2	6.4/9.0	6.5/8.9	6.0/8.1	5.5/8.1	4.1/7.7	4.7/7.0	3.1/5.4	2.9/4.4	5.6/6.6
Latitude -15	Average	4.4	5.5	6.6	7.9	7.9	7.4	7.1	6.9	6.5	6.4	5.1	4.2	6.3
	Min/Max	3.7/5.6	4.4/6.9	5.3/7.7	6.4/9.5	6.4/9.0	6.5/8.8	6.0/8.1	5.6/8.2	4.2/8.0	5.1/7.7	3.4/6.2	3.2/5.1	5.8/6.9
Latitude	Average	4.8	5.8	6.7	7.8	7.7	7.1	6.8	6.8	6.6	6.7	5.5	4.6	6.4
	Min/Max	4.0/6.1	4.7/7.3	5.3/7.9	6.3/9.4	6.2/8.7	6.2/8.4	5.7/7.8	5.4/8.0	4.2/8.1	5.3/8.0	3.6/6.7	3.4/5.6	5.9/7.0
Latitude +15	Average	5.0	5.9	6.6	7.5	7.2	6.6	6.3	6.4	6.4	6.7	5.7	4.9	6.3
	Min/Max	4.1/6.4	4.7/7.5	5.2/7.8	6.1/9.1	5.8/8.2	5.8/7.8	5.3/7.3	5.2/7.7	4.1/7.9	5.3/8.1	3.7/7.0	3.5/5.9	5.8/6.8

Solar Radiation for 2-Axis Tracking Flat-Plate Collectors (kWh/m²/day), Uncertainty ±9%

Tracker		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
2-Axis	Average	5.1	5.9	6.7	7.9	8.0	7.6	7.2	6.9	6.6	6.7	5.7	5.0	6.6
	Min/Max	4.1/6.5	4.8/7.5	5.3/7.9	6.4/9.5	6.5/9.1	6.6/9.0	6.1/8.2	5.6/8.2	4.2/8.1	5.3/8.1	3.7/7.0	3.6/6.1	6.1/7.2

Direct Beam Solar Radiation for Concentrating Collectors (kWh/m²/day), Uncertainty ±8%

Tracker		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
1-Axis, E-W Horiz Axis	Average	2.9	3.2	3.3	3.8	3.7	3.3	2.9	2.8	2.9	3.5	3.3	2.9	3.2
	Min/Max	2.0/4.1	2.3/4.6	2.0/4.2	2.8/5.2	2.4/4.5	2.4/4.4	2.0/3.8	1.9/4.0	1.5/4.1	2.3/4.8	1.6/4.4	1.7/3.8	2.8/3.7
1-Axis, N-S Horiz Axis	Average	2.5	3.2	4.0	5.0	4.8	4.2	3.8	3.7	3.6	3.9	3.0	2.4	3.7
	Min/Max	1.7/3.5	2.3/4.8	2.5/5.0	3.7/6.9	3.1/5.8	3.2/5.7	2.6/5.0	2.5/5.2	1.9/5.2	2.5/5.3	1.5/4.0	1.4/3.1	3.3/4.3
1-Axis, N-S Tilt=Latitude	Average	3.2	3.9	4.4	5.1	4.6	3.9	3.6	3.7	3.8	4.5	3.8	3.1	4.0
	Min/Max	2.2/4.6	2.8/5.8	2.8/5.6	3.7/7.0	2.9/5.6	2.9/5.3	2.4/4.7	2.5/5.1	2.0/5.5	3.0/6.1	1.9/5.1	1.9/4.2	3.5/4.7
2-Axis	Average	3.5	4.0	4.4	5.2	4.9	4.3	3.8	3.8	3.8	4.6	4.0	3.4	4.1
	Min/Max	2.3/4.9	2.9/5.9	2.8/5.6	3.8/7.1	3.1/5.9	3.2/5.7	2.6/5.0	2.5/5.3	2.0/5.5	3.0/6.2	1.9/5.4	2.0/4.5	3.7/4.9

Average Climatic Conditions

Element	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Temperature (°C)	10.3	11.8	15.7	19.1	23.1	26.4	27.4	27.4	25.7	20.4	15.4	11.8	19.6
Daily Minimum Temp	3.4	4.5	8.2	11.2	16.0	20.3	21.7	21.9	20.0	13.3	7.9	4.6	12.8
Daily Maximum Temp	17.2	19.1	23.1	26.9	30.2	32.7	32.9	32.8	31.4	27.5	22.8	18.8	26.3
Record Minimum Temp	-14.4	-10.0	-6.7	-1.7	1.1	7.8	13.9	15.6	4.4	-1.1	-10.6	-12.2	-14.4
Record Maximum Temp	27.8	29.4	32.2	35.0	36.7	39.4	39.4	38.9	37.2	34.4	31.1	28.9	39.4
HDD, Base 18.3°C	262	191	106	33	0	0	0	0	0	27	113	216	947
CDD, Base 18.3°C	12	7	23	54	148	243	281	281	222	91	24	13	1399
Relative Humidity (%)	75	72	72	70	72	76	80	81	78	74	76	76	75
Wind Speed (m/s)	3.0	3.3	3.4	3.2	2.9	2.5	2.3	2.3	2.7	2.9	2.8	2.9	2.8