

**An Examination of the Clear-Sky Solar
Irradiances and Albedo Over the
Ocean Surface at the COVE Site:
Observations Versus Models**

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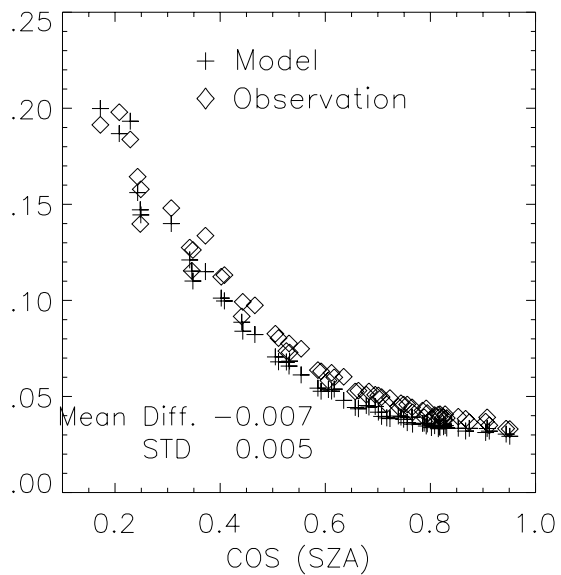
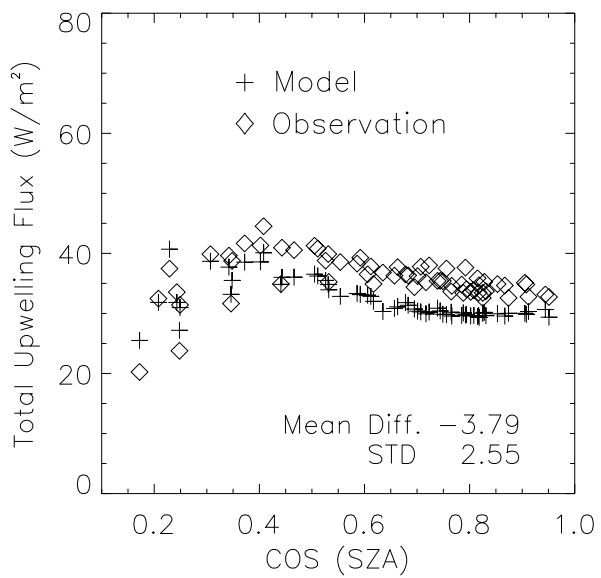
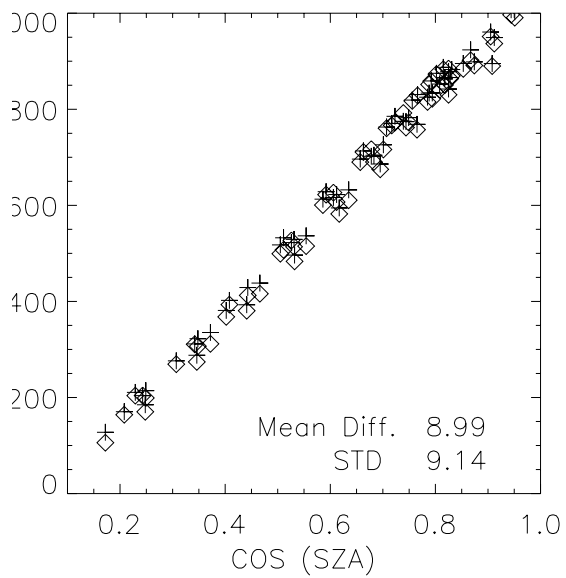
A whole year (3/1, 2000 -- 3/1, 2001) of measurement data for the downwelling and upwelling irradiances over the ocean surface at the Chesapeake Bay have been analyzed and compared with model calculations.

The coupled radiative transfer model for the atmosphere-ocean system (Jin and Stamnes, 1994) is used for the calculations.

The AOD and PW are from AERONET (Cimel) measurements.

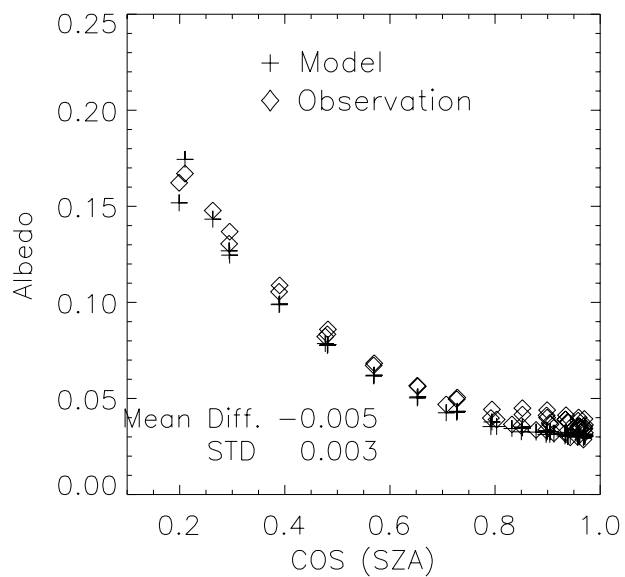
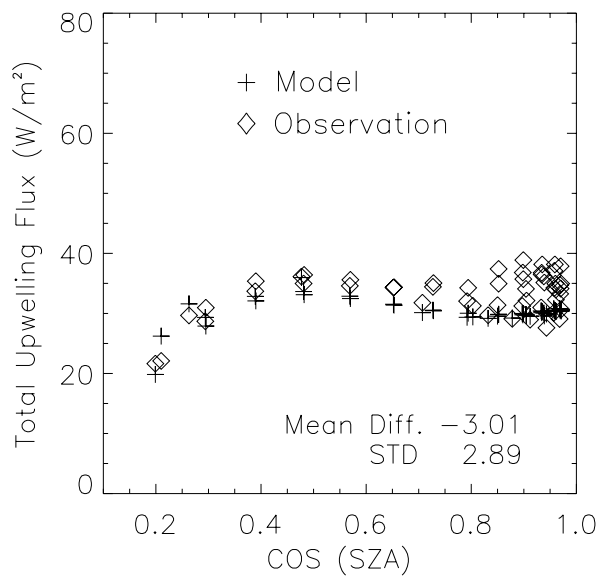
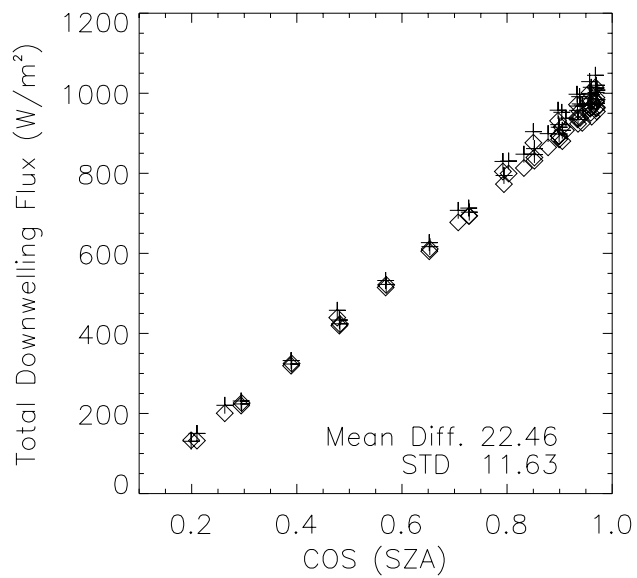
The wind speed is also from in situ observation. The chlorophyll concentration is based on monthly averaged observation data.

The Cloud screening is based on the Long and Ackerman (2000) algorithm.



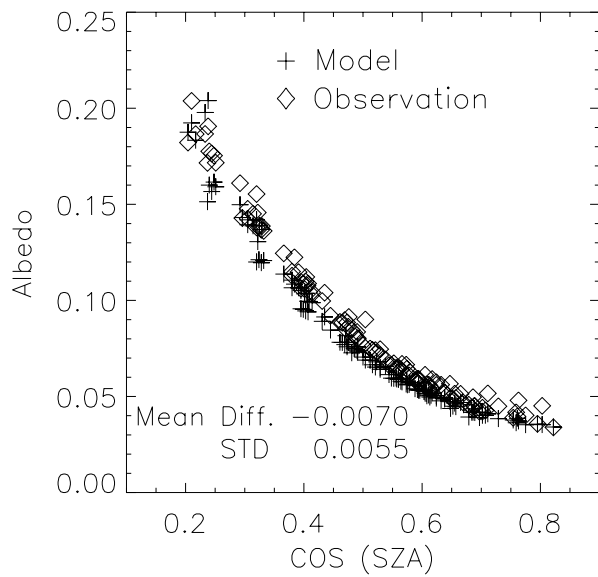
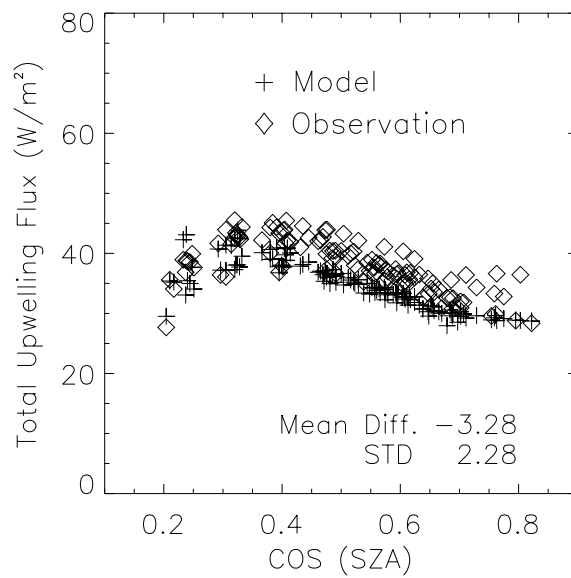
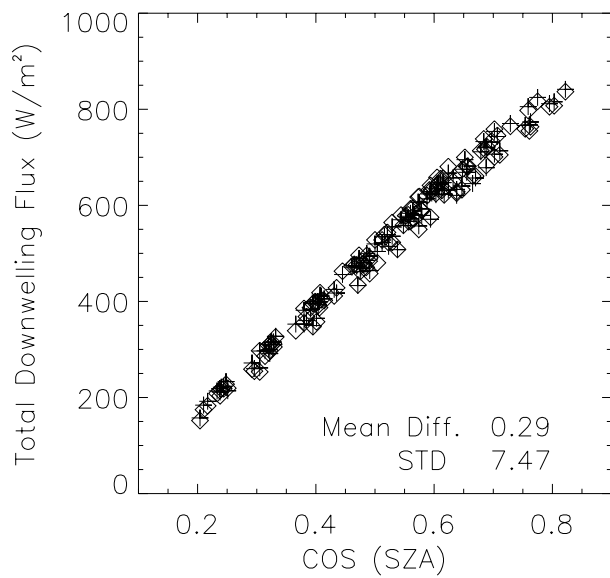
	Mean	Min.	Max.
Wind Speed (m/s)	5.25	0.97	11.18
AOD (500nm)	0.149	0.047	0.383
PW (cm)	1.43	0.59	3.48

MARCH APRIL MAY



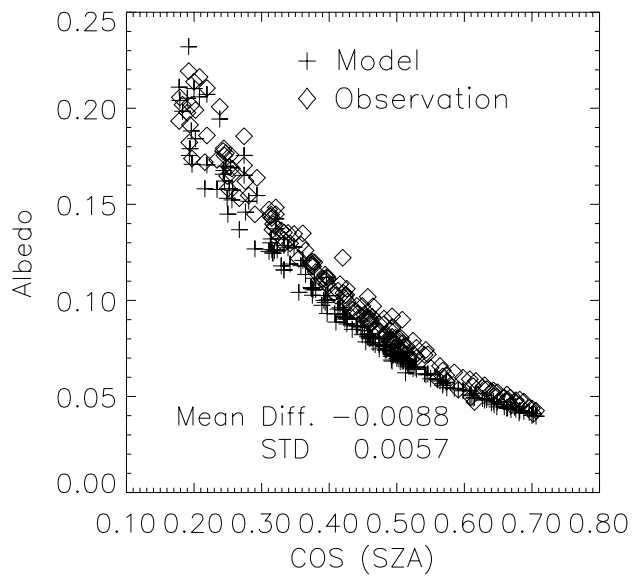
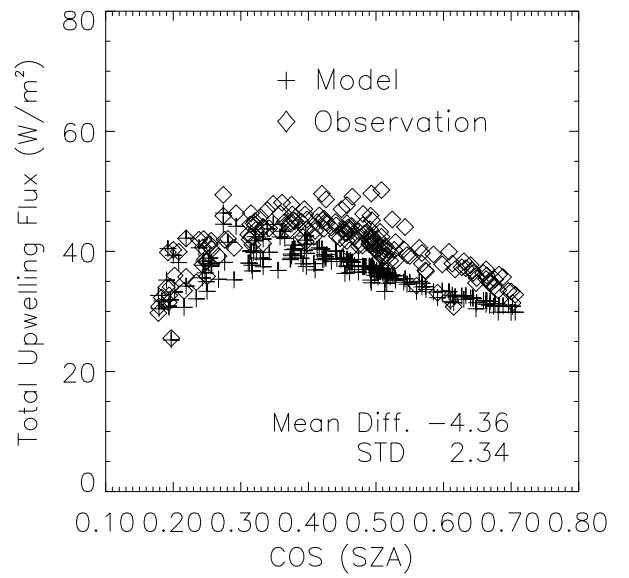
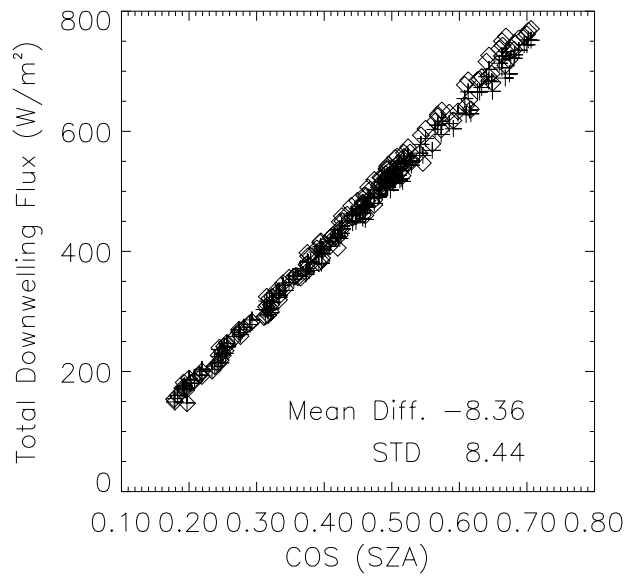
	Mean	Min.	Max.
Wind Speed (m/s)	7.09	1.25	10.58
AOD (500nm)	0.216	0.096	0.351
PW (cm)	3.14	1.58	4.77

JUNE JULY AUGUST



	Mean	Min.	Max.
Wind Speed	5.05	0.78	11.16
AOD (500nm)	0.078	0.029	0.263
PW (cm)	1.64	0.72	3.34

SEPTEMBER OCTOBER NOVEMBER



	Mean	Min.	Max.
Wind Speed	6.05	0.48	13.27
AOD (500nm)	0.059	0.019	0.176
PW (cm)	0.70	0.30	1.68

DECEMBER JANUARY FEBRUARY

