



This figure shows the broadband ocean albedo (color contours and dashed lines with numbers) versus wind speed (vertical axes) and cosSZA (horizontal axes) using the LUT; with panels for a pristine atmosphere (AOD of 0.0), for a marine AOD of 1.0, for a cloud optical depth of 5.0, and for a cloud optical depth of 20.0. All panels in Figure 6 assume Chl of 0.2 mg/m<sup>3</sup>, which is typical for the global ocean. Color scales are different for different panels. The results show that the sensitivity of albedo to SZA decreases quickly as aerosol/cloud optical depth increases. The broadband ocean albedo for a pristine sky (top left panel) has a smaller minimum, and a larger maximum, than any other sky condition. The incident radiation is diffuse with a large optical depth (bottom right panel), so the albedo is then barely sensitive to SZA and slightly sensitive to wind speed. Note that for the moderate optical depth of 1.0 and 5.0, albedo does not vary monotonically with SZA. With no foam effect included, albedo decreases as wind increases (except for small SZA under very clear skies). The wind effect on albedo is more significant for large SZA, but the SZA corresponding to the maximum wind effect depends on aerosol/cloud optical depth or atmospheric transmission.