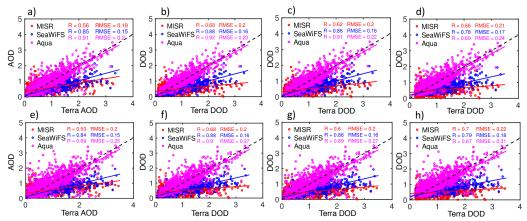
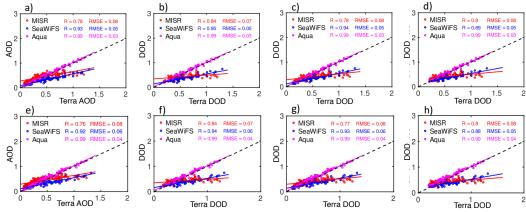
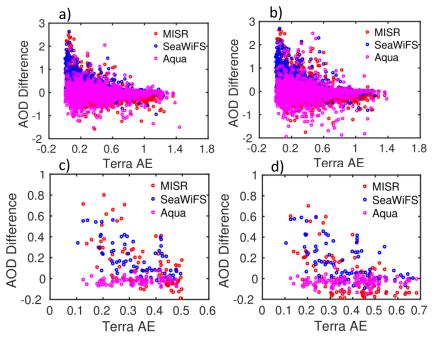
## **Supplementary Figures**



**Figure S1.** Comparisons of AOD (a and e) and DOD (b, c, d, f, g, and h) from MISR, SeaWiFS, and MODIS onboard Aqua with those from MODIS onboard Terra over the Taklimakan Desert on a daily basis. Panels b) and f) for criterion 1; Panels c) and g) for criterion 2; Panels d) and h) for criterion 3. Top panels: all quality flags; Bottom panels: the best estimate. Also shown are correlation co-efficiencies and root mean square errors for MISR (red), SeaWiFS (blue), and Aqua (purple). Dash lines indicate the 1:1 lines. All differences are statistically significant at the 95% confidence level.



**Figure S2.** Same as Figure S1, but on a monthly basis. Again, All differences are statistically significant at the 95% confidence level.



**Figure S3.** Differences AOD between MISR (red) / SeaWiFS (blue) / Aqua (purple) and Terra with all quality flags (a and c) and the best estimation (b and d) against the Angstrom exponent from Terra.