Supplementary Material

Seasonal and spatial variations in aerosol vertical distribution and optical properties over China from long-term satellite and ground-based remote sensing

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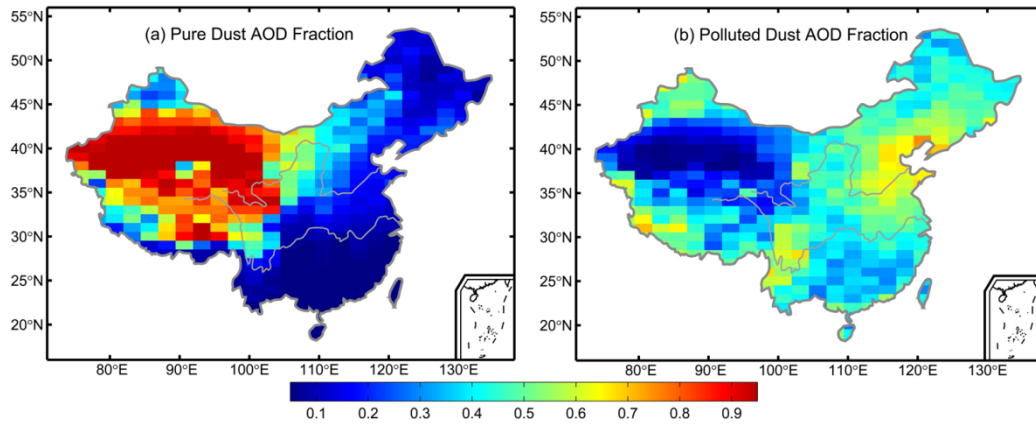
Figure S1. Annual pure dust and polluted dust AOD to total AOD ratio over China derived from CALIOP observations from June 2006 to January 2016, with a 1.0 °×2.5 °latitude-longitude grid.
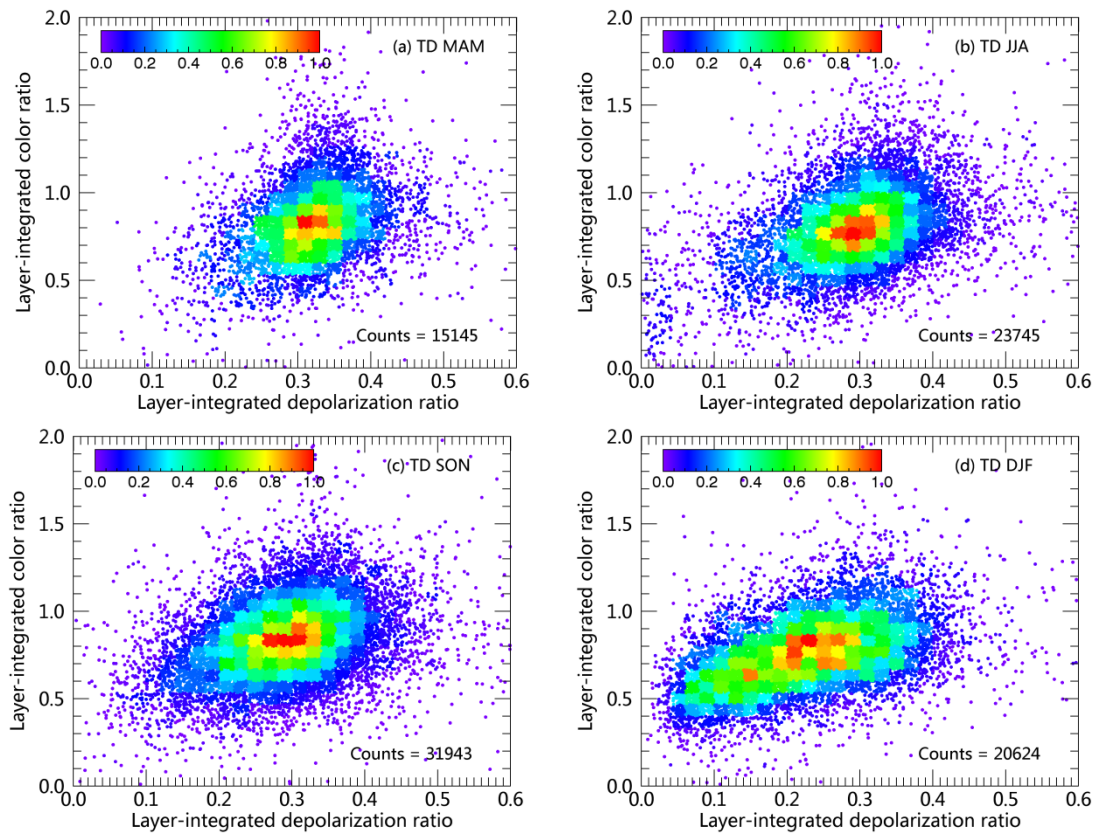
Figure S2. Scatter plots for the layer-integrated aerosol color ratios versus the layer-integrated aerosol depolarization ratios over the Taklimakan Desert (TD) region (a) spring; (b) summer; (c) autumn; (d) winter.
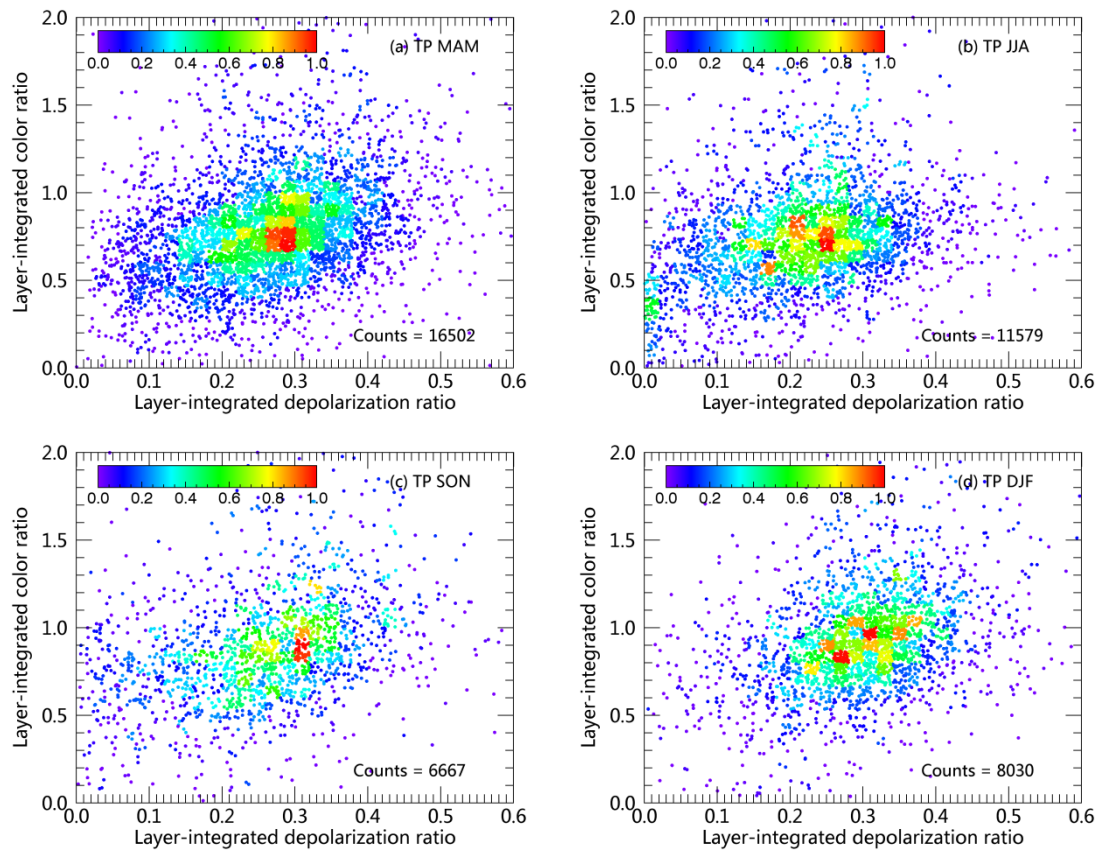
Figure S3. Scatter plots for the layer-integrated aerosol color ratios versus the layer-integrated aerosol depolarization ratios over the Tibetan Plateau (TP) region (a) spring; (b) summer; (c) autumn; (d) winter.
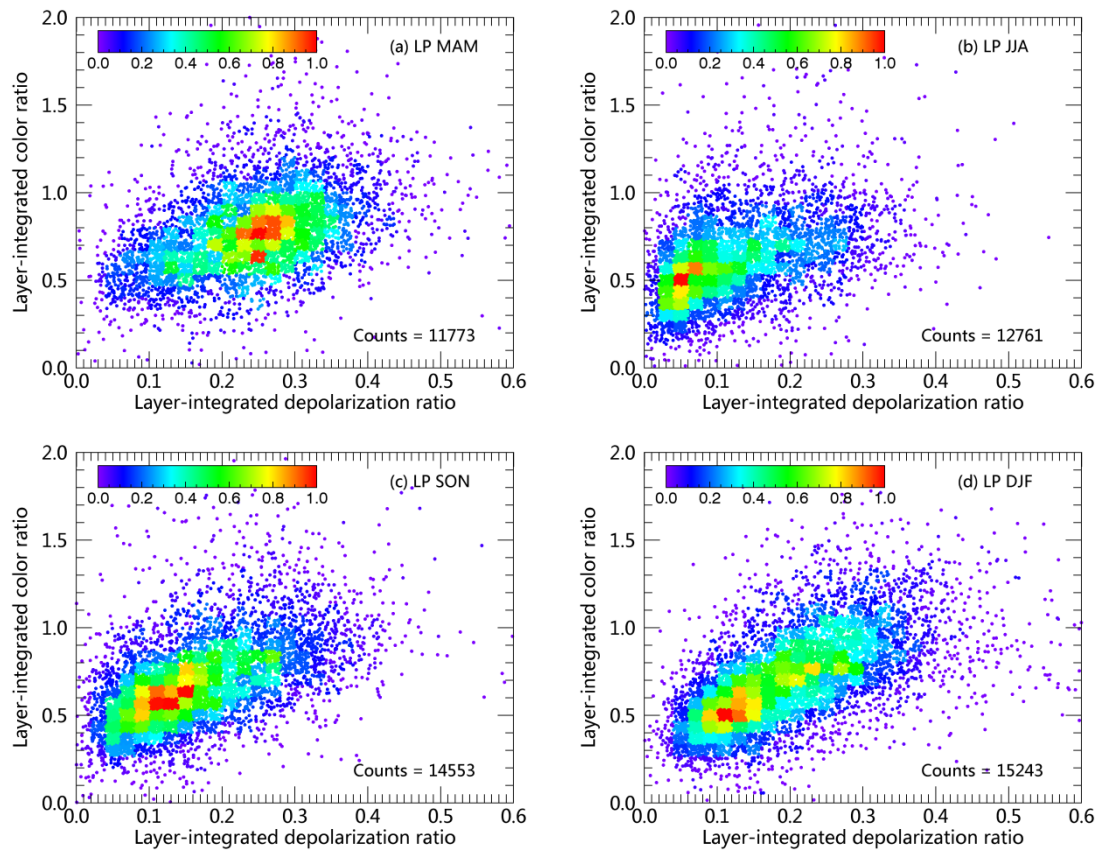
Figure S4. Scatter plots for the layer-integrated aerosol color ratios versus the layer-integrated aerosol depolarization ratios over the Loess Plateau (LP) region (a) spring; (b) summer; (c) autumn; (d) winter.
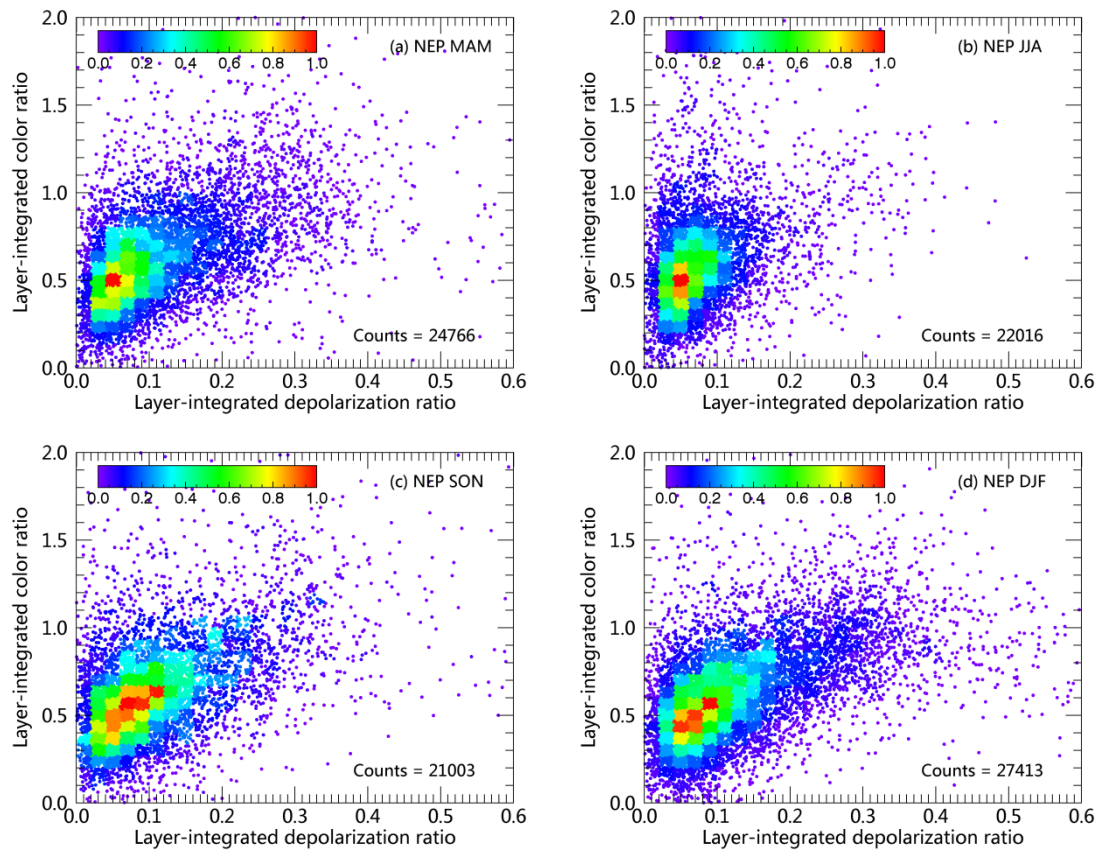
Figure S5. Scatter plots for the layer-integrated aerosol color ratios versus the layer-integrated aerosol depolarization ratios over the Northeast China Plain (NEP) region (a) spring; (b) summer; (c) autumn; (d) winter.
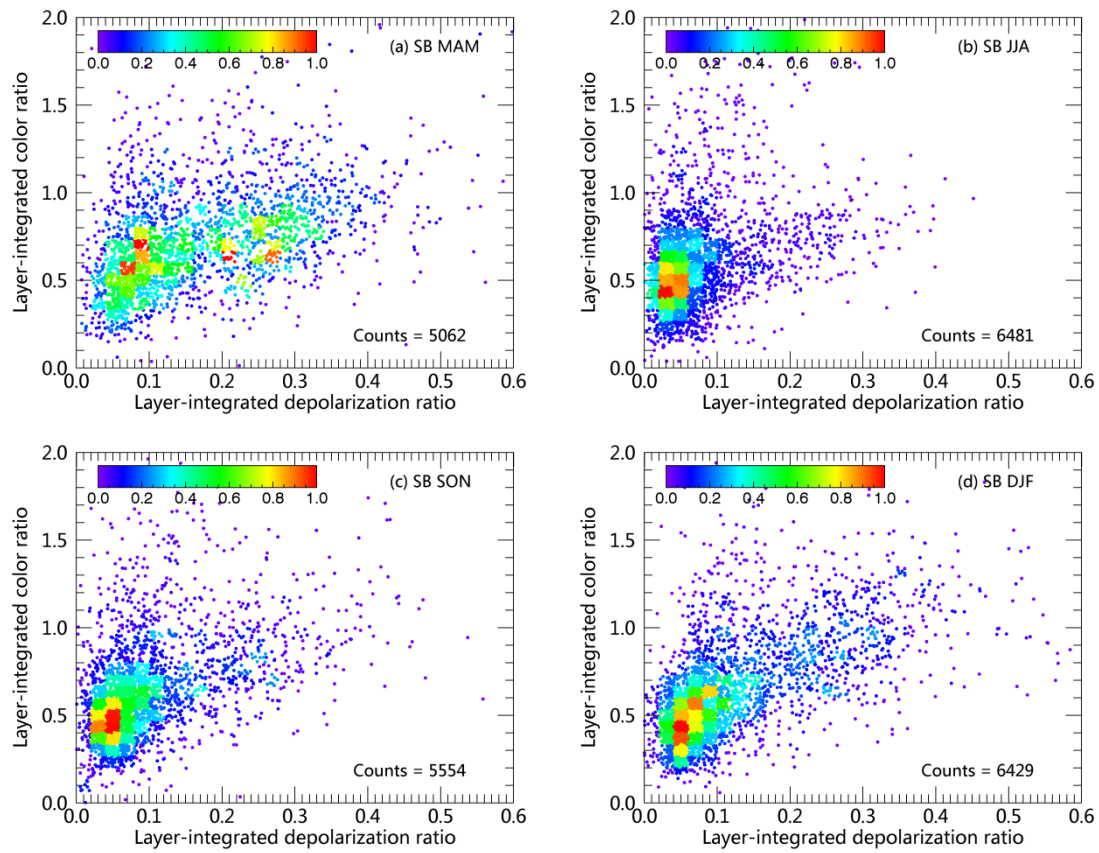
Figure S6. Scatter plots for the layer-integrated aerosol color ratios versus the layer-integrated aerosol depolarization ratios over the Sichuan Basin (SB) region (a) spring; (b) summer; (c) autumn; (d) winter.
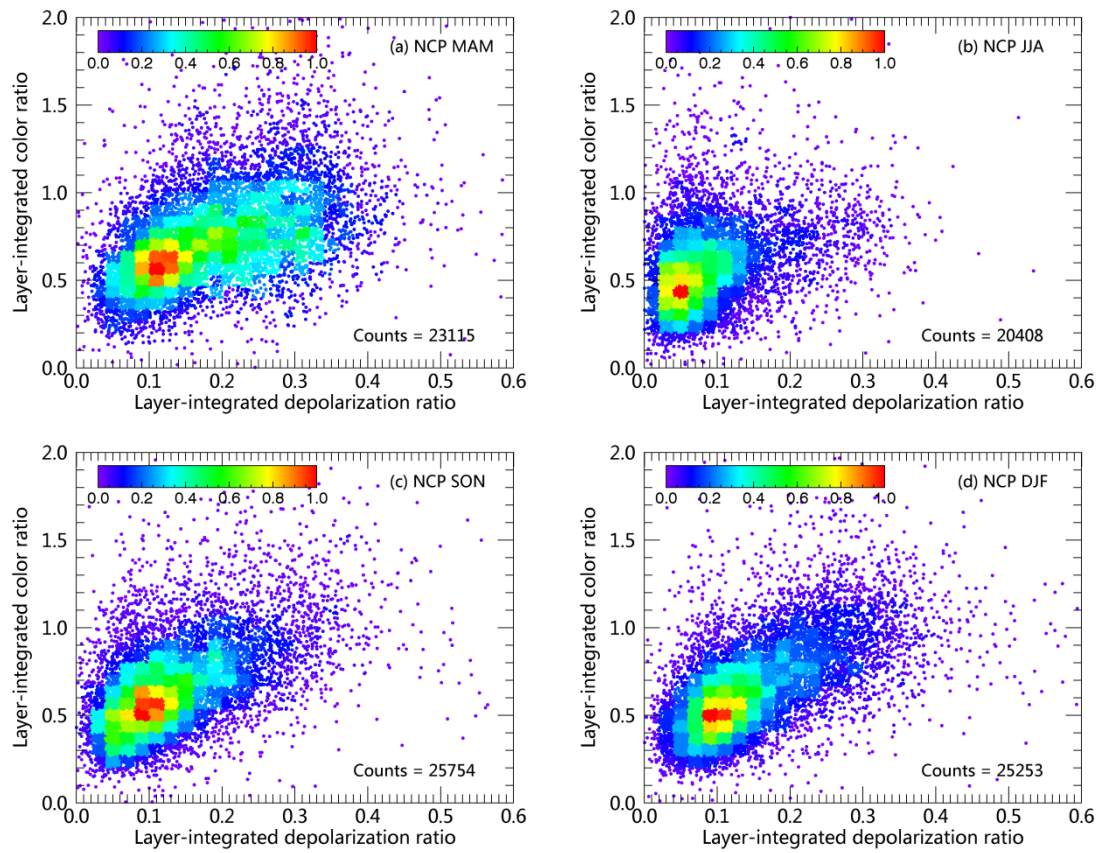
Figure S7. Scatter plots for the layer-integrated aerosol color ratios versus the layer-integrated aerosol depolarization ratios over the North China Plain (NCP) region (a) spring; (b) summer; (c) autumn; (d) winter.
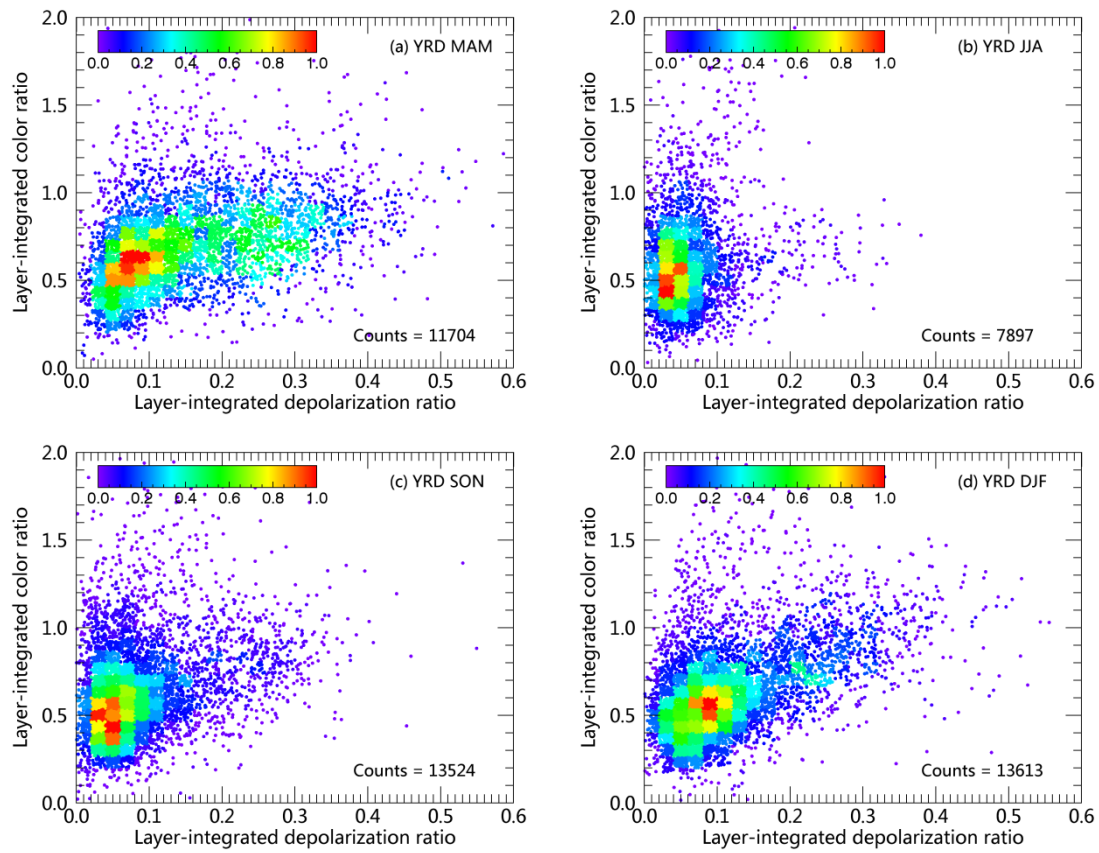
Figure S8. Scatter plots for the layer-integrated aerosol color ratios versus the layer-integrated aerosol depolarization ratios over the Yangtze River Delta (YRD) region (a) spring; (b) summer; (c) autumn; (d) winter.
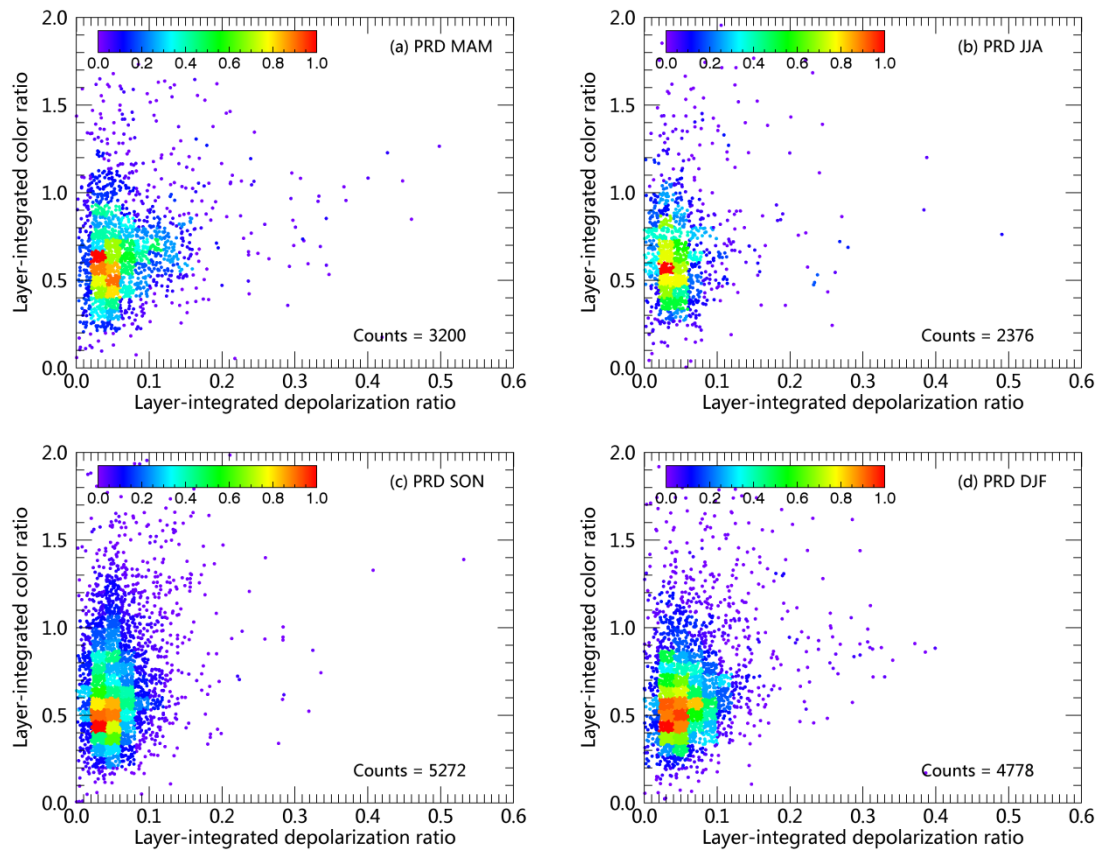
Figure S9. Scatter plots for the layer-integrated aerosol color ratios versus the layer-integrated aerosol depolarization ratios over the Pearl River Delta (PRD) region (a) spring; (b) summer; (c) autumn; (d) winter.