## Summary – absolute difference surface flux of SO2 - NH-indian surface flux of BC - NH-indiar surface concentration of BC - NH-in 4.1e-20 $\Delta$ emiso2 (kg m<sup>-2</sup> s<sup>-1</sup>) $\Delta$ emibc (kg m<sup>-2</sup> s<sup>-1</sup>) 2.0e-20 2e-12 1e-12 $\Delta$ mmrbc (kg kg – 1) 0.0e+000e+00 0e+00 -2.0e-20 -2e-12 -1e-12 इस्मान होता. इसम्मान होता. -4.1e-20 sho sho sho sho shi shi de shi beo surface concentration of SO4 - NH-ir surface concentration of SO2 - NH-ir load of so2 - NH-indian 6e-07 2e-10 2e-10 $\Delta$ mmrso4 (kg kg-1) $\Delta \cos (kg kg - 1)$ 1e-10 3e-07 $\Delta$ clivi (kg m<sup>-2</sup>) 0e+00 0e+00 0e+00 -1e-10 -3e-07-2e-10 sto all still ind still oso sto all still ind -2e-10 -6e-07 Dimethyl sulphide (DMS) mole fraction - NH-indian load of bc - NH-indian 1.5e-13 1.0e-13 2.5e-10 dms (mol mol<sup>-1</sup> 5.0e-14 $\Delta$ clivi (kg m<sup>-2</sup>) 0.0e+000.0e + 00-5.0e-14 -2.5e-10 -1.0e-13 -1.5e-13 CESM1 **GISS**

## Summary – absolute difference upwelling shortwave flux at TOA – NH–indian upwelling longwave flux net radiative flux at TOA – NH-indian at TOA - NH-indian 1e+00 1e+00 1e+00 $\Delta$ rlut rsut (W m – 2) 5e-01 $\Delta rlut (Wm-2)$ 5e-01 5e-01 ∆ rsut (W m-0e+00 0e+00 0e+00 -5e-01 -5e-01 -5e-01 -1e+00 -1e+00-1e+00sho sho sho sho shirt ship shirt sh incident shortwave flux upwelling clear-sky longwave upwelling clear-sky shortwave at TOA - NH-indian flux at TOA - NH-indian flux at TOA - NH-indian 5.0e-02 1e-01 2e-01 2.5e-02 $\Delta \operatorname{rsutcs} (\operatorname{Wm} - 2)$ $\Delta$ rlutcs (W m – 2) $\Delta \operatorname{rsdt} (\operatorname{Wm} - 2)$ 0.0e+000e+00 0e+00 -2.5e-02 -2e-01 -1e-01 -5.0e-02 clear-sky net radiative flux implied cloud response at TOA at TOA - NH-indian – NH–indian $\Delta$ rlut + rsut - rlutcs - rsutcs (W m<sup>-2</sup>) 1e+00 $\Delta$ rlutcs rsutcs (W m – 2) 2e-01 5e-01 0e+00 0e+00 -5e-01 -2e-01 sto all stift ind stift of story of stift of sti CESM1 **GISS**

## Summary - absolute difference

cloud cover percentage – NH-indian



