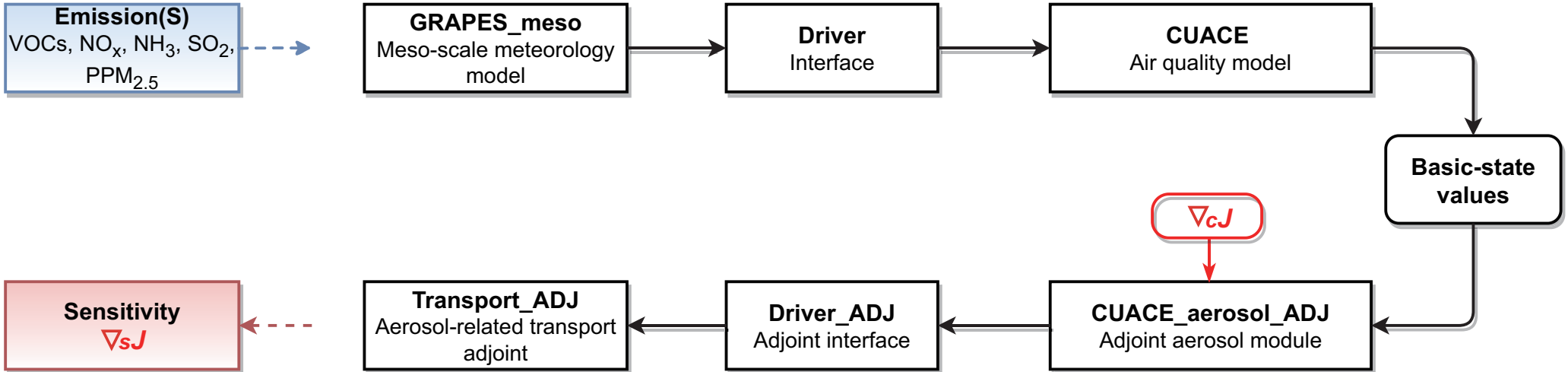
Emission(S)
VOCs, NO_x, NH_3, SO_2, $PPM_{2.5}$
GRAPES_meso
Meso-scale meteorology model
Driver
Interface
CUACE
Air quality model
Basic-state values
$\nabla_c J$
CUACE_aerosol_ADJ
Adjoint aerosol module
Driver_ADJ
Adjoint interface
Transport_ADJ
Aerosol-related transport adjoint
Sensitivity
$\nabla_s J$