with the rapid development of China’s economy, the haze of big city caused a greater impact on the people’s life, therefore, the detection and mechanism research of haze is increasingly important. The precision, spatial and temporal resolution of Mie aerosol lidar is high, and it can continuously detect the aerosol profile, so the lidar is one of the important remote sensing equipments for aerosol detection. The research group developed a Mie aerosol lidar based on 532 nm laser, and the lidar has two channel receivers including two 532 nm polarization channels. The aerosol extinction coefficient, particle phase state, cloud height data detected by this lidar were compared with the data detected by the aerosol lidar in the same district of Beijing, and the consistency is good.