

IMAGING DEVICE AND IMAGING METHOD

[ABSTRACT]

5 An imaging device (100) includes: a plurality of transmitters (101) that each transmit a wave to a measurement area in the atmosphere; a plurality of receivers (102) that each receive a scattered wave of the wave from the measurement area; and an information processing circuit (103) that images an object in the measurement area using measurement data of the scattered wave. The information processing circuit (103): derives a scattering field function using the measurement data; derives an imaging function that is defined using an amount output from the scattering field function in response to inputting an imaging target position into the scattering field function; and images the object in the measurement area using the imaging function. The information processing circuit (103) reflects in the scattering field function that the wavenumber of the wave changes as the refractive index in the atmosphere changes with height in the atmosphere.

20

Figure 7