Detection of the Subducted Philippine Sea Slab beneath Iriomote Island using later phases

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We detected the later phases to investigate the reflector below Iriomote Island, western Okinawa Trough. We used the seismograms carried out by the JMA. The waveforms contained two types of later phases. One was emerged between P and S arrivals and was dominant with vertical component. The other was appeared after S arrival and was dominant with horizontal components. We estimated the later phases as reflected wave below the hypocenters. We computed the model, which minimizes the differences between observed and calculated arrival times. The best-fitted reflector was located at the depth of 35 km below the Iriomote Island, dipping 30 degrees. This corresponds to the Wadati-Benioff zone in the Iriomote Island. We concluded that the reflector would be subducted Philippine Sea plate.