Lake-level change based on acoustic records of Uniboom since ca. 35,000 years ago in Lake Biwa, central Japan

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Sequence stratigraphical study was carried out on acoustic records of Uniboom in Lake Biwa, based on distribution patterns of remarkable reflector and weak reflectors at eastern margin of the lake. Five remarkable reflectors are correlated to wide spread tephra horizons, namely, AT (29 kyr cal. B.P.), BT9 (28.5 kyr cal. B.P.), Sakate (17.2 kyr cal. B.P.), BT5 (12.3 kyr cal. B.P.), U-Oki (10.7 kyr cal. B.P.), K-Ah (7.3 kyr cal. B.P.) and Kg (3.1 kyr cal. B.P.) in ascending order. Two horizons of buried terrace are observed in the records. Formation of these buried terraces occurred when the lake level was stable or at regression. In addition, backstep patterns and the downstep patterns are observed in this area. These are the evidence that lake-level gradually descended and ascended. These evidences contradict with the old hypothesis that intermittent lake-level change occurred controlled by faulting. Based on the above mentioned results, lake-level curve during the past 35 ka can be delineated which shows good correlation with that of lake-level change at Karasuma peninsula in south basin (Usami et al., 1999) and lowerings of lake level show good correlation with global cooling event. Further discussion is necessary to clarify the connection between lake level change and global climate change and the other causing factors of lake-level change.