

## Tohoku University Radiocarbon Measurements ?

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## Tohoku University Radiocarbon Measurements II

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The following list comprises selected measurements made in  $^{14}\text{C}$  Laboratory of Institute of Geography, Faculty of Science, Tohoku University, with the 2.4L  $\text{CO}_2$  proportional counter. Details of procedure are given in previous report (Nishimura *et al.*, 1972). Age calculations are based on the Libby half-life of  $^{14}\text{C}$ ,  $5570 \pm 30$  years, and the modern activity given by 95% of the activity of NBS oxalic acid standard. Errors quoted are the standard deviations obtained from the number of counts. When observed activity is less than  $2\sigma$  above back ground, infinite date is given with a limit corresponding to the activity of  $3\sigma$ . For shell samples, dates are computed without any correction for environmental and biological isotopic fluctuation. The description, comments, and references are essentially those of the submitters. The measurements between TH-008 and TH-014 were carried out between November 1972 and March 1974 by Makita and Koseki. Financial support was provided by Institute of Geography. The authors wish to express their hearty thanks to Professor K. Nishimura and Professor T. Noh for their critical readings on this manuscript.

### Sample Descriptions

#### 1 Check Samples

TH-017.	Tôya (B)	$11,970 \pm 695$ $10,020 \text{ B.C.}$
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Buried trunk in the deposits between Tôya pyroclastic flow I and II, at road cutting near Osaru, Datemachi, Usu-gun, Hokkaido ( $42^\circ 20' 28.3'' \text{N}$  Lat.,  $140^\circ 49' 33.8'' \text{E}$  Long.). Collected in 1970 by K. Omoto. Comment (K. Omoto): Charred wood of the same layer was dated  $9820 \pm 215$  yrs. B.P. (TH-001).

TH-020.	Skarvsnes (A)	$6020 \pm 175$ $4070 \text{ B.C.}$
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*Laternula elliptica*, about 14 m a.s.l., near Suribachi-ike, Skarvsnes, East Antarctica ( $69^\circ 29.0' \text{S}$  Lat.,  $39^\circ 37.5' \text{E}$  Long.). Collected in 1969 by K. Omoto. Comment (K. Omoto). The same sample was dated  $7450 \pm 135$  yrs. B.P. (N-926). Another *Laternula elliptica* of 8-10 m a.s.l. at Kizahashihama near TH-020 was dated  $4700 \pm 100$  yrs. B.P. (Yoshida, 1970).

**TH-021. East Ongul Island (A) 1450±110  
A.D. 500**

*Adamussium colbecki*, about 2 m a.s.l., at Kitamihama, East Ongul Island, East Antarctica (69°00'29"S Lat., 39°34'30"E Long.). Collected in 1970 by K. Omoto. Comment (K. Omoto): The same sample was dated 2510±110 yrs. B.P. (N-925). While the same kind of the shell sample, at 3-4 m a.s.l. of Kainohama 800 m southwest from Kitamihama, was dated 3840±100 yrs. B.P. (Meguro *et al.*, 1964). Sea water sample near East Ongul Island was dated 2860±125 yrs. B.P. (Omoto, 1972). According to the personal communication from Dr. T. Hoshiai (National Institute of Polar Research), calcareous algae at the elevation of high tide level of East Ongul Island was dated 3340±90 yrs. B.P., and the same sample at 1 meter above the former was dated 3540±90 yrs. B.P. (Gak-3664, and Gak-3665). While the Echinoidea sample on the sea bottom (about 10 m below the mean sea level at East Ongul Island), near Syowa Station was dated 150±80 yrs. B.P. (Gak-3666).

## 2 Geomorphic Samples

### Tôno Series

**TH-008. Tôno (1) 25,250 -1690  
+2145  
24,250 B.C.**

Peat bed in alternation of greyish or white coarse sand and blue-grey clay beds, at about 1.7 km southwest from Iwatekamigô Railway Station, Unanrin, Tôno, Iwate Pref. (39°16'10"N Lat., 141°34'30.8"E Long.). Collected in 1972 by K. Sugawara, N. Chida, and S. Takahashi. Comment (K. Sugawara): Expected result. The age shows that the river terrace deposits were brought on the way to cold stage of the Würm-II inter-glacial stage. It is worthy of notice when the gentle slope, which is slightly higher than the present alluvial plain, but continuous to river terrace surface, was formed.

**TH-012. Tôno (3) 15,940±1125  
13,990 B.C.**

Buried trunk in gentle slope deposits which cover Tôno terrace (Sugawara *et al.*, 1974), at Kotazawa, Tôno, Iwate Pref. (39°23'00"N Lat., 141°33'30"E Long.). Collected in 1973 by K. Sugawara. Comment (K. Sugawara): Slightly older than expected, but seems almost proper. The age shows that the gentle slope formation has started in Dorias stage of the Würm-IV inter-glacial stage.





