

PARADOX 3.5 and an IBM PC. Initial entries are based on the comprehensive data compiled by James Weinstein (1984) on the Southern Levant, and expanding the data to include reference material from *RADIOCARBON* as well as original sources. A computer demonstration of the project will be given, showing the possibilities for retrieving relevant paleoenvironmental and archaeological data. The potential for evaluating technological assessments and exercising quality control will also be presented.

#### REFERENCES

- Kra, R 1988 The first American workshop on the International Radiocarbon Data Base. *Radiocarbon* 30(2): 259-260.  
Weinstein, JM 1984 Radiocarbon dating in the southern Levant. *Radiocarbon* 26(3): 297-366.

### ATMOSPHERIC RADIOCARBON ACTIVITY VARIATION IN JAPAN

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Radiocarbon activity was measured periodically at an altitude of about 10 km at ground level between 1964 and 1985. The high-altitude sampling was performed by a jet fighter plane, and samples were obtained by adsorption on molecular sieves. The ground-level samples were obtained by absorption in sodium hydroxide solutions. Radiocarbon activity was measured by  $\text{CO}_2$  gas counting, and expressed as percent excess above the normal level, which is defined by 95% NBS standard oxalic acid.

In the beginning of our measurements, the  $^{14}\text{C}$  activity was widely scattered, but this seems to be due to the different activity in three large air masses that cover the Japan island randomly and alternatively. As the differences of  $^{14}\text{C}$  activity in the air masses decreased with time, the spread of  $^{14}\text{C}$  activity scatter also decreased.

### RADIOCARBON DATING OF FOSSIL WOOD FROM SOUTHERN POLAND

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In the last decade, a great number of trunks of subfossil oaks have been found during exploitation of gravel peats in the Vistula valley, up and downstream from Krakow, southern Poland. Preliminary radiocarbon measurements carried out in our laboratory point to a range of radiocarbon ages of individual oaks from 700 to 8400 BP. On the basis of about 100 trunks that were investigated, three floating chronologies were established, covering 700, 225 and 400 years, with  $^{14}\text{C}$  dated younger ends of the chronology estimated at  $1690 \pm 90$ ,  $3050 \pm 80$  and  $7800 \pm 100$  BP, respectively. Owing to the large quantity of the material, we hope that further measurements will enable us to link the chronologies and extend them to the present. Characteristic  $^{14}\text{C}$  variations were also observed in the calibration curve.