

A first summary of the consensus values for all the VIRI samples are presented below. These results were reported at the Radiocarbon conference in Hawaii and a detailed report is being prepared for publication.

Marian Scott, July 2009

Sample descriptions (in brief) VIRI-1

4 grain samples, 2 modern, 2 archaeological

Sample A was a barley mash collected in 2001,

sample C was barley mash used in the FIRI trial as samples G & J (consensus value 110.7 pMC) and was collected in 1998.

Samples B and D were grain, the expected ages (on archaeological grounds) of samples B and D are 2800 BP and 2850-2900 BP respectively.

VIRI-2

5 bone samples (one for AMS labs only)

Mammoth bone (>5 half-lives) provided by Tom Higham- sample E

Horse bone (from Siberia, a Scythian site, < 1 half-life) provided by Ganna Zaitseva-sample F

Whalebone (two samples)- provided by Paula Reimer and Steinar Gulliksen (both approx 2 half-lives)-samples H and I

Human bone (approx 1000 yrs)- provided by Alex Bayliss- sample G, for AMS only.

Consensus values for VIRI-1 and VIRI-2

Sample	Known or previous measurements	•	
A (pMC)	-	109.1(0.04) pMC ¹	
B (yBP)	2800	$2820(4) \text{ yBP}^2$	
C (pMC)	110.7	110.7(0.04) pMC	
D(yBP)	2850-2900	2836(4) yBP	
Е		39305 (121)	
F		2513 (5)	
G	934 (12)	969 (5)	
Н	9565 (130)	9528 (7)	
I	8335 (24)	8331 (6)	

¹percent modern carbon; ² radiocarbon years before present where present is 1950.

Sample descriptions for VIRI-3

12 samples distributed (1 for radiometric only, 4 for AMS only)

Humic acid: samples J (AMS only), T(AMS only) and U

Sample T: humic acid (<1 half life) from a peat deposit in Scotland.

Sample J: humic acid from a peat deposit in Siberia, provided by Prof Kh Arslanov, St Petersburg. This sample is close to background.

Sample U: humic acid from a peat deposit at St Bees, Cumbria. (2 half-lives approx)-already used as FIRI E

Wood: samples K, L, M (AMS only), N and O (cellulose)

Sample K: wood (anticipated to be background), provided by Michael Friedrich, Hohenheim.

Sample L: wood (known age) and provided by Mike Baillie, Belfast. The sample is identified as Corlea, Q5994.

Samples M, N: wood (<1 half-life), provided by Gordon Cook, SUERC. It is an oak (alder) sample from Loch Tay (a crannog site)

Sample O: cellulose (known age) from Cambridge, corresponding to 60 rings from a plateau period- previously used.

Charcoal: samples P and Q (AMS only)

Sample Q: charcoal from Iceland, provided by Dr Mike Church, University of Durham.

Sample P : charcoal from Mexico, provided by Dr L Manzanilla from the Teotihuacan archaeological site.

Barley mash:

sample S from Glengoyne distillery, 2001

Shell:

sample R: murex shell from the Tel Dor archaeological site, provided by Elisabetta Boaretto, Weizmann Institute.

Consensus values for VIRI-3 samples

Sample	Consensus value (pMC)	1 sigma	Sample	Consensus value (pMC)	1 sigma
J	0.4603	0.008	P	80.457	0.0862
K	0.0576	0.0062	Q	92.383	0.0512
L	75.719	0.0395	R	73.338	0.0368
M	73.900	0.0322	S	109.96	0.0417
N	73.839	0.0392	T	65.821	0.0333
0	98.457	0.0385	U	23.079	0.0155