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Supplementary to: Determination of the δ^2H values of high molecular weight lipids by high temperature GC coupled to isotope ratio mass spectrometry

Ian D. Bull[1], Jan-Peter Mayser[1], William D. Leavitt[6], Jerome Blewett[1], Ann Pearson[3] and Richard D. Pancost[1,7]

1 Organic Geochemistry Unit, School of Chemistry, University of Bristol, Cantock's Close, Bristol BS81TS, UK

2 Biogeochemistry Research Centre, School of Geography, Earth and Environmental Science, University of Plymouth, Drake Circus, Plymouth PL48AA, UK

3 Department of Earth and Planetary Sciences, Harvard University, 20 Oxford St, Cambridge, MA 02138, USA

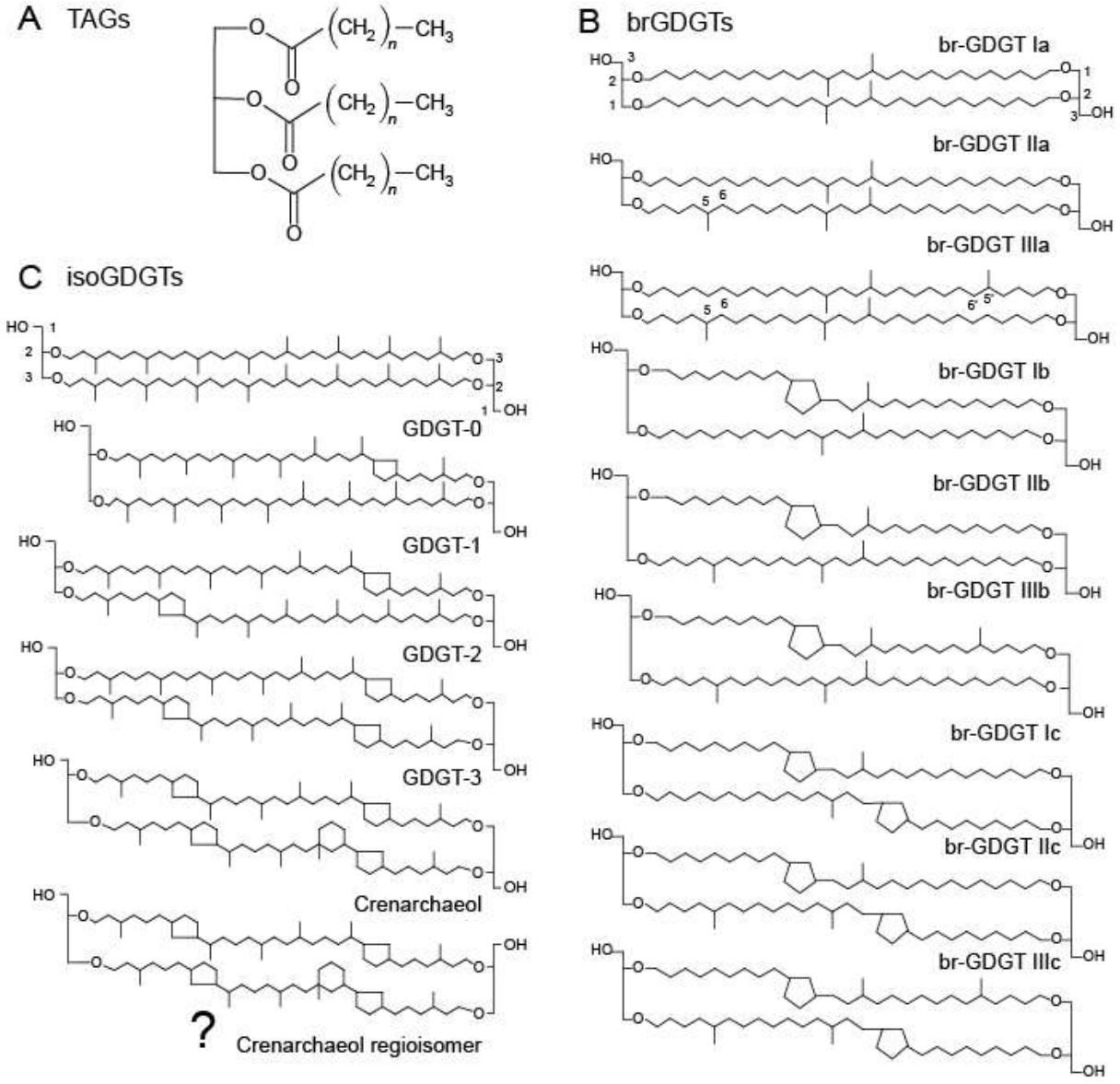
4 Elementar UK Ltd., Earl Road, Cheadle Hulme, Stockport, SK8 6PT, UK

5 Department of Geological Sciences, University of Colorado Boulder, Boulder, CO, USA

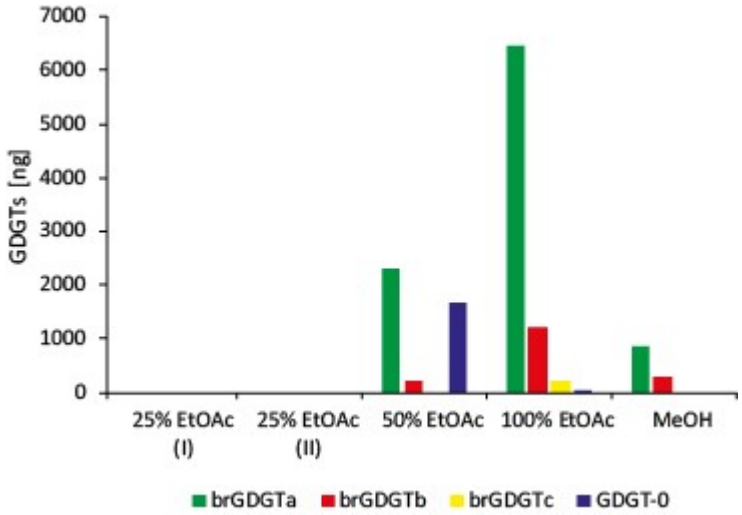
6 Department of Earth Science, Department of Chemistry, Department of Biological Sciences, Dartmouth College, Hanover, NH, USA

7 School of Earth Sciences and Cabot Institute for the Environment, University of Bristol, Queens Road, Bristol BS81RL, UK

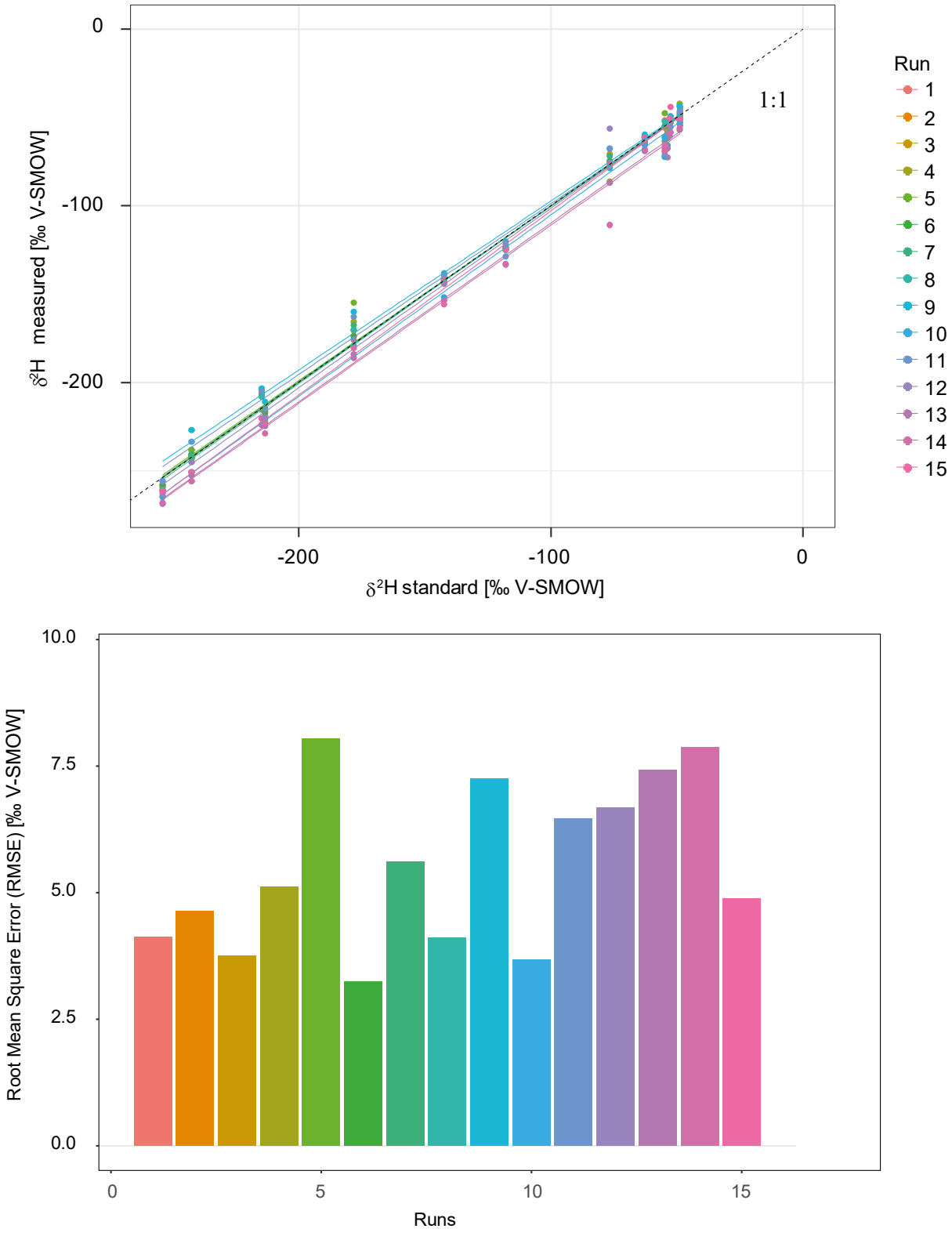
* corresponding author: sabine.lengger@plymouth.ac.uk



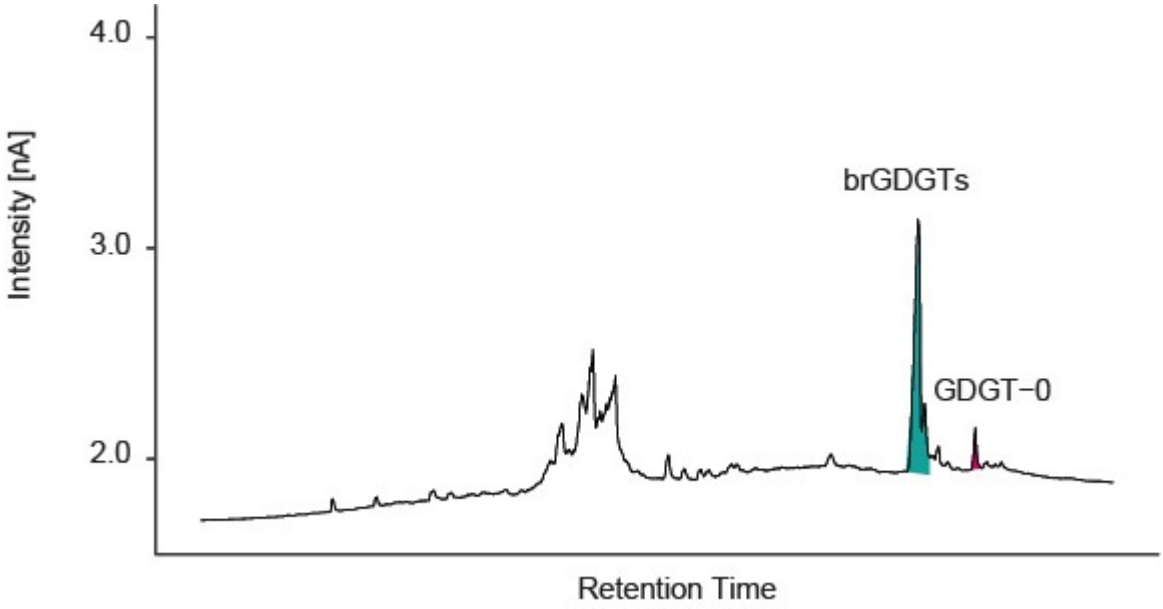
Supplementary Figure 1. Structures of analysed compounds. n = 14 (Trimyristate, TG 42:0); 16 (Tripalmitate, TG 48:0); 18 (Tristearate TG 54:0). Note that ? in panel denotes that structurall assignment is tentative.



Supplementary Figure 2. GDGTs in column chromatography fractions of sample from a Cors Caron peat (depth 100-200 mm below water table) as determined by HTGC-FID and comparison to triacylglyceride standards as described by Lengger et al. (2018)[1], with a, b and c denoting acyclic, mono-, and bi-cyclic brGDGTs, respectively.



Supplementary Figure 3. Performance monitoring results of *n*-alkane mixture B3 and Root Mean Square Error (RMSE) values of linearisations used for the measurements. Linear regression results and RMSE are shown in table 1.



Supplementary Figure 4. Chromatogram of a combined GDGT-fraction from a Welsh peat analysed by HTGC-P-IRMS.

Table S1. Linearisation coefficients and RMSE of B3 standard runs.

Run nr	Intercept [‰ V-SMOW]	Coefficient	RMSE [‰ V-SMOW]
1	-18.3	0.9615	4.1
2	-16.4	0.9629	4.6
3	-20.2	0.9759	3.8
4	-19.4	0.9152	5.1
5	-21.0	0.9120	8.0
6	-18.6	0.9924	3.2
7	-20.1	0.9597	5.6
8	-19.0	0.9703	4.1
9	-21.1	0.9225	7.3
10	-21.9	0.9905	3.7
11	-21.7	0.9319	6.5
12	-19.4	0.9799	6.7
13	-27.7	0.9762	3.0
14	-29.2	0.9730	7.9
15	-18.2	1.0048	4.9

References

1. Lengger SK, Sutton PA, Rowland SJ, et al. Archaeal and bacterial glycerol dialkyl glycerol tetraether (GDGT) lipids in environmental samples by high temperature-gas chromatography with flame ionisation and time-of-flight mass spectrometry detection. *Org Geochem*. 2018;121:10-21. doi:10.1016/j.orggeochem.2018.03.012