

# Data set for paper "Interplay of community dynamics, temperature, and productivity on the hydrogen isotope signatures of lipid biomarkers"

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<b>Name</b>	<b>Description</b>	<b>Units</b>	<b>Missing data identifier</b>
Date (YYMMDD)	Day of year sampling occurred	2 digit year, 2 digit month, 2 digit day	na
Water d2H (per mil VSMOW)	Surface water hydrogen isotope composition	‰, relative to Vienna Standard Mean Ocean Water	na
Surface water temp (degrees C)	Temperature of surface water	°C	na
Conc nC14:0 (ug/L)	Concentration of <i>n</i> -C <sub>14:0</sub> fatty acid in surface water	µg/L	na
Conc nC16:0 (ug/L)	Concentration of <i>n</i> -C <sub>16:0</sub> fatty acid in surface water	µg/L	na
Conc nC16:1 (ug/L)	Concentration of <i>n</i> -C <sub>16:1</sub> fatty acid in surface water	µg/L	na
Conc nC18:x (ug/L)	Concentration of unsaturated <i>n</i> -C <sub>18</sub> fatty acids in surface water	µg/L	na
Conc brassicasterol (ug/L)	Concentration of brassicasterol in surface water	µg/L	na
Conc phytol (ug/L)	Concentration of phytol in surface water	µg/L	na
natural d13C nC14:0 (per mil, VPDB)	Carbon isotopic composition of <i>n</i> -C <sub>14:0</sub> fatty acid in incubated, unlabeled surface water	‰ relative to Vienna Pee Dee Belemnite	na
labeled d13C nC14:0 (per mil, VPDB)	Carbon isotopic composition of <i>n</i> -C <sub>14:0</sub> fatty acid in surface water incubated with 13C enriched sodium bicarbonate	‰ relative to Vienna Pee Dee Belemnite	na
Prod rate nC14:0 (ug L <sup>-1</sup> hr <sup>-1</sup> )	Production rate of <i>n</i> -C <sub>14:0</sub> fatty acid	µg/(L*hour)	na
natural d13C nC16:0 (per mil, VPDB)	Carbon isotopic composition of <i>n</i> -C <sub>16:0</sub> fatty acid in incubated, unlabeled surface water	‰ relative to Vienna Pee Dee Belemnite	na

labeled d13C nC16:0 (per mil, VPDB)	Carbon isotopic composition of <i>n</i> -C <sub>16:0</sub> fatty acid in surface water incubated with 13C enriched sodium bicarbonate	‰ relative to Vienna Pee Dee Belemnite	na
Prod rate nC16:0 (ug L <sup>-1</sup> hr <sup>-1</sup> )	Production rate of <i>n</i> -C <sub>16:0</sub> fatty acid	μg/(L*hour)	na
natural d13C nC16:1 (per mil, VPDB)	Carbon isotopic composition of <i>n</i> -C <sub>16:1</sub> fatty acid in incubated, unlabeled surface water	‰ relative to Vienna Pee Dee Belemnite	na
labeled d13C nC16:1 (per mil, VPDB)	Carbon isotopic composition of <i>n</i> -C <sub>16:1</sub> fatty acid in surface water incubated with 13C enriched sodium bicarbonate	‰ relative to Vienna Pee Dee Belemnite	na
Prod rate nC16:1 (ug L <sup>-1</sup> hr <sup>-1</sup> )	Production rate of <i>n</i> -C <sub>16:1</sub> fatty acid	μg/(L*hour)	na
natural d13C nC18:1 (per mil, VPDB)	Carbon isotopic composition of unsaturated <i>n</i> -C <sub>18</sub> fatty acid in incubated, unlabeled surface water	‰ relative to Vienna Pee Dee Belemnite	na
labeled d13C nC18:1 (per mil, VPDB)	Carbon isotopic composition of unsaturated <i>n</i> -C <sub>18</sub> fatty acid in surface water incubated with 13C enriched sodium bicarbonate	‰ relative to Vienna Pee Dee Belemnite	na
Prod rate nC18:1 (ug L <sup>-1</sup> hr <sup>-1</sup> )	Production rate of unsaturated <i>n</i> - C <sub>18</sub> fatty acids	μg/(L*hour)	na
natural d13C brassicasterol (per mil, VPDB)	Carbon isotopic composition of brassicasterol in incubated, unlabeled surface water	‰ relative to Vienna Pee Dee Belemnite	na
labeled d13C brassicasterol (per mil, VPDB)	Carbon isotopic composition of brassicasterol in surface water incubated with 13C enriched sodium bicarbonate	‰ relative to Vienna Pee Dee Belemnite	na
Prod rate Brass (ug L <sup>-1</sup> hr <sup>-1</sup> )	Production rate of brassicasterol	μg/(L*hour)	na
natural d13C phytol (per mil, VPDB)	Carbon isotopic composition of phytol in incubated, unlabeled surface water	‰ relative to Vienna Pee Dee Belemnite	na

labeled d13C phytol (per mil, VPDB)	Carbon isotopic composition of phytol in surface water incubated with 13C enriched sodium bicarbonate	‰ relative to Vienna Pee Dee Belemnite	na
Prod rate phyt	Production rate of phytol	µg/(L*hour)	na
d2H nC14:0 (per mil, VSMOW)	Hydrogen isotope composition of <i>n</i> -C <sub>14:0</sub> fatty acid filtered from surface water	‰, relative to Vienna Standard Mean Ocean Water	na
d2H nC16:0 (per mil, VSMOW)	Hydrogen isotope composition of <i>n</i> -C <sub>16:0</sub> fatty acid filtered from surface water	‰, relative to Vienna Standard Mean Ocean Water	na
d2H nC16:1 (per mil, VSMOW)	Hydrogen isotope composition of <i>n</i> -C <sub>16:1</sub> fatty acid filtered from surface water	‰, relative to Vienna Standard Mean Ocean Water	na
d2H nC18:x (per mil, VSMOW)	Hydrogen isotope composition of unsaturated <i>n</i> -C <sub>18</sub> fatty acids filtered from surface water	‰, relative to Vienna Standard Mean Ocean Water	na
d2H Brass (per mil, VSMOW)	Hydrogen isotope composition of brassicasterol filtered from surface water	‰, relative to Vienna Standard Mean Ocean Water	na
d2H phytol (per mil, VSMOW)	Hydrogen isotope composition of phytol from surface water	‰, relative to Vienna Standard Mean Ocean Water	na
alpha nC14:0	Apparent hydrogen isotope fractionation between <i>n</i> -C <sub>14:0</sub> fatty acid and surface water	Unitless	na
alpha nC16:0	Apparent hydrogen isotope fractionation between <i>n</i> -C <sub>16:0</sub> fatty acid and surface water	Unitless	na
alpha nC16:1	Apparent hydrogen isotope fractionation between <i>n</i> -C <sub>16:1</sub> fatty acid and surface water	Unitless	na
alpha nC18:x	Apparent hydrogen isotope fractionation between unsaturated <i>n</i> -C <sub>18</sub> fatty acids and surface water	Unitless	na

alpha Brass	Apparent hydrogen isotope fractionation between brassicasterol and surface water	Unitless	na
alpha phytol	Apparent hydrogen isotope fractionation between phytol and surface water	Unitless	na