**Table ST2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Spot Name** | **Domain** | **18O/16O** | **± 95% cl** | **Measured ∂18O (‰)** | **± 2 SE** | **Xgros** | **Xpyr** | **Xspes** | **Xalm** | **BIAS gros** | **BIAS spes** | **Corrected ∂18O (‰)** | **± 2 sigma1** |
| **PB32GT-1** | rim | 0.002036637 | 1.84E-07 | 11.37 | 0.181 | 0.048 | 0.113 | 0.061 | 0.778 | -0.79 | 0.31 | 11.86 | 0.57 |
| **PB32GT-2** | rim | 0.002036742 | 1.60E-07 | 11.42 | 0.157 | 0.053 | 0.115 | 0.061 | 0.771 | -0.74 | 0.30 | 11.86 | 0.56 |
| **PB32GT-3** | rim | 0.002037117 | 1.59E-07 | 11.61 | 0.156 | 0.053 | 0.125 | 0.058 | 0.764 | -0.74 | 0.28 | 12.06 | 0.56 |
| **PB32GT-4** | rim | 0.002037182 | 1.06E-07 | 11.64 | 0.104 | 0.054 | 0.125 | 0.053 | 0.767 | -0.72 | 0.25 | 12.11 | 0.55 |
| **PB32GT-5** | rim | 0.002037332 | 9.20E-08 | 11.71 | 0.090 | 0.056 | 0.122 | 0.053 | 0.769 | -0.70 | 0.25 | 12.16 | 0.55 |
| **PB32GT-6** | rim | 0.002037235 | 1.47E-07 | 11.66 | 0.144 | 0.050 | 0.138 | 0.055 | 0.757 | -0.77 | 0.26 | 12.17 | 0.56 |
| **PB32GT-7** | rim | 0.002036371 | 2.62E-07 | 11.24 | 0.257 | 0.049 | 0.132 | 0.060 | 0.760 | -0.79 | 0.30 | 11.73 | 0.60 |
| **PB32GT-8** | rim | 0.002037013 | 1.13E-07 | 11.55 | 0.111 | 0.047 | 0.131 | 0.060 | 0.762 | -0.81 | 0.30 | 12.06 | 0.55 |
| **PB32GT-9** | rim | 0.002037167 | 1.53E-07 | 11.63 | 0.150 | 0.058 | 0.125 | 0.061 | 0.756 | -0.68 | 0.31 | 12.01 | 0.56 |
| **PB32GT-10** | rim | 0.002036883 | 1.82E-07 | 11.49 | 0.178 | 0.054 | 0.062 | 0.075 | 0.810 | -0.73 | 0.39 | 11.83 | 0.57 |
| **PB32GT-11** | rim | 0.002036159 | 1.40E-07 | 11.13 | 0.138 | 0.045 | 0.132 | 0.061 | 0.762 | -0.83 | 0.31 | 11.65 | 0.56 |
| **PB32GT-12** | rim | 0.002035962 | 1.91E-07 | 11.04 | 0.188 | 0.049 | 0.111 | 0.060 | 0.779 | -0.78 | 0.30 | 11.51 | 0.57 |
| **PB32GT-13** | rim | 0.002036772 | 1.96E-07 | 11.44 | 0.192 | 0.048 | 0.128 | 0.059 | 0.765 | -0.79 | 0.29 | 11.93 | 0.57 |
| **PB32GT-14** | rim | 0.002036872 | 1.83E-07 | 11.48 | 0.180 | 0.051 | 0.061 | 0.083 | 0.805 | -0.76 | 0.45 | 11.79 | 0.56 |
| **PB32GT-15** | rim | 0.002036994 | 1.70E-07 | 11.54 | 0.167 | 0.052 | 0.111 | 0.064 | 0.774 | -0.75 | 0.32 | 11.97 | 0.56 |
| **PB32GT-16** | rim | 0.002036824 | 2.29E-07 | 11.46 | 0.225 | 0.052 | 0.111 | 0.064 | 0.774 | -0.75 | 0.32 | 11.89 | 0.58 |
| **PB32GT-17** | rim | 0.002036384 | 1.16E-07 | 11.24 | 0.114 | 0.048 | 0.153 | 0.049 | 0.750 | -0.79 | 0.23 | 11.81 | 0.56 |
| **PB32GT-18** | rim | 0.002036965 | 1.29E-07 | 11.53 | 0.126 | 0.051 | 0.160 | 0.050 | 0.738 | -0.76 | 0.23 | 12.06 | 0.56 |
| **PB32GT-26** | rim | 0.002036836 | 1.46E-07 | 11.47 | 0.143 | 0.060 | 0.103 | 0.059 | 0.778 | -0.66 | 0.29 | 11.84 | 0.56 |
| **PB32GT-28** | rim | 0.002036777 | 1.31E-07 | 11.44 | 0.129 | 0.047 | 0.115 | 0.059 | 0.778 | -0.80 | 0.29 | 11.95 | 0.56 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **PB32GT-19** | core | 0.002038533 | 1.56E-07 | 12.30 | 0.153 | 0.052 | 0.171 | 0.047 | 0.729 | -0.74 | 0.21 | 12.84 | 0.56 |
| **PB32GT-20** | core | 0.002038300 | 2.28E-07 | 12.19 | 0.223 | 0.048 | 0.174 | 0.046 | 0.732 | -0.80 | 0.21 | 12.78 | 0.59 |
| **PB32GT-21** | core | 0.002038134 | 9.60E-08 | 12.11 | 0.095 | 0.049 | 0.173 | 0.045 | 0.733 | -0.78 | 0.20 | 12.69 | 0.55 |
| **PB32GT-22** | core | 0.002037844 | 2.01E-07 | 11.96 | 0.197 | 0.047 | 0.166 | 0.044 | 0.744 | -0.80 | 0.19 | 12.58 | 0.58 |
| **PB32GT-23** | core | 0.002038042 | 1.29E-07 | 12.06 | 0.126 | 0.050 | 0.158 | 0.047 | 0.745 | -0.77 | 0.21 | 12.62 | 0.56 |
| **PB32GT-24** | core | 0.002037903 | 1.83E-07 | 11.99 | 0.180 | 0.048 | 0.165 | 0.046 | 0.741 | -0.79 | 0.20 | 12.58 | 0.57 |
| **PB32GT-25** | core | 0.002038071 | 1.04E-07 | 12.08 | 0.102 | 0.049 | 0.151 | 0.048 | 0.751 | -0.78 | 0.22 | 12.64 | 0.55 |
| **PB32GT-27** | core | 0.002037844 | 1.09E-07 | 11.96 | 0.107 | 0.049 | 0.168 | 0.047 | 0.736 | -0.78 | 0.21 | 12.53 | 0.55 |
| **PB32GT-29** | core | 0.002038428 | 1.78E-07 | 12.25 | 0.175 | 0.051 | 0.185 | 0.045 | 0.719 | -0.76 | 0.19 | 12.81 | 0.57 |
| **PB32GT-30** | core | 0.002037714 | 1.01E-07 | 11.90 | 0.100 | 0.049 | 0.176 | 0.044 | 0.731 | -0.78 | 0.19 | 12.49 | 0.55 |
| **PB32GT-31** | core | 0.002038352 | 1.54E-07 | 12.22 | 0.151 | 0.048 | 0.171 | 0.043 | 0.738 | -0.80 | 0.18 | 12.83 | 0.57 |
| 1. The error includes the reproducibility of the standard UWG2 in the session and the residuals of the matrix bias correction. | | | | | | | | | | |  |  |  |