Table S3. EMP major oxide contents in g/100g (≃wt.%) of glass samples. The analyses are averages from 8 spots analyzed in 4-6 different glass chips.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample** | **Lat (°S)** | **Long (°E)** | **SiO2** | **TiO2** | **Al2O3** | **FeO** | **MnO** | **MgO** | **CaO** | **Na2O** | **K2O** | **P2O5** | **S** | **Cl** | **Total** |
| **Outsider Seamount** | | | | | | | | | | | | | | | |
| SO199-DR1-7 | 6.23 | 97.37 | 50.49 | 1.61 | 15.36 | 9.24 | 0.15 | 6.45 | 11.09 | 3.30 | 1.03 | 0.23 | 0.13 | 0.02 | 99.13 |
| SO199-DR1-10 | 6.23 | 97.37 | 50.39 | 1.60 | 15.38 | 9.26 | 0.16 | 6.48 | 11.07 | 3.33 | 1.03 | 0.24 | 0.13 | 0.02 | 99.16 |
| SO199-DR1-15 | 6.23 | 97.37 | 50.60 | 1.62 | 15.33 | 9.07 | 0.15 | 6.43 | 11.15 | 3.24 | 1.03 | 0.24 | 0.13 | 0.03 | 99.06 |
| SO199-DR1-18 | 6.23 | 97.37 | 49.97 | 1.60 | 15.26 | 9.07 | 0.20 | 6.67 | 11.19 | 3.28 | 1.00 | 0.27 | 0.13 | 0.02 | 98.69 |
| **Investigator Ridge** | | | | | | | | | | | | | | | |
| SO199-DR2-15 | 7.01 | 98.11 | 50.74 | 1.11 | 14.92 | 8.79 | 0.13 | 8.44 | 12.68 | 2.43 | 0.06 | 0.09 | 0.10 | 0.00 | 99.53 |
| SO199-DR2-17 | 7.01 | 98.11 | 50.01 | 1.01 | 15.49 | 8.54 | 0.16 | 8.72 | 12.67 | 2.47 | 0.05 | 0.06 | 0.10 | 0.00 | 99.32 |
| SO199-DR2-18 | 7.01 | 98.11 | 50.54 | 1.11 | 15.04 | 8.98 | 0.15 | 8.43 | 12.59 | 2.49 | 0.06 | 0.07 | 0.10 | 0.00 | 99.58 |
| SO199-DR10-13 | 10.99 | 98.13 | 49.51 | 1.46 | 14.05 | 11.12 | 0.15 | 8.05 | 11.54 | 2.31 | 0.20 | 0.15 | 0.13 | 0.05 | 98.75 |
| SO199-DR10-14 | 10.99 | 98.13 | 49.94 | 1.45 | 13.98 | 11.16 | 0.17 | 8.12 | 11.55 | 2.30 | 0.19 | 0.14 | 0.13 | 0.05 | 99.22 |
| SO199-DR10-15 | 10.99 | 98.13 | 51.23 | 1.31 | 14.30 | 10.54 | 0.15 | 7.60 | 12.02 | 2.21 | 0.18 | 0.13 | 0.12 | 0.04 | 100.05 |
| SO199-DR10-22C | 10.99 | 98.13 | 50.12 | 1.56 | 14.05 | 11.55 | 0.19 | 7.37 | 11.43 | 2.35 | 0.21 | 0.15 | 0.13 | 0.06 | 99.19 |
| SO199-DR22-1A | 13.24 | 98.24 | 51.47 | 3.03 | 12.82 | 14.68 | 0.25 | 4.46 | 8.65 | 3.02 | 0.50 | 0.31 | 0.19 | 0.07 | 99.52 |
| SO199-DR22-1B | 13.24 | 98.24 | 51.17 | 3.03 | 12.71 | 14.32 | 0.23 | 4.36 | 8.63 | 3.04 | 0.49 | 0.33 | 0.19 | 0.07 | 98.62 |