|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reference | Name in ThermoBar | Temperature-dependent? | Pressure-dependent? | H2O-Dependent? |
| **Clinopyroxene-Liquid Barometry. *Function “calculate\_cpx\_liq\_press”*** | | | | |
| Putirka (1996) | P\_Put1996\_eqP1 | **Yes** |  | No |
| P\_Put1996\_eqP2 | **Yes** | No |
| Putirka (2003) | P\_Put2003 | **Yes** | No |
| Putirka (2008) | P\_Put2008\_eq30 | **Yes** | **Yes** |
| P\_Put2008\_eq31 | **Yes** | **Yes** |
| P\_Put2008\_eq32c | **Yes** | **Yes** |
| Masotta et al. (2013) *recalibration of Putirka eqs. for alkali systems* | P\_Mas2013\_eqPalk1 | **Yes** | No |
| P\_Mas2013\_eqPalk2 | **Yes** | No |
| P\_Mas2013\_eqalk32c | **Yes** | **Yes** |
| Masotta et al. (2013) | P\_Mas2013\_Palk2012 | No | **Yes** |
| Neave & Putirka (2017) | P\_Neave2017 | **Yes** |  | No |
| **Clinopyroxene-Liquid Thermometry. *Function “calculate\_cpx\_liq\_temp”*** | | | | |
| Putirka (1996) | T\_Put1996\_eqT1 |  | No | No |
| T\_Put1996\_eqT2 |  | **Yes** | No |
| Putirka (1999) | T\_Put1999 |  | **Yes** | No |
| Putirka (2003) | T\_Put2003 |  | **Yes** | No |
| Putirka (2008) | T\_Put2008\_eq33 |  | **Yes** | **Yes** |
| Masotta et al. (2013)  *Recalibration of Putirka eqs. for alkali systems* | T\_Mas2013\_eqTalk1 |  | No | No |
| T\_Mas2013\_eqTalk2 |  | **Yes** | No |
| T\_Mas2013\_eqalk33 |  | **Yes** | **Yes** |
| Masotta et al. (2013) | T\_Mas2013\_Talk2012 |  | No | **Yes** |
| Brugman & Till (2019) | T\_Brug2019 |  | No | No |
| **Clinopyroxene-only Barometry. *Function “calculate\_cpx\_only\_press”*** | | | | |
| Putirka (2008) | P\_Put2008\_eq32a | **Yes** |  | No |
| P\_Put2008\_eq32b | **Yes** |  | **Yes** |
| **Clinopyroxene-only Thermometry. *Function “calculate\_cpx\_only\_temp”*** | | | | |
| Putirka (2008) | T\_Put2008\_eq32d |  | **Yes** | No |
| T\_Put2008\_eq32d\_subsol |  | **Yes** | No |
| **Orthopyroxene-Liquid Barometry. *Function “calculate\_opx\_liq\_press”*** | | | | |
| Putirka (2008) | P\_Put2008\_eq29a | **Yes** |  | **Yes** |
| P\_Put2008\_eq29b | **Yes** |  | **Yes** |
| Putirka Supplement New “Global” calibrations | P\_Put\_Global\_Opx | No |  | No |
| P\_Put\_Felsic\_Opx | No |  | No |
| **Orthopyroxene-Liquid Thermometry. *Function “calculate\_opx\_liq\_temp”*** | | | | |
| Putirka (2008) | T\_Put2008\_eq28a |  | **Yes** | **Yes** |
| T\_Put2008\_eq28b\_opx\_sat |  | **Yes** | **Yes** |
| **Orthopyroxene-only Barometry. Function “calculate\_opx\_only\_press”** | | | | |
| Putirka (2008) | P\_Put2008\_eq29c | **Yes** |  | No |
| **Orthopyroxene-Clinopyroxene Barometry. *Function “calculate\_cpx\_opx\_press”*** | | | | |
| Putirka (2008) | P\_Put2008\_eq38 | No |  | No |
| P\_Put2008\_eq39 | **Yes** |  | No |
| **Orthopyroxene-Clinopyroxene Thermometry. *Function “calculate\_cpx\_opx\_press”*** | | | | |
| Putirka (2008) | T\_Put2008\_eq36 |  | **Yes** | No |
| T\_Put2008\_eq37 |  | **Yes** | No |
| Brey and Kohler (1990) | T\_Brey1990 |  | **Yes** | No |
| Wood and Banno (1973) | T\_Wood1973 |  | No | No |
| Wells (1977) | T\_Wells1977 |  | No | No |
| **Other Functions** | | | | |
| ***calculate\_cpx\_liq\_press\_temp(), calculate\_cpx\_only\_press\_temp(), calculate\_cpx\_opx\_press\_temp()***  Iteratively solves P and T for cpx-liq pairs/cpx-only/cpx-opx using an equation for P and an equation for T  **calculate\_cpx\_liq\_press\_temp\_matching(), calculate\_cpx\_opx\_press\_temp\_matching()**:  Calculates P and T for all possible cpx-liquid/cpx-opx pairs (with user-selected options for equilibrium criteria) | | | | |