**Model run Olympics\_5**

**Main outcomes**

* compared to run 4: hotter, especially the high temperature isotherms are shifted towards the surface (500°C approx. 0.5 km)
* topography seems to have a stronger impact on the isotherms, stronger perturbation
* still very old AHe ages in the Mt. Constance region (14 Ma), in principal the pattern is the same as in run 4
* the zone of reset ZHe/ZFT ages is much broader than in run 4, furthermore the age peak at Mt. Olympus almost disappeared, the ages are much younger than in run 4 (5 – 7 Ma!)
* ZHe and ZFT outside the ellipse are mostly unreset (?)
* shape of AFT profile also slightly changed
* *Mt Olympus*: very young AHe (1.4 – 2.4 Ma, m = 1.5) and AFT (2.5 – 3.8 Ma, m=1.2) ages, but the same ages like in run 4, ZHe is no longer curved but rather straight (m=1.1), ZFT shows no knickpoint (m=1.1), but ages are very young (5 – 6.7 Ma)
* *Mt Mystery:* AHe is rather straight (m=0.58), slightly younger than in run 4, AFT is significantly younger (9.7 – 13 Ma, m=0.36), ZHe and ZFT are unreset
* *Mt Constance:* in principal the same pattern as in run 4 (curved + straight AHe line)

**Modelsetup**

|  |  |  |
| --- | --- | --- |
| **Time (Ma)** | **Topography** | **Erosion rate (mm/yr)** |
| 15 | planar | 0 |
| 7 | present | elliptic (1 in the centre, 0.2 at rim) |
| 0 | present | elliptic (1 in the centre, 0.2 at rim) |

**Temperature slices**





**Thermochronometer ages**







