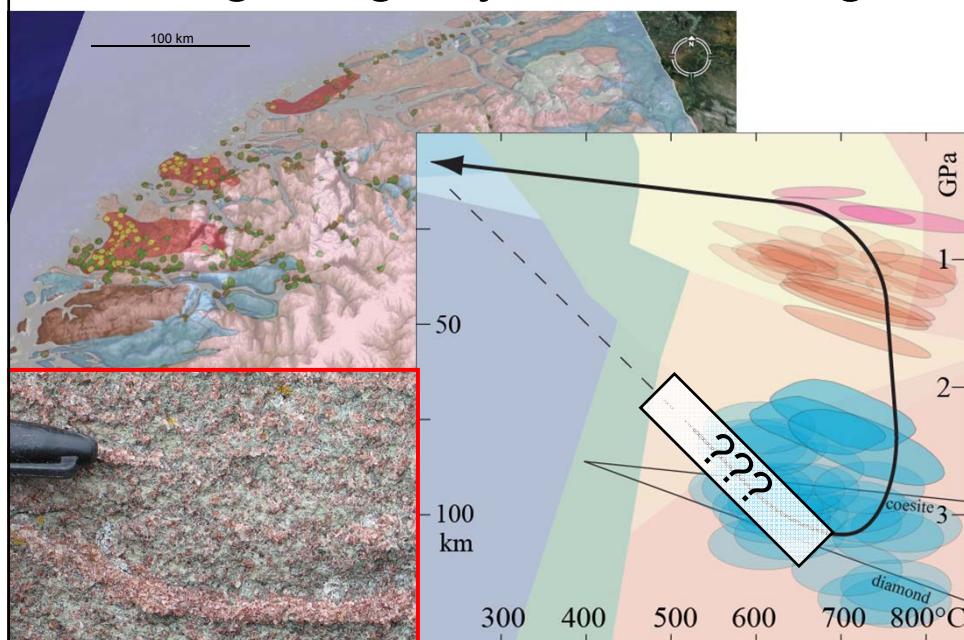


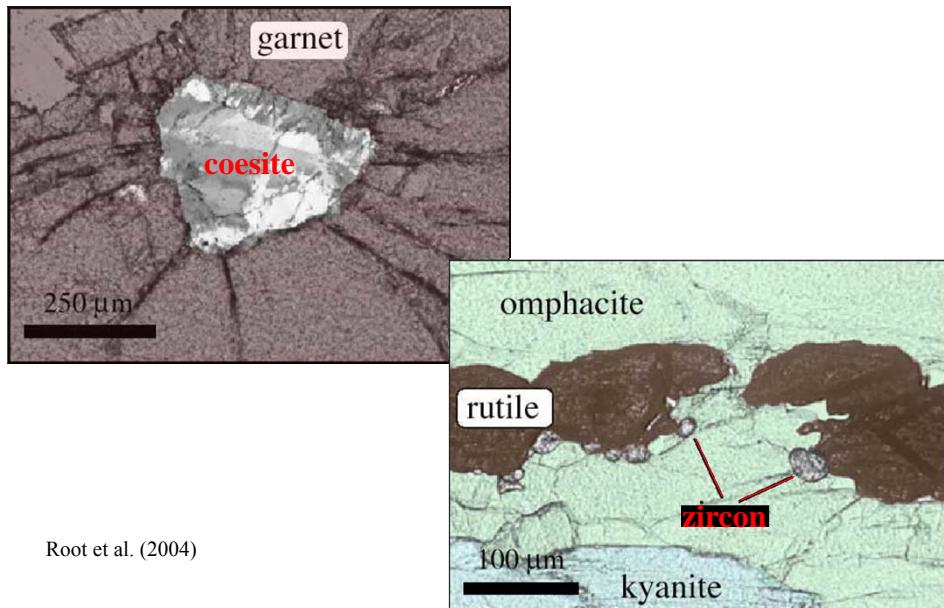
Geochronology of UHP Rocks

- U/Pb zircon
- U-Th/Pb monazite
- Lu/Hf & Sm/Nd
- Rb/Sr
- U/Pb sphene
- U/Pb rutile
- $^{40}\text{Ar}/^{39}\text{Ar}$

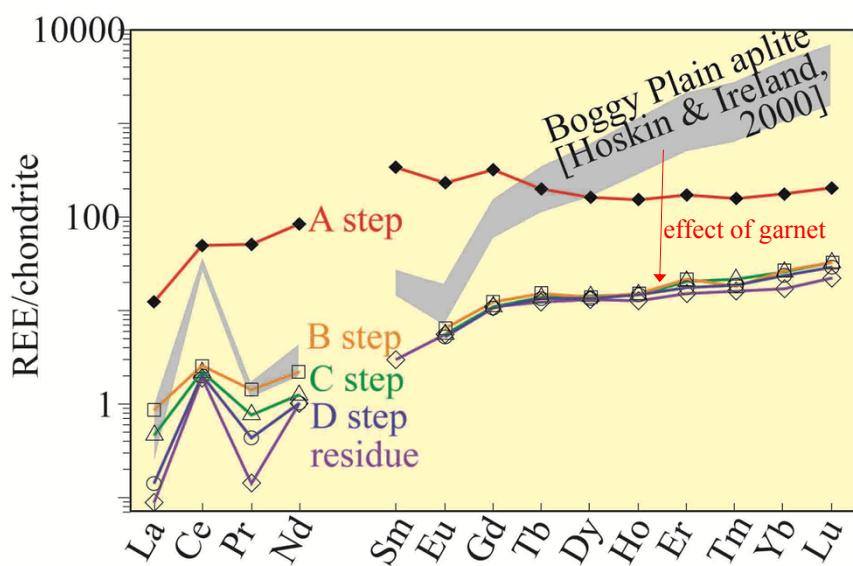
Eclogite ages yield HP timing



Evaluation of Zircon Textures

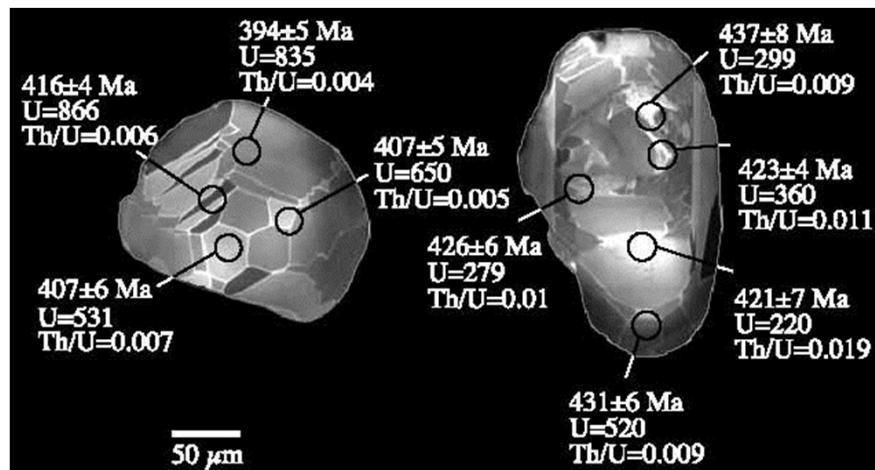


Assess Zircon Growth P Using REE



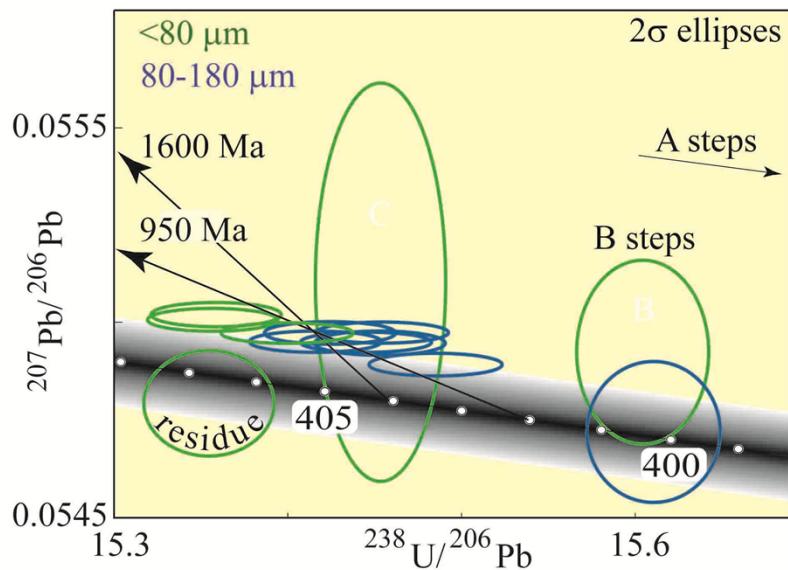
Root et al. (2004)

Identification of Inheritance & Type of (Re)crystallization



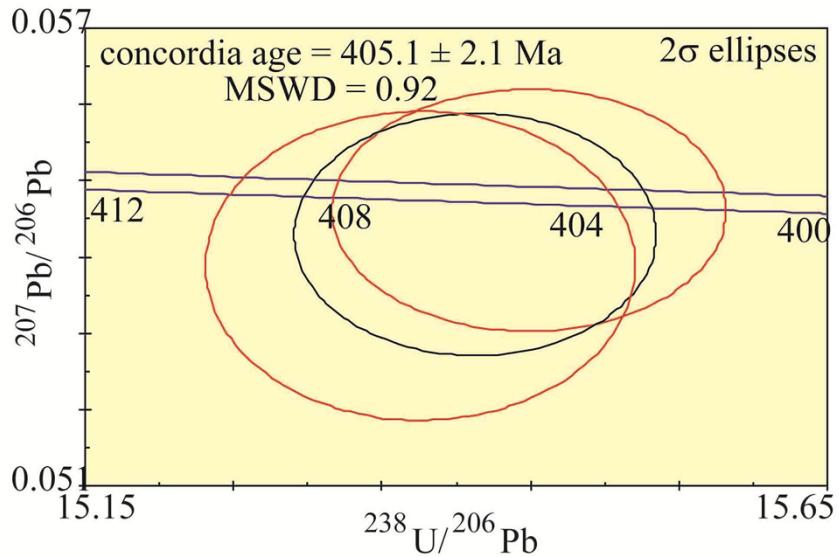
Root et al. (2004)

CA-TIMS for Precise Bulk Ages



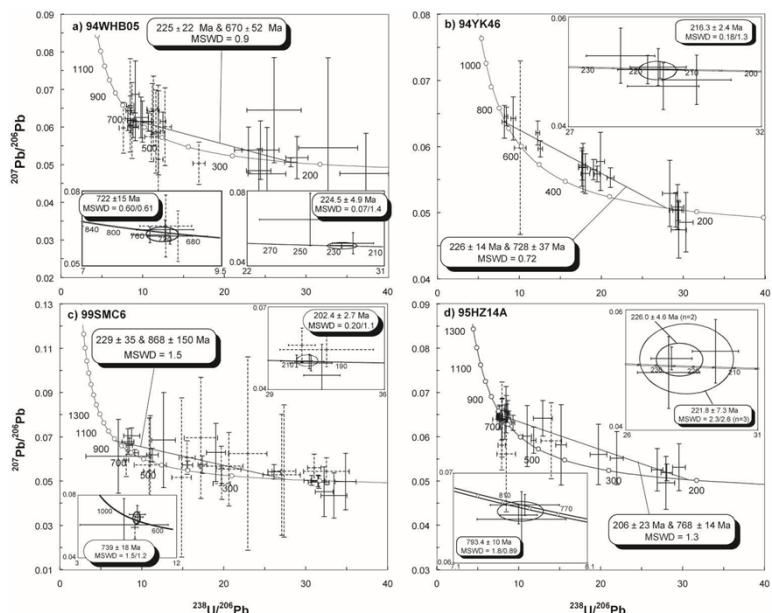
Root et al. (2004)

ID-TIMS for Precise Single-Grain Ages



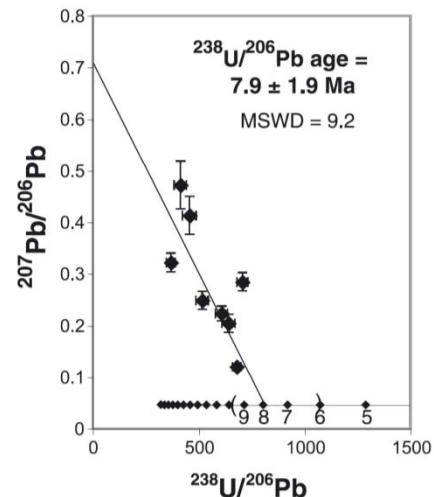
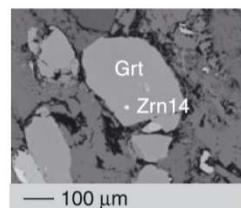
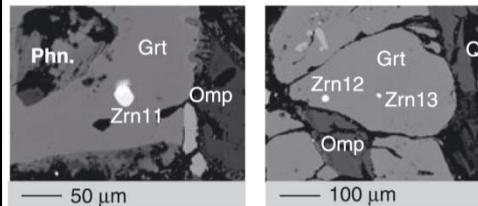
Young et al. (2007)

Zircon SIMS & LA-ICP-MS



Hacker et al. (2006)

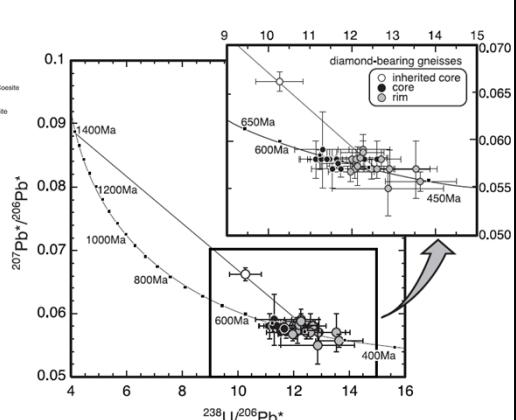
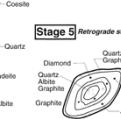
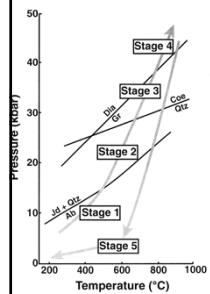
Pliocene UHP Rocks



89321a

Monteleone et al. (2007)

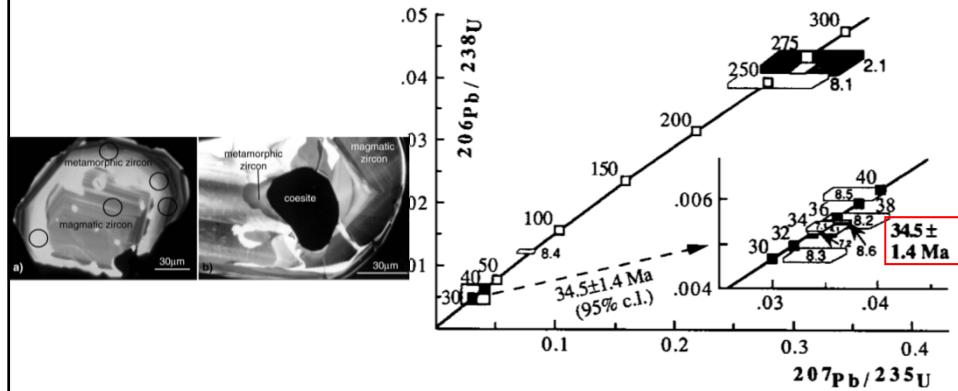
Kokchetav Massif



Katayama et al. (2000)

domains with HP inclusions: 537 ± 9 Ma
domains with LP inclusions: 507 ± 8 Ma

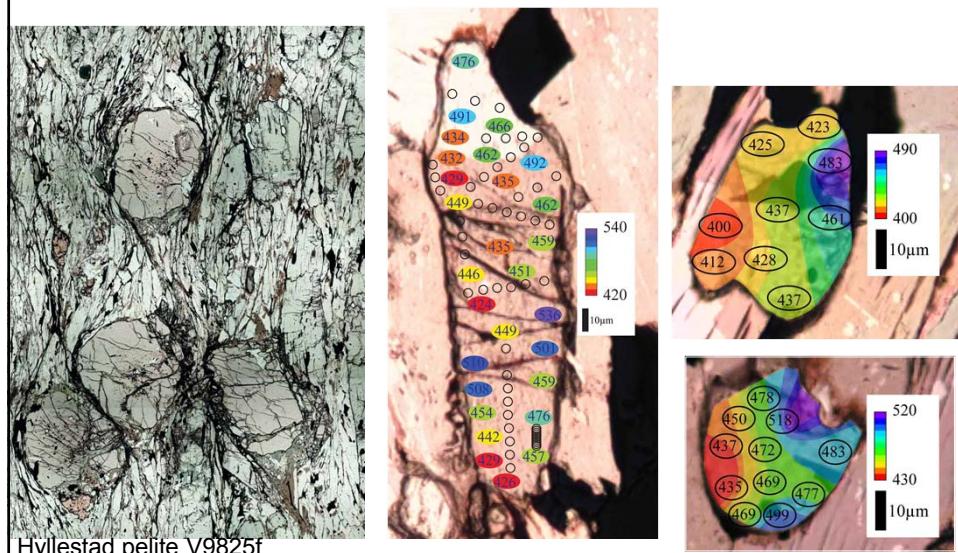
Dora Maira

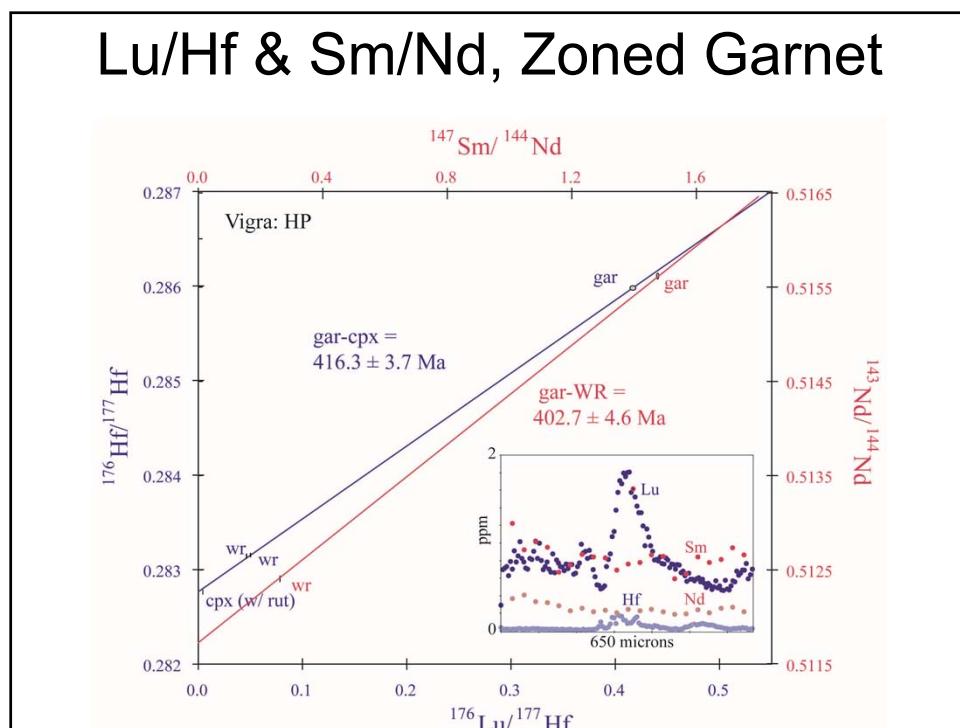
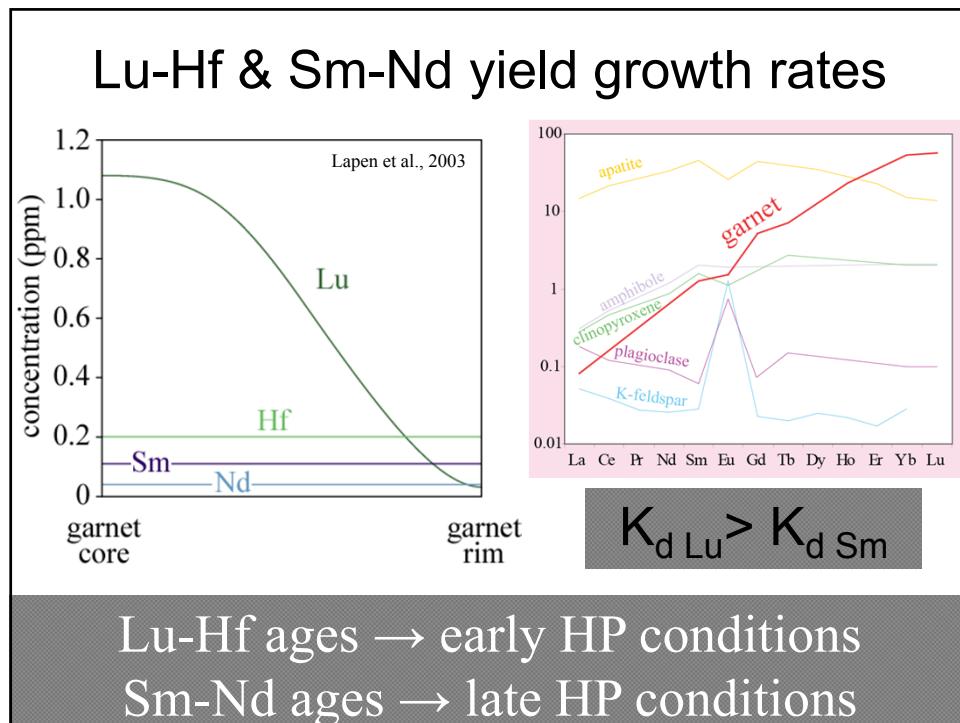


UHP inclusions in Permian magmatic zircon!
(Gebauer et al., 1997)

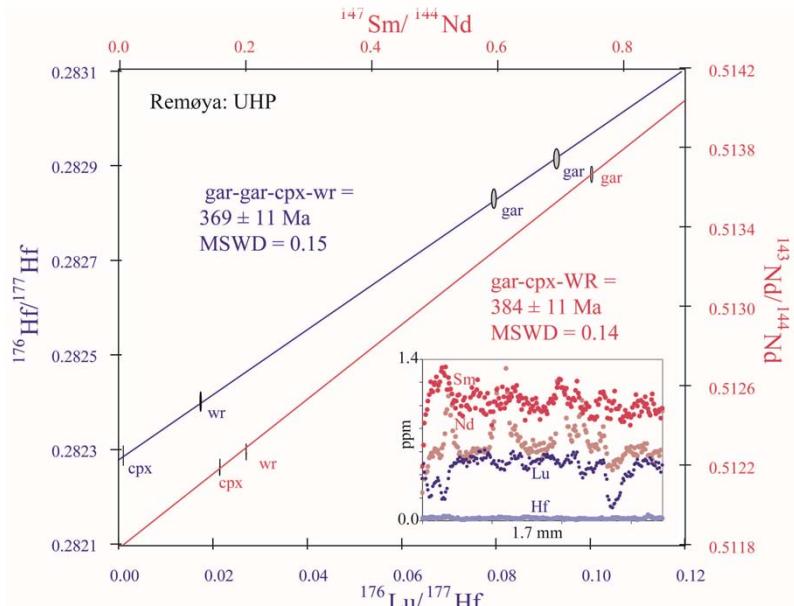
pyrope megablast zircons Gebauer et al. (1997)

Monazite U/Th-Pb?

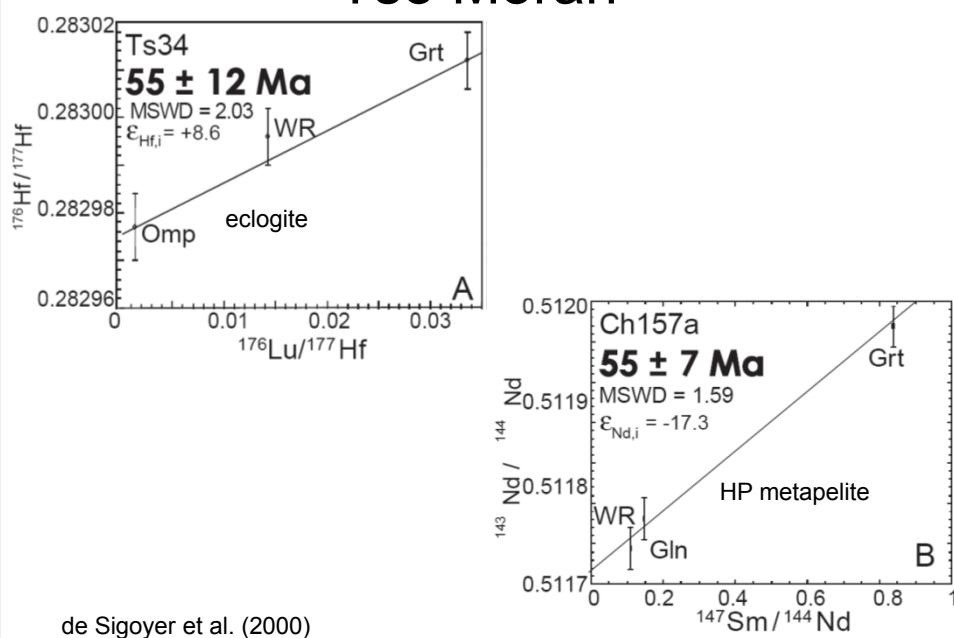




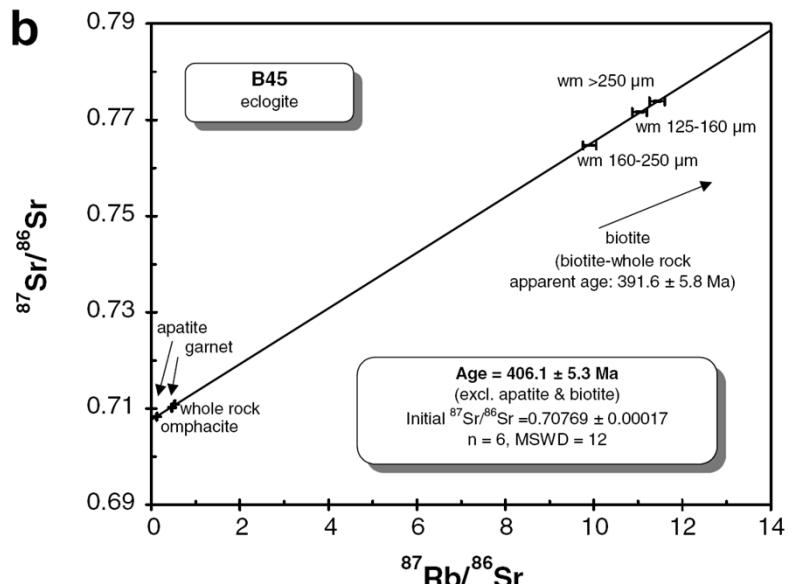
Lu/Hf & Sm/Nd, Unzoned Garnet



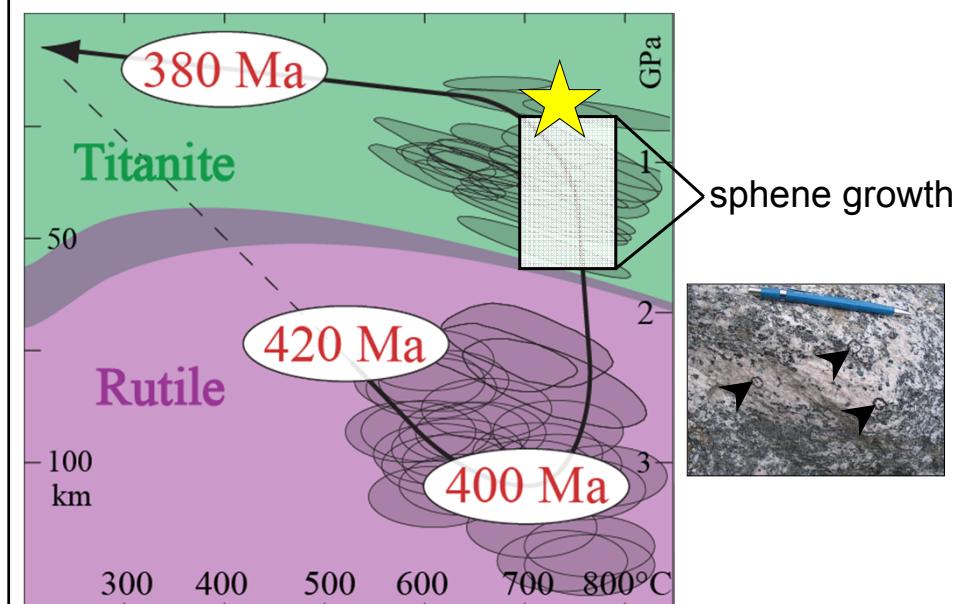
Tso Morari



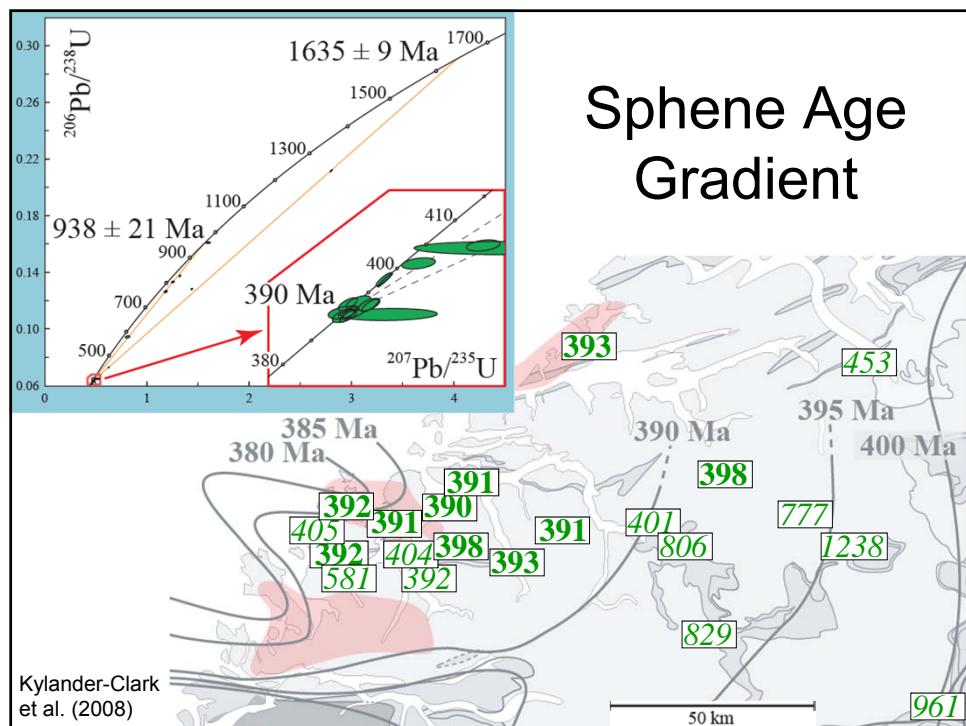
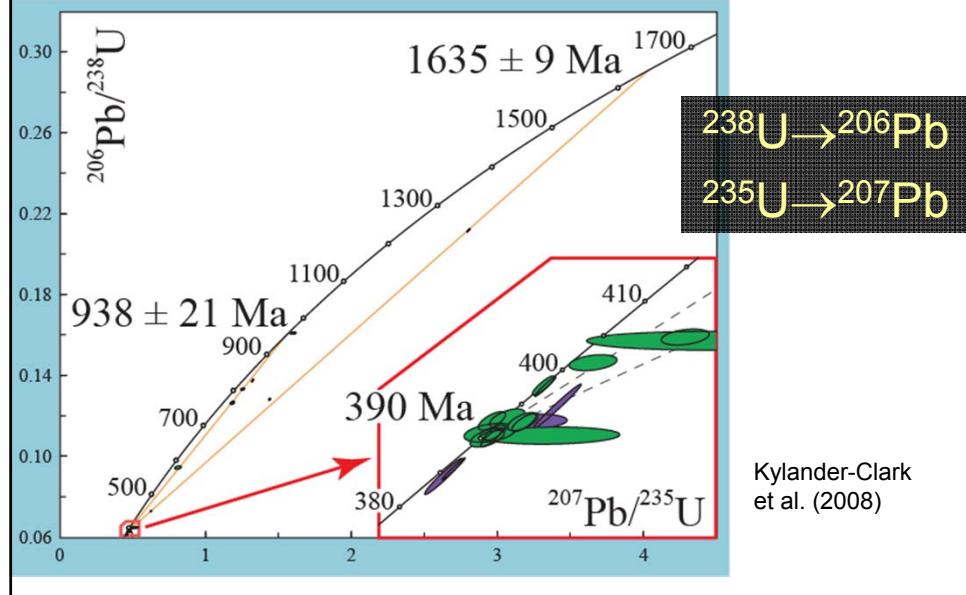
Rb/Sr Growth Isochron



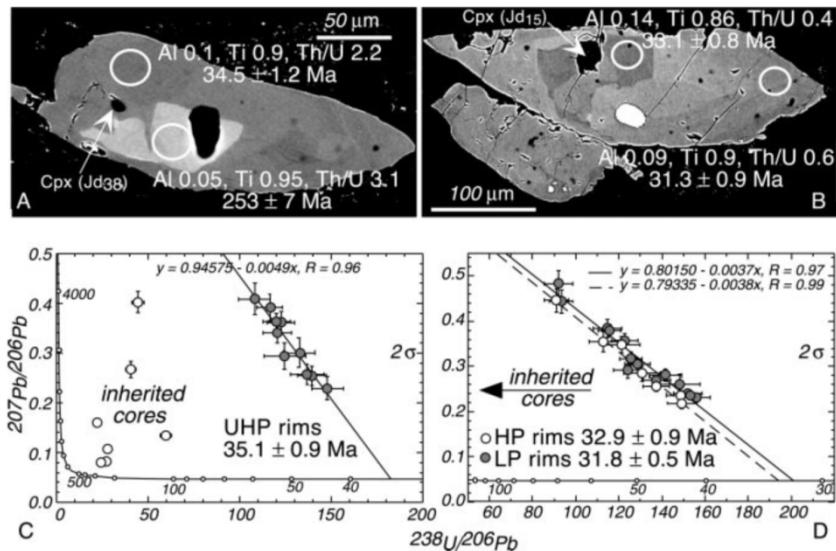
Sphene Exhumation Ages



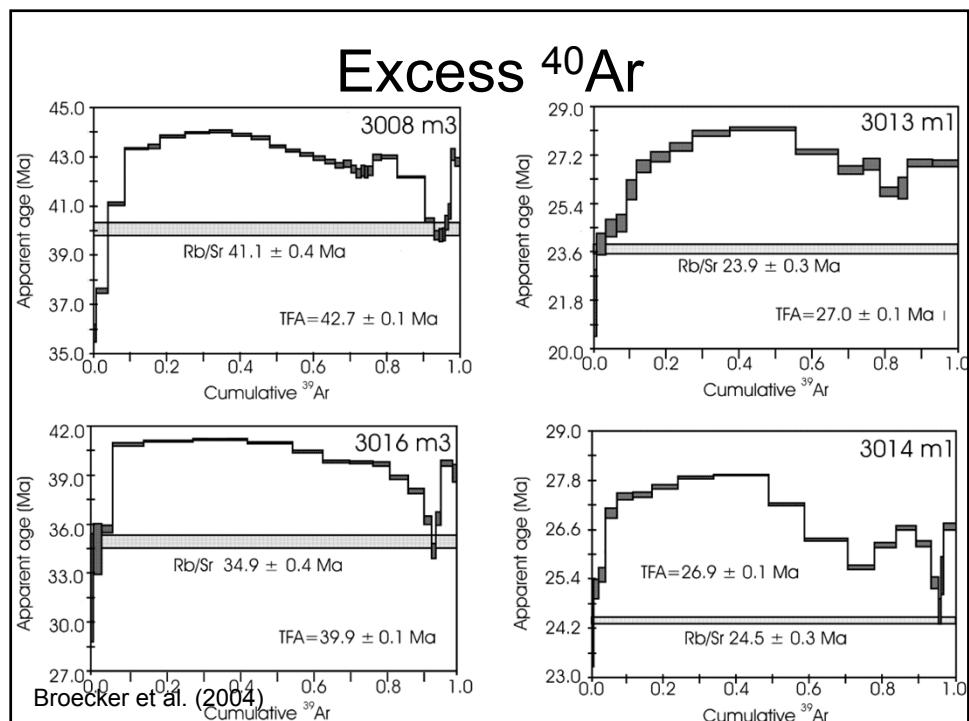
U-Pb Sphene TIMS Geochronology

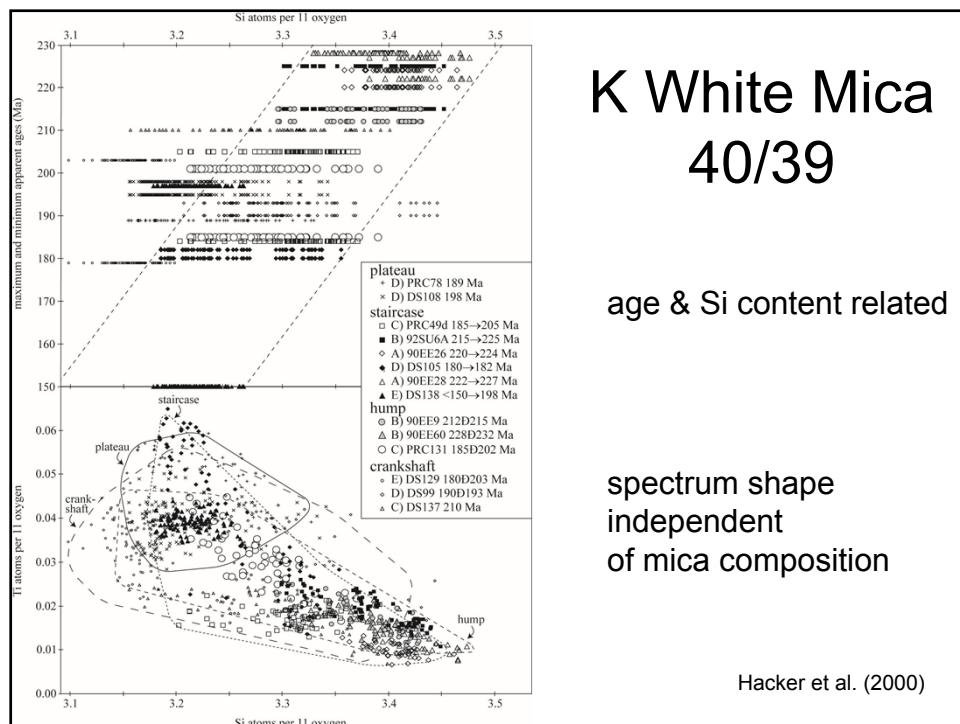
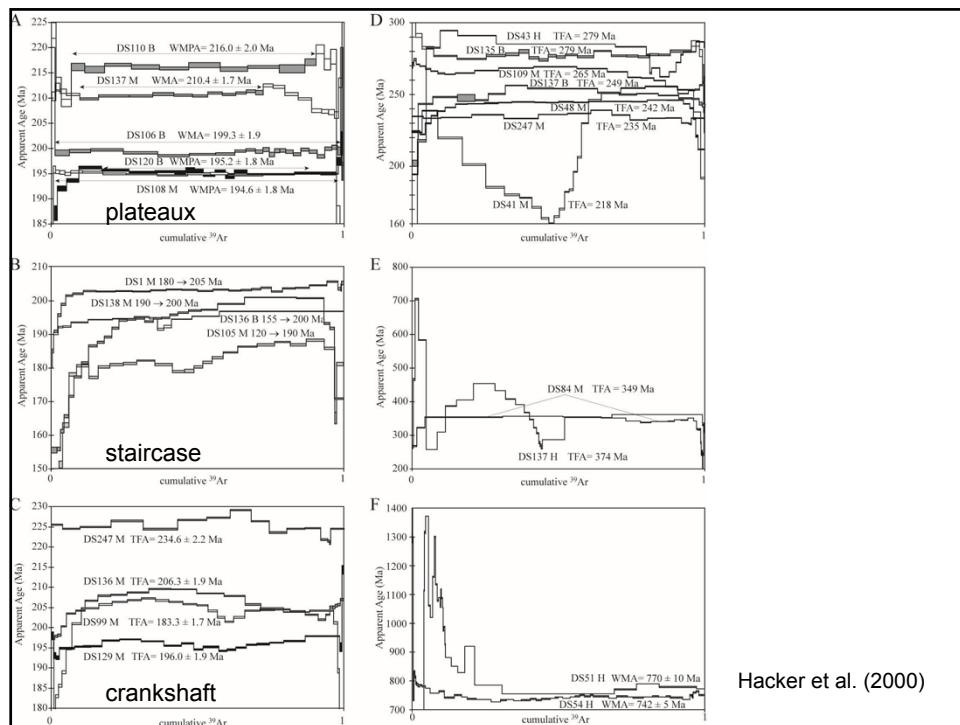


U-Pb Sphene SIMS Geochronology

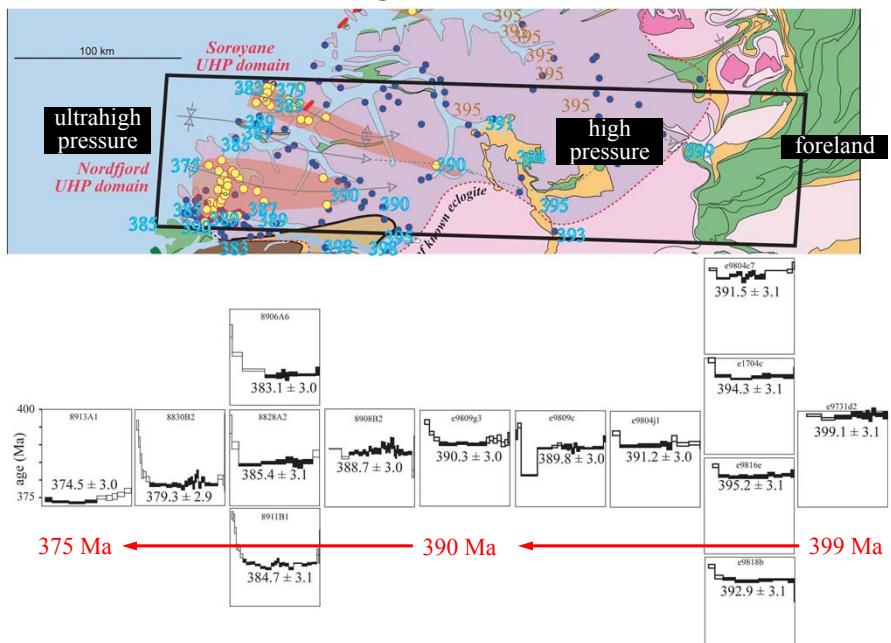


Dora Maira; Rubatto & Hermann (2001)

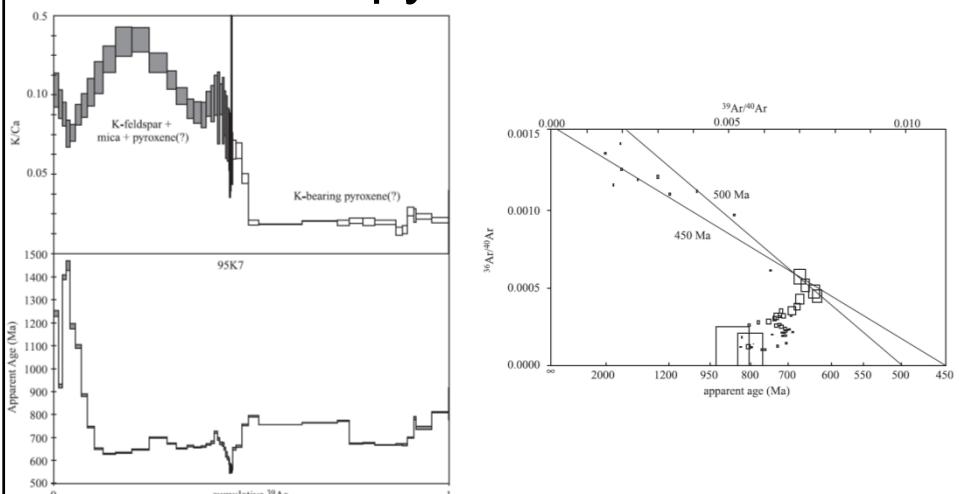




White Mica Ages Decrease Westward

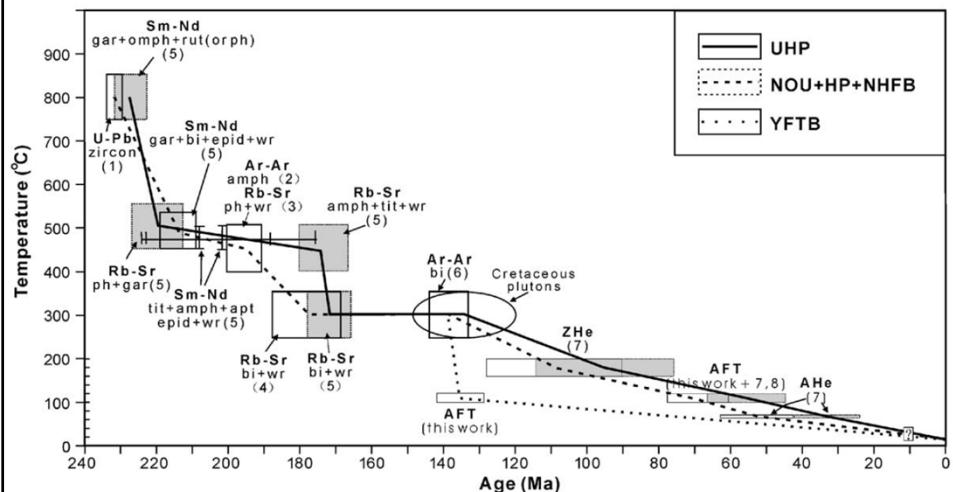


K-clinopyroxene 40/39



Hacker et al. (2003)

Dabie Cooling History



S Hu et al. (2006)