### Post Congress FIELD TRIP

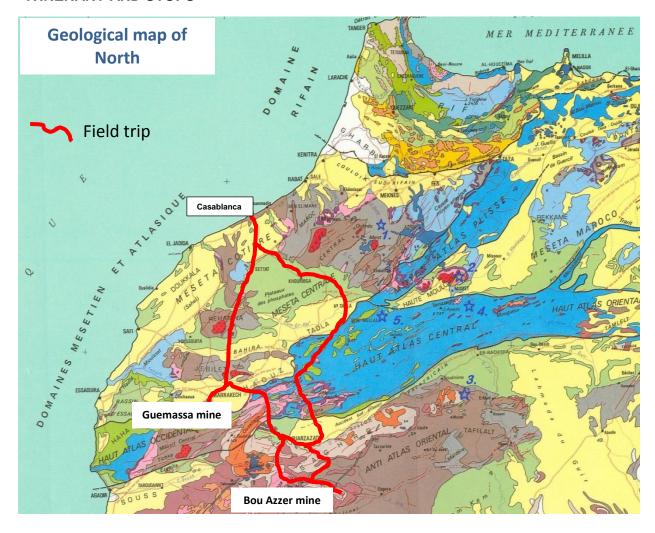
9<sup>th</sup> to 12 November 2017 Directed by

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### Structural evolution of the High Atlas/Anti-Atlas domains: An overview

Paleoproterozoic and Eburnian orogeny Neoproterozoic and Pan-African orogeny Paleozoic and Variscan orogeny Mesozoic and the central Atlantic opening Cenozoic and Atlasic deformation

### **ITINERARY AND STOPS**



<u>Day 1 (J1):</u> Casablanca-Marrakech: The coastal block with phosphates plateaus and hercynian massifs of Rehamna and Jebilet. Visit of Guemassa polymetallic mine.

# <u>Day 2 (J2)</u>: Marrakech-Ouarzazate *via* Tizi n'Tichka: The Marrakech High Atlas (Ouzellarh Block)

Stop J2.1: The north Sub-Atlasic zone at Ait Ourir; Triassic basalts Liassic-Turonian series

Stop J2.2: North Sub-Atlasic zone (continuation); the Cretaceous-Eocene sequence

Stop J2.3: Oued Rdat overall panorama, Triassic Oukaimeden sandstones

- Stop J2.4: Tazlida Precambrian basement
- Stop J2.5: "Ouarzazate 97 km": Ordovician slump beds and Bou Ourhioul panorama
- Stop J2.6: Agdal Tichka: Middle Cambrian unconformity upon Upper Neoproterozoic rhyolites
- Stop J2.7: Tichka Pass panorama
- Stop J2.8: Telouet crossroad; South Atlas Fault, Mesozoic-Cenozoic cover
- Stop J2.9: Aguelmous-Agouim: the Tiouridal basalt sequence
- Stop J2.10: Imini fault-ramp fold, Cretaceous transgression and Mn mine

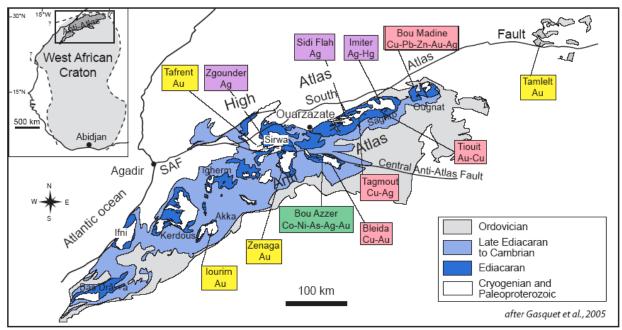
## <u>Day 3 (J3)</u>: Ouarzazate-Tazenakht-Ouarzazate: Proterozoic basement and Paleozoic cover of the Central Anti-Atlas

- Stop J3.1: Panorama High Atlas/Anti-Atlas, Late Proterozoic ignimbrite (Ouarzazate Group OG)
- Stop J3.2: Contact Adoudounien/OG
- Stop J3.3: Quartzites saghro Group (SG), Pan-African deformation
- Stop J3.4: Zenaga Paleoproterozoic schists
- Stop J3.5: Tazenakht 2 Ga old granite, OG/Eburnean unconformity
- Stop J3.6: Transgression Adoudounian limestones/OG
- Stop J3.7: Quartz-diorite SG west of Bou Azzer, Adoudounian unconformity
- Stop J3.8: Bou Azzer ophiolite complex
- Stop J3.9: Foum Zguid 200 Ma old dolerite mega-dyke
- Stop J3.10: Bleida 580 Ma old granodiorite

#### **Day 4 (J4): Ouarzazate-Demnate-Casablanca:**

- Stop J4.1: The road to the north offers a gorgeous panorama on the South Atlas Front
- Stop J4.2: The Skoura inlier with post-Pan-African angular unconformity
- Stop J4.3: Landscapes on the Mesozoic cover (CAMP basalts and Liassic carbonates). The Ait Tamlil village is built on allochthonous Devonian shales and limestones
- Stop J4.4: A thick Visean turbiditic complex associated with the Devonian nappes
- Stop J4.5: The folded/faulted Mesozoic cover offers a famous site with dinosaur foot prints
- Stop J4.6: The Imi n'Ifri touristic waterfalls overhang the Demnat town.

#### Back way to Casablanca



Location of the main ore deposits in the Anti-Atlas belt. The calc-alkaline magmatism of the Ediacaran, late Pan-African metacratonic period was associated with large-scale base metal and gold mineralization. Metallogenic activity was greatest during the final extensional stage, at the Precambrian-Cambrian boundary. It is characterized by world-class precious metal deposits, base-metal porphyry and SEDEX-type occurrences (Gasquet et al., 2005).