Reference List

JaH 479 - 553 grams
Enriched Basaltic Shergottite

Figure 1: *Photo of JaH 479 by Norbert Classen.*

Introduction
Jiddat al Harasis 479 was found in 2008 in Oman (Weisberg et al. 2010). It was an oriented stone and has a partial fusion crust (figure 1).

Petrography
JaH is a basaltic shergottite similar to Zagami. It has a coarse-grained (1 - 2 mm) sub-ophitic texture (Lorenz et al. 2010). Both pigeonite (up to 10 mm) and augite (1 - 3 mm) grains are present. Pigeonite is twinned and shows undulatory extinction. Plagioclase (0.1 – 1.5 mm) is shocked to maskelynite. Minor phases include olivine, ilmenite, silica, K-spar, phosphate, zircon, pyrrhotite and troilite. Rare, thin, shock-melt glass veins cris-cross the rock.

Lorenz et al. (2010) give mineral compositions. This data seems very similar to that of Zagami.

Chemistry
Lorenz et al. (2010) reported enough REE data to discern that JaH479 is slightly depleted in LREE – stay tuned.

Cosmogenic isotopes and exposure ages
Cartwright et al. (2010) reported the rare gas content and isotopic ratios. They found that JaH 476 had a 2 m.y. exposure to cosmic rays.

Other Studies
Oxygen isotopes were reported by Lorenz et al. (2010). Delta ^{17}O is 0.315 per mil.

Processing
This sample is being studied at the Vernadsky Institute.

References for JaH479

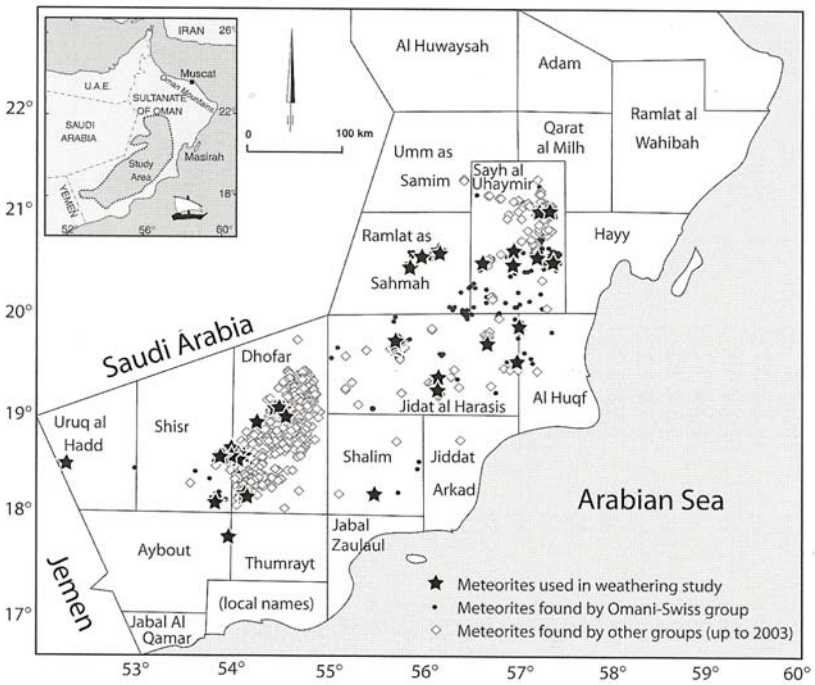

Figure 2: *Map of Oman, where meteorites are relatively easy to spot on limestone pavement (from Al'Kathiri et al. 2004). Dhofar and Sayh al Uhaymir regions also located.*