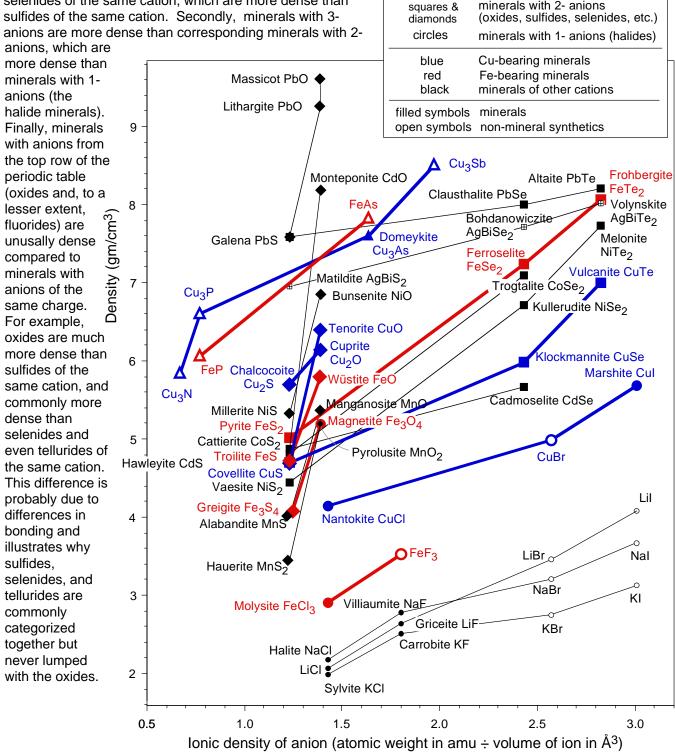
Density of minerals IV: Simple anions

This plot shows the density of minerals with simple anions (e.g.,Cl⁻, O²⁻, or P³⁻) as opposed to those with complex anions (e.g., the CO_3^{2-} of CaCO₃). At least three things emerge. First, more dense anions lead to more dense minerals, as the upward trend of all the linking lines shows. For example, tellurides are more dense than selenides of the same cation, which are more dense than sulfides of the same cation. Secondly, minerals with 3-



LBR 4DensityIdes123plot06 1/2007 rev 2/2008

He

Xe 1-

N³⁻ O²⁻ F-Ne

P3-

As³⁻

Sb³⁻

minerals with 3- anions

minerals with 2- anions

(nitrides, phosphides, etc.)

triangles

S²⁻ Cl-Ar

Se²⁻ Br⁻ Kr

Te²⁻