RADIOMETRIC AGES OF ROCK SAMPLES

Samples from the same rock unit can yield very different radiometric "ages," depending on the atoms being measured. The table below shows varying "ages" from rock units found in the Grand Canyon. Why is there so much variation? The measurements are not wrong, so there is only one reasonable answer: each radioactive element decayed at a different, faster rate in the past!

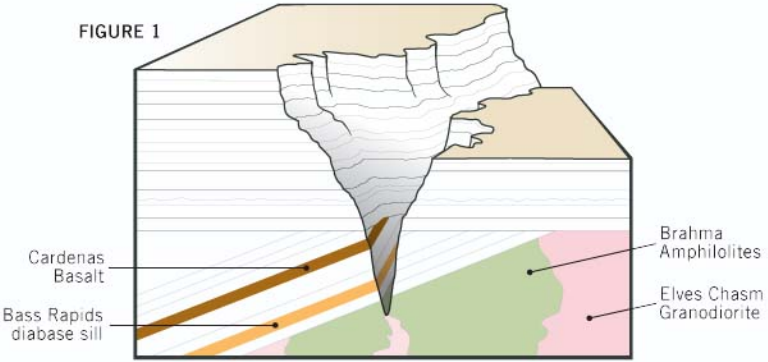


FIGURE 2—Cardenas Basalt


FIGURE 3—Bass Rapids diabase sill


FIGURE 4—Brahma amphibolites


FIGURE 5—Elves Chasm Granodiorite

photos courtesy Andrew Snelling

TABLE 1—Radioactive ages yielded by four Grand Canyon rock units. (The error margins are shown in parentheses.)

Rock Unit	Ages (million years)			
	Potassium-argon	Rubidium-strontium	Uranium-lead	S marium-neodymium
Cardenas Basalt	516 (±30)	1111 (±81)	—	1588 (±170)
Bass Rapids diabase sill	842 (±164)	1060 (±24)	1250 (±130)	1379 (±140)
Brahma Amphibolites	—	1240 (±84)	1883 (±53)	1655 (±40)
Elves Chasm Granodiorite	—	1512 (±140)	1933 (±220)	1664 (±200)