Table 1: Ratios of activity concentrations in global and Chernobyl fallout (Reference data from literature)

	Chernobyl	Global
$^{137}Cs/^{134}Cs$	1.715[a]	0,001 (in 1969)**
$^{238}Pu/^{239,240}Pu$	0.461 ± 0.032[b]	0.035 ± 0.008[c]
$^{207}Bi/^{137}Cs$	-	(1.70 ± 0.13)E-03[d]
$^{239,240}Pu/^{137}Cs$	0.0000066[e]	0.018 ± 0.0024[f]
$^{90}Sr/^{137}Cs$	0.017[g]	0.641[h]
$^{90}Sr/^{239,240}Pu$	2600[e]	36[e]

[a] Estimated from measurements of environmental media of the Hohe Tauern region with high ^{134}Cs concentrations, reference date 1st May 1986 (Bossew).

[b] Calculated (Bossew) after values out of: Irlweck K. & J. Wicke: Isotopic composition of plutonium immissions in Austria after the Chernobyl accident. J. Radioanalytical Nuclear Chemistry 227, 1-2 (1998) 133 - 136.

[c] Perkins R. W., C.W. Thomas: Worldwide Fallout, In: W.C. Hanson (ed.): Transruanic Elements in the Environment, U.S. Department of Energy, 1980.

[d] Bossew et al. (2006)

[e] Calculated from Bossew (2007).

[f] Bunzl and Kracke (1988).

[g] For Salzburg; determined from time-integrated aerosol measurements (Irlweck and Khademi, 1993).

[h] UNSCEAR (2000); calculated from the figures in annex C, table 10, p. 214f, as the ratio of the sum of the decay corrected, quoted annual depositions of ^{90}Sr and ^{137}Cs in the Northern hemisphere. Decay corrected to 2000.

** Cigna 1971

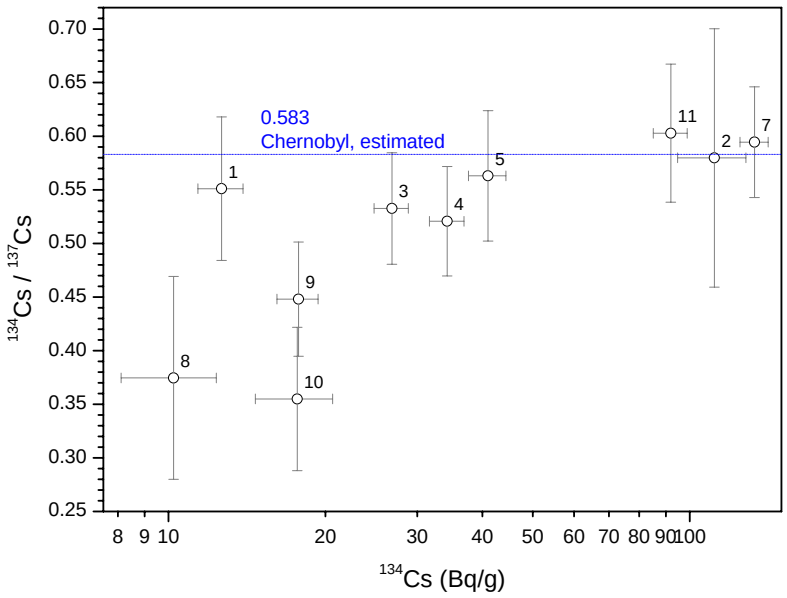

Figure 1: Plot of QCs = ^{134}Cs / ^{137}Cs against ^{134}Cs. Uncertainty bars: 1 σ. Values from **¡Error! No se encuentra el origen de la referencia.**, sample 6 omitted. Labels: sample number.

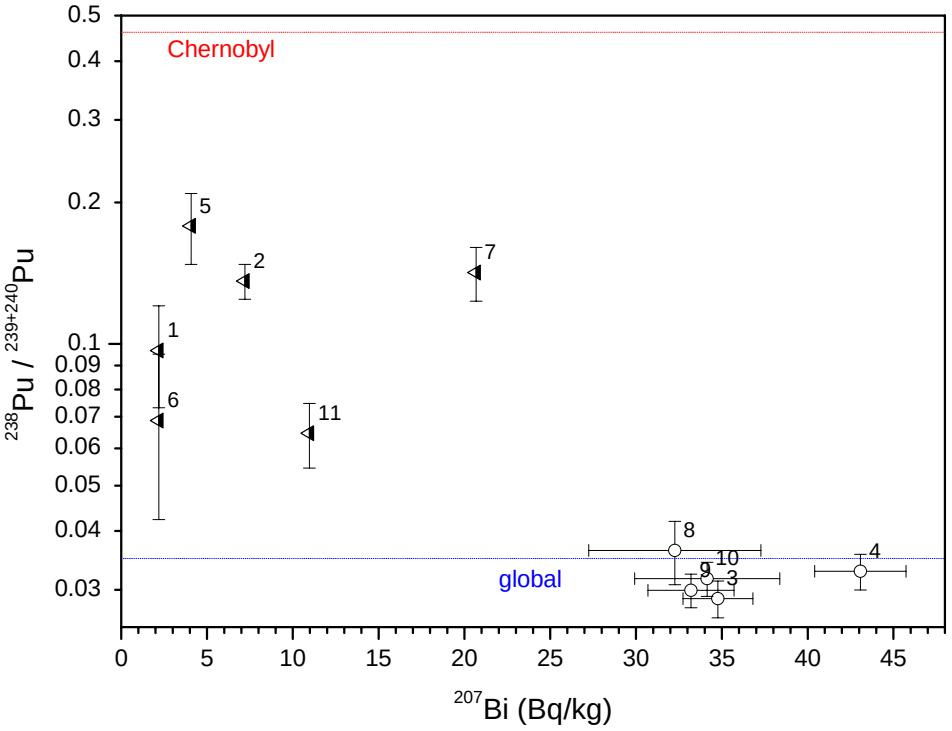

Figure 2: Plot of QPu = ^{238}Pu / $^{239+240}$Pu against ^{207}Bi. Uncertainty bars: 1 σ. Values from **¡Error! No se encuentra el origen de la referencia.**. Labels: sample number. Triangular symbols without x-uncertainty bars: LLDs of ^{207}Bi used.

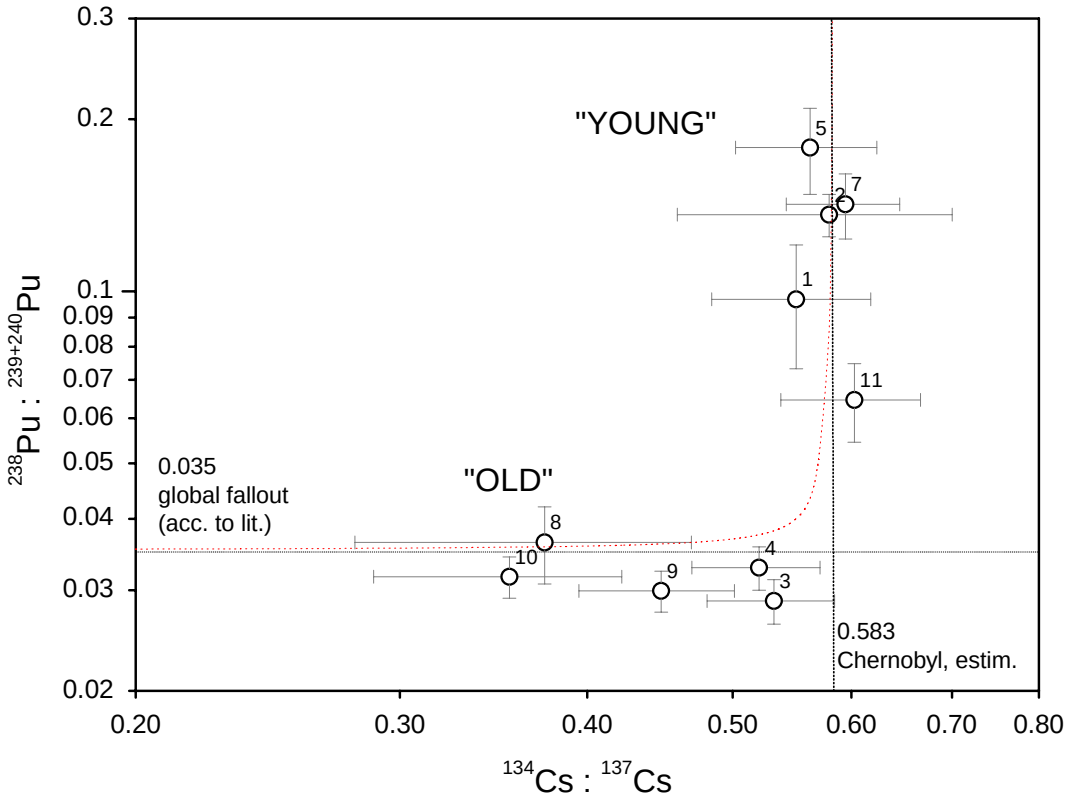

Figure 3: Scatterplot QPu vs. QCs, and theoretical mixing line (red, dotted; see text).

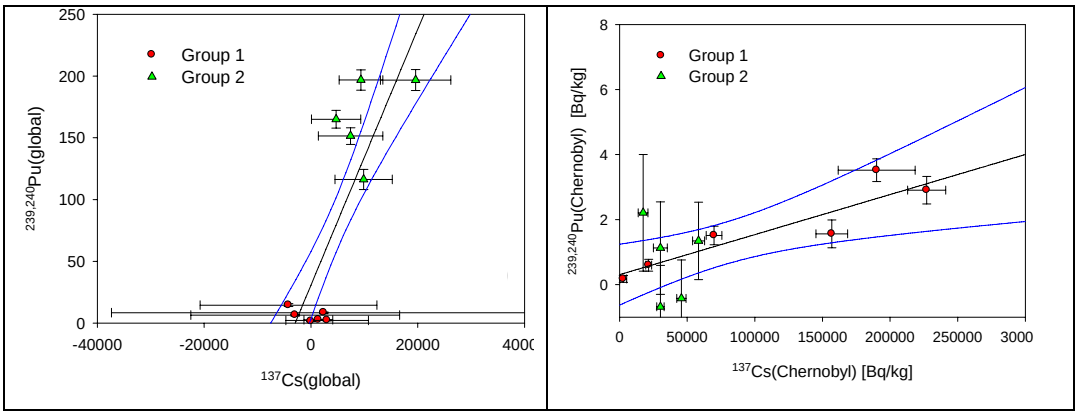

Figure 4: Scatterplots $^{239+240}Pu$ / ^{137}Cs, (a) for global fallout (left) and (b), Chernobyl fallout.

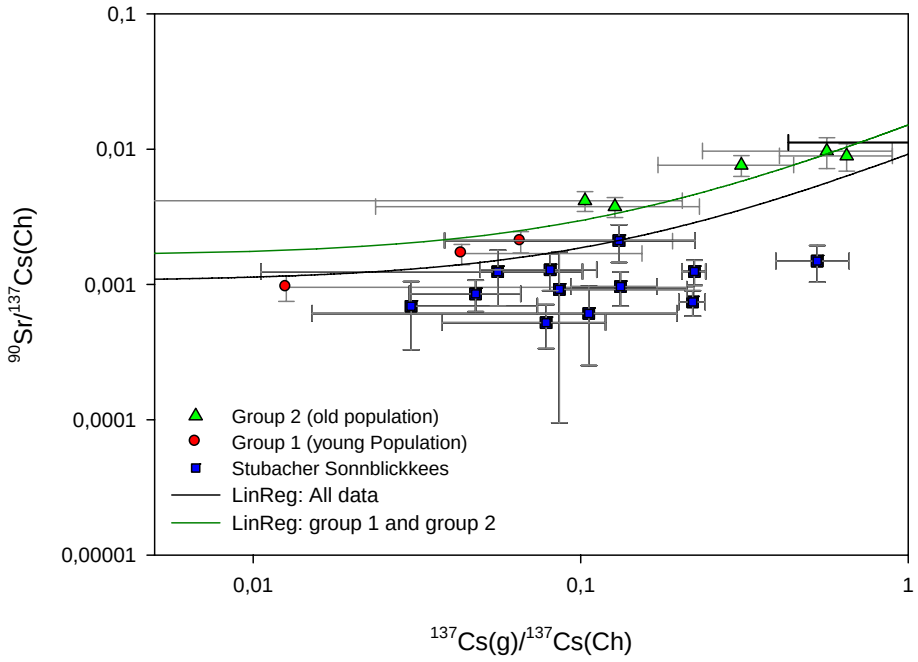

Figure 5: Scatterplot of Cs(g)/Cs(Ch) versus Sr/Cs(Ch)

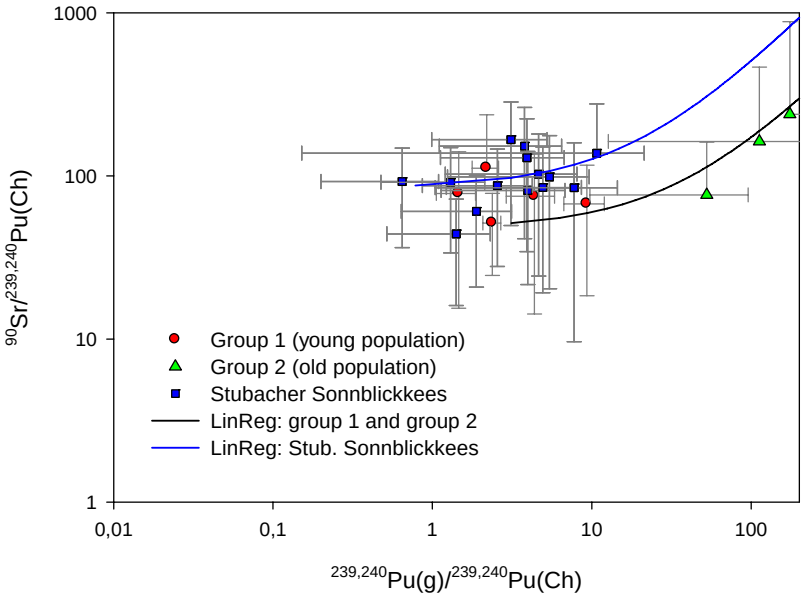

Figure 6: Scatterplot of Pu(g)/Pu(Ch) versus Sr/Pu(Ch)

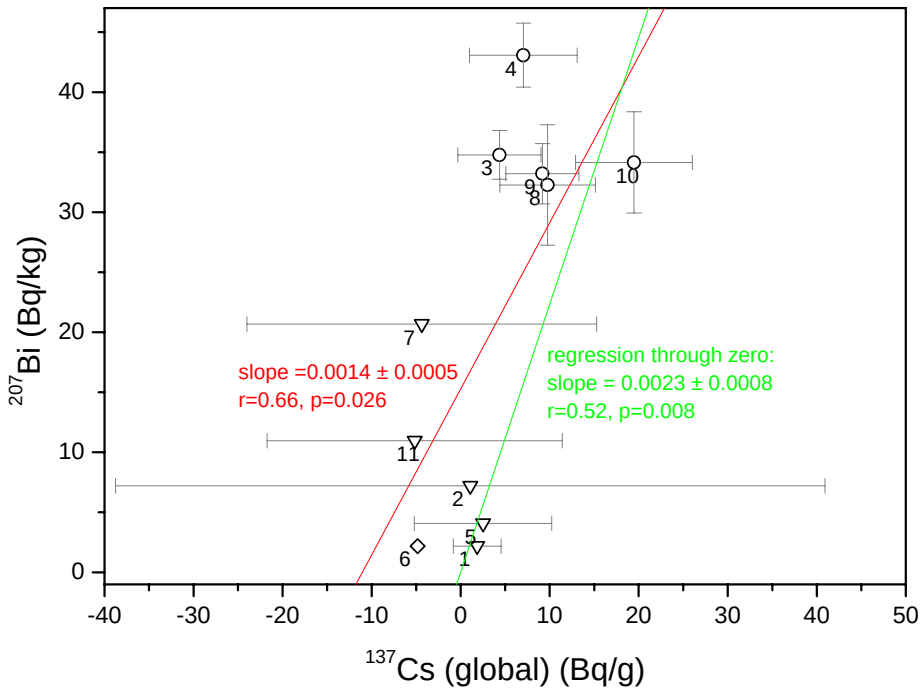

Figure 7: Correlation of ^{207}Bi and ^{137}Cs (global). "o" symbols: both radionuclides > LLD; down triangle: LLD of ^{207}Bi; diamond (sample 6): LLD of ^{207}Bi and ^{134}Cs (from which ^{137}Cs(gl) is calculated). Uncertainty bars: 1 σ. Reference date: 1 May 1986. Labels: sample id.