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Erratum: Pre-eruptive excess volatiles and their relationship to effusive and explosive eruption styles in semi-plugged volcanoes

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An Erratum on

[Pre-eruptive excess volatiles and their relationship to effusive and explosive eruption styles in semi-plugged volcanoes](#)

by Utami SB, Andújar J, Costa F, Scaillet B, Humaida H and Carn S (2022). *Front. Earth Sci.* 10:882097. doi: [10.3389/feart.2022.882097](#)

Due to a production error, there was a mistake in [Table 3](#) as published. The table headings were incorrect. The corrected [Table 3](#) appears below.

The publisher apologizes for this mistake. The original version of this article has been updated.

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TABLE 3 Summary of representative mineral compositions from the 1990–2014 eruptions.

Mineral	Cpx	Cpx	Cpx	Opx	Opx	Opx		OI
Eruption year	1990	2007	2014	1990	2007	2014		2014
rock type/stage	main-stage pumice	dome	pumice	main-stage pumice	dome	pumice		
Texture	cores, glomerocryst	cores, glomerocryst	cores, glomerocryst	cores, glomerocryst	glomerocryst	cores, glomerocryst		
<i>n</i>	8	16	26	20	7	27		27
wt. %								
SiO ₂	51.6 (0.7)	51.8 (0.4)	51.2 (0.6)	52.7 (0.2)	52.9 (0.1)	52.7 (0.5)	SiO ₂	36.9 (0.4)
TiO ₂	0.48 (0.30)	0.33 (0.04)	0.36 (0.07)	0.28 (0.12)	0.16 (0.01)	0.19 (0.04)	TiO ₂	0.02 (0.02)
Al ₂ O ₃	1.78 (0.62)	1.71 (0.18)	2.00 (0.44)	1.24 (0.34)	0.91 (0.17)	1.09 (0.36)	Al ₂ O ₃	b.d.
FeO*	9.24 (0.58)	9.54 (0.16)	9.48 (0.26)	18.53 (1.18)	19.2 (0.2)	18.44 (1.38)	FeO*	25.9 (1.6)
MnO	0.50 (0.09)	0.52 (0.03)	0.49 (0.05)	0.87 (0.18)	0.90 (0.04)	0.84 (0.11)	MnO	0.65 (0.09)
MgO	14.47 (0.09)	14.30 (0.23)	14.40 (0.22)	23.5 (0.5)	22.84 (0.07)	23.71 (0.90)	MgO	35.1 (1.4)
CaO	21.1 (0.4)	20.8 (0.3)	20.8 (0.3)	1.71 (0.43)	1.44 (0.08)	1.59 (0.22)	CaO	0.18 (0.05)
Na ₂ O	0.27 (0.02)	0.29 (0.02)	0.28 (0.02)	0.02 (0.01)	0.02 (0.01)	0.01 (0.01)	P ₂ O ₅	0.04 (0.04)
Total	99.4 (0.2)	99.3 (0.4)	99.0 (0.3)	98.9 (0.3)	98.4 (0.1)	98.6 (0.4)	Total	98.8 (0.4)
Pyroxene end-members ^b								
Wo	43.6 (0.8)	43.2 (0.6)	43.1 (0.6)	3.50 (0.87)	2.99 (0.16)	3.24 (0.44)	Fo content ^c	70.7 (2.1)
En	41.6 (0.3)	41.3 (0.5)	41.6 (0.5)	66.9 (1.2)	65.9 (0.3)	67.4 (2.0)		
Fs	14.88 (0.91)	15.46 (0.31)	15.34 (0.42)	29.6 (2.0)	31.1 (0.2)	29.4 (2.4)		
Mg Number	73.7 (1.3)	72.8 (0.5)	73.0 (0.6)	69.3 (1.8)	67.9 (0.2)	69.6 (2.4)		
Mineral	Plag	Plag	Plag	Plag	Mineral	Amph ^a	Amph ^a	Amph
Eruption year	1990	2007	2014	2014	Eruption year	1990	1990	2014
rock type/stage	main-stage pumice	dome	pumice	pumice	rock type/stage			
Texture	microlite/rim	rim	core	rim	Texture			
<i>n</i> of new spots	11	12	4	2	<i>n</i>	13	4	4
SiO ₂	50.9 (1.3)	50.6 (1.3)	45.3 (1.4)	51.0 (0.1)	SiO ₂	41.3 (0.2)	42.5 (0.5)	43.7 (3.1)
Al ₂ O ₃	30.2 (0.6)	30.4 (0.9)	33.6 (0.3)	29.3 (0.1)	TiO ₂	1.47 (0.10)	1.54 (0.14)	1.60 (0.60)
FeO*	0.45 (0.16)	0.62 (0.06)	0.53 (0.05)	0.67 (0.01)	Al ₂ O ₃	15.14 (0.32)	13.92 (1.01)	11.37 (3.99)
MgO	0.07 (0.02)	0.06 (0.02)	0.01 (0.01)	0.08 (0.01)	FeO*	11.25 (0.28)	11.29 (0.19)	11.33 (2.05)
CaO	13.58 (0.45)	13.48 (0.88)	17.93 (0.90)	13.42 (0.05)	MnO	0.15 (0.01)	0.17 (0.02)	0.19 (0.13)
Na ₂ O	4.06 (0.23)	3.62 (0.50)	1.31 (0.18)	3.86 (0.08)	MgO	13.84 (0.25)	14.21 (0.11)	15.15 (1.0)

(Continued on following page)

TABLE 3 (Continued) Summary of representative mineral compositions from the 1990–2014 eruptions.

Mineral	Plag	Plag	Plag	Plag	Mineral	Amph ^a	Amph ^a	Amph
Eruption year	1990	2007	2014	2014	Eruption year	1990	1990	2014
rock type/stage	main-stage pumice	dome	pumice	pumice	rock type/stage			
Texture	microlite/rim	rim	core	rim	Texture			
n of new spots	11	12	4	2	n	13	4	4
K ₂ O	0.09 (0.02)	0.09 (0.03)	n.a.	n.a.	CaO	12.06 (0.16)	11.71 (0.07)	11.14 (1.63)
Total	99.4 (1.0)	98.9 (0.6)	98.7 (0.8)	98.35 (0.01)	Na ₂ O	2.25 (0.08)	2.23 (0.02)	1.77 (0.67)
					K ₂ O	0.31 (0.02)	0.29 (0.02)	n.a.
Plag end-member ^c					Cl	0.01 (0.01)	0.01 (0.01)	n.a.
An	64.4 (1.8)	67.0 (4.5)	89.2 (0.9)	65.8 (0.5)	F	0.08 (0.07)	0.15 (0.12)	n.a.
Ab	35.1 (1.7)	32.5 (4.4)	10.8 (0.9)	34.2 (0.5)	Total	97.9 (0.5)	98.0 (0.2)	96.2 (0.8)
Or	0.4 (0.2)	0.50 (0.15)	n.a.	n.a.				
					Amph end-member ^d	Mg-Hst	Ts-Prg	Ts-Prg

Notes. n.a., not analyzed, and b.d., below detection limit. FeO* or Fe*, total Fe as Fe²⁺. Glom, glomerocryst. See Table 2 for meaning of mineral abbreviations.

^aAmphibole composition from Utami et al. (2021).

^bPyroxene end-members: wollastonite, Wo = 100 x Ca / [Mg + Fe* + Ca]; enstatite, En = 100 x Mg / [Mg + Fe* + Ca]; ferrosilite, Fs = 100 x Fe* / [Mg + Fe* + Ca]; Mg # = 100 x Mg / [Mg + Fe*].

^cPlagioclase end-members: anorthite, An = 100 x Ca / [Ca + Na + K]; albite, Ab = 100 x Na / [Ca + Na + K]; orthoclase, Or = 100 x K / [Na + Ca + K].

^dAmphibole end-members according to Leake et al. (1997), as calculated in Ridolfi et al. (2010). Mg-Hst, magnesio-hastingsite; Ts-Prg, Tschermakite-Pargasite.

^eOlivine Fo content, Fo = 100 x Mg / [Mg + Fe*].