EXPLANATION

Dendrogram displaying cluster classification of 418 craters on four principal components (weighted) using the simple distance function (Parks, 1966) and an unweighted pair-group sorting strategy (see text). Values of distance-function coefficient are low for similar craters and groups of craters and high for different craters and crater groups. Length of vertical lines shows level of affinity at which each crater or crater group joins its cluster. Short lines indicate highest affinity. Lettered subgroups are discussed in text; their makeup is detailed in table 5. The lunar mare-filled basins and two Hawaiian volcanic shields group apart from all other craters.

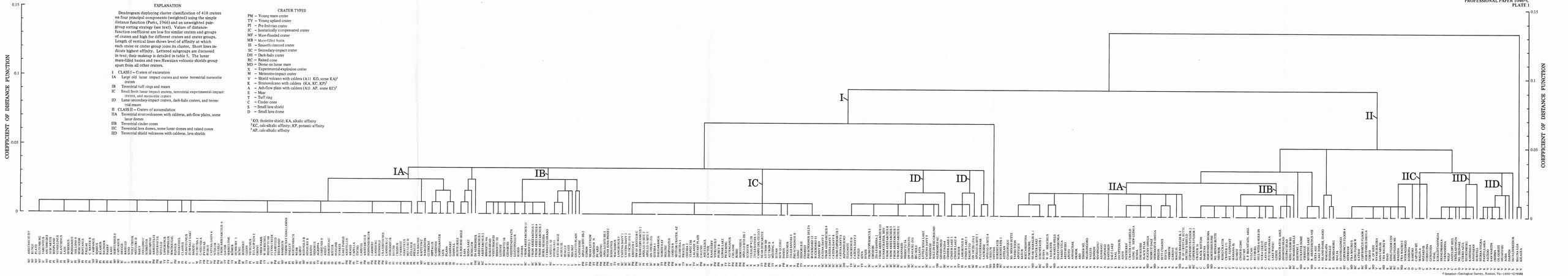
I CLASS I – Craters of excavation
- IA Large old lunar impact craters and some terrestrial meteorite craters
- IB Terrestrial tuff rings and maars
- IC Small fresh lunar impact craters, terrestrial experimental-impact craters, and meteorite craters
- ID Lunar secondary-impact craters, dark-halo craters, and terrestrial maars

II CLASS II – Craters of accumulation
- IIA Terrestrial stratovolcanoes with calderas, ash-flow plains, some lunar domes
- IIB Terrestrial cinder cones
- IIC Terrestrial lava domes, some lunar domes and raised cones
- IID Terrestrial shield volcanoes with calderas, lava shields

CRATER TYPES

- PM – Young mare crater
- TY – Young upland crater
- PI – Pre-Imbrian crater
- IC – Isostatically compensated crater
- MF – Mare-flooded crater
- MB – Mare-filled basin
- IS – Smooth-rimmed crater
- SC – Secondary-impact crater
- DH – Dark-halo crater
- RC – Raised cone
- MD – Dome on lunar mare
- X – Experimental-explosion crater
- M – Meteorite-impact crater
- V – Shield volcano with calders (All KO, some KA)[1]
- K – Stratovolcano with calders (KA, KC, KP)[2]
- A – Ash-flow plain with calders (All AP, some KC)[3]
- E – Maar
- T – Tuff ring
- C – Cinder cone
- S – Small lava shield
- D – Small lava dome

[1] KO, tholeiite shield; KA, alkalic affinity
[2] KC, calc-alkalic affinity; KP, potassic affinity
[3] AP, calc-alkalic affinity



DENDROGRAM DISPLAYING CLUSTER CLASSIFICATION OF 418 CRATERS

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