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**Code snippets for the field calculator of QGIS**

Supplemental Material 1 for the paper entitled:

*A predictive model for the ichnological suitability of the Jezero crater, Mars: searching for fossilized traces of life-substrate interactions in the 2020 Rover Mission Landing Site*

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# Substrate suitability for bioturbation (L)

CASE WHEN BedrkUName = 'Crater floor fractured 1' THEN 4

WHEN BedrkUName = 'Crater floor fractured 2' THEN 4

WHEN BedrkUName = 'Crater floor fractured rough' THEN 4

WHEN BedrkUName = 'Margin fractured' THEN 4

WHEN BedrkUName = 'Crater rim blocky' THEN 1

WHEN BedrkUName = 'Crater rim breccia' THEN 1

WHEN BedrkUName = 'Crater rim layered' THEN 1

WHEN BedrkUName = 'Crater rim rough' THEN 1

WHEN BedrkUName = 'Crater rim rough' THEN 1

WHEN BedrkUName = 'Crater rim rough' THEN 1

WHEN BedrkUName = 'Neretva Vallis layered' THEN 4

WHEN BedrkUName = 'Nili Planum fractured' THEN 1

WHEN BedrkUName = 'Delta blocky' THEN 4

WHEN BedrkUName = 'Delta layered rough' THEN 4

WHEN BedrkUName = 'Delta thickly layered' THEN 4

WHEN BedrkUName = 'Delta thinly layered' THEN 4

WHEN BedrkUName = 'Delta truncated curvilinear layered' THEN 4

ELSE 10

END

# Substrate suitability for bioerosion (H)

CASE WHEN BedrkUName = 'Crater floor fractured 1' THEN 2

WHEN BedrkUName = 'Crater floor fractured 2' THEN 2

WHEN BedrkUName = 'Crater floor fractured rough' THEN 2

WHEN BedrkUName = 'Margin fractured' THEN 2

WHEN BedrkUName = 'Crater rim blocky' THEN 4

WHEN BedrkUName = 'Crater rim breccia' THEN 4

WHEN BedrkUName = 'Crater rim layered' THEN 4

WHEN BedrkUName = 'Crater rim rough' THEN 4

WHEN BedrkUName = 'Crater rim rough' THEN 4

WHEN BedrkUName = 'Crater rim rough' THEN 4

WHEN BedrkUName = 'Neretva Vallis layered' THEN 1

WHEN BedrkUName = 'Nili Planum fractured' THEN 4

WHEN BedrkUName = 'Delta blocky' THEN 1

WHEN BedrkUName = 'Delta layered rough' THEN 1

WHEN BedrkUName = 'Delta thickly layered' THEN 1

WHEN BedrkUName = 'Delta thinly layered' THEN 1

WHEN BedrkUName = 'Delta truncated curvilinear layered' THEN 1

ELSE 10

END

# Ichnological suitability for sedimentation rate (L)

CASE WHEN BedrkUName = 'Crater floor fractured 1' THEN 4

WHEN BedrkUName = 'Crater floor fractured 2' THEN 3

WHEN BedrkUName = 'Crater floor fractured rough' THEN 4

WHEN BedrkUName = 'Margin fractured' THEN 2

WHEN BedrkUName = 'Crater rim blocky' THEN 4

WHEN BedrkUName = 'Crater rim breccia' THEN 4

WHEN BedrkUName = 'Crater rim layered' THEN 4

WHEN BedrkUName = 'Crater rim rough' THEN 4

WHEN BedrkUName = 'Crater rim rough' THEN 4

WHEN BedrkUName = 'Crater rim rough' THEN 4

WHEN BedrkUName = 'Neretva Vallis layered' THEN 3

WHEN BedrkUName = 'Nili Planum fractured' THEN 4

WHEN BedrkUName = 'Delta blocky' THEN 1

WHEN BedrkUName = 'Delta layered rough' THEN 4

WHEN BedrkUName = 'Delta thickly layered' THEN 4

WHEN BedrkUName = 'Delta thinly layered' THEN 4

WHEN BedrkUName = 'Delta truncated curvilinear layered' THEN 3

ELSE 10

END

# Ichnological suitability of the energy regime (E)

CASE WHEN BedrkUName = 'Crater floor fractured 1' THEN 4

WHEN BedrkUName = 'Crater floor fractured 2' THEN 3

WHEN BedrkUName = 'Crater floor fractured rough' THEN 4

WHEN BedrkUName = 'Margin fractured' THEN 3

WHEN BedrkUName = 'Crater rim blocky' THEN 2

WHEN BedrkUName = 'Crater rim breccia' THEN 1

WHEN BedrkUName = 'Crater rim layered' THEN 2

WHEN BedrkUName = 'Crater rim rough' THEN 2

WHEN BedrkUName = 'Crater rim rough' THEN 2

WHEN BedrkUName = 'Crater rim rough' THEN 2

WHEN BedrkUName = 'Neretva Vallis layered' THEN 1

WHEN BedrkUName = 'Nili Planum fractured' THEN 2

WHEN BedrkUName = 'Delta blocky' THEN 2

WHEN BedrkUName = 'Delta layered rough' THEN 4

WHEN BedrkUName = 'Delta thickly layered' THEN 4

WHEN BedrkUName = 'Delta thinly layered' THEN 4

WHEN BedrkUName = 'Delta truncated curvilinear layered' THEN 3

ELSE 10

END

# Ichnological suitability of the surficial cover (K)

CASE WHEN SurfUName = 'Aeolian bedforms, large' THEN 1

WHEN SurfUName = 'Aeolian bedforms, small' THEN 2

WHEN SurfUName = 'Minor Cover Us' THEN 2

WHEN SurfUName = 'Moderate Cover Us' THEN 1

WHEN SurfUName = 'Talus' THEN 3

WHEN SurfUName = 'Undifferentiated smooth' THEN 2

ELSE 4

END