|  |  |  |  |
| --- | --- | --- | --- |
| **column**  *(+1, depth)* | **complete lithology name** | **short name** | **RGB values** |
| 1 | |  | | --- | | peridotite | | Perid | (25 115 75) |
| 2 | dunite | Dunite | (75 185 0) |
|  | olivine-rich troctolite | Dunite |  |
| 3 | troctolite | Troctolite | (157 63 255) |
| 4 | troctolitic gabbro | TGabbro | (0 12 255) |
| 5 | olivine gabbro | OGabbro | (9 162 224) |
|  | amphibole-bearing olivine gabbro | OGabbro |  |
|  | opx-bearing olivine gabbro | OGabbro |  |
|  | olivine microgabbro | OGabbro |  |
| 6 | gabbro | Gabbro | (191 226 235) |
|  | olivine-bearing gabbro | Gabbro |  |
|  | olivine- and opx-bearing gabbro | Gabbro |  |
|  | microgabbro | Gabbro |  |
| 7 | gabbronorite, opx-bearing gabbros | NGabbro | (255 255 182) |
|  | norite | NGabbro |  |
| 8 | oxide gabbronorite, | XNGabbro | (255 255 0) |
|  | olivine-bearing oxide gabbronorite | XNGabbro |  |
| 10 | olivine- and oxide-bearing gabbro | xbGabbro | (255 126 51) |
|  | oxide-bearing olivine gabbro | xbGabbro |  |
|  | oxide-bearing gabbro | xbGabbro |  |
|  | oxide- and opx-bearing gabbro | xbGabbro |  |
|  | oxide- and olivine-bearing gabbro | xbGabbro |  |
| 9 | disseminated-oxide gabbro | dxGabbro | (238 189 8) |
|  | disseminated-oxide olivine gabbro | dxGabbro | " |
|  | disseminated-oxide opx-bearing gabbro | dxGabbro |  |
| 11 | oxide gabbro | XGabbro | (245 28 20) |
|  | olivine-bearing oxide gabbro | XGabbro | " |
|  | olivine oxide microgabbro | XGabbro | " |
|  | amphibole oxide gabbro | XGabbro |  |
|  | olivine oxide gabbro | XGabbro |  |
|  | olivine-bearing oxide microgabbro | XGabbro |  |
|  | olivine oxide gabbro | XGabbro |  |
| 12 | diabase, basalt | Diabase | (90 90 90) |
| 13 | felsic, diorite, trondhjemite | Felsic | (255 217 255) |

***1473lith\_(mo/day)\_RecAve10m.xlsx*** gives fraction of drilled interval

to run your own lithology averaging:

copy columns extending from 'CCSF depth (mbsf) thru 'Complete Lithology Name' from macroscopic Excel file, plutonic mantle Worksheet

Paste Special, Values into new document

Save in CSV format

>>> remove any Fishing Run rows from top of file so that first row is top of first core

check that columns used by matlab routine match the correct table columns (change the number if needed to get: top depth, bottom depth, domain number, domain %, lithology

run Matlab program ***lithave360*** (lithave360.m), which will query you for the following:

input filename (the .csv file you made)

output filename (where fractions of each rock group type are saved, with depth)

averaging window length (e.g. 10 or 20 m)

step to shift window moving downhole (e.g. 1 or 2 m)

Donna Blackman

26 January 2016