Input Parameters

The content of 'parameter.yaml' file looks like this:

```
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H: [0.85, 0.7, 0.6, 0.4]
H_wt: [0.6, 0.2, 0.1, 0.1]
seed: [19, 17, 11, 37]
elev_range: [0, 1300]
max_level: 9
river_drop: 10
counter: 1
DEMcreator_option: fm2D
north: 60
north_west: 20
west: 5
south_west: 25
south: 45
south_east: 55
east: 25
north_east: 60
center: 52
Three_DplotDEM: n
output_dir: Output
response: n
min_area: 100
max_area: 600
aspect_ratio: 2.1
next_patch_orientation_probability: 0.8
agri_area_limit: 0.25
training_data_elev: new_elev.asc
training_data_landcover: new_land.asc
training_data_river: new_rivers.asc
...
```

Parameter Description

General parameters	
Output_dir	The directory where output results (output images and files) will be saved. Data-type: String
Three_DplotDEM:	If you want to plot a 3-D map of the eroded DEM specify y/Y for yes otherwise n/N for no. Data-type: String <y/Y/n/N>
Parameters related to DEM generation and erosion	
H	List of auto-correlation values

H_wt	List of weight for each correlation values specified in H list Data-type: [float, float, …]
seed	List of values(ints preferably prime no's) to be used as a seed for random number generator Data-type: [int, int, …]
elev_range	Range of elevation in DEM[min elevation, max elevation] Data-type: [float, float]
max_level	Size of the DEM grid $2^{(max\_level)}$ Data-type: int
river_drop	Maximum extent of erosion, a fraction of this value is subtracted from the DEM based on distance from river Data-type: float
counter	No of iteration of DEM erosion to be performed Data-type: int
DEMcreator_option	Choice of the Algorithm used to generate DEM fm2D or SS
North **north_west** **west** **south_west** **south** **south_east** **east** **north_east** **center**	Gradient values at 9 points required by the fm2D algorithm Data-type: float
Parameters related to Decision tree module	
training_data_elev	Name of the training data file in which elevation data is kept. Data-type: String
training_data_landcover	Name of the training data file in which Landcover data is kept. Data-type: String
training_data_river	Name of the training data file in which River presence/absence data is kept. Data-type: String
Response	If decision_tree.pkl file (decision tree) is already present in the source code directory then specify n/N else y/Y to create a decision tree.
Parameters related to Geometric features module	
min_area	Minimum area of the fields allowed Data-type : integer
max_area	Maximum area of the field allowed Data-type: integer
aspect_ratio	Ratio of width to the height of the fields(rectangle)

	Data-type: float
next_patch_orientation_probability	Probability of next patch having the same orientation as the previous patch placed Data-type: float , Domain: 0 - 1
agri_area_limit	Fraction of area in the grid to be covered by agricultural patches Data-type: float , Domain: 0 - 0.99

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