

```

1 def run_NorSand_Simus_P(final_comp,dictpos,n_samples_2,path_xlsm):
2     letras = list(string.ascii_uppercase)
3     wb = xw.Book(path_xlsm)
4     app = wb.app
5     macro_vba = app.macro("'NorTx1.xlsm'!RunSim")
6     macro_vba_type = app.macro("'NorTx1.xlsm'!ChangeSimMode")
7     ws = wb.sheets["Params & Plots"]
8     results_comp = []
9     for idini,new_v in enumerate(final_comp):
10        matv = int(math.floor(idini/n_samples_2))
11        for nv,ps in zip(new_v,dictpos.values()):
12            pl,pc = ps
13            pfinal = letras[pc-1]+str(pl)
14            ws[pfinal].value = nv
15        for type_v in ["Drained","Undrained"]:
16            if ws["D34"].value == type_v:
17                pass
18            else:
19                macro_vba_type()
20                macro_vba()
21                ws_results = wb.sheets["Tx1 SimResults"]
22                np_arr = (ws_results['A4'].expand('table')).value
23                path_xlsm_init = ("\\").join(path_xlsm.split("\\")[:-1])
24                new_h5_file = path_xlsm_init+
25                '\\Simus\\'+type_v+'\\Par_'+str(matv)+'_'+str(idini)+".h5"
26                new_h5_file_spl = new_h5_file.split("\\")
27                for va in range(-3,0):
28                    try:
29                        os.mkdir(os.path.join(*new_h5_file_spl[:va]))
30                    except:
31                        pass
32                h5f = h5py.File(new_h5_file, 'w')
33                dd = h5f.create_dataset('NorSandTXL',
34                    ↪ data=np.array((ws_results['A4'].expand('table')
35                    ).value).astype(np.float32),compression='gzip')
36                for keyv,pvalu in zip(dictpos.keys(),new_v.astype(np.float32)):
37                    dd.attrs[keyv] = pvalu
38                dd.attrs["Type"] = type_v
39                h5f.close()

```