Running TANGO

Running TANGO from the command line (for windows users: a dos box).

1) Open a command line window and go to the directory where you have put the executable.

2) Call tango as in the following example (use spaces, not tabs)
tango P05100 nt="N" ct="N" ph="7.4" te="303" io="0.05" tf="0" stab=”-10” seq="DNEWGYIAYHVSQDP"

formally this would translate as
[executable_name] [identifier] []…(parameter list)...[] [input sequence]

parameters:
nt: Protection at the C-terminus: can be N for no or Y for amidated
ct: Protection at the N-terminus: can be N for no, A for acetylated or S for succinilated.
ph: pH
te: Temperature in Kelvin
io: Ionic strength
tf: Percentage of the organic solvent TFE:i.e 20% is written 0.2
stab: Stability of your protein in Kcal/mol: for a standard protein it could be between -4 and -11 Kcal/mol
conc: Concentration in M of your protein or peptide.

Running TANGO in batch mode under windows.

You can make a text file with many line of tango calls like the one shown above.
If you change the extention of this file to .bat, you can double click it to execute the commands inside.

TANGO output.

The output of TANGO is in text format with the extension .out. You will get two classes of outputs. One with the name of the file you run that will contain the average aggregation per residue for every sequence you had in your file. The other will be a series of files with the names of the sequences you run that will contain the prediction at the residue level. Those files will have the following columns:

Sequence Number
Amino acid in one-letter code
Percentage of β-strand conformation
Percentage of β -turn conformation
Percentage of α-helical conformation
Percentage of Aggregation
Percentage of Helical Aggregation.

Please be aware that the latest is calculated independently of the first four and therefore you could get a number higher than 1 if you sum the 5 columns. Below you have an example of the sequence output.

```
01,   M,  0.14,  0.08,  0.00,  0.00,  0.00
02,   R,  0.24,  0.11,  0.00,  0.00,  0.00
03,   S,  0.44,  0.11,  0.00,  0.00,  0.00
04,   L,  0.45,  0.27,  0.00,  0.87,  0.00
05,   E,  0.36,  0.19,  0.00,  0.87,  0.00
06,   T,  1.14,  0.16,  0.00,  1.40,  0.00
07,   F,  1.08,  0.16,  0.00,  1.61,  0.00
08,   V,  1.08,  0.62,  0.00,  1.61,  0.00
09,   G,  1.03,  0.66,  0.00,  0.74,  0.00
10,   D,  0.18,  0.67,  0.00,  0.74,  0.00
11,   Q,  0.14,  0.67,  0.00,  0.74,  0.00
12,   V,  0.39,  0.05,  0.00,  3.80,  0.00
13,   L,  0.64,  0.00,  0.00,  3.80,  0.00
14,   E,  0.73,  0.00,  0.00,  3.31,  0.00
15,   I,  0.75,  0.00,  0.00,  3.31,  0.00
16,   V,  0.48,  0.00,  0.00,  3.31,  0.00
17,   P,  0.23,  0.22,  0.00,  3.04,  0.00
18,   S,  0.12,  0.24,  0.00,  0.62,  0.00
19,   N,  0.00,  0.35,  0.00,  0.00,  0.00
```

20,	E,	0.00,	0.38,	0.00,	0.00,	0.00
21,	E,	0.00,	0.17,	0.00,	0.00,	0.00
22,	Q,	0.33,	0.15,	0.00,	0.00,	0.00
23,	I,	0.39,	0.14,	0.00,	0.00,	0.00
24,	K,	0.40,	0.12,	0.00,	0.00,	0.00
25,	N,	0.40,	0.12,	0.00,	0.00,	0.00
26,	L,	0.11,	0.12,	0.00,	0.00,	0.00
27,	L,	0.34,	0.03,	0.00,	0.00,	0.00
28,	Q,	0.59,	0.02,	0.00,	0.00,	0.00
29,	L,	0.63,	0.04,	0.00,	0.00,	0.00
30,	E,	0.62,	0.04,	0.00,	0.00,	0.00
31,	A,	0.33,	0.06,	0.00,	0.00,	0.00
32,	Q,	0.09,	0.12,	0.00,	0.00,	0.00
33,	E,	0.06,	0.10,	0.00,	0.00,	0.00
34,	H,	0.16,	0.10,	0.00,	0.00,	0.00
35,	L,	0.44,	0.09,	0.00,	0.00,	0.00
36,	Q,	0.56,	0.04,	0.00,	0.00,	0.00
37,	L,	0.78,	0.03,	0.00,	0.00,	0.00
38,	D,	0.82,	0.03,	0.00,	0.00,	0.00
39,	F,	0.70,	0.00,	0.00,	0.00,	0.00
40,	W,	0.76,	0.00,	0.00,	0.00,	0.00
41,	K,	0.54,	0.00,	0.00,	0.00,	0.00
42,	S,	0.38,	0.25,	0.00,	0.00,	0.00
43,	P,	0.20,	0.25,	0.00,	0.00,	0.00
44,	T,	0.05,	0.25,	0.00,	0.00,	0.00
45,	T,	0.04,	1.47,	0.00,	0.00,	0.00
46,	P,	0.04,	1.36,	0.00,	0.00,	0.00
47,	G,	0.04,	1.48,	0.00,	0.00,	0.00
48,	E,	0.01,	1.48,	0.00,	0.00,	0.00
49,	T,	0.14,	0.27,	0.00,	0.00,	0.00
50,	A,	0.20,	0.12,	0.00,	0.00,	0.00
51,	H,	0.49,	0.00,	0.00,	0.00,	0.00
52,	V,	2.69,	0.00,	0.00,	0.00,	0.00
53,	R,	2.57,	0.00,	0.00,	0.00,	0.00
54,	V,	2.50,	0.00,	0.00,	6.27,	0.00
55,	P,	2.21,	0.00,	0.00,	6.27,	0.00
56,	F,	0.00,	0.00,	0.00,	11.61,	0.00
57,	V,	0.00,	0.00,	0.00,	11.93,	0.00
58,	N,	0.00,	0.00,	0.00,	11.93,	0.00
59,	V,	0.00,	0.01,	0.33,	11.69,	0.00
60,	Q,	0.00,	0.01,	0.33,	8.01,	0.00
61,	A,	0.00,	0.01,	0.33,	7.08,	0.00
62,	V,	0.00,	0.01,	0.33,	6.80,	0.00
63,	K,	0.00,	0.00,	0.00,	0.00,	0.00
64,	V,	0.00,	0.00,	0.00,	4.17,	0.00
65,	F,	0.00,	0.00,	0.00,	4.39,	0.00

66,	L,	0.00,	0.09,	0.00,	4.39,	0.00
67,	E,	0.00,	0.19,	0.00,	4.39,	0.00
68,	S,	0.00,	0.38,	0.00,	4.53,	0.00
69,	Q,	0.00,	0.40,	0.00,	5.02,	0.00
70,	G,	0.00,	0.31,	0.00,	12.27,	0.00
71,	I,	0.00,	0.21,	0.00,	64.25,	0.00
72,	A,	0.00,	0.02,	0.00,	68.13,	0.00
73,	Y,	0.00,	0.01,	0.00,	70.91,	0.00
74,	S,	0.00,	0.01,	0.00,	70.91,	0.00
75,	I,	0.00,	0.01,	0.00,	70.91,	0.00
76,	M,	0.00,	0.01,	0.00,	67.35,	0.00
77,	I,	0.00,	0.12,	0.00,	62.97,	0.00
78,	E,	0.00,	0.12,	0.00,	4.98,	0.00
79,	D,	0.00,	0.12,	0.00,	1.93,	0.00
80,	V,	0.00,	0.12,	0.00,	1.85,	0.00
81,	Q,	0.00,	0.00,	0.00,	0.00,	0.00