Confusion Matrix

predicted
labels

	0	0.5	1
0	a	b	c
0.5	d	e	f
1	g	h	i

true labels (rows: 0, 0.5, 1)

labels

$0 \implies$ no algae

$0.5 \implies$ blue-green algae

$1 \implies$ green algae

$$\text{Balanced Error Rate (BER)} = \frac{\frac{a+c}{a+b+c} + \frac{d+f}{d+e+f} + \frac{g+h}{g+h+i}}{3}$$

No Algae Label Error Rate $= \dfrac{a+c}{a+b+c}$

Blue-green Algae Label Error Rate $= \dfrac{d+f}{d+e+f}$

Green Algae Label Error Rate $= \dfrac{g+h}{g+h+i}$

$$\text{Accuracy} = \frac{a+e+i}{\sum\limits_{i=1}^{3}\sum\limits_{j=1}^{3} C_{ij}}, \quad \text{where } C_{ij} \text{ is the } i,j \text{ entry of the confusion matrix}$$