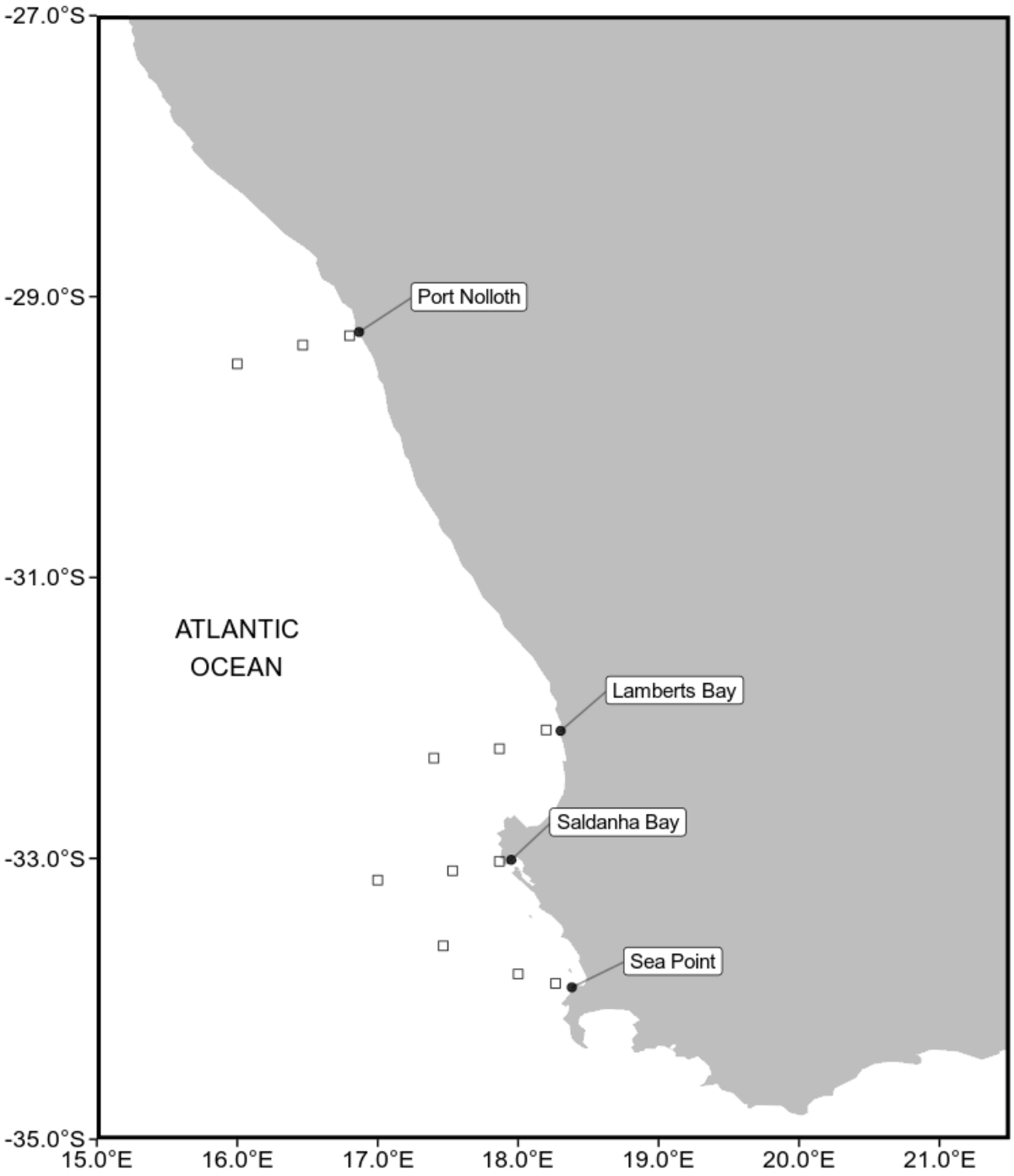

Fig.1. A map of the study region along the west coast of South Africa. The black points represent the location of the *in situ* temperatures and the empty boxes show the pixels used along the shore normal transect from the satellite sea surface temperatures (SST) time series. The black boxes are at 10 km, 30 km and 50 km from the coastline.

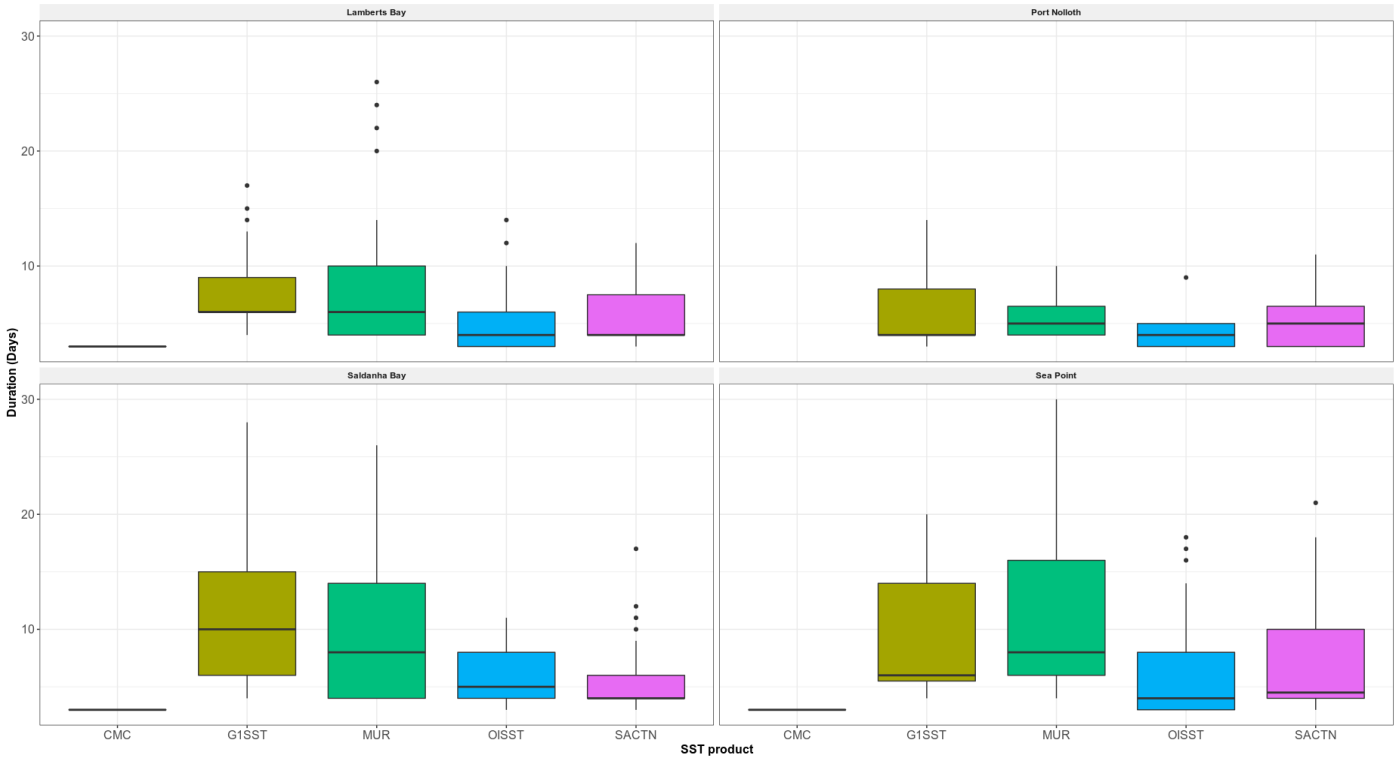

Fig.2. Graph showing the duration for each of the signals detected for the four satellite products and the SACTN *in situ* collected data for the summer months (December, January and February) over a four year period.

Table 1

A pairwise correlation coefficient of the relationship between the number of signals collected at a distance of 10 km versus a distance of 30 km from the coastline and a correlation between the number of signals at 10 km and 50 km from the coastline.

Product	Site	10km vs 30km	10km vs 50km
OISST	Lamberts Bay	0.59	0.14
	Port Nolloth	0.76	0.38
	Saldanha Bay	0.65	0.42
	Sea Point	0.76	0.18
CMC	Lamberts Bay	0.12	0.05
	Port Nolloth	0.66	0.54
	Saldanha Bay	0.44	0.33
	Sea Point	0.69	-0.01
MUR	Lamberts Bay	0.60	0.29
	Port Nolloth	0.74	0.58
	Saldanha Bay	0.52	0.23
	Sea Point	0.63	0.42
G1SST	Lamberts Bay	0.73	0.32
	Port Nolloth	0.66	0.65
	Saldanha Bay	0.28	0.33
	Sea Point	0.57	0.30

Table 2

The number of upwelling signals detected in each of the SST products. The distance column indicates the various distances from the coastline (10, 30 and 50 km) as seen in Fig.1. The signal column indicates the number of signals detected at each of these distances.

SST product	Distance (km)	Number of signals
OISST	10	160
	30	116
	50	99
CMC	10	31
	30	45
	50	60
MUR	10	171
	30	138
	50	140
G1SST	10	160
	30	170
	50	182