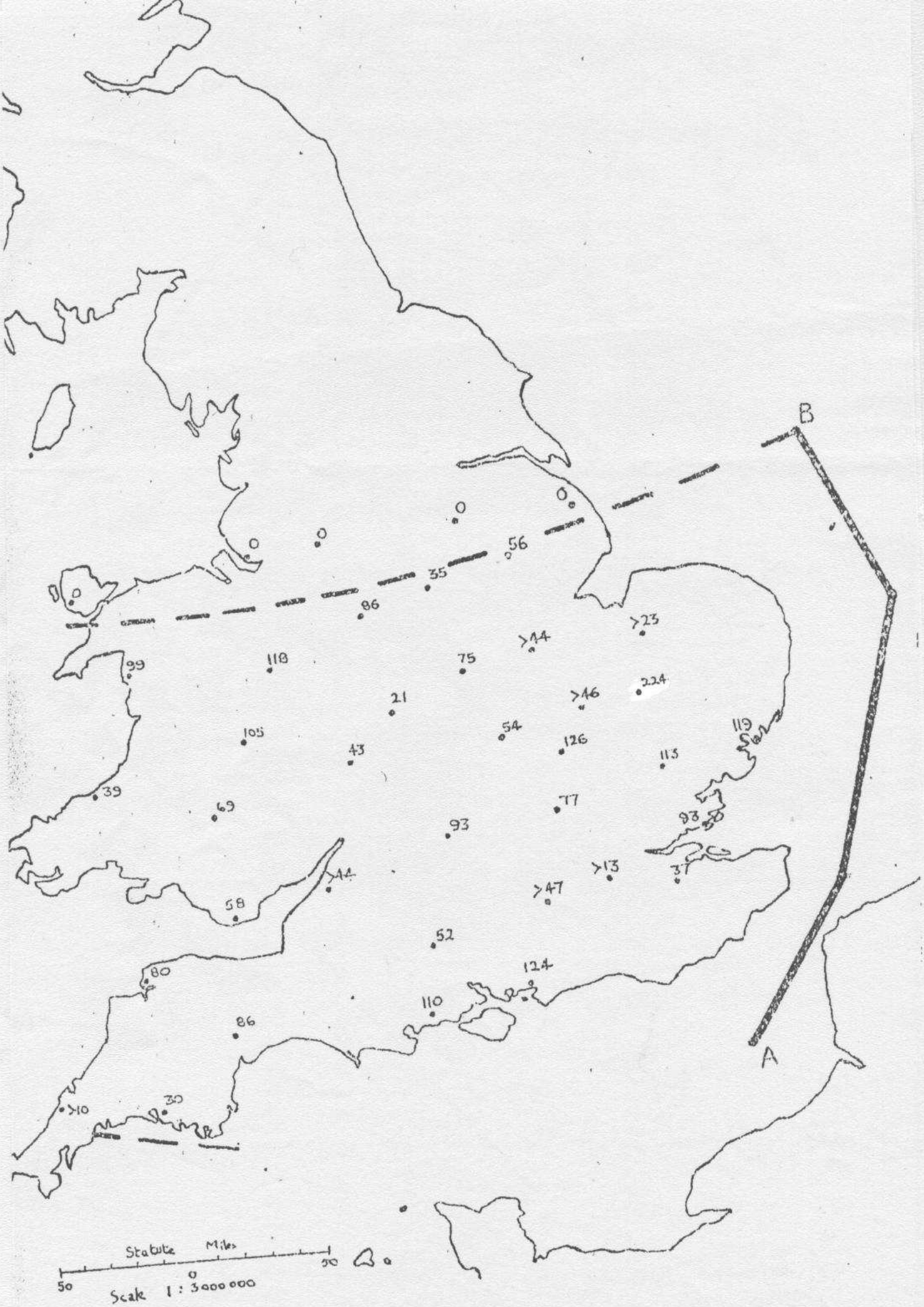

Fig 6. Total number of particles collected at sampling stations (13.11.57)
Standard sampling rate of 20 l/min .
source line. estimated boundaries of cloud. PN 74

(b) 13.11.57

An easterly airstream covered England and Wales. A broad area of overcast stratocumulus, in most places about 2000 ft thick with tops coinciding with the base of a widespread inversion, covered the area traversed by the particle cloud.

During the developing period of the particle cloud the lapse rate near the ground was about the dry adiabatic up to the stratocumulus base where it became the saturated adiabatic lapse rate to the top of the cloud. After dark, persistence of the stratocumulus prevented any more than about 2^{o} - 3^{o} cooling at the surface and it is unlikely that surface stability set in at all. The base of the inversion (and top of the stratocumulus layer) occurred at about the 900 mb pressure level in the east and the 850 mb level in the west - an average of 4200 feet.

The wind flow was reasonably uniform and the speed of transport of the cloud centre was 23 mi/hr over the first 200 miles.

No precipitation was reported by the source-laying aircraft. A few sampling stations occasionally reported very slight drizzle but this did not affect sampling.

Wind measurements (^{o}true/m.p.h)

Station	Hemsby	Crawley	Larkhill	Liverpool	Camborne
Time G.M.T.	1700	1700	1800	2300	2300
Height (m)					
900	070/29	080/29	084/30	100/24	110/39
1500	100/24	110/27	103/27	120/28	120/33
2100	100/28	110/30	097/38	100/31	100/17
3000	090/39	100/29	090/37	100/39	100/21
Mean to 1300m	070/30	080/29	082/30	110/25	
Geostr. wind	070/27	080/35	100/32	120/33	110/45