

Slide images from the **Walter Munk Papers. SMC 17. Special Collections & Archives, UC San Diego.**

Slide groupings were determined by the original order of Walter Munk's slide collection, and a corresponding inventory. Titles and descriptions were transcribed from Munk's labels and the inventory, with some editing for consistency and clarity.

SAS (likely "Waves Across the Pacific" experiment documentation, based in American Samoa), 1963

1. Unidentified man
2. Man standing in snow
3. Walter Munk and others at beach hut
4. FLIP (Floating Instrument Platform)
5. FLIP (Floating Instrument Platform)
6. FLIP (Floating Instrument Platform)
7. Coastline
8. Foliage
9. Compound with vehicle
10. Mountain and compound
11. Aerial photo of buildings
12. Waves crashing against shore
13. Samoa beach
14. Samoa hut by beach
15. Diver in water with spherical equipment
16. Ship
17. Equipment
18. Deploying equipment
19. View from beach
20. Equipment
21. Rocky beach with foliage
22. Coastline
23. Two men standing on plank outside
24. Three men relaxing with food and drink
25. Equipment diagram
26. Seismic background spectra on land and sea - Graph, 1963 February 8
27. Vectors - Diagram
28. Background data - Graph
29. Graph
30. Graph
31. Graph
32. Power spectra, normalized co-spectra, and normalized quadrature spectra - Graph

33. Graph
34. Graph
35. Graph
36. Graph
37. Scattering interactions, Boltzmann integral, and results - Equations and graphs
38. Equation of radiative transfer - Equations and graphs
39. Graph
40. Graph
41. Course of FLIP - Chart
42. Palliser Islands chain - Chart
43. Tutuila - Map
44. Graph

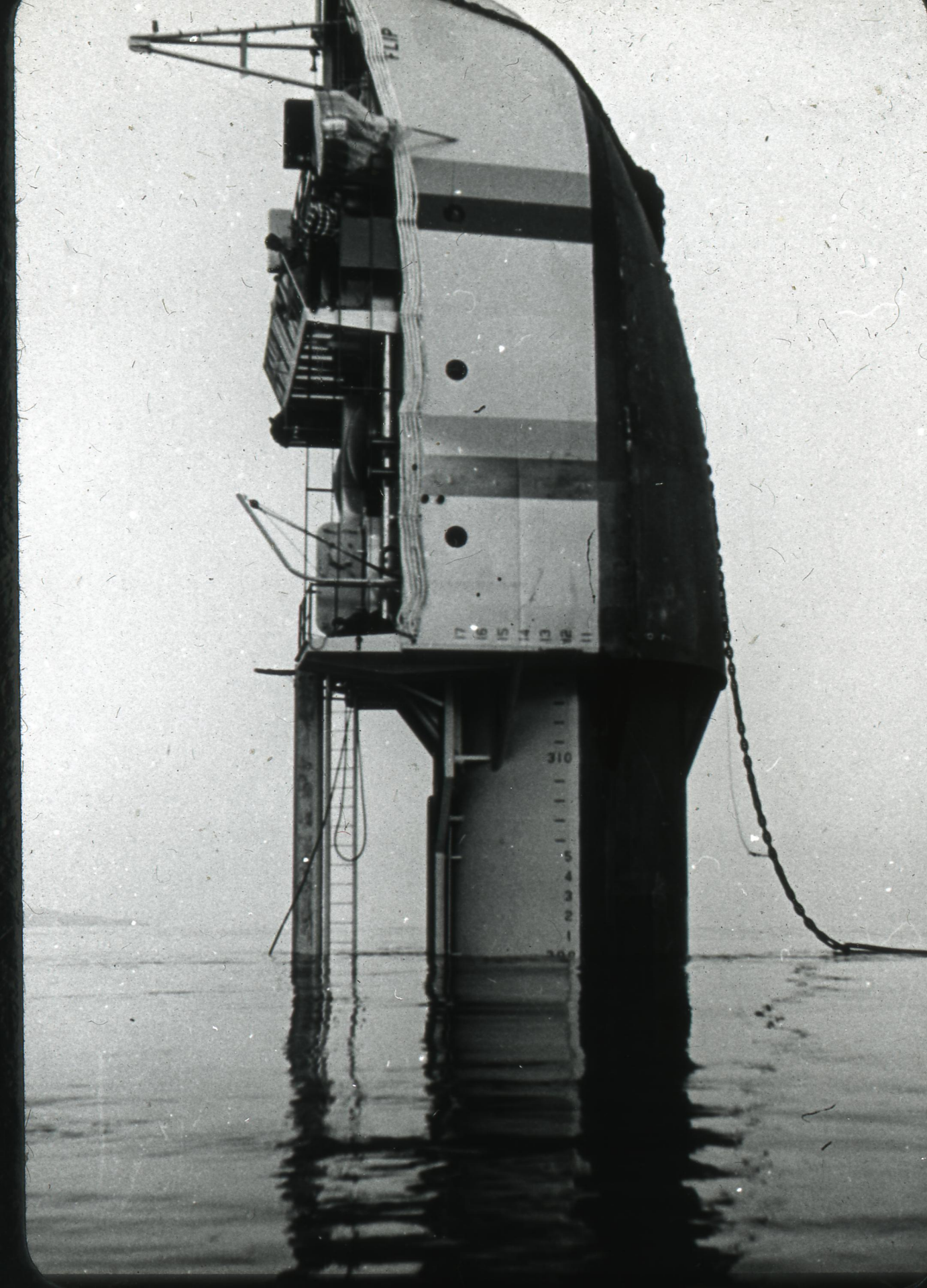
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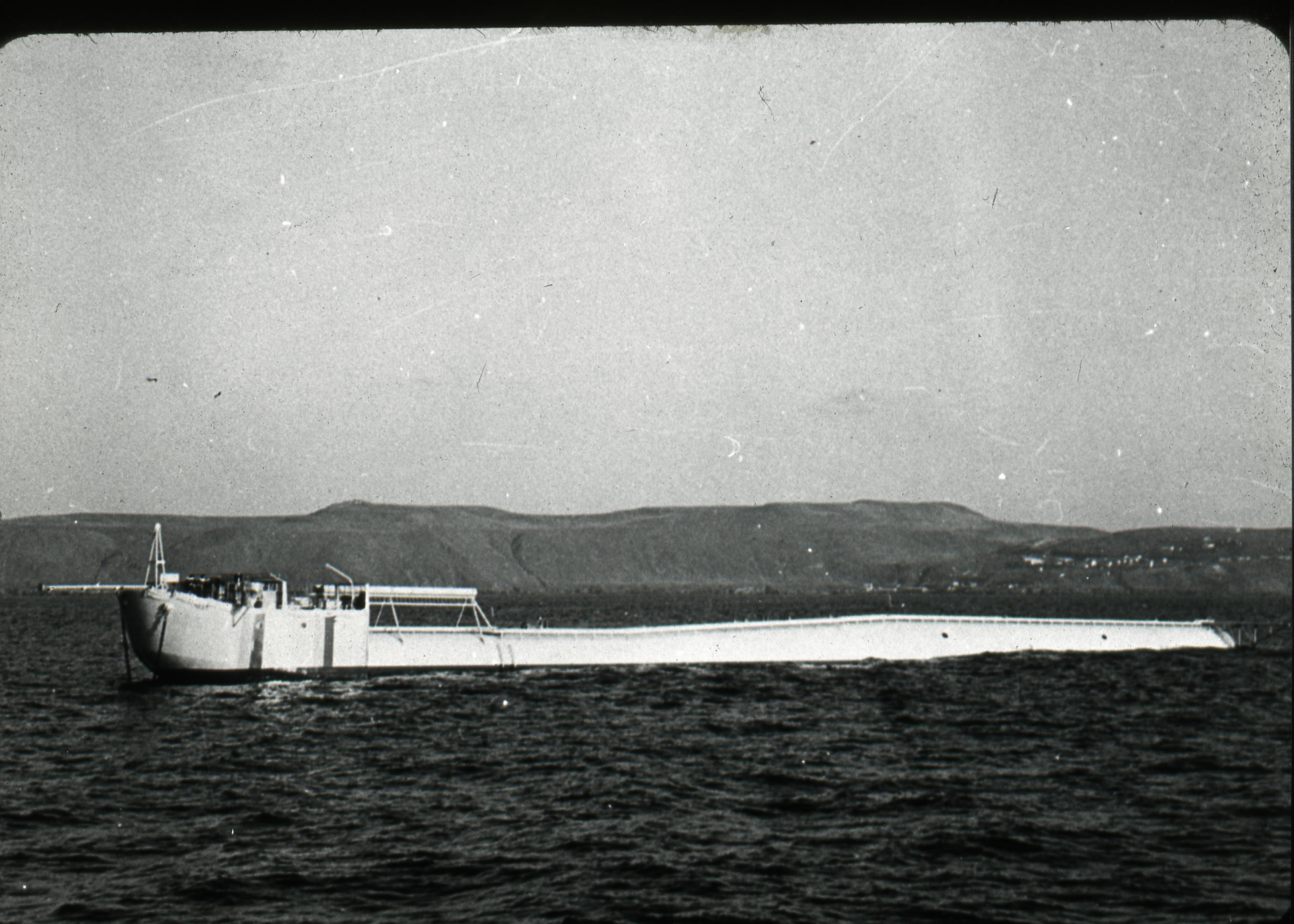


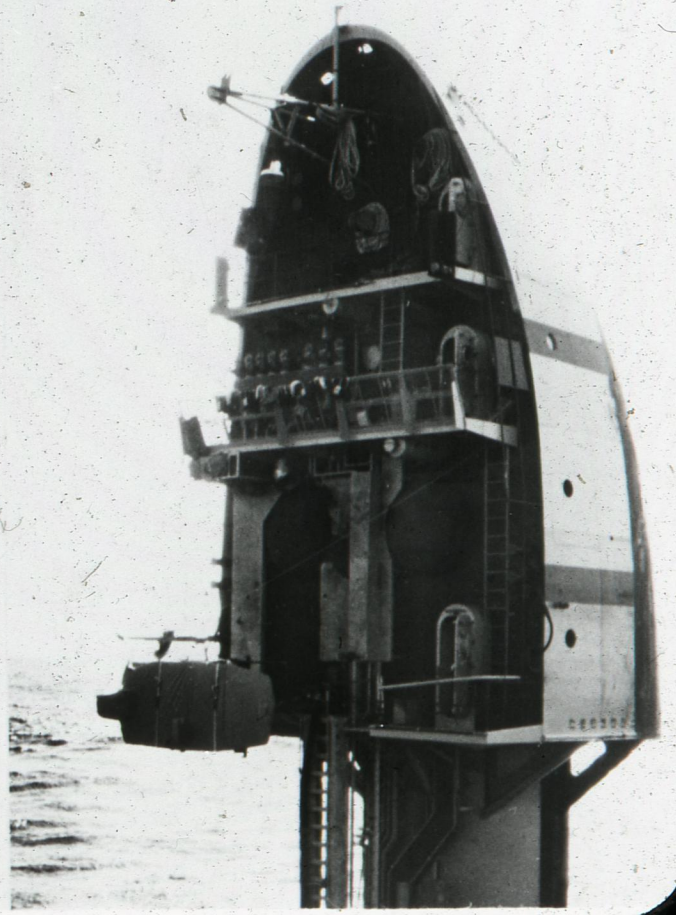
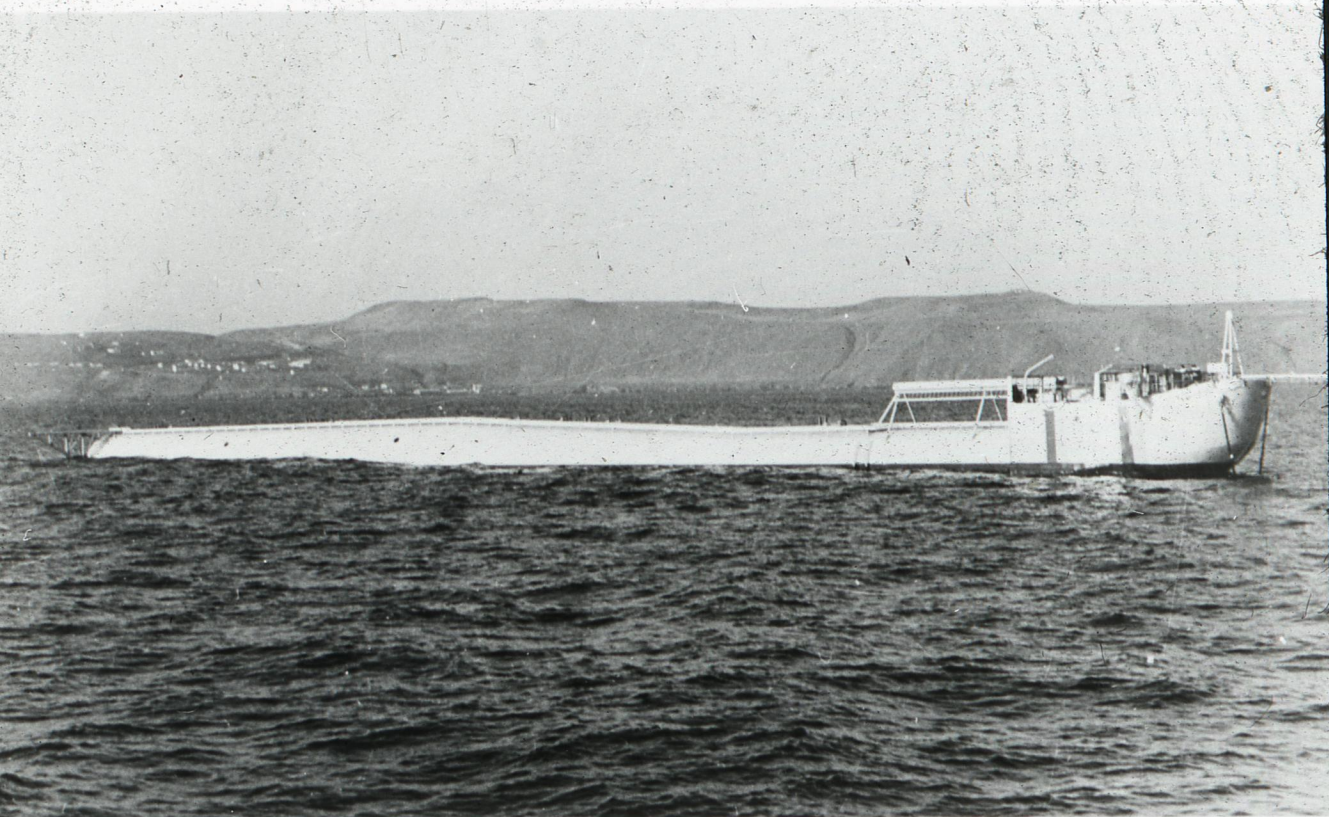
FLIP

17 16 15 14 13 12 11

016

1
2
3
4
5
6

















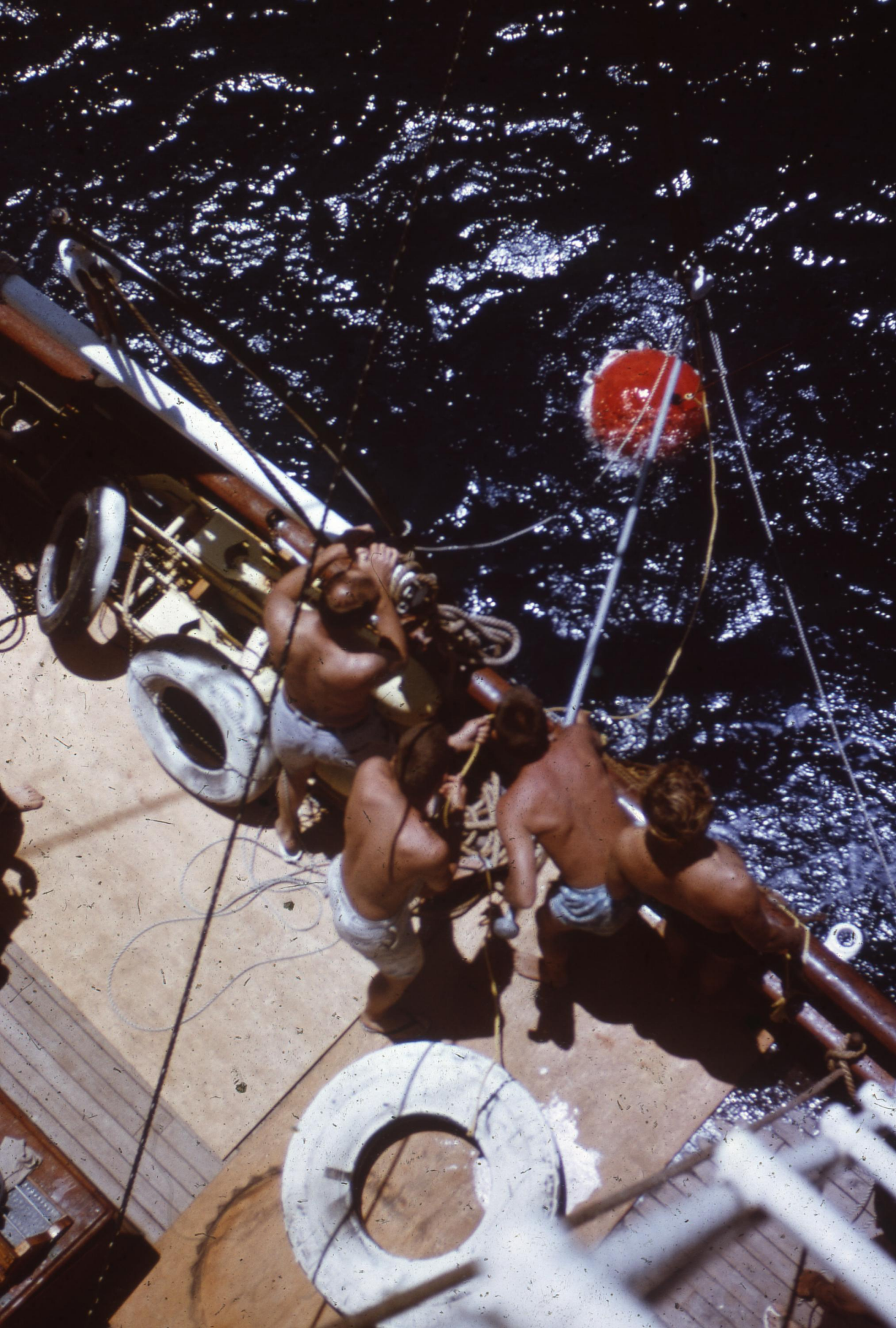














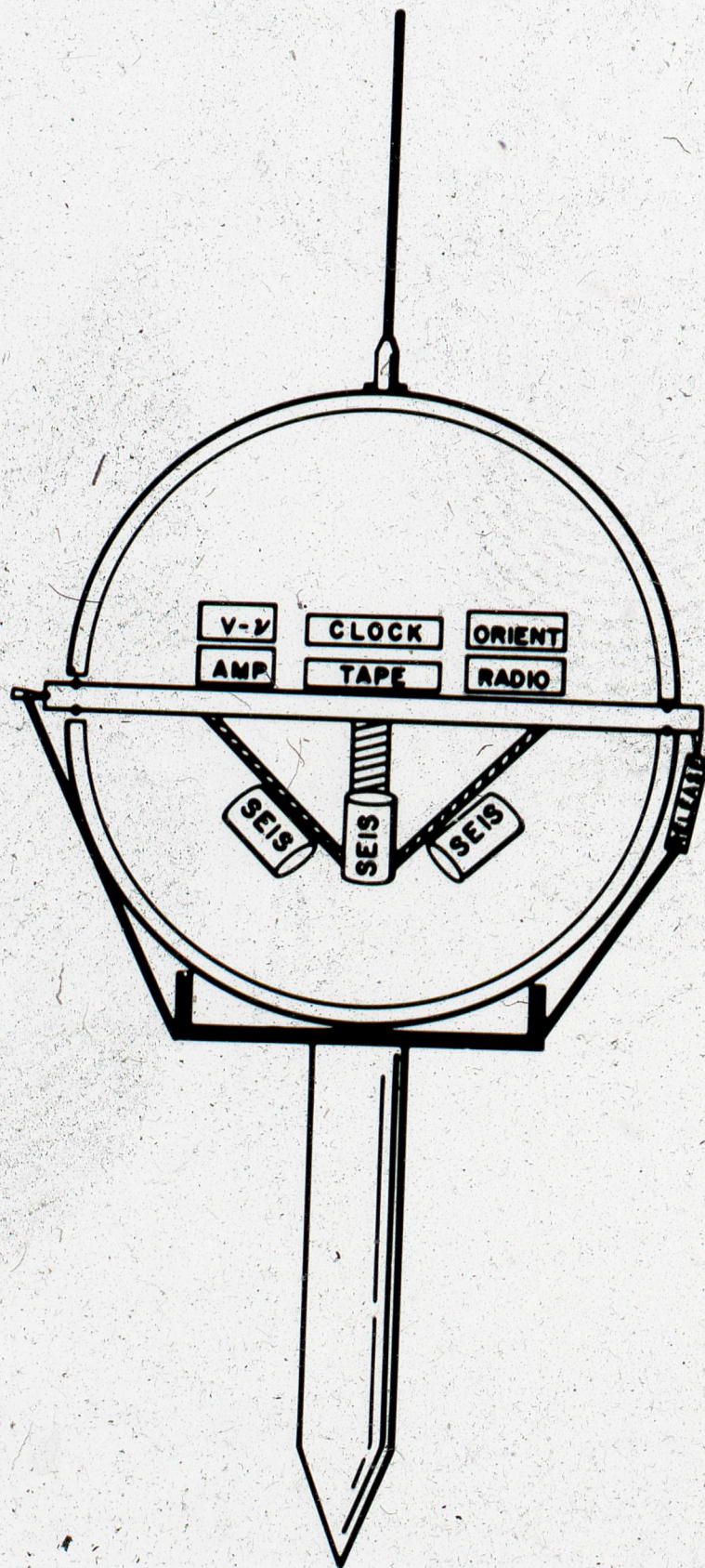


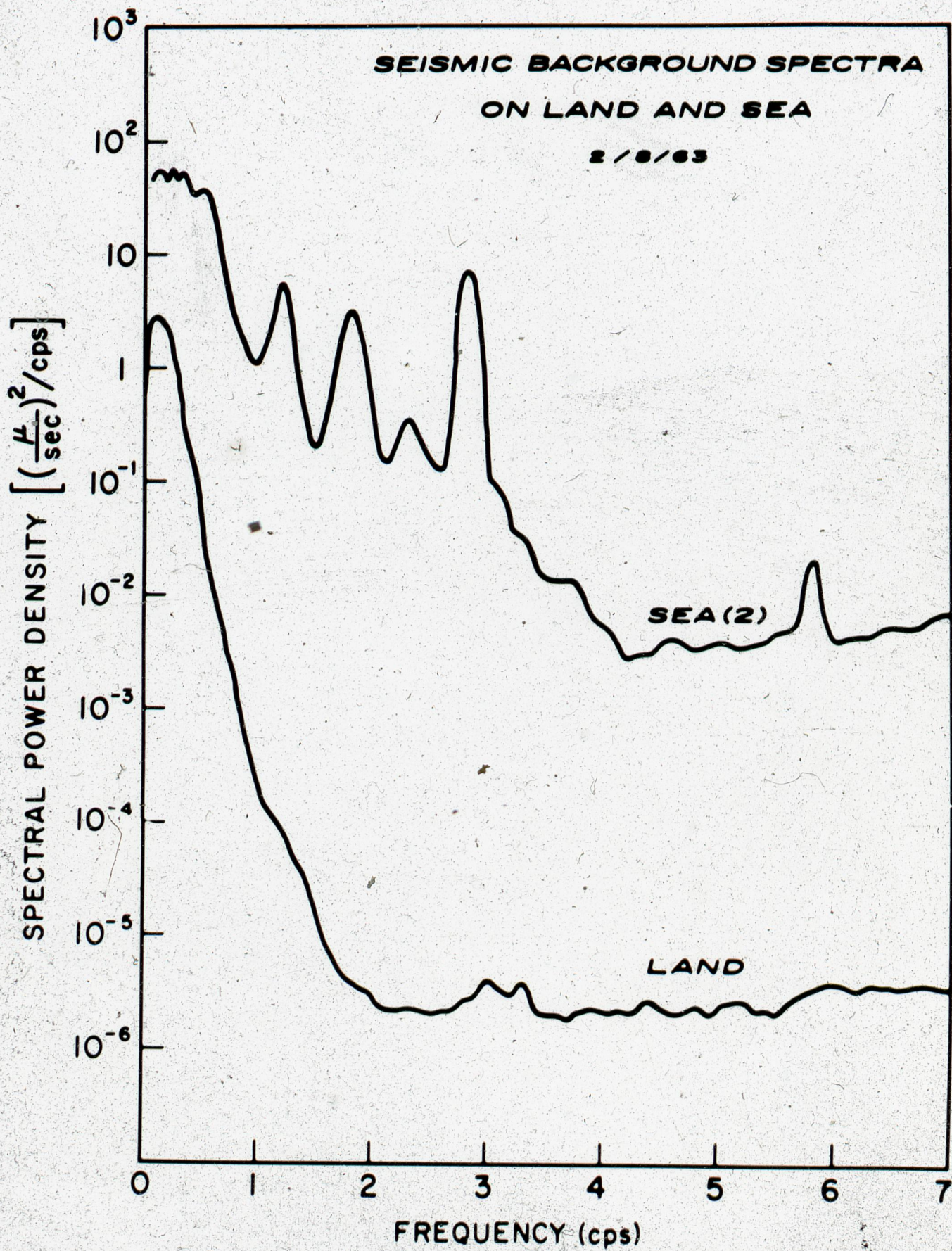


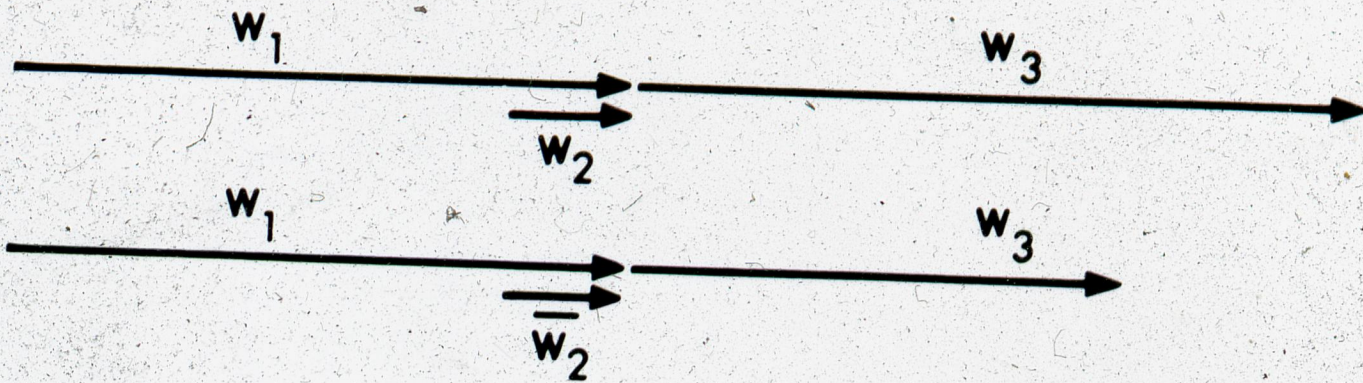
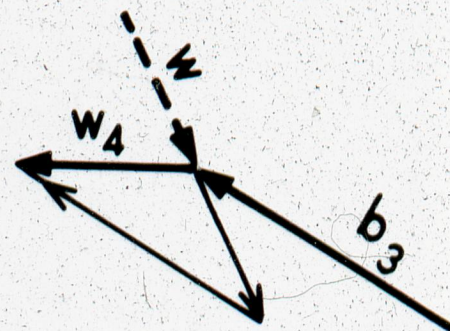
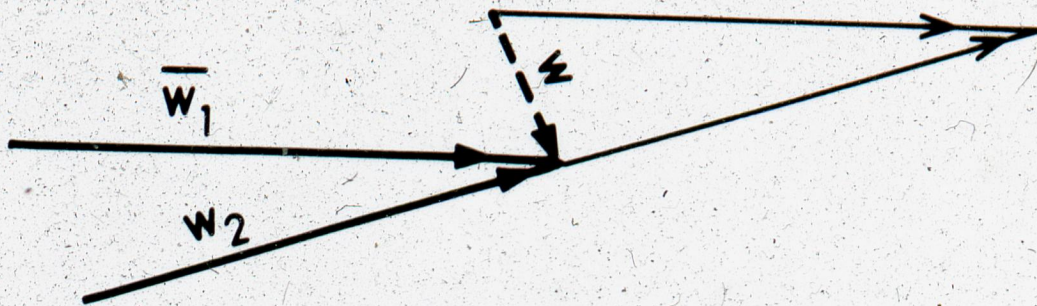
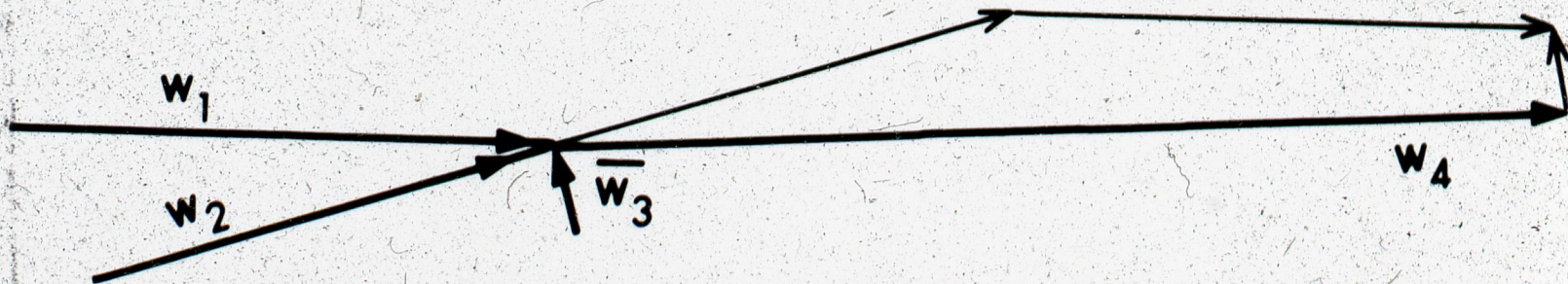


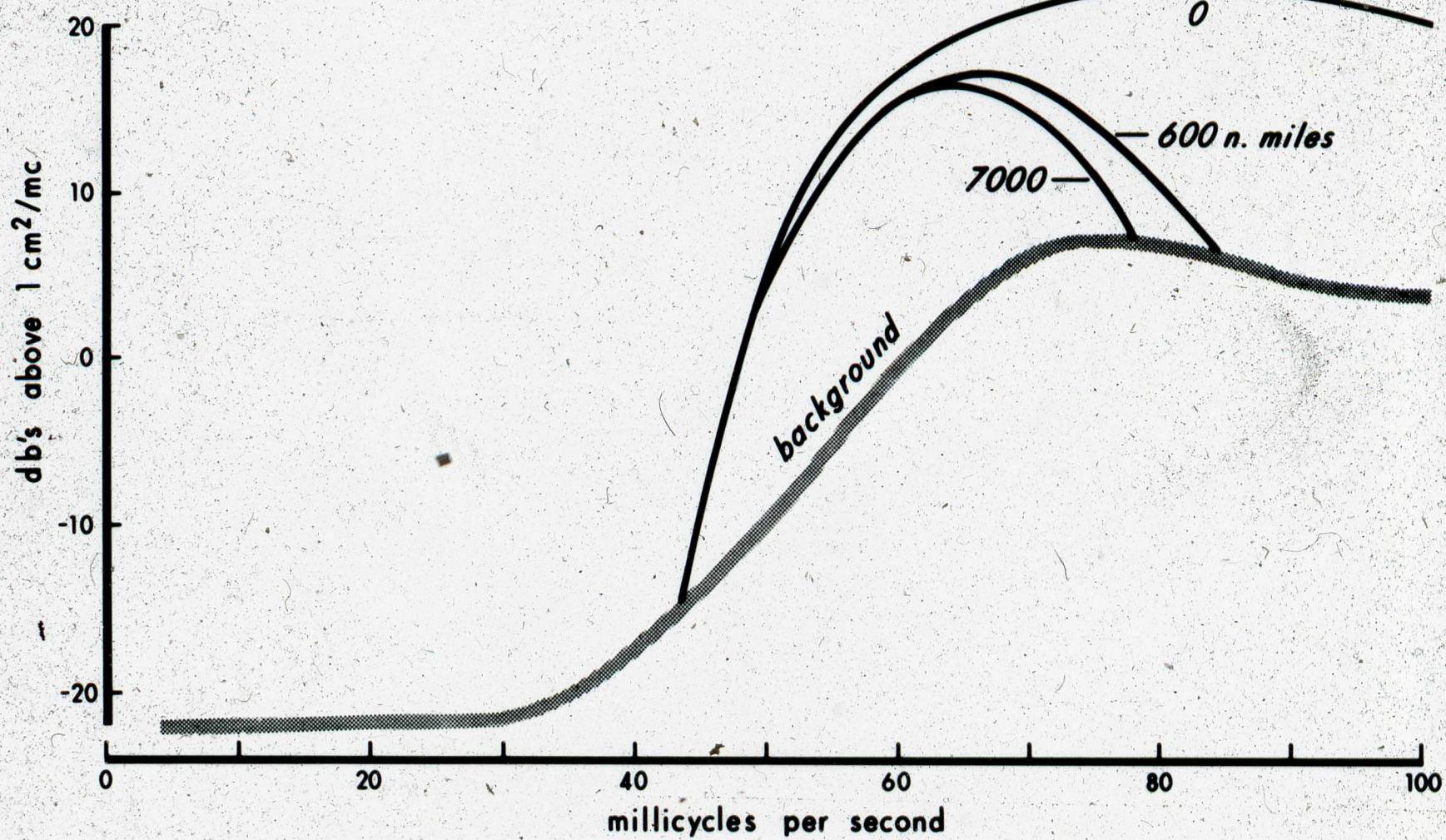


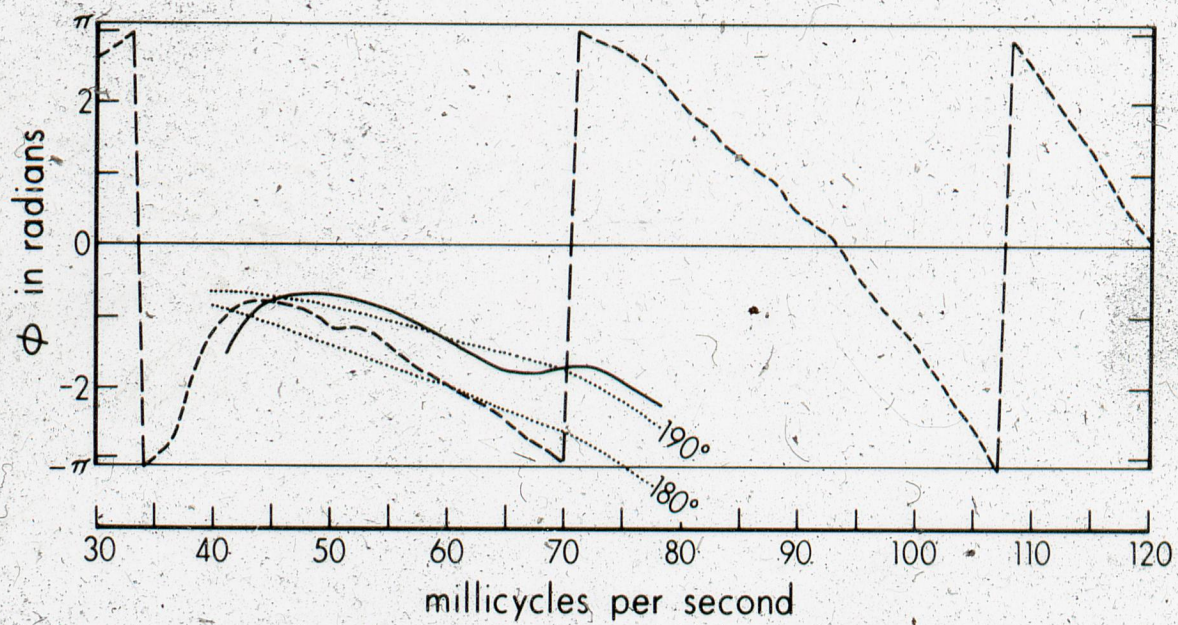
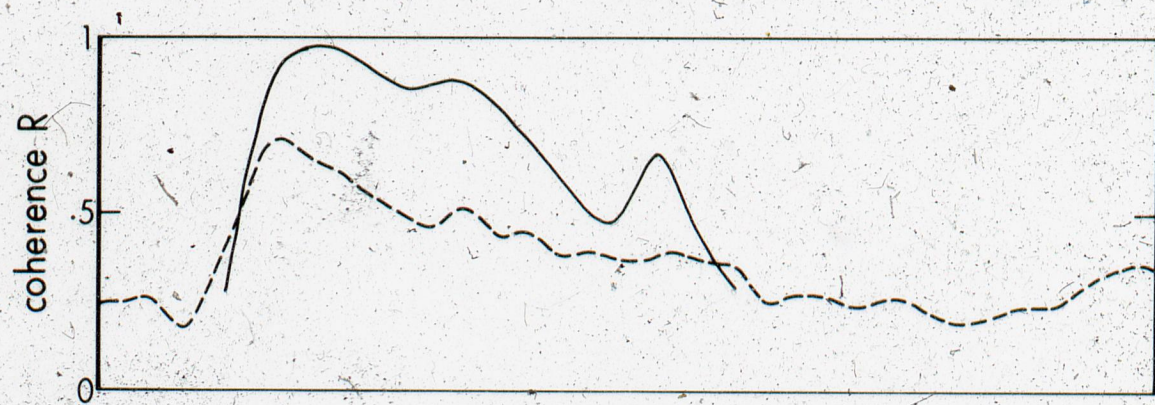
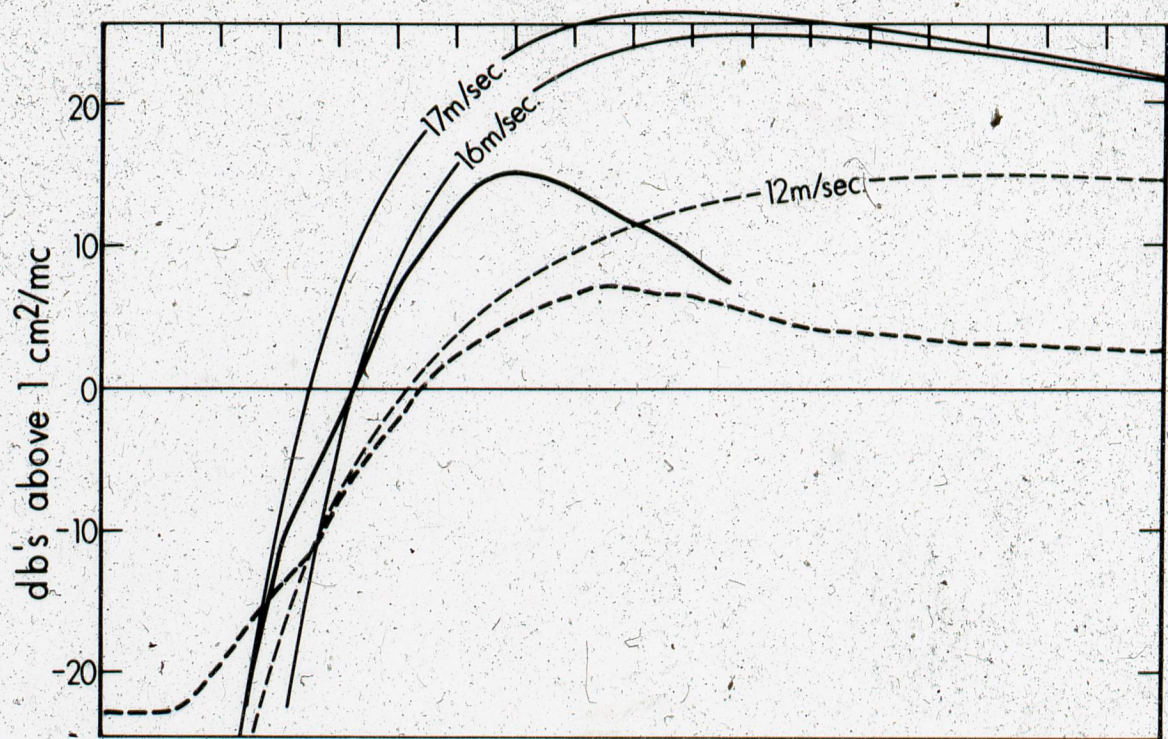


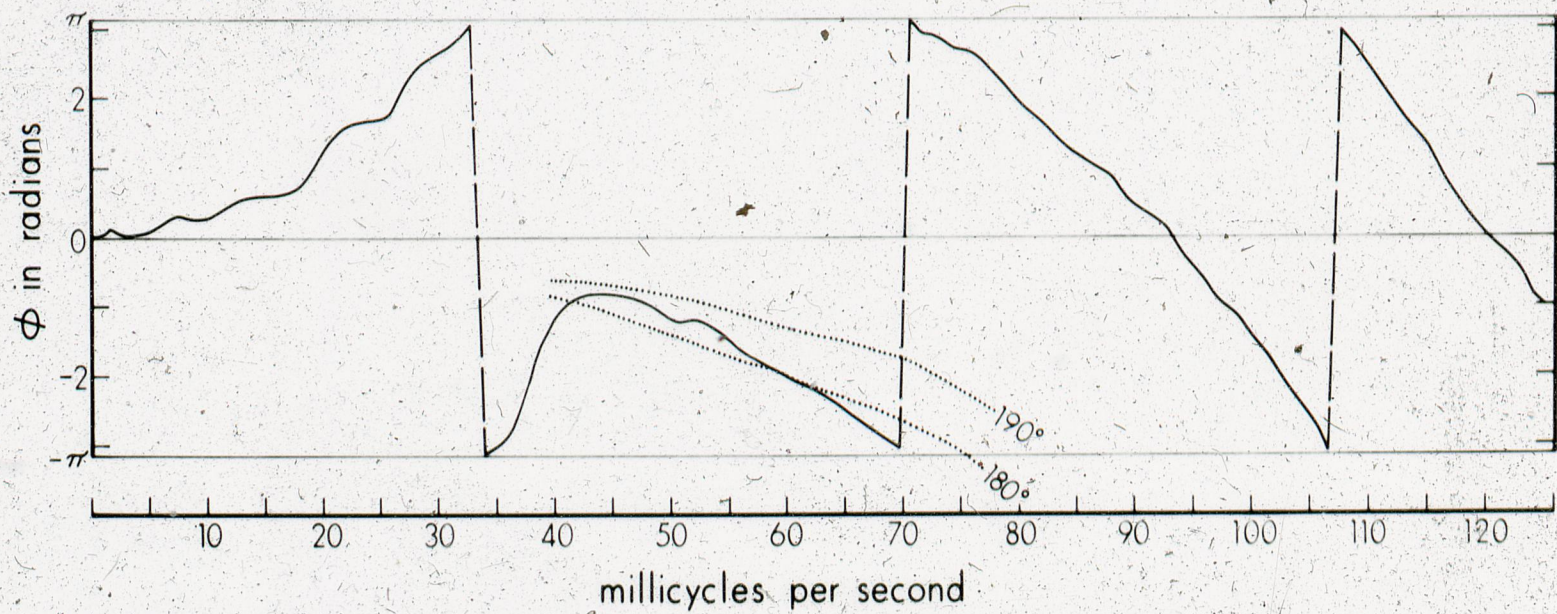
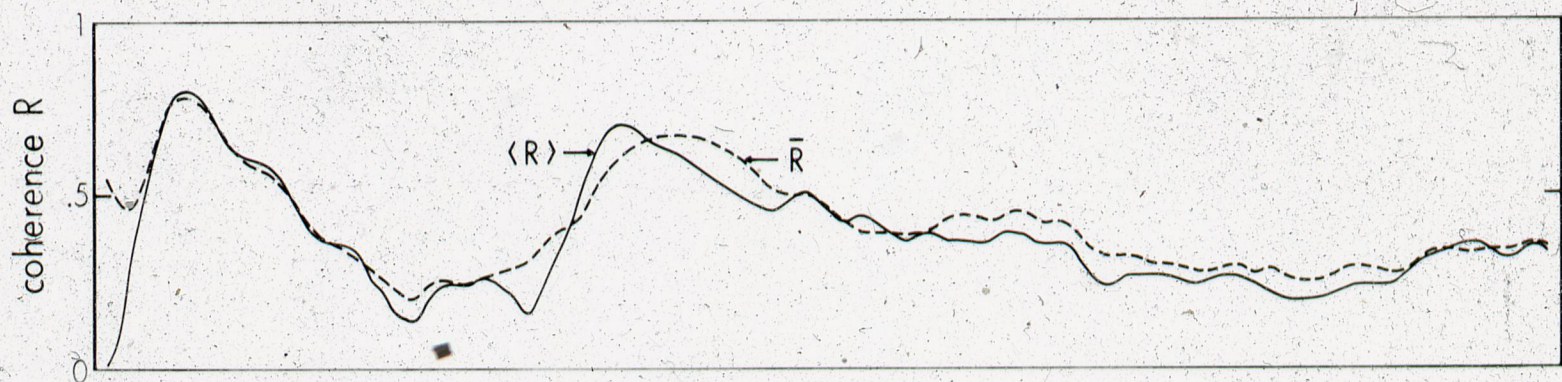
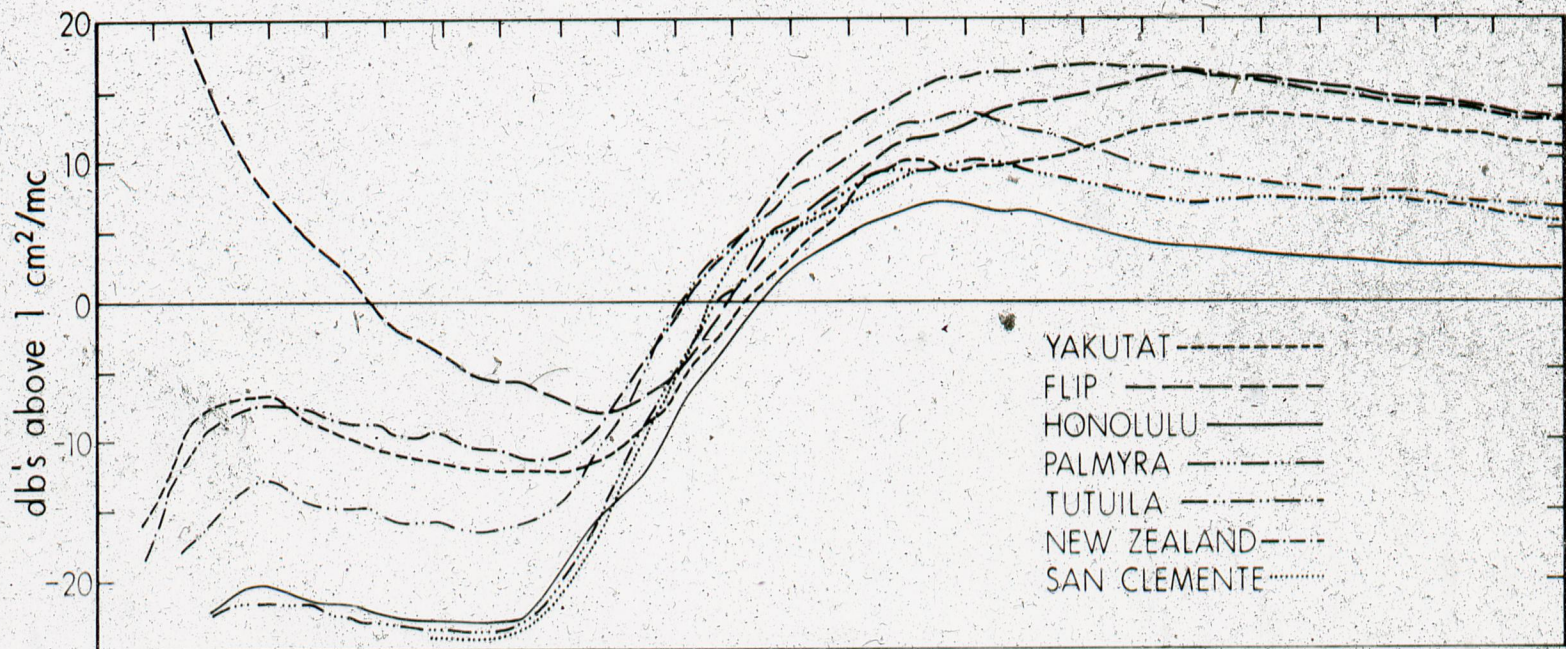


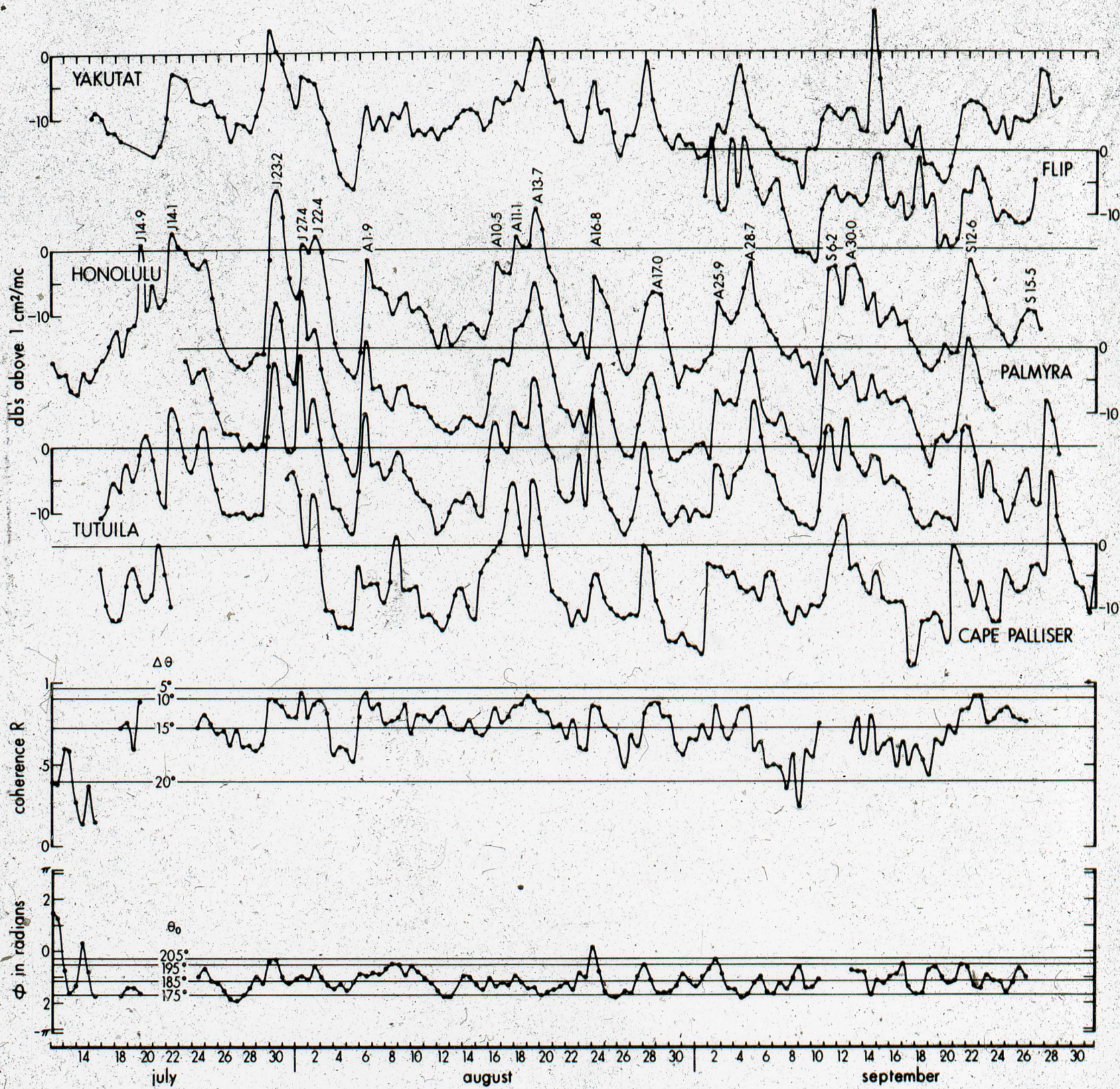












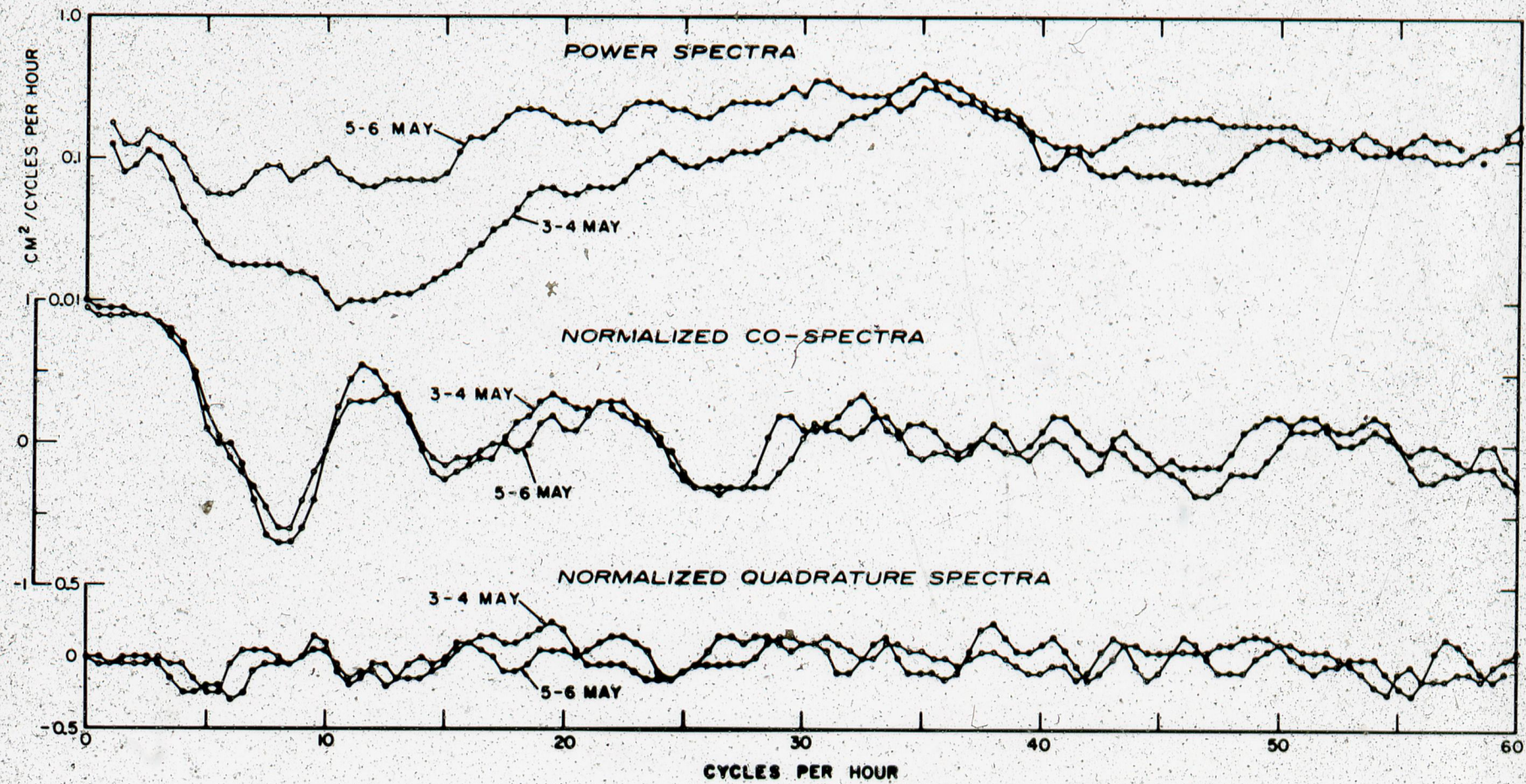
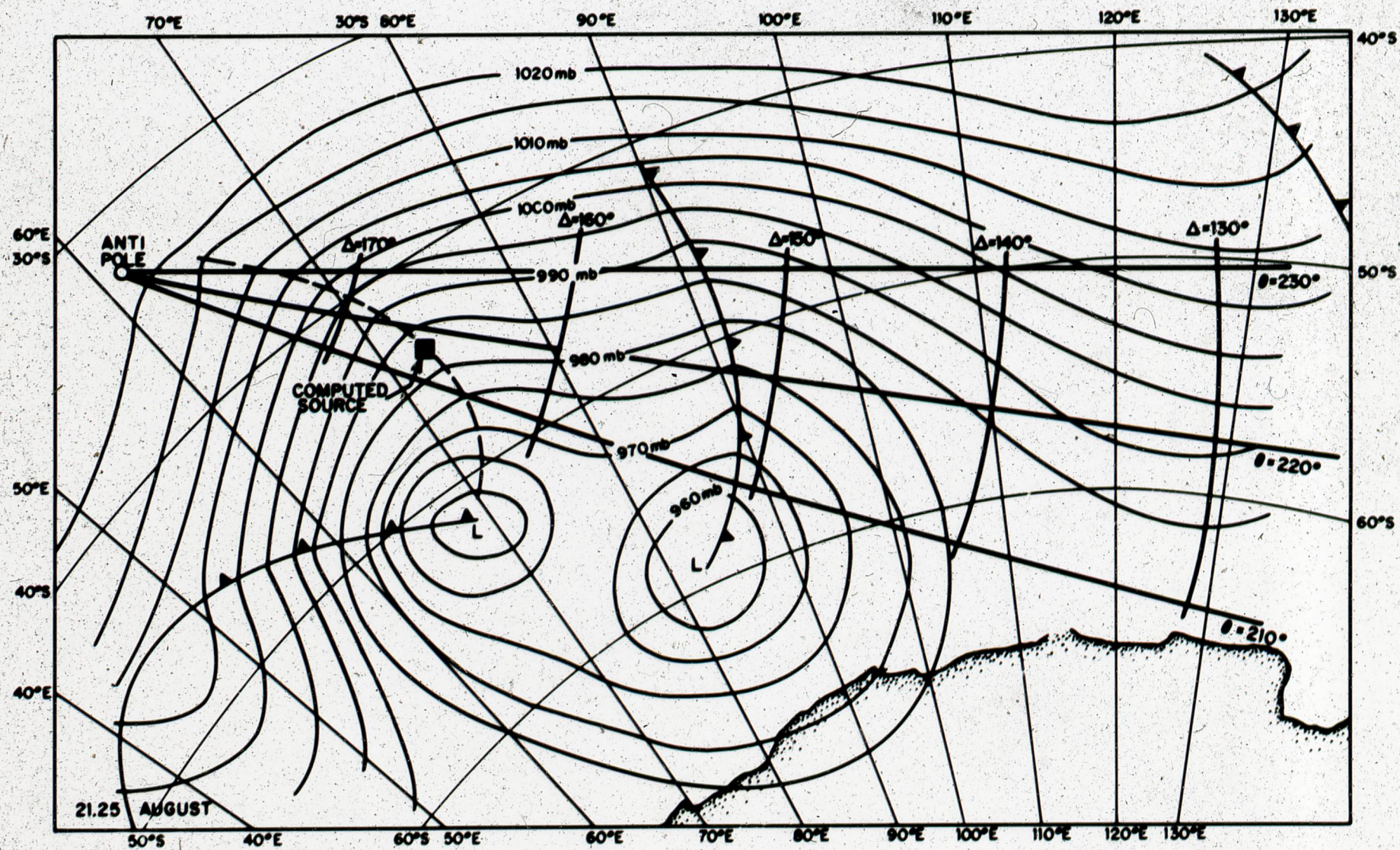
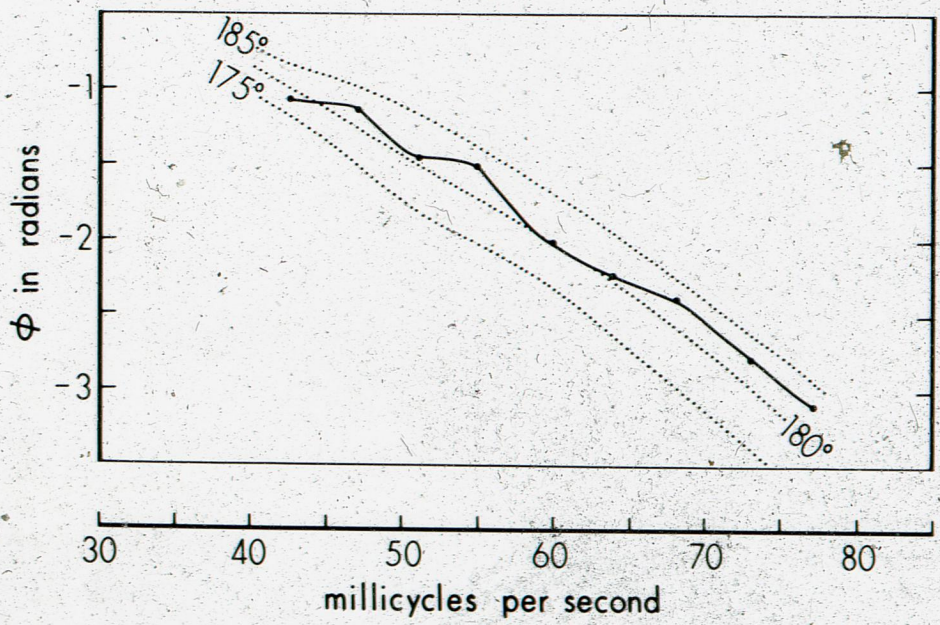
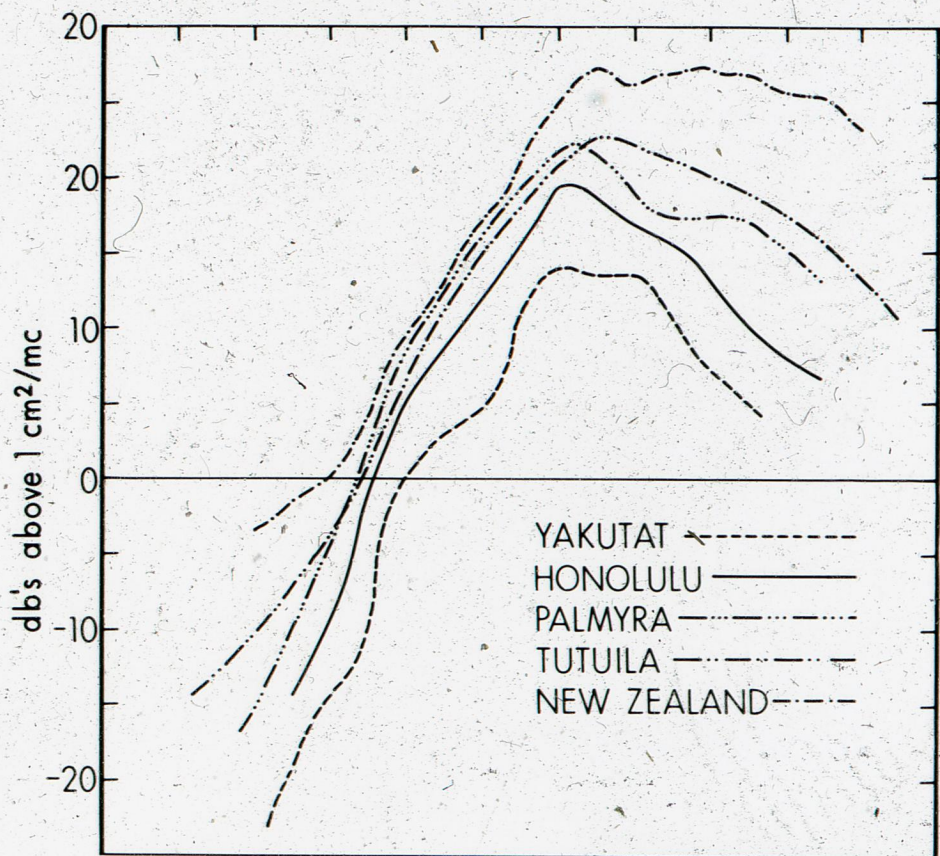
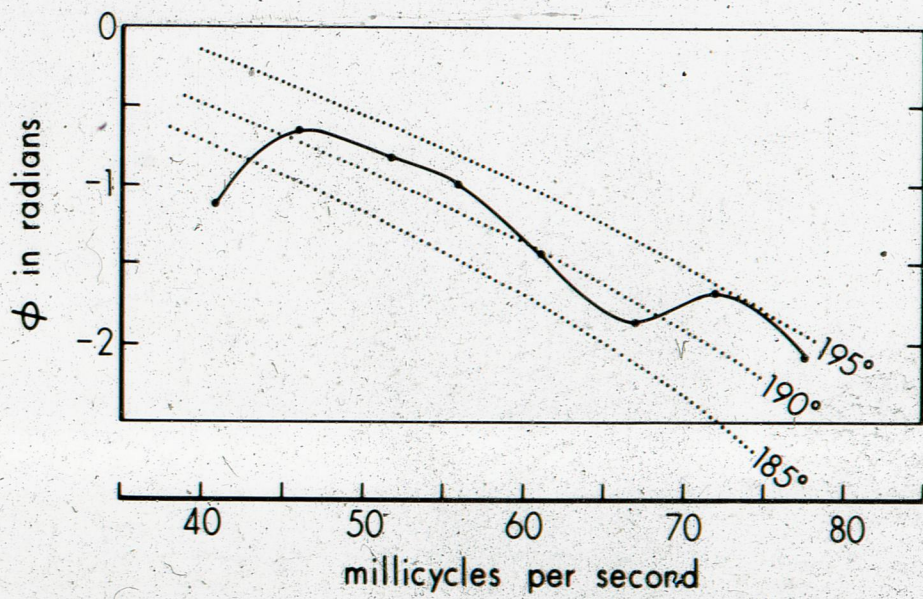
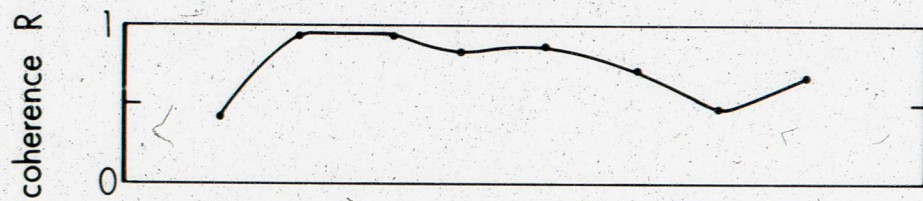
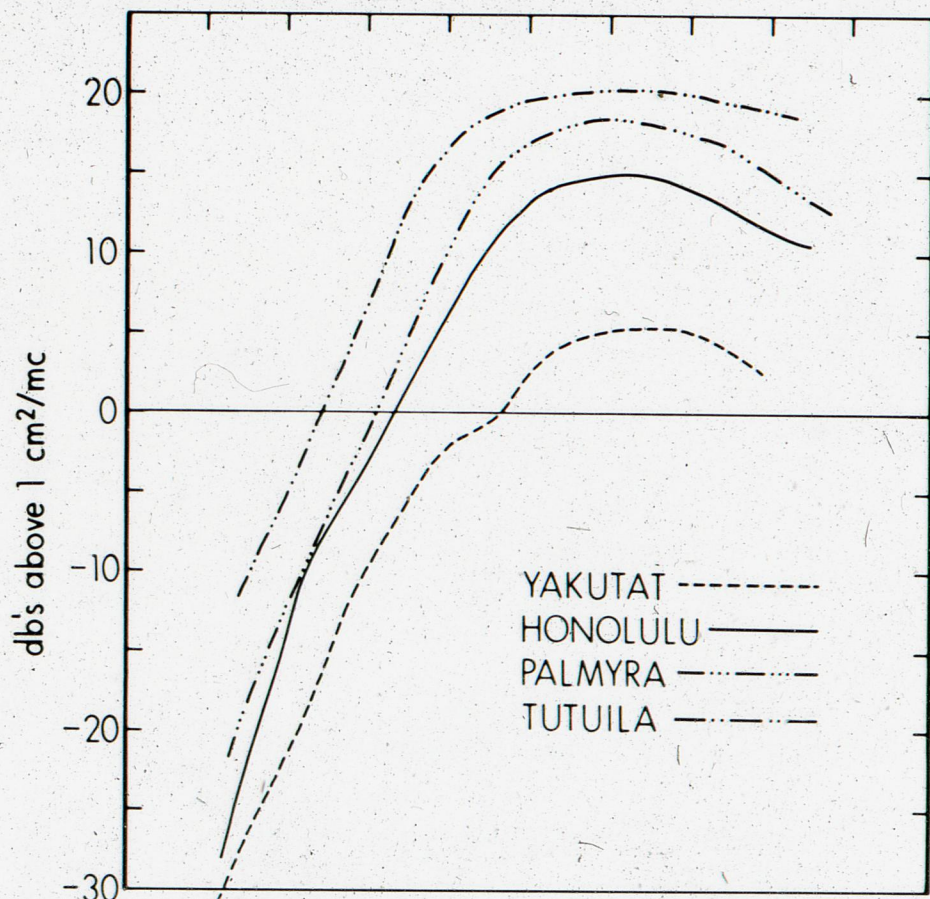
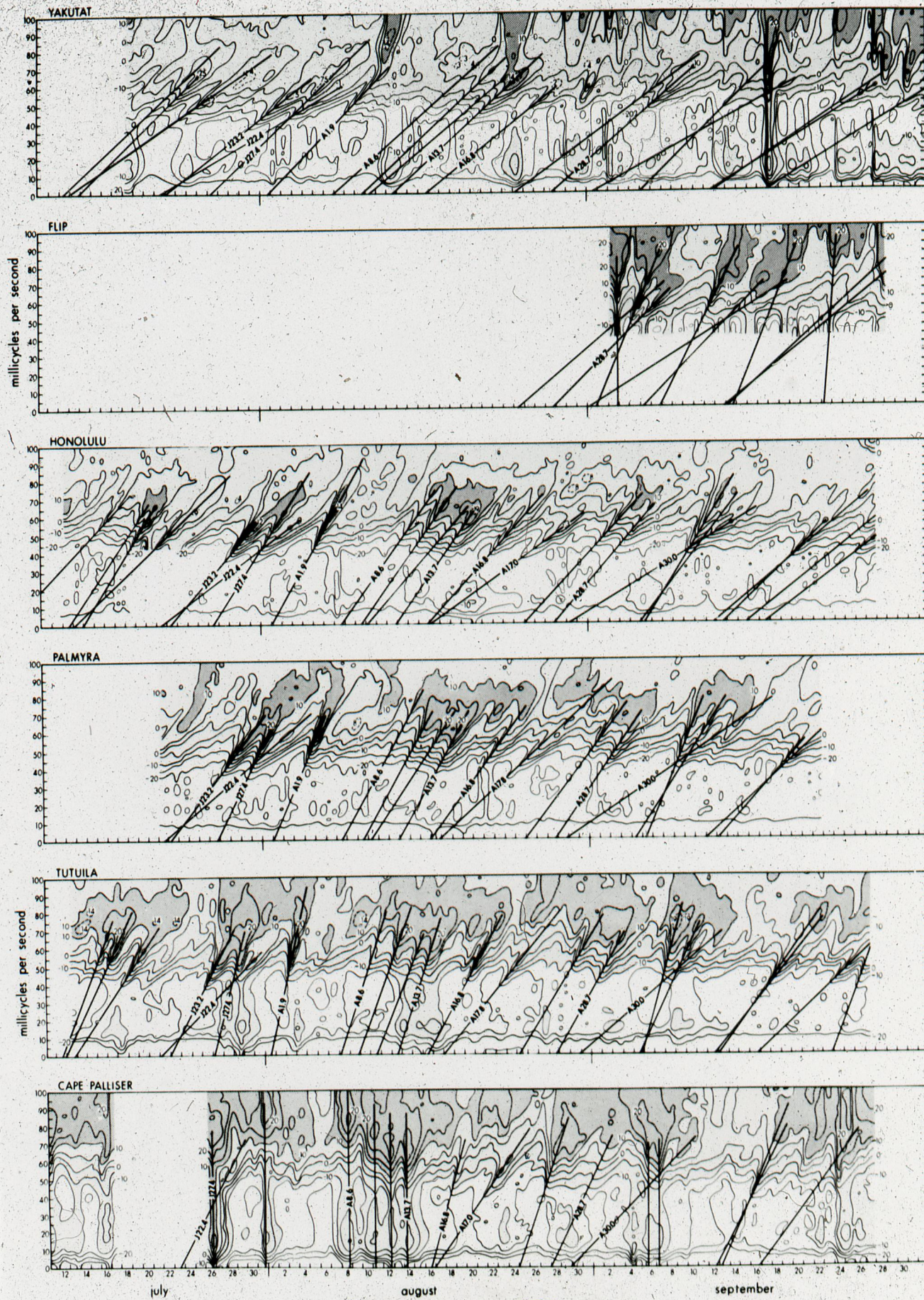


FIG. 5









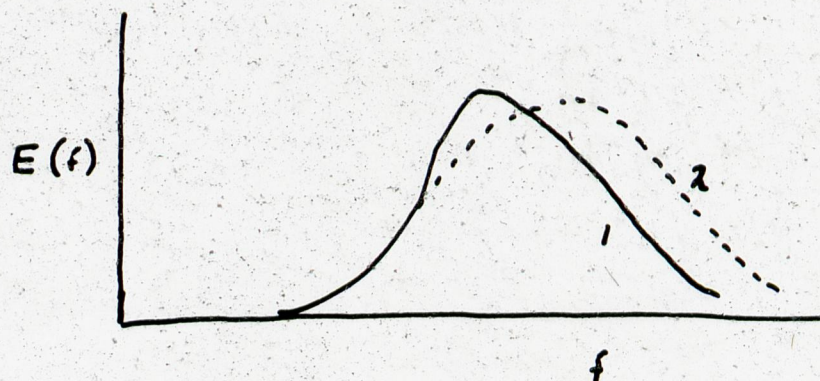
SCATTERING INTERACTIONS

$$\underline{\kappa}_1 + \underline{\kappa}_2 + \underline{\kappa}_3 + \underline{\kappa}_4 = 0$$

$$\omega_1 + \omega_2 + \omega_3 + \omega_4 = 0$$

BOLTZMANN INTEGRAL

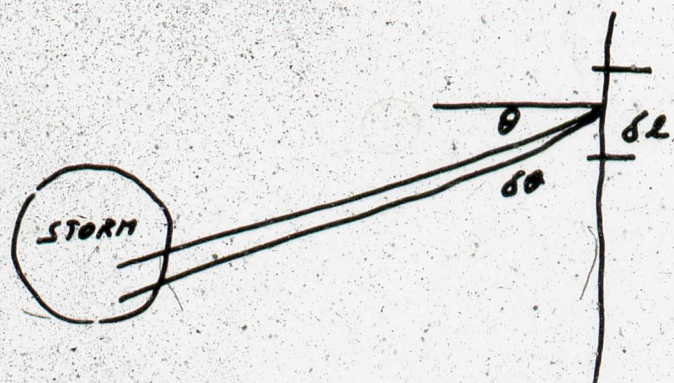
$$\frac{dF(\underline{\kappa}_4)}{dt} = \iiint \underbrace{\sigma(\underline{\kappa}_1, \underline{\kappa}_2, \underline{\kappa}_3)}_{\text{cross-section}} F(\underline{\kappa}_1) F(\underline{\kappa}_2) F(\underline{\kappa}_3) d\underline{\kappa}_1 d\underline{\kappa}_2 d\underline{\kappa}_3$$



increases with E , Δf , $\Delta \theta$.

RESULTS db's per degree.

.03-.06 c/s	.07 c/s	.08 c/s	Theory	.1 - .4
attenuation	<u>ZONE</u>			waves
Too small to be measured	near	.2	.4	Too small to be measured
	far	<.02	.1	
			0(1)	
			0(.1)	



$$\int I(f, \theta; x, y, t) \cos \theta \delta L \delta \theta \delta f$$

EQUATIONS OF RADIATIVE TRANSFER

1. Specific Intensity
or Apparent Brightness

$$I = \nu(f) F(f, \theta; x, y, t)$$

2. Energy density

$$E(f; x, y, t) = \int F d\theta$$

3. ENERGY PER UNIT AREA

$$\rho \int E df$$

NO ABSORPTION

$$I = \text{const}, \quad F = \text{const}, \quad E = \int F d\theta = \bar{F} \Delta \theta$$

↑ visible aperture

