

Accession No.: 82-58

PROCESSING RECORD
SCRIPPS INSTITUTION OF OCEANOGRAPHY ARCHIVES

Munk, Walter Heinrich 1917 -

Walter Heinrich Munk Slides, 1931-1979

PHYSICAL DESCRIPTION: 624 slides

DESCRIPTION: 624 slides on waves, tsunamis, tides, acoustics, Venice and its flooding and damages, and SIO and IGPP buildings and grounds. Images of 'Spring Stirring' statue installation at IGPP. Two slides are numbered 461.

Walter Heinrich Munk Slides, 1930-1974
Accession Number 82-58

SLIDE	TITLE
Miscellaneous Interval Waves and Acoustics [I.221-228]	
1	[graph, n.d.]
2	[California Current, n.d.]
3	[line drawing, n.d.]
4	[depth chart, n.d.]
5	[radial acoustic graph, n.d.]
6	[Eastward Mooring Displacement, n.d.]
7	[graph, December, 1975-February, 1976]
8	[Ray Theory, Synthetic SOFARgram, comparison with measured values, graph, n.d.]
Tidal Effects of Long-Range Sound Transmissions [I.201-206]	
9	[graph, September-November, 1978]
10	[Diurnal and Semidiurnal, graph, n.d.]
11	[graph, December, 1975-February, 1976]
12	[Predictions, graph, March, 1976]
13	[Moored Source: fixed receiver & moored receiver, graph, April-May, 1979]
14	[graph, n.d.]
Internal Wave Spectra at the Buoyant and Inertial Frequencies [I. 181-188]	
15	[graph, n.d.]
16	[graph, n.d.]
17	[graph, n.d.]
18	[graph, n.d.]

SLIDE**TITLE****Internal Wave Spectra at the Buoyant and Inertial Frequencies (continued)**

19 [graph, n.d.]

20 [graph, n.d.]

21 [graph, n.d.]

22 [graph, n.d.]

January 1980 Seattle Meeting and Ocean Variability [I. 121-129]

23 [graph, September-November, 1978]

24 [Atlantic Eddies Surrounding Bermuda, depth chart, n.d.]

25 [graph and data table, n.d.]

26 [graph, n.d.]

27 [site determination chart, n.d.]

28 [site description, graph, n.d.]

29 [Pacific Ocean, n.d.]

30 [graph, September-November, 1978]

31 [Byte Magazine, August, 1979]

Tomography Proposal to NSF [I.101-107]

32 [Atlantic Eddies Surround Bermuda, depth chart, n.d.]

33 [graph, n.d.]

34 [graph and data table, n.d.]

35 [Bermuda and Eleuthera, graph, 1961-1963]

36 [graph, September-November, 1978]

37 [Ray Theory, compared with measured data, graph, September 18-20, 1978]

38 [Sound Speed at Depths, graph, n.d.]

SLIDE**TITLE****February 1981, Experiment Bermuda Square [I.241-259]**

- 39 [Man with equipment on deck, n.d.]
- 40 [Man working on equipment on deck, n.d.]
- 41 [Man with spherical equipment on deck, n.d.]
- 42 [Man with control panel on deck, n.d.]
- 43 [Man with equipment on deck, n.d.]
- 44 [Man with control panel on deck, n.d.]
- 45 [Man working on equipment on deck, n.d.]
- 46 [Research equipment, n.d.]
- 47 [Research equipment, n.d.]
- 48 [Equipment on deck, n.d.]
- 49 [Man with spherical equipment on deck, n.d.]
- 50 [Man working on cylindrical equipment on deck, n.d.]
- 51 [Man with spherical equipment on deck, n.d.]
- 52 [Cylindrical equipment, n.d.]
- 53 [Three men at dining table, n.d.]
- 54 [Man working, n.d.]
- 55 [Spherical equipment floating in ocean, n.d.]
- 56 [Man working on cylindrical equipment on deck h, n.d.]
- 57 [Man with spherical equipment on deck, n.d.]

On the Dynamics of Neutrally Buoyant Capsules [I.21-29]

- 58 [Temperature at Depths, graph, n.d.]
- 59 [Capsule Displacement per Time, graph, n.d.]

SLIDE**TITLE****On the Dynamics of Neutrally Buoyant Capsules (continued)**

- 60 [Capsule Depth per Time, graph, n.d.]
- 61 [graph, n.d.]
- 62 [graph, n.d.]
- 63 [graph, n.d.]
- 64 [graph, n.d.]
- 65 [Oscillatory Damping Force, graph, n.d.]
- 66 [graph, n.d.]

Carl Wunsch Slides used in Talks in PRC, June, 1977 [I.1-6]

- 67 [chart, n.d.]
- 68 [Depth Charts, n.d.]
- 69 [Transport, East Coast chart, n.d.]
- 70 [Cape Henry section, data, n.d.]
- 71 [chart, n.d.]
- 72 [chart, n.d.]

Internal Waves & Small Scale Processes [I.41-68]

- 73 [Cabo San Lazaro, photograph and depth chart, n.d.]
- 74 [chart, n.d.]
- 75 [Contours of Relative Velocity, graph, June, 1977]
- 76 [graph, n.d.]
- 77 [graph, n.d.]
- 78 [graph, n.d.]
- 79 [Frequency chart, n.d.]

SLIDE**TITLE****Internal Waves & Small Scale Processes (continued)**

80	[graph, n.d.]
81	[graph, n.d.]
82	[graph, n.d.]
83	[graph, n.d.]
84	[graph, n.d.]
85	[graph, n.d.]
86	[graph with equations, n.d.]
87	[Elastic Scattering, Induced Diffusion, and Parametric Subharmonic Instability, graph, n.d.]
88	[chart, n.d.]
89	[Couette Profile and Transition Layer, graph, n.d.]
90	[California Current, depth and frequency charts, n.d.]
91	[Internal Wave and Intrusive Glob, chart, n.d.]
92	[Internal Wave and Intrusive Glob, graph, n.d.]
93	[graph, n.d.]
94	[Tasaday and Southtow data, graph, n.d.]
95	[graph, n.d.]
96	[graph, n.d.]
97	[Graphs: active, fossil, n.d.]
98	[Vertical Displacement and Wind Stress, graph, June-July, 1974]
99	[Kinetic Energy and Wind Stress, graph, August-September, 1977]
100	[graph, n.d.]

SLIDE**TITLE****Ocean limits to Precision Acoustic Ranging [H.81-91]**

101	[graph, n.d.]
102	[graph, n.d.]
103	[graph, n.d.]
104	[graph, n.d.]
105	[Scatter diagram, n.d.]
106	[diagram, n.d.]
107	[diagram, n.d.]
108	[graph, n.d.]
109	[Frequency diagrams: raw received signal, complex demodulated, inverse filtered, strong scatter, n.d.]
110	[Scatter diagrams: weak, stronger (unsaturated), very strong (saturated), n.d.]
111	[diagram, n.d.]

1976 JOA, Edinburgh [H.61-75]

112	Major Features of the Surface Circulation of the Oceans (after McLellan), 1965
113	[Depth chart, 1973]
114	[Depth chart, April-June, 1973]
115	[Isotherms and Current Vectors, graph, April, 1973]
116	[data table, n.d.]
117	[Currents and Eddies, chart, n .d.]
118	[Cloud Formations, aerial photograph, n.d.]
119	[Current Vectors, graph, May, 1970]
120	Abundance of Dominant Euphausiids [graph, n.d.]
121	[Transmitter and Receiver Locations, diagram, n.d.]

SLIDE**TITLE****1976 JOA, Edinburgh [H.61-75]**

- 122 April 28, 1974 Gulf Stream IR Data
- 123 [East Coast of United States, chart, n.d.]
- 124 Temperature Section, Nova Scotia-Bermuda, August 14-20, 1932
- 125 Temperature Section, Nova Scotia-Bermuda, November 21-26, 1931
- 126 [East Coast of United States, data and diagram, March 16-July 9, 1973]

Monitoring the Ocean Acoustically [H.41-49]

- 127 [graph, n.d.]
- 128 [Diagram of reseach equipment hanging from ship, n.d.]
- 129 [graph, n.d.]
- 130 [graph of depth vs. range, n.d.]
- 131 [Graphs: processed phase, processed amplitude, received signal, n.d.]
- 132 [graph, n.d.]
- 133 [data plot, n.d.]
- 134 [data plot, n.d.]
- 135 [graph, n.d.]

Ocean Hearing [H.1-6]

- 136 [graph, n.d.]
- 137 [graph, n.d.]
- 138 [graph, n.d.]
- 139 [graph, n.d.]
- 140 [RMS Cycles, graph, n.d.]
- 141 [graph, n.d.]

SLIDE**TITLE****Directional Wave Spectra [G.1-19]**

- 142 [graph, n.d.]
- 143 [Graphs: backscatter power vs. frequency, n.d.]
- 144 [Wake Island, diagram, n.d.]
- 145 [graph, November 13-17, n.d.]
- 146 [Wind Speed and Wind Direction, graph, November 11-19, 1972]
- 147 [graph, November 11-19, n.d.]
- 148 [graph, November 13-15, 1972]
- 149 [graph, November 13-15, 1972]
- 150 [graph, November 13-15, 1972]
- 151 [graph, n.d.]
- 152 [graph, November 14-15, 1972]
- 153 [graph, January 17, 1973]
- 154 [graph, May 24, 1973]
- 155 [Determination of Ocean Surface Conditions by long range radar reflections. North Atlantic Ocean Weather Data, chart, April 20, 1972]
- 156 [graph, May 24, 1973]
- 157 [graph, May 24, 1973]
- 158 [graph, n.d.]
- 159 [Location of current drogue, n.d.]
- 160 [San Clemente Island Data, January 17, 1973]

"Wiggleness" and Mode Tides [F .21-27]

- 161 [graphs: diurnal, semidiurnal, n.d.]
- 162 Mode Tides, n.d.

SLIDE**TITLE****"Wiggliness" and Mode Tides (continued)**

163	[graphs: diurnal, semidiurnal, n.d.]
164	[graphs: diurnal, residuals, reference predicted series, n.d.]
165	[graph, n.d.]
166	[chart, n.d.]
167	[graphs: CPD, n.d.]

Mode Bottom Experiment [F.1-18]

168	[chart, n.d.]
169	[Reiko, Mert, Edie. Data, March-July, n.d.]
170	[Mode data, March-July, n.d.]
171	[Filter Response, graph, n.d.]
172	[Pressure graphs: atmospheric, sea level, bottom. March-July, n.d.]
173	[chart, n.d.]
174	[chart, n.d.]
175	[Coherence and Phase, graph, n.d.]
176	[Coherence and Phase, graph, n.d.]
177	[Coherence and Phase, graph, n.d.]
178	[diagram of Mode Area, Bermuda, n.d.]
179	[graph, n.d.]
180	[chart, March-July, n.d.]
181	[Mode, Pacific. Graph, March-July, n.d.]
182	[graph, n.d.]
183	[chart, Reiko, Edie. n.d.]

SLIDE**TITLE****Mode Bottom Experiment (continued)**

- 184 [Mathematical Formulas, n.d.]
- 185 [chart, Merit, Edit, Reiko. March-July, n.d.]

Internal Wave Observations from a Midwater Float [E.81-88]

- 186 [graph: depth (June '74), n.d.]
- 187 [Phase, Coherence, and Power Spectrum, graph, n.d.]
- 188 [Coherence, Phase, Vertical Separation, graph, n.d.]
- 189 [graph, power spectrum, frequency. n.d.]
- 190 [Misery 1, Misery 3, frequency. chart, n.d.]
- 191 Instrument Capsule Configuration [diagram, n.d.]
- 192 [Female Figure, matte painting, n.d.]
- 193 [graph, n.d.]

GM74 [E.61-72]

- 194 Paper number One, Munk [graph, n.d.]
- 195 Katz Spectra, Solid Curve, Garret and Munk Spectrum, 1972
- 196 Towed Lagged Coherence [graph, n.d.]
- 197 [graph, n.d.]
- 198 [three-dimensional graphic representation, n.d.]
- 199 Spectra by Millard with Brown CTD [graph, n.d.]
- 200 [graph, n.d.]
- 201 Dropped Horizontal Coherence [graph, n.d.]
- 202 Towed Vertical Coherence [graph, n.d.]
- 203 Top-Hat (GM 72) [equations, n.d.]

SLIDE**TITLE****GM74 (continued)**

- 204 Dropped Lagged Coherence [graph, n.d.]
- 205 Cairns Letter [Displacement graph, June 11-12, 1973]

Scenario [E.21-27]

- 206 Cover of “The Sea, Ideas and Observations on Progress in the Study of the Seas”, n.d.
- 207 [Major Ocean Currents, diagram, n.d.]
- 208 [graph: oxygen and carbon dioxide levels, n.d.]
- 209 Scan x49 [Excess Radon, graph, n.d.]
- 210 Carbon-14 GEOSECS [graph, n.d.]
- 211 [graph: salinity, temperature, n.d.]
- 212 Radium, Broecker, Li, and Cromwell, North East Equatorial Pacific [graph, n.d.]

Space-Time Scales of Interval Waves [E.1-10]

- 213 [graph, n.d.]
- 214 [graph, n.d.]
- 215 [graph, n.d.]
- 216 [graph, n.d.]
- 217 Moored Vertical Coherence and Towed Vertical Coherence, [graph, n.d.]
- 218 [graph, n.d.]
- 219 [graph: highlands, slope, n.d.]
- 220 [graph: slow tow, fast tow, n.d.]
- 221 [graph, n.d.]
- 222 [three-dimensional graph: wave number, frequency, n.d.]

SLIDE**TITLE****Venice (M. Hendershott) [D.101-108, D.110-115]**

- 223 [Mestre, Lido di Venezia, Estuario, Venezia: Venice city map, 1970]
- 224 [Venice Estuary / Estuario map, c. 1970]
- 225 [two men in gondola, 1946, n.d.]
- 226 Curve Ipsografiche del Centro Storico di Venezia, 1961
- 227 [water levels marked on column: 4/11/66, 12/11/51, 16/4/36, 21/11/16, n.d.]
- 228 [water levels marked on column: 4/11/66, 12/11/51, 16/4/36, 21/11/16, n.d.]
- 229 [flood damage, debris floating by building, photo, n.d.]
- 230 [boats in waterway between buildings, photo, n.d.]
- 231 [partially submerged building, photo, n.d.]
- 232 [partially submerged building, photo, n.d.]
- 233 [man in boat next to partially submerged buildings, n.d.]
- 234 [People huddled against waves next to boats, n.d.]
- 235 [tide, water flooding streets, n.d.]
- 236 Distribuzione della Superficie del Centro Storico di Venezia alle Varie Quote nel 1908 [and] 1961 [chart, 1961]

Venice [D.81-85, D.87-92]

- 237 [building with people, n.d.]
- 238 [people walking by water's edge with building reflections, n.d.]
- 239 [water damaged building, remains of a doorway, n.d.]
- 240 [gondoliers with passengers in gondolas, photo, n.d.]
- 241 [gondolier with passenger in gondola, with buildings, n.d.]
- 242 [water damaged building, building door, n.d.]
- 243 [water damaged building, n.d.]

SLIDE**TITLE****Venice (continued)**

- 244 [mosaic on building with wall crack, n.d.]
- 245 [water damaged building, building arch, n.d.]
- 246 [building alley walkway, photo, n.d.]
- 247 [mosaic with damage, n.d.]

Venice (Ralph Wuerker slides) [D.62-70, D.72-73]

- 248 [city square, 93356-72, n.d.]
- 249 [building and bridge, 93357-72, n.d.]
- 250 [studio, man sitting with equipment, 93367-72, n.d.]
- 251 [open air market by waterway, 93359-72, n.d.]
- 252 [studio, two men with angel statues, 93362-72, n.d.]
- 253 [cityscape aerial, 93361-72, n.d.]
- 254 [studio, man at work with equipment, 93363-72, n.d.]
- 255 [building at edge of water, 93360-72, n.d.]
- 256 [statue, 93365-72, n.d.]
- 257 [person painting inside, 93355-72, n.d.]
- 258 [unidentified object, 93364-72, n.d.]

Venice Hologram [D.41-48, D.50-59]

- 259 [falling tower, n.d.]
- 260 [lower horse statue by building, n.d.]
- 261 [building, n.d.]
- 262 [people by building rubble, n.d.]

SLIDE**TITLE****Venice Hologram (continued)**

- 263 [sketch of boat construction, n.d.]
- 264 [sketch of a ship, n.d.]
- 265 [sketch, n.d.]
- 266 [etching of two men building with wood, n.d.]
- 267 [etching of man on boat with floating house, n.d.]
- 268 Galleria dell'Accademia, slide number VA22, Bellini, Processione (Parade) in piazza San Marco [slide copyright 1969]
- 269 National Gallery of Art, slide number 1604, Turner, The Dogana and Santa Maria della Salute
- 270 Slide number A-19, Donatello, St. John the Baptist
- 271 Slide number 1365, Carpaccio, Madonna and Child
- 272 Slide number 603, Canaletto, View in Venice
- 273 Slide number 1408, Titian, Doge Andrea Gritti
- 274 Slide number 1605, Canaletto, The Portello and the Brenta Canal at Padua
- 275 Slide number 876, Canaletto, The Square of Saint Mark's
- 276 Slide number 1846, Monet, Palazzo da Mula, Venice

Venice Hologram [D.21, D.23-26, D.28, D.30-31, D.33-36, D.39-40]

- 277 [painting, building by water with boats, n.d.]
- 278 Gallerie dell'Accademia, slide number 504, Carpaccio, Miracolo della S. Croce
- 279 [etching, woman sitting with objects, n.d.]
- 280 [etching, two men, n.d.]

SLIDE**TITLE****Venice Hologram (continued)**

- 281 [print, festival by water, n.d.]
- 282 [print, building, n.d.]
- 283 [print, building with people, n.d.]
- 284 [print, people working at a press, n.d.]
- 285 [Renaissance period map of Venice, n.d.]
- 286 [print, two men fighting with words “oppone si element ad element”, n.d.]
- 287 [etching, boat crossing dam, n.d.]
- 288 Die Murazzu [painting, coastline with buildings, n.d.]
- 289 [print, train crossing bridge over water, n.d.]
- 290 [Plan of a tower, n.d.]

Venice Hologram [D.1-4, D.7-13, D.16-19]

- 291 [Contemporary map of Venice, n.d.]
- 292 [Diagram of contemporary and historic Venice, bridges and gates of canal, n.d.]
- 293 [Diagram of contemporary and historic Venice, n.d.]
- 294 [Chart of local governmental echelons, “Great Council”, n.d.]
- 295 [print, boat launching from floating building, n.d.]
- 296 [print, construction of ship hull, n.d.]
- 297 [print, two men working with wood, n.d.]
- 298 [print, buildings, n.d.]
- 299 [print, ships on water, n.d.]
- 300 [print, n.d.]

SLIDE**TITLE****Venice Hologram (continued)**

- 301 [Venice population vs. water level, graph, n.d.]
- 302 [print, highway with cars by buildings, n.d.]
- 303 [print, building by river, n.d.]
- 304 [print, huts with tools, n.d.]
- 305 [print, ship, n.d.]

Directional Swell [C.201-212, C.238]

- 306 [graph, October 6, 1956, n.d.]
- 307 [graph, n.d.]
- 308 [graph, n.d.]
- 309 [graph, May, 1959]
- 310 [graph, October, 1959]
- 311 [graph, August-September, 1959]
- 312 [graph, August-September, 1959]
- 313 [graph, October, 1959]
- 314 [South Pole-Antarctica, chart, n.d.]
- 315 [Chart of the world, n.d.]
- 316 [Southeast Pacific Ocean, chart, n.d.]
- 317 Honolulu, Hawaii [graph, Energy density vs Frequency, n.d.]
- 318 [graph, n.d.]

SAS [C.181-194]

- 319 [person standing and looking out at horizon, n.d.]

SLIDE**TITLE****SAS (Haubrich/Bradner) (continued)**

- 340 [photo of coastline from distance, n.d.]
- 341 [two men standing on plank outside, n.d.]
- 342 [three men relaxing with food and drink, n.d.]
- 343 [diagram of spherical equipment, n.d.]
- 344 Seismic Background Spectra on Land and Sea, February 8, 1963

SAS [C.141-158]

- 345 [vector diagram, n.d.]
- 346 [background data, graph, n.d.]
- 347 [graph, n.d.]
- 348 [graph, n.d.]
- 349 [graph, July-September, n.d.]
- 350 Power Spectra, Normalized Co-spectra, Normalized Quadrature Spectra, n.d.
- 351 [graph, n.d.]
- 352 [graph, n.d.]
- 353 [graph, n.d.]
- 354 [graph, July-September, n.d.]
- 355 [equations & graphs: Scattering Interactions, Boltmann integral, Results, n.d.]
- 356 [equations & graphs: Equation of Radiative Transfer, n.d.]
- 357 [graph, n.d.]

SLIDE TITLE

SAS (continued)

- 358 [graph, n.d.]
- 359 [Course of FLIP, chart, n.d.]
- 360 [island chain, chart, n.d.]
- 361 Tutuila [chart, n.d.]
- 362 [graph, n.d.]

Deep Sea Breakers [C.121-127]

- 363 [Ship at Sea, aerial photo, n.d.]
- 364 [Ship at Sea, aerial photo, n.d.]
- 365 [Clipper Ship, n.d.]
- 366 [Deck of Ship with large waves, photo, n.d.]
- 367 [Ship at Sea, aerial photo, n.d.]
- 368 [aerial photo of water, n.d.]
- 369 [Ship at Sea, aerial photo, n.d.]

Shorebreaking [C.101, C.103-113]

- 370 [waves crashing against a rock (shot from the beach), n.d.]
- 371 [waves, n.d.]
- 372 [waves crashing against a coast, n.d.]
- 373 [waves, n.d.]
- 374 [waves, n.d.]
- 375 [Surf and Surfers, photo, n.d.]

SLIDE**TITLE****Shorebreaking (continued)**

376 [Surf and Surfers, photo, n.d.]

377 [Surf and Surfers, photo, n.d.]

378 [waves, n.d.]

379 [Surf and Surfers, photo, n.d.]

380 [Surf and Surfers, photo, n.d.]

381 [Surf and Surfers, photo, n.d.]

382 [Surf and Surfers, photo, n.d.]

Ocean Turbulence [E.41-48]

383 [chart, June 21, 1970, n.d.]

384 The Wave-Cloud Formation at Denver, February 14, 1953

385 [chart, February 6, 1970]

386 "Starry Night," Van Gogh [painting, n.d.]

387 [art work, n.d.]

Tsunami-Breakers [C.81-89]

388 [waves, n.d.]

389 View of the Explosion at 13h 12m, September 23, 1952

390 [Explosion, photo, n.d.]

391 [man standing by explosion on beach, n.d.]

392 [beach house and waves under strong winds, n.d.]

393 [people running from coast, n.d.]

SLIDE**TITLE****Tsunami-Breakers (continued)**

- 394 [wreckage of boats and post, n.d.]
- 395 [person in wreckage looking out at waves, n.d.]
- 396 [waves and wreckage, n.d.]

Refraction [C.61-66, C.80]

- 397 [aerial photo of waves along coast, n.d.]
- 398 [aerial photo of waves along coast, n.d.]
- 399 [aerial photo of waves along coast, n.d.]
- 400 [aerial photo of waves along coast, n.d.]
- 401 [aerial photo of coastline, May 6, 1944]
- 402 [diagram: wave crests by coast, n.d.]
- 403 [aerial photo of waves along coast, n.d.]

Refraction [C.41-56]

- 404 [cliffs by coastline, waves, n.d.]
- 405 [waves, aerial photo of coastline, n.d.]
- 406 [waves, aerial photo of coastline, n.d.]
- 407 [waves, aerial photo of coastline, April 2, 1946]
- 408 [waves, aerial photo of coastline, n.d.]
- 409 [waves along coast of small island, n.d.]
- 410 [waves, "deep channel, waves breaking up in to multiple crests, shallow channel", n.d.]
- 411 [waves, aerial photo of coastline, n.d.]
- 412 [waves, aerial photo of coastline, n.d.]

SLIDE**TITLE****Refraction (continued)**

- 413 [waves, aerial photo of coastline, n.d.]
- 414 [waves, aerial photo of coastline, n.d.]
- 415 [aerial photo of waves with small rock island, n .d.]
- 416 [waves, La Jolla Shores, diagram, n.d.]
- 417 [waves, diagram of wave travel against shoreline, n.d.]
- 418 [waves, diagram of wave travel against shoreline, n.d.]
- 419 Swell From WNW, [diagram of waves against coastline, n.d.]

Glitter, Slicks, Capillaries [C.21-27]

- 420 [Reverie, ship, watercolor, n.d.]
- 421 [waves, n.d.]
- 422 [waves, aerial photo of coastline, n.d.]
- 423 [waves, August 31, 1953]
- 424 [diagram of coastline, n.d.]
- 425 [waves, aerial photo with overlaying map, September 17, 1951]
- 426 [waves, aerial photo with overlaying map, August 29, 1951; September 3-4, 1951; September 10, 1951]

Elementary Wave Theory [C.1-3]

- 427 Orbital Motion, [chart, n.d.]
- 428 [diagram of waves intersecting, n.d.]
- 429 [diagram of sand bottom, August 2, 1954]

SLIDE**TITLE****Tides Off Shore [B.161-180]**

430	[Southern California Shoreline, diagram, n.d.]
431	[graph, n.d.]
432	[graph, n.d.]
433	[graph, n.d.]
433	[graph, n.d.]
434	[graph, n.d.]
435	[graph, n.d.]
436	[graph, n.d.]
437	[graph, n.d.]
438	[graph, n.d.]
439	[graph, n.d.]
440	[graph, n.d.]
441	[graph, n.d.]
442	[graph, n.d.]
443	[graph, n.d.]
444	[graph, n.d.]
445	[diagrams of observed currents, n.d.]
446	[map with diagrams of observed currents, n.d.]
447	[map with diagrams of observed currents, n.d.]
448	[Multiple Site Diagrams, 1904-1967]

SLIDE**TITLE****Tides Off Shore (continued)**

449 [Multiple Site Diagrams, 1944-1967]

Tides Off Shore (continued) and Antarctic Launch [B.181-186, B.191-196]

450 [graph, “range if typical deep sea conditions”, n.d.]

451 [chart, n.d.]

452 Table of M2 Tidal Constants, n.d.

453 Table of K1 Tidal Constants, n.d.

454 Summary of Tidal Constants, n.d.

455 Josie II Observed Currents, n.d.

456 [Equipment in ocean, n.d.]

457 [Equipment hanging off side of a ship, n.d.]

458 [Equipment hanging over ocean, n.d.]

459 [Equipment hanging off side of a ship, n.d.]

460 [Two Men & equipment handing off side of ship, n.d.]

461 [Men with equipment on deck, n.d.] [2 slides are numbered 461]

461 M2, [data table, n.d.] [2 slides are numbered 461]

462 [data table, n.d.]

Shallow Tides/Tide Theory [B.141-154]

463 Incident Amplitudes [graph, n.d.]

464 [graph, n.d.]

465 [graph, n.d.]

SLIDE**TITLE****Shallow Tides/Tide Theory (continued)**

- 466 [graph, n.d.]
- 467 [equations: tide potential, convolution prediction, harmonic prediction, nonlinear convolution, nonlinear harmonic, n.d.]
- 468 [graph, n.d.]
- 469 [graph, n.d.]
- 470 [graph, n.d.]
- 471 [graph, n.d.]

Shallow Tides/Tide Theory [B.141-154]

- 472 [graph, n.d.]
- 473 [graph, n.d.]
- 474 [graph, n.d.]
- 475 [World] Chart of Cotidal Lines, n.d.
- 476 Map: Contours of Gravitational Potential, Corresponding High Tide, n.d.

Benthic Boundary Layer [B.121-129]

- 477 [data table, n .d.]
- 478 [data table, n.d.]
- 479 [graph, n.d.]
- 480 [graph, n.d.]
- 481 [graph, n.d.]
- 482 [graph, n.d.]
- 483 [graph, n.d.]

SLIDE**TITLE****Benthic Boundary Layer (continued)**

484 [graph, n.d.]

485 [graph, n.d.]

485 [graph, n.d.]

Tidal Friction (Jeffreys) [B.101-108]

486 [data table, n.d.]

487 [data table, n.d.]

488 [data table of solar eclipses in antiquity, n.d.]

489 [diagram, n.d.]

490 [graph, n.d.]

491 [data table, n.d.]

492 [data table “dissipation during Gerstenkorn event”, n.d.]

493 [graph, March 27-28, 1968]

Abyssal Recipes [B.81-90]

494 [graph, n.d.]

495 [graph, n.d.]

496 [graph, n.d.]

497 [graph, n.d.]

498 [graph, n.d.]

499 [graph, n.d.]

SLIDE**TITLE****Abyssal Recipes (continued)**

- 500 [graph, n.d.]
- 501 [graph, n.d.]
- 502 [diagram of ice coverage, n.d.]
- 503 [October Ice Limit, graph, n.d.]

Earth Rotation [B.61-63, B.65-71]

- 504 [graph, n.d.]
- 505 [graph, n.d.]
- 506 [graph: modern vs. ancient, n.d.]
- 507 [graph, n.d.]
- 508 [data table, n.d.]
- 509 [graph, n.d.]
- 510 [graph, n.d.]
- 511 [graphs: Tidal Friction and Core Accretion, tidal friction, Wells' observations, n.d.]
- 512 [data table, Brown vs. Brouwer, n.d.]
- 513 [photo, rock specimens, n.d.]

Tidal Spectroscopy [B.41-43, B.45-48, B.50-52, B.54-60]

- 514 [poem by Hilare Belloc, n.d.]
- 515 [graph, n.d.]
- 516 [graph, n.d.]
- 517 [graph, n.d.]

SLIDE**TITLE****Tidal Spectroscopy (continued)**

518	[graph: mean sea ice level, n.d.]
519	[graph, n.d.]
520	[graph, n.d.]
521	[graph, n .d.]
522	[graph: auto-covariance, predicted variance, n.d.]
523	[graph, n.d.]
524	[graph, n.d.]
525	[graph, n.d.]
526	[graph: atmospheric pressure, n.d.]
527	[graph, n .d.]
528	[graph: atmospheric pressure, n.d.]
529	[graph: atmospheric pressure, n.d.]
530	[Map of the World, n.d.]

Deep Sea Tides [B.21-40]

531	[Docked Ship, n.d.]
532	[Equipment on deck, n.d.]
533	[Men with equipment on deck, n.d.]
534	[Men with equipment on deck, n.d.]
535	[Men working on deck, n.d.]
536	[Men with equipment on deck, n.d.]
537	[Men with equipment on deck, n.d.]

SLIDE**TITLE****Deep Sea Tides (continued)**

- 538 [Man with equipment in water, n.d.]
- 539 [Men working on deck, February, 1966]
- 540 [Men working on deck, n.d.]
- 541 [Men working on deck, n.d.]
- 542 [Men working on deck, n.d.]
- 543 [Men with equipment on deck, n.d.]
- 544 [Men with equipment on deck, n.d.]
- 545 [Men with equipment on deck, n.d.]
- 546 [Men with equipment on deck, n.d.]
- 547 [Men working on deck, n.d.]
- 548 Judith, February 13-20, 1966 [graph]
- 549 [diagram of research equipment, n .d.]
- 550 World Map: Contours of Gravitational Potential, corresponding high tide, n.d.]

Deep Sea Tides [B.1-20]

- 551 [docked boat, n.d.]
- 552 [equipment on deck, n.d.]
- 553 [Men with equipment on deck, n.d.]
- 554 [two men with half-submerged equipment, n.d.]
- 555 Identification of a Deep-Sea Mooring-Cable Biter: Head and Jaws of a Barracudina *Sudis hyalina*, (photo, n.d.)
- 556 [Men with equipment, n.d.]

SLIDE TITLE

Deep Sea Tides (continued)

- 557 [photo of waves, shot from deck of ship, n.d.]
- 558 [Men with equipment on deck, n.d.]
- 559 [underwater photo of fish, October 17-19, 1967]
- 560 [Man looking out at the sea, n.d.]
- 561 [Men with equipment on deck, n.d.]
- 562 [Men with equipment on deck, n.d.]
- 563 [Spherical equipment, n.d.]
- 559 [underwater photo of fish, n.d.]
- 565 Thermistor 3 (55 Feet), Experiment 66-2A [graph, n.d.]
- 566 [photo of waves shot from deck of ship, n.d.]
- 567 [Men with equipment on deck, n.d.]
- 568 [Two men with equipment on deck, n.d.]
- 569 [Men with equipment on deck, n.d.]
- 570 [Man with equipment on deck, n.d.]

SIO/IGPP, August, 1962 [A.61-76]

- 571 [aerial photo of SIO parking lot by pier with coast, August 15, 1962]
- 572 [SIO Pier with people on beach, August 15, 1962]
- 573 [SIO Pier with people by pier, August 15, 1962]
- 574 [SIO Lunch Area, August 15, 1962]
- 575 [Aerial photo of beach south of SIO, August 15, 1962]

SLIDE**TITLE****SIO/IGPP, August, 1962 (continued)**

- 576 Institute of Geophysics and Planetary Physics Construction Site,
August 21, 1962 -- IGPP sign
- 577 Roel Construction Co. sign
- 578 Construction Site
- 579 Stick in sand
- 580 Construction by road
- 581 Construction by hill
- 582 House by road along beach
- 583 Construction by beach
- 584 [Photo of SIO parking lot by beach with pier, August 15, 1962]
- 585 [Project Engineers Office, IGPP, August 21, 1962]
- 586 IGPP Construction Site, August 21, 1962 – Photo of building by
beach

"Spring Stirring" IGPP (taken by Cecil Green, Dec. 1963) [A.41-55]

- 587 [crane lifting rock near a man, photo, n.d.]
- 588 [crane lifting rock, n.d.]
- 589 [crane lifting rock, n.d.]
- 590 [men digging dirt for the rock, n.d.]
- 591 [people watching crane lifting statue, n.d.]
- 592 [men placing statue on rock, n.d.]
- 593 [men placing statue on rock, n.d.]

SLIDE**TITLE****"Spring Stirring" IGPP (taken by Cecil Green, Dec. 1963) (continued)**

- 594 [people watching men place statue on rock, n.d.]
- 595 [men by statue on rock, n.d.]
- 596 [men by statue on rock, n.d.]
- 597 [people by statue on rock, n.d.]
- 598 [photo of beach, n.d.]
- 599 [people overlooking fabric, n.d.]
- 600 [person sitting by building, n.d.]
- 601 [SIO pier, shot from beach, n.d.]

Miscellaneous SIO/IGPP [A.21-24, A.31-36]

- 602 [Man covered in ropes, n.d.]
- 603 [Men pulling up equipment from ocean, n.d.]
- 604 [ship, from a distance, n.d.]
- 605 [ship, n.d.]
- 606 [SIO, building, n.d.]
- 607 [IGPP, photo of beach shot from balcony, n.d.]
- 608 [IGPP, photo of beach shot from balcony, n.d.]
- 609 [IGPP, building, n.d.]
- 610 [IGPP, building, n.d.]
- 611 [IGPP, aerial photo of house by beach, n.d.]

SLIDE**TITLE****Cecil Green Slides of IGPP (taken October, 1968) [A.1-10]**

612 [IGPP, Spring Stirring statue, n.d.]

613 [IGPP, Spring Stirring statue, n.d.]

614 [IGPP, Spring Stirring statue, n.d.]

615 [IGPP, building, n.d.]

616 [IGPP, building, n.d.]

617 [IGPP, building, n.d.]

618 [IGPP, building, n.d.]

619 [IGPP, building, n.d.]

620 [IGPP, lawn by building, n.d.]

621 [IGPP, lawn by building, n.d.]

622 [IGPP, building, n.d.]

Miscellaneous

623 People's Republic of China, Building with roof top slogan "Down with US Imperialism, Down with Soviet Revisionism"