

Accession No.: 2004-06

PROCESSING RECORD
SCRIPPS INSTITUTION OF OCEANOGRAPHY ARCHIVES

Craig, Harmon Bushnell 1926-2003

Harmon Bushnell Craig Papers, 1955-1999

Physical Description: 55 mss; 1 Lmss

Description: The accession consists of the papers of geochemist Harmon Craig, covering subject, research and teaching files from Scripps Institution of Oceanography. Papers of geochemist Harmon Craig, including teaching files, laboratory notebooks, Gulf of California, hydrothermal vents, Hawaiian Islands, volcanic gases, Yellowstone Park, GEOSECS, Helios stations, and Earth and Planetary Sciences Letters.

Harmon Bushnell Craig
Papers, 1955-1989
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BOX	FOLDER TITLE
1	<p>[Excess Radon Graphs, Infinite Z-model Graphs, and East Pacific Rise Map, n.d]</p> <p>[Reprints, 1975-1985]</p> <p>[Pluto, Carbon, Hydrogen, and Other Miscellaneous Graphs, 1979-1981]</p> <p>[Miscellaneous Notes and Calculations, 1984]</p> <p>[Miscellaneous Chung Graphs, n.d.]</p> <p>[Reprints, 1982-1985]</p> <p>[Correspondence with Dr. G. Brent Dalrymple, Notes and Reprints Regarding Helium and Argon Isotopes in Olivine Phenocrysts In Ocean Island Basalts, 1981-1989]</p> <p>[Miscellaneous Correspondence, 1982-1989]</p> <p>[International Atomic Energy Agency: Advisory Group On Stable Isotope, Reference Samples For Geochemical And Hydrological Investigations, Vienna, 19-21 September 1983]</p> <p>[Miscellaneous Notes and Calculations, 1973-1988]</p> <p>[Correspondence regarding Sano, Wakita et. al paper concerning atmospheric helium-3/ helium-4 ratio over the past two decades, n.d]</p> <p>[Miscellaneous Reprints, 1974-1988]</p> <p>Gulf of California: [Reprints, 1959-1961]</p> <p>[Gulf of California: Alvin-Pascua, 1988]</p> <p>Gulf of California, [1961]</p>

BOX	FOLDER TITLE
1	<p>Gulf of California: Miscellaneous Water Samples, [1965]</p> <p>[Reprints, 1972-1984]</p> <p>["Notice Research Project, Science Information Exchange, Smithsonian Institution, National Science Foundation Project, n.d]</p> <p>[Geophysical constraints on the volume of hydrothermal flow at ridges axes, n.d]</p> <p>[Miscellaneous Research Time Requests, Notes, and Pertaining Correspondence, 1974-1984]</p> <p>[Reprints & Miscellaneous Essays, 1974]</p> <p>252 Notes-Homework Current, [1977-1982]</p> <p>["Stable Isotopes," 1980-1982]</p>
2	<p>[Loihi Data, Calculations, and Graphs, 1987-1988]</p> <p>Loihi-Main File, [1985]</p> <p>Loihi-Vents, [1987]</p> <p>Loihi-Neon, [1984-1985]</p> <p>Circulation Notes, [1968-1970]</p> <p>[Reprints, 1969-1981]</p> <p>Loihi-Plots, (Reference File), [1984-1985]</p> <p>Loihi Figures, [n.d.]</p> <p>[Loihi Data, n.d]</p> <p>Loihi-Original Figures Table, [n.d]</p> <p>Alvin Loihi, [1984-1987]</p> <p>Loihi Dives, [1982-1987]</p> <p>[Reprints, 1982-1985]</p>

BOX	FOLDER TITLE
2	["Methane, Hydrogen, Carbon Monoxide and Nitrous Oxide In Submarine Hydrothermal Vent Waters," and Other Pertinent Graphs and Reprints, 1980-1984}
3	[Miscellaneous Reprints and Correspondence, 1975-1984] [Miscellaneous Graphs, Notes, and Calculations, 1981-1982] Laboratory Notebook: 13 Degree North Water Samples, [1982] [Dive Notes, Mariana Trough Dive Notes, 1987] ["Geophysical Log: R/V Atlantis II (Ship), Cruise 118, Leg 13, Book 1, From Guam to Saipan," 1987] [Miscellaneous Correspondence, 1986] [Reprints, 1985-1986] Emiuani-Data On Core Samples Run for Carbon-13 vs. Oxygen-18, [1965-1969] [Hydrothermal Fluid Transparencies and International Association of Volcanology and Chemistry of the Earth's Interior Newsletter No. 17, 1983] [Class Transparencies, 1979-1980] [Reprints, 1976-1982] [Miscellaneous Graphs and Reprints, 1971-1987] Thesis, M.S. Data, [1974-1980] [Dive 1822 Data, 1987] [Reprints, 1972-1983] [Miscellaneous Graphs and Notes, 1982] Ice: Hail Data, [1980]
4	Transparencies, Hydro Vents-Chemistry, Gases, Ion Chrom., CH ₄ (Methane), Helium-3, Loihi- Pascua -Pluto Vents, [n.d.]

BOX	FOLDER TITLE
4	21 (Degrees) North, EPR, [n.d]
	13 (Degrees) North, EPR, [1984]
	Pluto-4, 21 (Degrees) North EPR, [1983]
	Miscellaneous Notes and Ocean Basin Data, [1981-1987]
	Helium-3 EPR, Thumpson Samples, 1980
	[21 Degrees North Data, 1979-1981]
	[21 Degrees North Plots, [1981-1986]
	[Miscellaneous Notes, Reprints, and Graphs, 1877-1987]
	[Correspondence Between Mr. George Tanabe and Dr. Brian Taylor, 1985]
	[Summary of Loihi and Marianas Vent Chemistry, Kenneth A. Farley, March 15, 1988 and Other Pertinent Notes]
	[“Technical Report: Abyssal Mixing and Circulation In the North Pacific From Radio Carbon Data, by Rooth, Fine and Ostlund, 1980”]
	[Correspondence, 1977-1983]
	[Helium-3 Data Samples, n.d]
	[Miscellaneous Notes, 1982]
	[Thermometer Reprint and Thermometer Arrangement, 1964-1981]
	[Helium-3 Data in Indian Ocean, 1977-1978]
	21 Degrees North Mixtures, [1981]
	[Galapagos Data, 1979-1982]
	13 Degrees North Deuterium Data, [n.d]
	H. Vents, [1971-1985]
5	[“Galapagos Rift Hydrothermal Plume Samples,” and other notes, n.d]

BOX	FOLDER TITLE
5	<p>["Chemistry of Hydrothermal Solutions From the Southern Juan de Fuca Ridge, K.L. Von Damm and James L. Biscnott, n.d]</p> <p>["Scripps Institution of Oceanography Shipboard Technical Support, Cost of Services," 1/21/87]</p> <p>[Reprints, 1966-1987]</p> <p>[Atlantis II Cruise Track Overlays, 1987]</p> <p>[Hochschul Sammlung Natur Wissenschaft, Chemie Bana 1, Manfred Gehrig: Phasengleichge Wichte und put-Daten ternarer Mischungen aus Wasser, Kohlendioxid und Na triumchlorid bis 3 kbar und 550 (Celcius), 1980]</p> <p>[Calculation of the Thermodynamic and Geochemical Consequences of Non-ideal mixing in the system H₂O (Water)-CO₂ (Carbon Dioxide)-NaCl (Sodium Chloride). On Phase Relations in Geologic Systems: Equation of State for H₂O-CO₂-NaCl Fluids at High Pressures and Temperatures by Bowers and Hegelson, n.d]</p> <p>[Mariana Trough, 1987]</p> <p>[Dive 1831 and Dive 1876, 1987]</p> <p>Galapagos, Carbon-13, Oxygen-18, Deuterium, [1980]</p> <p>21 Degrees North-1979 Data</p> <p>Miscellaneous Dive Samples, [1979-1981]</p> <p>13 North Vents, [1984-1986]</p>
6	<p>[Galapagos and Pluto Data, 1981]</p> <p>[Carbon-14 Dating Vent Data, Methane Data, Mariana Trough Data, 1982-1987]</p> <p>[Flask Tasks, 1993]</p> <p>[Tritium Concentrations at Kilauea Volcano Data, 1990]</p> <p>[Easter Island, San Felix and Juan Fernandez Island Data, 1974-1986]</p>

BOX	FOLDER TITLE
6	[Reprints, 1979-1986] [Contour Maps of the Pacific Coast of Raroia, Tahiti, Caroline, Mururoa, Marquises, and Hao. Topographical Map of Rarotonga Island as well as Loihi Vent Data and Loihi Seamount Collected Papers, 1973-1982] Moore: Basalts, [1965-1973] Loihi: Petrology, [1982-1983] [Loihi Basalt Data and Research Papers, 1982]
7	Loihi Seamount, [1981] Loihi: Helium-3 Data, [n.d] Loihi: Carbon plus H ₂ O (Water), [1983] [Miscellaneous Shipboard Tags, 1992-1993] [Benthic Data, 1982] [Loihi Seamount Data, Maps, and Other Pertinent Data, 1967-1983] [Miscellaneous Reprints, 1977-1988] Kauai, Kauai Maps, [1960-1998] [Krypton-Argon Data, 1985-1995] Samoa, [1972-1982] [Earthquake Maps, October 1976] Vulcan: Plots: Helium-3 us.d, [1985-1986] Kilauea: References, [1954-1979] Hawaiian Islands, [1973-1980]
8	Galapagos sp. Center-Reprints, [1973-1976] G. Comore, [1906]

BOX	FOLDER TITLE
8	[Oanu Data and Reprints, 1940-1947]
	[Papatua Data, 1986-1998]
	[Rurutu Data, 1982-1983]
	[Siljan, Hawaii, and Kosrae Data, 1974-1990]
	[Juan Fernandez Data and Reprints, 1987]
	[South Pacific Islands Data, 1989]
	[Benthic Expedition Leg 7,1983]
	[Tahiti SM Survey, 1983]
	[“Krypton-Argon Dating of the Cook-Austral Island Chain: A Test of the Hot Spot Hypothesis,” by Donald Turner and Richard Jarrard]
	[Tahiti Reprints, 1975-1979]
	ET-76 Report-Mise, [1976]
	[“Vermilion Sea Expedition, 13 April-29 May 1959,” 1960]
	Gulf California: Helium-3, [n.d]
	[“Crustal Spreading in Southern California,” 1972]
	[“Heat Flow in the Central Gulf of California,” by Lawrence A. Lawver, 1976]
	Hypogene: Hydro Data, [1975]
	Carbon-14: Geology, Archaeology, etc, [1957]
	CO ₂ (Carbon Dioxide)-CaCO ₃ (Calcium Carbonate), [n.d]
9	Radiocarbon-II, MS Copies, [1958]
	[“First Miami Conference on Isotope Climatology and Paleoclimatology,” 1977]
	Manuscript-Atm. Sea Carbon-14 Calculations, [1953-1954]

BOX	FOLDER TITLE
9	Carbon, [1957]
	Misc. Hot Springs Completed, [1955-1958]
	Reunion Articles, [1969-1982]
	["Moorea," 1977]
	[South Pacific Island Reprints, 1974-1982]
	Yellowstone Glossies and Negatives, [1979]
	ET-Climate, Rain, [n.d]
	Glover-Gases 1976
	[Lake Tanganyika Data and Graphs, 1979]
	LT-Brussels-Paris-Kenya, [1975]
	BT Data: Navy, [n.d]
	BJ Data: Ours, [n.d]
	ET-76: Samples for SO ₄ (Sulfate), [1976]
	ET-76: Carbon-13 Data, Liquid Phase, [1977]
	Chem. PH-1, Lakes, Chem. Mass-Hydrogen Springs, [1975]
	ET-76 Chemical Analysis Sample Data, [1987]
	ET-76, Data, [n.d.]
10	Duplicates, [1976-1977]
	MIT: Chem. Data, [1981]
	[Reprints, 1973-1988]
	[Geyser Data at Yellowstone Park, 1954-1978]
	Volcanic Gas Sample Lists, [n.d]

BOX	FOLDER TITLE
10	Malawi-GT, [n.d] [Mangareva Islands Data, n.d.] Vapors-Rains-Pier, etc, Current Data, [1959-1962] ET-Geological Map Explanation, [1975] Tables, [1987] Vapor, [1961] Sealed Ampules, [n.d]
11	Sort, [1958-1966] Pluto 4, Hydro Data, [1979-1981] Steamboat Springs, [1954] Kuo-Veronis, Horizontal Circulation Model, [n.d] California Coast: T.S. Data, [1958-1962] LJ Vapor Data and Monsoon Vapor and Rains, [1960-1968] Horibe-LJ Vapors, V-2 (thru) V-13, Analysis-Running File, [n.d] Drawings, [1959] GS Vapors, [n.d] Type I Hot Springs, [1948-1955] Old Field Notes, [1954] Carrousel Notes, [1964] Monsoon Water, Temperature Graph, [1961-1963] Carbonate Log Carbon-13 and Oxygen-18, INS Data, [n.d] Hydrogen Notes, [n.d]

BOX	FOLDER TITLE
11	Horizon, Recent Notes, Circulation Notes, [1978]
12	[Yellowstone Data, 1960-1972] ["II Measurement of Isotope Ratios," Spectrometer Notes, n.d] YP (Yellowstone Park): Chem. Analyses, [1954-1960] Yellowstone Park: Carbon-13 Data, [1979] [Calculation of Tracer Distributions in Deep Water, 1986] "Horizon" Program Calculations, [1972] Yellowstone May, September 1978, June 1979, Sample Inventory Evaporation Experiments, [1959] Isotopic Oceanography Craig-Gordon-Horibe, [1962-1963] Saline Lakes, [1954] Oceanic and Coastal Rains, Arctic and Antarctic Precipitate, Composite Oceanic Data, [1949] YP (Yellowstone Park) D-Oxygen-18, [n.d] Yellowstone: Carbon-13-Oxygen-18, [1954-1958] [Yellowstone Data, 1977] Yellowstone: (Summation) CO ₂ (Carbon Dioxide), Oxygen-18, Dymon/Hogan, [1978-1979]
13	Samples Lists and Notes, [n.d] [Chem. Data and Plots, n.d] Yellowstone Park: Papers (Waters) Isotopes, [1977] Yellowstone Park, [1986] [Yellowstone Data, 1978]

BOX	FOLDER TITLE
13	<p>Letters-Samples, Yellowstone Park, [1935-1957]</p> <p>Yellowstone Meteoric Samples, [1954]</p> <p>Yellowstone Chapter and Appendix, Welhan Thesis, [1973-1975]</p> <p>Yellowstone Thermal Waters Reactivity, [1971-1977]</p> <p>Laboratory Notebook: Yellowstone Park Field Book, Harmon Craig, Summer-1950</p> <p>["Relations of Late Paleozoic and Early Mesozoic Formations of Southwestern Montana and Adjacent parts of Wyoming," 1918]</p> <p>Plates: Yellowstone Park Plume Western U.S., [1961]</p> <p>[Yellowstone Calcium Carbonate Data, 1954-1984]</p> <p>Laboratory Notebook: Yellowstone Park, CaCO₃ (Calcium Carbonate)-HCO₃-CO₂ (Carbon Dioxide), Harmon Craig, [1955]</p>
14	<p>["Isotopic Composition of Carbonates," n.d]</p> <p>[Yellowstone Data and Papers, 1954-1979]</p> <p>Isotope Data, [n.d]</p> <p>Cosmic Ray Reprints, [1961-1968]</p> <p>South Atlantic Reprints and Data, [1895-1977]</p> <p>Hot Spots, [1974-1982]</p> <p>["The Petrology of Rodriguez Island, Indian Ocean," 1967]</p> <p>Hot Spots, Plumes, [1979-1983]</p> <p>Hot Spots, [1973-1983]</p> <p>Marion, P. Edward, Bouvet, [1981-1983]</p> <p>[Yellowstone Data, n.d]</p> <p>Fairhall: Helium-3-T, Letters and Papers, [1969-1970]</p>

BOX	FOLDER TITLE
14	<p>Bouvetoya, [1964-1983]</p> <p>[Reprints, 1967-1971]</p> <p>Bunsen Information, [n.d]</p> <p>CO₂ (Carbon Dioxide) Production, [n.d]</p>
15	<p>N₂ (Nitrogen Gas), Nitrogen-15, [1967-1977]</p> <p>["Proposal for Research to Be Conducted Under the Sponsorship of the International Decade of Ocean Exploration," 1979]</p> <p>Lab Data: Status, [n.d]</p> <p>[Notes, n.d]</p> <p>CO₂ (Carbon Dioxide), Monometer-GT (Geothermal) Line, [1975]</p> <p>[Pacific Geosecs Data, 1973]</p> <p>[Helium, EPR-MAR Transparencies, 1961-1972]</p> <p>CDK Papers, [1973-1976]</p> <p>Keeling, Atm. CO₂ (Carbon Dioxide), [1962-1963]</p> <p>CO₂ (Carbon Dioxide) Recent Notes, etc. [1976]</p> <p>N₂O (Nitrogen Dioxide) Isotopes MS, Nitrogen-15/Oxygen-18, Nature MS, [1976-1990]</p> <p>N₂O (Nitrogen Dioxide) Papers, [1972-1975]</p> <p>Geosecs Pacific: UFO: Wang: Fr., [1978]</p> <p>["Photodissociation of Isotopically Heavy O₂ as a Source of Atmospheric O₃" 1980 Reprint]</p> <p>N₂O (Nitrogen Dioxide): Models, MS, [1982]</p> <p>Calculation, [n.d]</p>
16	<p>CO₂ (Carbon Dioxide) Models, [1957-1978]</p>

BOX	FOLDER TITLE
16	<p>I. Chicago Rain and Snow Samples, Harmon Craig, [1952-1954]</p> <p>Carbonate Standard Log, [n.d]</p> <p>[Original Slides of ET-76, n.d]</p> <p>[Original Allan Hills Slides, 1987]</p> <p>CO₂ (Carbon Dioxide)-Manometer, [1969]</p> <p>Monsoon, Gasses, P.K, [1971]</p> <p>Spare Plots, Graphs, [n.d]</p> <p>[Nitrogen and Argon, 1961-1984]</p> <p>[“Carbon-13 Data, 1979-1983”]</p> <p>Monsoon Gases, Carrousel, [1965]</p> <p>FGGE Atm. CO₂ (Carbon Dioxide) and SW pCO₂ (Pressure of Carbon Dioxide), (Weiss) Data, [1979-1982]</p> <p>FGGE Schedules Collection, Flask Data Directions, etc, [1979]</p> <p>FGGE, [1979]</p>
17	<p>N₂O VP, Fract., CO₂ (Carbon Dioxide)-Atm, Carbon-13-Oxygen-18 Corrections, [1976]</p> <p>N₂O: Miscellaneous: Letters, etc, [1976-1977]</p> <p>Cutler: Atlantic, SIO Pier, Tests, etc-Carbon-13, N₂O (Nitrogen Dioxide), [1972-1973]</p> <p>CA-64 Shipboard Samples (MAJT), Carbon-13, [n.d]</p> <p>T2-CDK: CO₂ Calibration, [1976]</p> <p>N₂O (Nitrogen Dioxide) Fuel Combustion and Bombs, [1950-1976]</p> <p>N₂O (Nitrogen Dioxide): New Data, [1976-1980]</p> <p>Old Atm. Samples Break Seals, [1962-1963]</p>

BOX	FOLDER TITLE
17	Dr. Harmon Craig, Jason Mtg., Cumming Hall, [1974-1978] N2O Data, [1979-1989] Various N ₂ O (Nitrogen Dioxide)/CO ₂ (Carbon Dioxide) Plots Including Stds., [n.d] East Africa, [1987] Lab Notebook: Chloride, [1978]
18	[Chlorides, 1960] [Chlorides, 1960] [“Ultrabasic Xenoliths and Lava from the Lashaine Volcano, Northern Tanzania,” and “Preliminary Notes on the Geology of Kilimanjaro,” 1969-1970] Transparencies: Oxygen-18 Bugs, [n.d] Geothermal-Transparencies, [n.d] Transparencies Isotopes, Dymon-Hogan, Nitrogen Gas, Geosecs Vapors, [n.d] Transparencies Oxygen-18, [n.d] Transparencies: Helium-3-Helium-4: Seawater, [n.d] Helium-3, T Ages, [n.d] Transparencies-General, [n.d] Transparencies: Geosecs: International NAOW Forum, [n.d] Transparencies: GS-I, [n.d] Transparencies: Yaloc, [n.d]
19	Atlantic Leg 4-M. Layer, Steps, Oxygen Gas, [n.d] [“Geosecs Geochemical Ocean Sections I: A U.S Program For the International Decade of Ocean Exploration,” n.d]

BOX	FOLDER TITLE
19	Geosecs Humidity, [1964-1974]
	Geosecs Helium-3 Indian ocean, [1982]
	Harmon Craig Input, 1983's to add, [n.d]
	Transparencies: Atlantic Leg-4, S-Profiles, [n.d]
	Horizon Transparencies, [n.d]
	Geosecs: Pacific Profiles, [n.d]
	Geosecs: Pacific Sections, [n.d]
	Pacific Geosecs-Transparencies, [n.d]
	Geosecs Nitrogen Gas-Argon Data, Shipboard and Shore Based (JL-RW), [1977-1979]
	Geosecs I: Hydro, Tritium Data, [1981]
	[“University of Miami, Rosenthal School of Medicine and Atmospheric Sciences: Tritium Laboratory Data Report #9, Geosecs Indian Ocean, Radiocarbon and Tritium Results (Miami) by Ostlund, Oleson, Brescher,” 1980]
	[“University of Miami, Rosenthal School of Medicine and Atmospheric Sciences: Tritium Laboratory Data Report #8, Geosecs Pacific Radiocarbon and Tritium Results (Miami) by Brescher, Oleson, and Ferguson,” May 1979]
20	Geosecs Humidity Vapor P, [1974-1975]
	Atlantic Leg 4: Oxygen and Nutrients, [n.d]
	Geosecs, [1986]
	Geosecs Red Sea, [1985]
	Geosecs-1975 Samples
	Geosecs: Sample Status, May 1978

BOX	FOLDER TITLE
20	<p data-bbox="464 279 1346 352">[“Reprints: Earth and Planetary Science Letters, Results From 1970-1971 and 1976-1979,”]</p> <p data-bbox="464 390 1154 424">[Reprints: “Geosecs Results From 1969,” 1970-1980]</p> <p data-bbox="464 462 935 495">Geosecs Proposals, NSF, 1976-1977</p> <p data-bbox="464 533 935 567">Geosecs Proposals, NSF, 1976-1977</p> <p data-bbox="464 604 1346 678">Models > (greater than) Argon, Thermodynamic Pen. Models, ∞ Z. C=O to 600 meters (approximately), [1985]</p> <p data-bbox="464 716 1295 789">Chung: Antarctic Pacific Radium-226 and Radium/Barium Data, [1976]</p> <p data-bbox="464 827 850 861">Radium Reports, [1972-1973]</p>
21	<p data-bbox="464 900 850 934">Radium Reports, [1972-1973]</p> <p data-bbox="464 972 841 1005">Radium-226: SIO Data, [n.d]</p> <p data-bbox="464 1043 815 1077">[Pacific Argon Data, 1988]</p> <p data-bbox="464 1115 1105 1148">[Phosphate, Argon, and Tritium Data, 1972-1980]</p> <p data-bbox="464 1186 915 1220">[Carbon Dioxide Data, 1979-1984]</p> <p data-bbox="464 1260 1346 1333">[Reprints: “A Dating Method with Argon-39” and Original Argon Slides of Graphs, 1982]</p> <p data-bbox="464 1371 873 1404">[Reprints: Krypton, 1980-1987]</p> <p data-bbox="464 1442 894 1476">Argon-19 Transparencies, [1981]</p> <p data-bbox="464 1514 1190 1547">Argon-39 Models, Calculations, and Notes, [1982-1984]</p> <p data-bbox="464 1585 867 1619">Argon-39: Station Data, [1983]</p> <p data-bbox="464 1656 782 1690">Argon-39 Original, [n.d]</p> <p data-bbox="464 1728 761 1761">[Argon-39 Data, 1980]</p> <p data-bbox="464 1799 1263 1833">Argon-39 Calculations, V. Models, Pen Model, Z-Star, [1985]</p>

BOX	FOLDER TITLE
21	TCINE Model, [1981] Radon Reports, [1972-1973] Geosecs-Schedules, [1970-1976] Geosecs (Summation) Σ CO ₂ (Carbon Dioxide), [1975-1977]
22	Geosecs 17 January 1980: ATL (Atlantic) Geosecs Seawater Inventory for Isotopes GOG (Geosecs Operation Group) Terminal T-S Plots, etc, Geosecs Atlantic, [n.d] Geosecs-Pacific T-S Plots, [n.d] WAN Cyc 2000 Reported, [n.d] (Summation) Σ CO ₂ (Carbon Dioxide) Reruns, AABLU Pacific, [1976-1977] Geosecs Dissolved Σ CO ₂ (Carbon Dioxide), [1976] Geosecs-Atlantic Data Sent to GOG (Geosecs Operation Group), December 1977 Most Recent Geosecs Probably Not Reported to GOG (Geosecs Operation Group): Geosecs Sample Inventory, [1975] Geosecs Correspondence, [1972-1977] Geosecs Correspondence, Request for Ampoules-Geosecs from WHOI, [1975-1977] Geosecs-Packing Slips for Samples, Received, [1972-1977] Geosecs Packing Slips: Packing Lists, Other Than Geosecs, [1972-1980] Geosecs Packing Slips: Geosecs-Seawater Received, [1972] The Geosecs Program, [1973-1975] Knorr-Vapors, Early Geosecs Lists, [1972-1973]

BOX	FOLDER TITLE
22	IDOE Progress Report Data as of 13 July 1973
	IDOE Progress Report as of 1 March 1974
23	Geosecs Working File: Recent Oxygen-18 Water Preps. And water graphs, [1976]
	Geosecs Working File: Dealings with Peter Kroopnick, [1973-1974]
	Final Geosecs, August 1984, Oxygen-18 Data
	Final Geosecs, August 1984: D/H (Dymon/Hogan) Data
	Antipode (Leg 15), South Pacific, August 1971
	Geosecs I, North Pacific, September 1969
	Geosecs II, North Atlantic, August 1970
	Geosecs Preliminary Cruise 1972, Knorr 29, Station 249 Cast 3 & 8 Sea Water Isotope Data
	Geosecs-Atlantic Leg I, Stations, Deuterium Seawater, [1973]
	Geosecs-Atlantic Leg II, Station 11, Seawater Deuterium, [1972]
	Geosecs-Atlantic Leg II, Station 14, Seawater Deuterium, [n.d]
	Geosecs-Atlantic, Leg II, Station 16, Seawater Deuterium, [n.d]
	Sent to GOG (Geosecs Operations Group) 1981: Geosecs Sent to GOG Summer 1981
	Geosecs-Atlantic, Leg VII, Station 78, Sea Water Deuterium, [1976]
	Geosecs-Atlantic, Leg VII, Station 1979, Sea Water Deuterium, [1976-1977]
	Geosecs-Atlantic, Leg VII, Station 82, Seawater Deuterium, [1976]
	Geosecs-Atlantic, Leg VII, Station 85, Seawater Deuterium, [1977]
	Geosecs-Atlantic, Leg VII, Station 89, Seawater Deuterium, [1975]

BOX	FOLDER TITLE
23	Geosecs-Atlantic, Leg II, Station 17, Seawater Deuterium, [1972]
	Geosecs-Atlantic, Station 18, [1976]
	Geosecs-Atlantic, Station 19, [n.d]
	Geosecs-Atlantic, Station 23, [1976]
	Geosecs-Atlantic, Station 29, [n.d]
	Geosecs-Atlantic, Station 37, [1977]
	Geosecs-Atlantic, Station 56, [1979]
	Geosecs-Atlantic, Station 67, [1976]
	GOGO I, North Pacific, November 1971
	Geosecs-Indomed, Station 438, [n.d]
	Geosecs-Atlantic, Station 91, [1976-1977]
	Geosecs-Atlantic, Station 107, [1977-1978]
	Geosecs Atlantic, Station 115, [1977]
	Geosecs-Pacific Station 219, [1973]
24	Geosecs Pacific, Station 286, [1974-1979]
	Geosecs Pacific, Station 293, [1974]
	Geosecs-Pacific, Station 303, [1974-1981]
	Geosecs-Pacific, Station 306, [n.d]
	Geosecs-Pacific, Station 321, [n.d]
	Geosecs-Pacific, Station 322, [1974]
	Geosecs-Pacific, Station 324, [n.d]
	Geosecs-Pacific, Station 343, [1974-1981]

BOX	FOLDER TITLE
24	Geosecs-Atlantic, Leg VII, Station 76, Seawater Deuterium, [1975]
	Geosecs-Atlantic, Surface Sea Waters, [1975-1976]
	Geosecs-Pacific, Surface Sea Waters, [1976]
	Geosecs Atlantic Leg I-Leg IX, Vapor Isotope Data, [1972-1974]
	Geosecs-Pacific Station 345, [1974-1980]
	Geosecs-Pacific, Station 347, [1974-1981]
	Geosecs-Indomed, Station 416, [n.d]
	Geosecs-Indomed, Station 428, [n.d]
	Geosecs-Indomed, Station 435, [n.d]
	Vapor, Flasks, etc, [1972]
	Geosecs Atlantic Sections, [n.d]
	Geosecs-Indomed, Station 446, [n.d]
	Geosecs-Indomed, Station 450, [n.d]
	Geosecs Preliminary Cruise 1972, Knorr 29, Vapor Isotope Data, Vapor Samples: Knorr 29, July 1972
	Geosecs Pacific Vapor Isotope Data, [1973-1974]
	Juan de Fuca, [n.d]
	Geosecs-Snow, [1975]
	El Tanin Data Sheets, [1984]
	San Martin Data Sheets, (Weddell Sea), San Martin-Zapiola, 1965- 1966, (Samples Ave. 1966)
	TT 154, [n.d]
	Antipode-Newsletters, [n.d]

BOX	FOLDER TITLE
24	Helium Samples-Atlantic, [n.d]
	Lead-210 Pacific, [1973]
	Atm. Flasks-Atlantic, [1972]
25	Atm. Flasks-Pacific, [1973]
	Exec. Comm. Notes, etc, August 1973
	Antipode, [1971]
	Miami, T(Tritium) and Carbon-14 Reports, [1972-1978]
	Geosecs: Tritium and Carbon-14: Atlantic, [n.d]
	Geosecs Tritium and Carbon-14 Releases, [1975-1976]
	Tritium and Carbon-14: Cross-Checks Analysis Priorities, [1965-1973]
	Geosecs: The Geochemical Ocean Section Study, A Program for the International Decade of Ocean Exploration, [1971-1977]
	Laboratory Notebook: Geosecs-Pacific, Atmospheric Water Vapor and Flask, [1974]
	Geosecs-Constituents, To Be Analyzed, [n.d]
	Geosecs Summer Institute, [1971]
	Laboratory Notebook: R. Cutler and E. Linck, Geosecs Atmospheric Samples, 7-17-73 to 4-29-75
	Niskin, [1970-1971]
26	Geosecs-1976 Sample Report
	R.M. Cutler and E. Linck, 2 May 1975-12 April 1976, N2O-Hudson-70 Samples, 6-7-72 to 12-31-80
	Geosecs Pacific Expedition, Underway Log Sheets, Leg 7 (=G), [1974]
	Geosecs Pacific Expedition, Underway Log Sheets, Leg 9 (=J), [1974]

BOX	FOLDER TITLE
27	Geosecs Pacific Expedition, Underway Log Sheets, Legs 1 (=A) – 2 (=B), [1973]
	Geosecs Pacific Expedition, Underway Log Sheets, Leg 10 (=K), [1974]
	["Earth and Planetary Science Letters, Volume 49, No.2, September 1980"]
	[Earth and Planetary Science Letters, Volume 49, 1980"]
	["Earth and Planetary Science Letters, Volume 32, 1976"]
28	["Earth and Planetary Science Letters, Volume 16, 1972"]
	["Earth and Planetary Science Letters, Volume 23, 1974"]
	["Geosecs Preliminary Report, First Draft, Leg 4, Bridgetown to Recife, October 9 to October 31, 1972"]
	["N2O and CO2 (Carbon Dioxide) Data, 1973-1975"]
	Geosecs: Atmospheric Carbon-13 and Oxygen-18, [1973-1974]
	1978 Geosecs Reports
	Geosecs Current, 1978-1979, Radium-226
	["Woods Hole Oceanographic Institution, Reference No. 70-63, Geosecs Intercalibration and Test Cruise, D.W. Spencer, 1970"]
	Earthquake Field Manual Lab Copy, [1976]
	Delilah O(xygen) Calculations, [1967-1968]
	["Delilah Testing Data and Graphs," 1973]
	Carrousel-1964
	["Carrousel Vapor Data," 1964]
	SIO Pier: Oxygen-18, Sulfur, [1955-1961]
	Lusiad-Atlantic, [1963-1964]

BOX	FOLDER TITLE
29	Monsoon, Oxygen-18 and Deuterium Isotope Data, Seawater, Rains, Vapors, [1960-1962]
	Monsoon-Special Costs, [n.d]
	Monsoon, [1960-1963]
	La Jolla Rains Data Sheets, [n.d]
	Nova Data Sheets, [1975]
	Rise Pac, [1961]
	Pioneer-Surveyor, [1965]
	Proa, [1962-1965]
	Risepac Data Sheet, [1961]
	Monsoon Data Sheets Oxygen and Oxygen-18, [1960-1961]
	Water Catalogue, [1955-1961]
	Zephyrus Dymon/Hogan Sheets, Deuterium Worksheets, [1962]
	Zephyrus-Seawaters, Isotope Data, [1962]
	Zephyrus-Vapor, 1962
	Zephyrus-Lusiad Horizon Log, Atlantic and Med, [1962]
	["Zetes Deep Water Salinity Samples, Oxygen-18, and Zetes Vapor Leg I Data," 1966]
	Zetes-I,II,III Data, [1966]
	Calibrations, [1965-1973]
	Deuterium Line,[1965-1975]
30	Summary of Smow-1 and NBS-1 Preps, [n.d]
	Chemistry Lab, [1964-1967]

BOX	FOLDER TITLE
30	<p>Hom-Nova, [1966]</p> <p>[Delilah, n.d]</p> <p>Benthic-1:Loihi, S.M, Miscellaneous and Plots, [1983-1984]</p> <p>Benthic-1: Loihi, GAD, Helium-3 Data, [1984]</p> <p>Benthic-1:Loihi Micah Helium-Neon (Delta Change)</p> <p>Benthic 1: Loihi Original Hydro Data Depth T.S. , [1982-1994]</p> <p>[Reprints and Graphs, 1975-1982]</p> <p>[Reprints and Graphs, 1975-1982]</p> <p>Vulcan, [1981-1985]</p> <p>Pluto-4 Micah Alvin Dives, [1983-1984]</p> <p>Pluto-4 Hydro Cast, [1982-1984]</p> <p>South Tow, [1977-1983]</p> <p>13 Degrees North EPR: [Micah Helium-Neon Data, 1984]</p> <p>[Lake Tanganyika, 1975, Micah Data]</p> <p>Tahoe, [1968-1978]</p>
31	<p>[Notebook: GAD, 1980]</p> <p>[Geosecs Atlantic, 1977-1979]</p> <p>[Smoothie Data, 1981]</p> <p>[Pacific Geosecs Helium Sampling Procedure, August 3, 1973]</p> <p>Alcyone, [1985-1986]</p> <p>Micah, [1980-1983]</p> <p>Helios Station 1, [1988-1989]</p>

BOX	FOLDER TITLE
31	Helios Station 2, [1989-1990]
	Helios Station 3, [1989]
	Helios Station 4, [1989]
	Helios Station 5, [1989-1990]
	Helios Station 6, [1989]
	Helios Station 7, [1989]
	Helios Station 8, [1988]
	Helios Station 9, [1989]
	Helios Station 10, [1989-1990]
	Helios Station 11, [1989]
	Helios Station 12, [1989]
	Helios Station 13, [1989-1990]
	Helios Station 14, [1989-1990]
	Helios Station 15, [1989-1990]
	Helios Station 16, [1989-1990]
	Helios Station 17, [1989-1990]
	Helios Station 18, [1989]
	Helios Station 19, [1989-1990]
	Helios 21, MacDonald Seamount, [1988]
	Helios Station 20, [1990]
	Helios 22, MacDonald Seamount, [1988]
	Helios 23, MacDonald Seamount, [1988]

BOX	FOLDER TITLE
31	Hydros Station 1, [1990]
	Hydros Station 2, [n.d]
	Hydros Station 3, [n.d]
	Hydros Station 4, [n.d]
	Hydros Station 5, [n.d]
	Hydros Station 6, [n.d]
	Hydros Station 7, [n.d]
	Hydros Station 8, [n.d]
	Hydros Station 9, [n.d]
	Notebook: Micah Calculations, [n.d]
	Loihi Dive Notes, [1984]
32	Pluto Hydro CH ₄ (Methane) Date, [n.d]
	Hydros Expedition Leg 1, Dredge Records 1-11, November 1988, Melville Dr. Craig, S.I.O
	Hydros Data, [1989-1990]
	Hydros Data, [1989-1990]
	Indomed Data, [1990]
	GAD-old std. plots, [1980-1981]
	GAD-old std. plots, [1980-1981]
	Current Research Support Forms, NSF, [1983-1988]
	UCSD #941205/NSF EAR9405805: Microscope Facility-Inclusions Basaltic Olivines, [1993-1996] Revised Budget (Matching Funds Microscope Facility)

BOX	FOLDER TITLE
32	<p>Copies Microscope, UCSD 941205, NSF EAR9405805, [1993-1994]</p> <p>["Coversheet for Proposal to the NSF," 1988]</p> <p>NSF-Atm-(SGER), 9812077, UCSD 981353, Krypton-Argon-Xenon Gravitational Sep. Temperature in GISP2, Correl, w/Oxygen-18 and Borehole Temp., SGER: Atm-GISP Borehole, 1998</p> <p>WOCE Progress Report Request for Supplement, May 13, 1991</p>
33	<p>WOCE HPS 88 Degrees West and 1540 Degrees West, (WOCE 16C) Rev. Bud. UCSD # 891529-R1, [1989-1990]</p> <p>New WOCE [1989-1996]</p> <p>VOSTOK: Progress Reports and Final Report, March 31, 1998</p> <p>NSF DPP 9118494, UCSD #911051, Vostok Original, [1989-1994]</p> <p>VOSTOK Copies, [1991-1996]</p> <p>Vostok Letter of Intent w/Ant., also Polar Ops. Forms Vostok, 1991</p> <p>Alvin-Loihi, [1983-1985]</p> <p>Alvin-Vents (Seabeam) Proposal, 1981</p> <p>WOCE Proposal-88 Degrees S 150 Degrees West Helium, July 1, 1990-June 30, 1992, UCSD #891529; Helium Analyses</p> <p>Various Journals: Physics Today-letter, [1983]</p> <p>Various Journals: JGR, Nature and Science and GCA Magazine Information, [1984-1991]</p> <p>Nature, [1988-1991]</p> <p>Annual Review-Earth and Planetary Sciences, [n.d.]</p> <p>American Geophysical Union Correspondence, [1982-1990]</p>
34	<p>AGU Abstracts, [American Geophysical Union, 1978-1996]</p> <p>AGU Fall Meeting, 1997-1998</p>

BOX	FOLDER TITLE
34	AGU Fall Meeting, 1996
	OC Earth Science Meeting, San Diego, 1996
	AGU Fall Meeting, 1995
	AGU Fall Meeting, 1994
	AGU Fall Meeting, 1993
	AGU Fall Meeting, 1992
	AGU Fall Meeting, 1991
	AGU Fall Meeting, 1990
	Western Pacific AGU, Kanazawa, August 1990
	AGU Fellow nomination, Allegre, and Francheteau, [1983]
	AGU Fall Meeting, 1988
	AGU Abst, Fall 1987
	AGU Fall Meeting, 1986, Spilhaus Letter
	AGU Spring Meeting, 1986
35	AGU Fall Meeting, 1989
	AGU Fall Meeting 1985
	AGU Fall Meeting, 1984
	AGU Abstracts, 1978
	AGU Fall Meeting, 1983
	AGU [1972-1981]
	Spring AGU, 1983
	AGU Spring Meeting, 1982

BOX	FOLDER TITLE
35	<p>AGU Meeting, 1982</p> <p>AGU Fall Meeting 1981, (Abstracts)</p> <p>AGU Abstracts, Fall 1980</p> <p>Abstracts 1983 Geological Society of America</p> <p>K-R-Kim Independent Contract, 1992-1994</p> <p>Kim Various, 1993-1994</p> <p>Geochemical and Environmental Studies of 2 Hokkaido Deep Lakes, UCSD #89-1439, [1989]</p> <p>Geochemical and Environmental Studies of 2 Hokkaido Deep Lakes, UCSD #89-1439, [1989-1991]</p> <p>Nitrous Oxide, NASA, Diamonds, UCSD 891402, 1989-1990</p>
36	<p>NASA 1989-1990 Diamonds, UCSD 891402, Copies and Correspondence</p> <p>NASA Proposal UCSD #891402, [1989]</p> <p>Harmon Craig UCSD #891488, Subcontract University of Nevada, 1989</p> <p>DOE Equipment, Silicon-32, Global Geochemistry Purchase Order Information for Analyses, [1984-1987]</p> <p>Purchase Order Global Geochemistry for Helium Analyses (GRI Samples) Information and Oxygen/Hydrogen, [1986-1990]</p> <p>Subcontract, University of Utah-Cerling UCSD 871222 Helium as Indicator of Terrestrial Exposure Age of Minerals, NSF Sabba, [1986-1987]</p> <p>Geological Research Division General Ledger, [1987-1988]</p> <p>Thure Cerling Subcontract Oak Ridge Analysis, 1986</p>
37	<p>IGPP-Lin I Finkel Proposal Ion Chromatographic Analyses of Ice Core Samples, [1985-1987]</p>

BOX	FOLDER TITLE
37	NATO Grants for Collaborative res. Iceland, [1983-1985]
	NATO Programs, Rona (Runcorn), 1982
	Gas Research Institute/Rare Gases in the Continental Crust, 41983-1985
	Gas Research Institute Correspondence, [1983-1986]
	Willis, Robert, [1979-1987]
	ORNL Inventory of SIO Equipment, Willis, [1986-1987]
	Dr. Roger Daniman, Department of Energy, AR-39, Correspondence, [1983-1984]
	Argon Extract System-Sea, [n.d.]
	DOE Argon-39, Proposal, 1983-1984, Original
	DOE-Argon-39, Proposal, Copies and Extra Figures, 1983-1984
	DOE-Gas Workshop, Ar-39 Proposal, 1982-1983
	Argon-39, Proposal Correspondence #1905 [1982-1983]
38	DOE Argon-39, Proposal 1982-1983, Copies
	DOE Argon-39, Proposal-Original, 1982-1983
	Laser Proposal Extra Pages, [n.d.]
	DOE: Argon-39 Proposal, 1980-1981
	DOE: Geothermal-Kolstad File Rarga Review, etc, [1980]
	California Space Institute Proposal (Chouls Salary) Original and Copies, 1984
	IDOE Budget Summary Forms, [n.d.]
	UREP Expedition and UCSD Com. Research, [University of California's Research Expedition Program, 1988]
	DOE: Long Valley Final Report, DE-FG03-34ER, 3267, [1987-1987]

BOX	FOLDER TITLE
38	<p>DOE: Renewal UCSD #881209, July 1, 1988-June 30, 1989</p> <p>DOE: Long Valley 2nd Year Report, 1987</p> <p>Long Valley Renewal-Originals, 1986-1988</p>
39	<p>DOE: Long Valley Caldera, 1984-1986, Two Years, Correspondence and Copies</p> <p>DOE: Long Valley Caldera, 2 Years Original, 1984-1986</p> <p>[Proposals, 1977-1984]</p> <p>BASALTS, 1983-1984</p> <p>BASALTS, 1983-1984</p> <p>BASALTS, 1983-1984</p> <p>EPR [East Pacific Rise] Seabeam and Hydrothermal Vent Survey: Cooperative Work, Original, [1983-1984]</p> <p>[EPR] Seabeam, Final Report Summary, December 1984</p>
40	<p>EPR Seabeam and Hydrothermal Vent Survey: Cooperative Work, 2317 [1981-1983]</p> <p>13 Degrees North Alvin, Vents, Final Report [1984]</p> <p>NSF, EPR-Correspondence, [1980-1983]</p> <p>NSF, EPR-Original, [1980-1981]</p> <p>NSF, EPR-Alvin, June 1, 1981-December 31, 1982, (GRD-MIT)</p> <p>Lab, NSF, Ocean Atmospheres Specific Creative Final Project Report, May 26, 1984</p> <p>Peter Brewer, NSF, Washington (Anderson Lab), Correspondence, 1982</p> <p>Lab, NSF, Creativity Award, Original Budget, 1982</p>

BOX	FOLDER TITLE
40	Lab, NSF, Renewal/Progress Report/Supplement Correspondence and Budget/Salary, 1981
	Lab, NSF, Renewal/Progress Report/Originals, Copy, 1981
	Lab, NSF, Supplement Original and Copy, 1981
41	Lab, NSF, 1980-1981
	NSF: Ocean-Atmosphere Investigations, Original Proposal and Revision 1677, January 1980-December 1982
	H. Craig's Travel Working Papers for December 1979, DJIBOUTI Trip
	[Research Grant Proposal Budget (Renewal) January 1981]
	UCSD-1647 NSF, Lab Proposal, Renewal, [1979-1980]
	First Year Report-Ocean Atmosphere Specific Creativity Award, [1982]
	7715, NSF-Ocean Atmosphere Investigation Supplement to OCE78-25586, January 1, 1979-June 30, 1980
	NSF Lab Fund #7715, Original Proposal and Copies, 1979
	NSF, EPR Site, EC-GC, Correspondence and Budgetary Items, Fund #5266, [1980]
42	NSF, EC-GC Proposal, Fund 5266, 1979
	[Final Project Report, Isotope Lab Publications, Correspondence, 1977-1989]
	NSF Lab Fund #7715, Budgetary Items and Correspondence, 1979
	NSF Helium Refrigerator, Original Proposal and Copies, 1979
	NSF Helium Refrigerator, Budgetary Items and Correspondence, 1979
	NSF Lab Fund, Budgetary Items and Correspondence, 1977
	NSF Lab Fund, Original Proposals and Copies, 1977

BOX	FOLDER TITLE
42	NSF 1977
43	Final Technical Report for NSF Lab Fund, 1976/1978, Photographs also enclosed
	Geothermal Gases, [1981]
	African Samples, [n.d.]
	Gas Data, [n.d.]
	[H.C. Journals, Notes, Gas Data, 1987-1991]
	[Correspondence, Articles, Journals, 1984-1991]
	D. Hilton, National Geographic Society, UCSD #891012, [1988]
	Krypton-Argon Labs, (Kutschera) [1991]
	ONR Indonesia Field Work, D. Hilton, UCSD 891053, [1988-1990]
	Maui Data, C/R [1996]
44	Dge/He, Ne, MICAH Data, 1983, Ice
	[Helium Data, 1998]
	He-Air and Air-Z, GISP-2, [1998]
	Helium, Ice Cores, Working File, [1992]
	Lake Tanganyika, ["Hydrobiologia-The International Journal on Limnology and Marine Sciences, Volume 407" 1999]
	Lake Tahoe Program, [1973]
	American Chemical Society Application-Hilton, 1987-[1989]
	UCSD 88-1026, Lal, Renewal of He-3, He-4, and Isotopes of NE and AR in Mantle, January 1988-December 1989
	Lal's NSF Proposal-Experimental Attempt...1984
	DPP Polar, Final Report, 1986-1988

BOX	FOLDER TITLE
44	<p>Polar Continuation 1987, UCSD 871326, Year 2</p> <p>Polar Renewal Correspondence, #7315, 1986-1988</p> <p>Polar Renewal, 1986-1987, UCSD 861953, #7315</p>
45	<p>BASALTs Supplement, UCSD #3884, November 1, 1984-April 30, 1985, 6 months</p> <p>BASALTs Renewal, Correspondence, 1984-1986</p> <p>BASALTs Renewal, Originals, 1984-1986</p> <p>NSF, EAR 88-03559, Indonesia, UCSD #881165, He, Ar, CH₄, Sunda-Banda Arc system, [1987-1990]</p> <p>Deep Ocean Tracers and Hydrothermal Vents, Chemicals, Ocean, NSF, UCSD 871088, 3 year (1987-1990) Original, New Lab NSF</p> <p>Deep Ocean Tracers and Hydrothermal Vents, 871088, 3 Year, 1987-1990, Copies and Correspondence</p> <p>Spieß Money, Irvine Meeting, [1983]</p> <p>Computer Printouts, Budgets, 1982</p> <p>Correspondence/Budget Review #1, Joint Chinese US Investigations of Fluid Phase Geochemical Characteristics, [1981-1986], Tectonics and Earthquake Studies</p> <p>Joint Chinese US Investigation of Fluid Phase Geochemical Characteristics, Tectonics, and Earthquake Studies: January 27, 1984, UCSD #3487, Original and Copy</p> <p>NSF Joint Chinese US Earthquake Proposal, 1981 (Original)</p>
46	<p>Joint Chinese Collaborative Program, NSF, Original 3485, and revised 1984-1986</p> <p>Proposal for Research, UCSD #3485, February 10, 1984, "Geochemical Studies of Stable and Radioactive Isotopes in Crustal Fluids in Relation to Geology and Tectonics..."</p> <p>Juan de Fuca Alvin Correspondence and UNOLS, 1983-1984</p>

BOX	FOLDER TITLE
46	Alvin, Juan de Fuca, NSF Originals, 1983-1984 Juan de Fuca: Alvin, [1986] 13 Degrees North, Alvin Hydrothermal Vents, 1983-1984: Correspondence, NSF 13 Degrees North: August 1, 1983-July 30, 1984, Working-Original File
47	L Legal Sized Papers [n.d.] L Negatives-West Indian Ocean L Legal Sized Papers, [n.d.] L Legal Sized Papers, [n.d.] L [Legal Sized Papers, n.d.] L Arcs, [n.d.] L Loihi [n.d.] L Legal Sized Papers, [n.d.] L Plates, [n.d.] L Legal Sized Papers, [n.d.] L Legal Sized Papers, [n.d.] L Legal Sized Papers, [n.d.] L Legal Sized Papers, [n.d.] L [Rison/Craig Loitti MS Artwork, n.d.] L Precise Shipboard Determination of Dissolved Nitrogen, Oxygen, Argon, n.d.] L [Legal Sized Papers, n.d., October 11, 1985]
48	B. Front-Drawings, 1971-72

BOX	FOLDER TITLE
48	<p>RW Benthic Front Stuff, 1971</p> <p>Aeries Exp., 1970</p> <p>Zephyrus-Red Sea, 1961-65</p> <p>GS-II, N-AT, CO2 (Carbon Dioxide), Carbon-13, Oxygen-18, Notes, Calculations, n.d.</p> <p>Scorpio-Alk Profiles, Belling Basin, n.d.</p> <p>Zephyrus-52, Profiles, n.d.</p> <p>Atlantic-Discovery Profiles, B-Fronts, n.d.</p> <p>Scorpio Notes, n.d.</p> <p>Scorpio-I, 28 Degrees south, T-S, Si-S, n.d.</p> <p>Scorpio-I, 28 Degrees South, Z-si, z-s, n.d.</p> <p>Scorpio II, 63 Degrees South, T₀, Si, Si-S, 1972</p> <p>Scorpio II, z-s, z-si, 63 Degrees South, June 1972</p> <p>Scorpio II, Z Sigma 4, z-Tp, 63 Degrees South, June 8, 1972</p>
49	<p>Scorpio Sections, July 24, 1971</p> <p>G4 Calculations, n.d.</p> <p>Brines: Thermodynamics, Isotopes, 1964-74</p> <p>Steam: References, 1963-73</p> <p>The Geysers, n.d.</p> <p>IAGC Group, 1973-74</p> <p>Geothermal Development, Italy: General, 1973-74</p> <p>Larderello: References, n.d.</p> <p>Geothermal: Geochemistry, 1975-76</p>

BOX	FOLDER TITLE
49	Ore Fluids, 1968 Geothermal: Pacific Areas, 1960 Geothermal-US News, 1967-71 Taiwan, 1973 Geothermal: General Refs. 1965-75 GT: Sampling Equipment, 1968-73 CO ₂ (Carbon Dioxide)-CaCO ₃ ⁰ (Calcite) Solubility, 1963-65 Lai-Spallation Calculation, n.d. Cosmic Ray Variations, 1976-89 Cr-Transparencies, n.d.
50	Erosion-Cr. Production, 1985 Spalls Reprints, 1962-68 Spalls: Output, Moons, 1970
(2)	Cosmogenic Papers, 1972-88 Star Production, Tropo Pause Data, n.d. Old Calculations, Manti data, 1978 “Woods Hole Oceanographic Institution,” 1976 Pb ²¹⁰ (Lead 210), Mike Applequist Thesis, 1975
51	Pb ²¹⁰ (Lead 210), Mike Applequist Reports, 1971-74 Pb ²¹⁰ (Lead 210), S.A.T., Station 48, 1972 Pb ²¹⁰ (Lead 210), Rn (Radon): Bottom Water, Scavenging Equations, 1971-72 Pb ²¹⁰ (Lead 210), Station 48, 89 Atlantic Data, 1973-76

BOX	FOLDER TITLE
51	Santa Barbara Basin, 1970 TOS, 1960-78 Josite MS, n.d. Disko Island, 1940-81 Josephnite Data Notes, n.d.
52	Miscellaneous Calculations and Data, n.d. Fugacities, Virutes, etc, 1951-74 Josite: Reprints, Miscellaneous Isotopes, Diffn, etc, 1964-76 Josite: Russian Papers, 1972-75 Josite Reprints, 1927-65 Josite: Thermo Reprints, 1965-76 NBS Stolenhofen, 1964-69 Chung-T Profiles, n.d. "Oxygen Isotopic Studies of Atmosphere Sulfate" Peter Kroopnick, 1974 Nova Data, 1968
53	First Year Progress Report, Basalts, March 1, 1988-Feb. 28, 1989 Basalts Final Report-OCE 87-22810, 1991 Basalts Renewal, UCSD #881078 Originals, Feb. 1, 1988-Jan. 31, 1990 National Science Foundation Papers, 1955-1988 Basalts, 2 nd Year Progress Report, Original, Copies, Budgets, 1987-88 Final Report-Basalts, nsf OCE 86-00938, 1986-88 Basalts Renewal, Correspondence and Copies, Jan. 1, 1987-Dec. 31, 1987

BOX	FOLDER TITLE
53	Basalts, 1986-87 Basalts Renewal Originals, Jan. 1, 1986-Dec. 31, 1987 Correspondence Regarding: Customs Duty on New MS, 1989
54	Final Report EAR 87-09056, New Mass Spectrometer: #9242, Jan. 15, 1990 Neon-Nitrogen Gas MS, 1986-88 Miscellaneous Neon-Nz Proposal, 1984-88
(2)	UCSD 871223, Neon and Nitrogen Mass Spectrometer, 2 nd Submission, Copies and Correspondence, 1986-89 UCSD Purchase Order, 1987 NSF Deviation of Dedicated Mass Spectrometer for Neon and Nitrogen, UCSD #871-61, 1986 Mass Spectrometer for Neon and Nitrogen Gas, UCSD #871223 (2 nd Submission), Originals and Correspondence, 1981-87 Neon-Nitrogen Gas Machine, 1987 NSF-US-Japan Cooperative Science Program, Original, 1987, UCSD #871436
55	Ocean Atmospheres Final Report, 84-87, Feb. 1, 1988 Guam-Sasebo, Kagoshima Bay, Papatua 8, 1985-86 Lab NSF Ocean Atmospheres Correspondence, 1984-87 Progress Report and the Third Year Budget Lab NSF, 1986-87 Ocean-Atmospheres Second year 85-86, Originals and Copies, Lab NSF Ocean Atmospheres First Year Progress Report 1985, lab NSF

BOX	FOLDER TITLE
55	<p>“Proposal for Research to be Conducted under the Sponsorship of the Marine Chemistry Program, Division of Ocean Sciences, National Science Foundation,” 1984-87</p> <p>Submarine R/V Alvin Investigations of W. Pac. Back-Arc and Fore-Arc Regions: US-Japanese Coop Research. Taylor, Craig, Gill, 1984-85</p> <p>OCE Loihi, Mariana, Central Pacific Transect, 86-88, Final Report</p> <p>Alvin-Loihi, Original NSF, 1986</p> <p>Loihi Seamount-Alvin Correspondence and UNOLS, 1984-85</p> <p>Central Pacific Transect UCSD #861381, Letter Proposal, Original and Copies, 1986-87</p>
(2)	Mariana NSF Copy and Correspondence, Heinrich-Stakes, etc, 1983-88
56	<p>Alvin-Mariana Trough, NSF, 1984-85, Originals</p> <p>Letter Proposal, Alvin Mariana, Original and Copies, UNOLS, 1984-85</p> <p>“Alvin, Marianas, Proposal for Research to be Conducted Under the Sponsorship of the Division of Ocean Sciences, National Science Foundation,” 1983</p> <p>Craig-Nigec, 1994-96</p> <p>Craig, Nigec, 1994</p> <p>Craig-Nigec, 1992-94</p> <p>(2) DOE-NIGEC-088: Final Report and Various other Reports, 1991-94</p> <p>(4) W. NIGEC-DOE UCSD #92118, 1992-93</p> <p>(2) WRC NIGEC, Copies and Correspondence, UCSD 911262</p> <p>(2) WRC-NIGEC: Isotope Character of Sources of Atmospheric N₂O, Originals, UCSD 911262, Jan. 15, 1991</p> <p>Western Regional Center of the National Institute for Global Environmental Change, 1991-92</p>