



POTENTIAL OTEC SITES  
Between Latitudes 40°N. and 40°S.

LOCATION MAP



GEOGRAPHIC, BATHYMETRIC, GEOLOGIC, AND  
PHYSICAL OCEANOGRAPHIC DATA OF POTENTIAL OTEC SITES

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POTENTIAL SITES	COUNTRY	LOCATION	POPULATION (ESTIMATED)	GEOLOGIC TYPE	COLD WATER PIPE			DISCHARGE PIPE			USE		WATER
					DEPTH (m)	OFFSHORE (km)	BOTTOM (km)	DEPTH (m)	OFFSHORE (km)	BOTTOM (km)	DOMESTIC	INDUSTRIAL	
PACIFIC OCEAN													
Hawaii, Keahole Point	USA	158° W 20° N	75,337	High Island	600	1	1	100	0.3	0.3	X	X	
Maui	USA	157° W 21° N	54,985	High Island	700	3	3	100	1	1	X	X	
Oahu, Kahe Point	USA	158° W 21° N	705,381	High Island	700	4	4	100	1.5	1.5	X	X?	X?
Majuro	Marshall Is./USA	171° E 07° N	10,000	Atoll	425	1	1	100	0.5	0.5	X		
Ponape	Fed. St. Micronesia	158° E 07° N	23,140	High Is./Reef	375	3	3	100	3	3	X		
Truk, Moen	Fed. St. Micronesia	152° E 07° N	12,000	Atoll	375	4	4	90	4	4	X		
Yap	Fed. St. Micronesia	138° E 09° N	6,200	Atoll	350	1.5	1.5	90	0.5	0.5	X		
Palau	Belau	134° E 07° N	14,800	High Is./Reef	350	2	2	80	1	1	X		
Saipan	N. Mariana Is./USA	140° E 16° N	14,600	High Island	425	1	1	120	0.5	0.5	X		
Guam, Agaña	USA	145° E 13° N	105,979	High Island	425	1	1	120	0.5	0.5	X		
Am. Samoa, Pago Pago	USA	171° W 14° S	32,297	High Island	650	1	1	100	0.5	0.5	X	X?	
Kwajalein	Marshall Is./USA	167° E 09° N	11,000	Atoll	425	1	1	100	0.5	0.5	X	X	
Johnston Island	USA	168° W 17° N	370	Atoll	550	2	2	100	1	1	X	X	
Kosrae, Lelu	Marshall Islands	163° E 05° N	5,600	Atoll?	425	1	1	100	0.5	0.5	X	X	
Punta Arenas	Costa Rica	84° W 06° N	26,331	Cont./Trench	600	10	10	30	5	5	X	X	
Acapulco	Mexico	100° W 17° N	402,188	Cont./Trench	500	5	5	30			X	X	
Puerto Vallarta	Mexico	105° W 21° N	402,188	Cont./Trench	750	10	10	30			X	X	
Pacific Coast	Columbia	77° W 06° N	36,784	High Island	700	2	2	100	1	1	X	X	
Tahiti, Papeete	France	150° W 18° S	36,784	High Island	650	2	2	100	1	1	X	X	
Suva	Fiji	178° E 18° S	86,108	High Island	700	7	7	2	2	2	X	X	
Nauru	Nauru	167° E 01° S	8,000	High Island	450	3	3	100	1	1	X	X	
Port Vila	Vanuatu	168° E 15° S	14,797	High Island	900	10	10	100	1	1	X	X	
Espirito Santo	Vanuatu	167° E 18° S	5,500	High Island	800	6	6	100	1	1	X	X	
Tongatapu	Tonga	175° W 21° S	18,858	Atoll	1000	5	5	100	1	1	X	X	
Apia	Western Samoa	172° W 14° S	32,099	High Island	650	0	8	80	1	1	X	X	
Tarawa	Kiribati	173° E 02° N	20,000	Atoll	450	3	3	120	1	1	X	X	
New Caledonia, Noumea	France	168° E 22° S	113,700	Cont. Island	900	10	10	100	5	5	X	X	
New Britain, Rabaul	Papua New Guinea	152° E 04° S	19,000?	High Island	500	2	2	100	0.5	0.5	X		
New Guinea, Wewak	Papua New Guinea	144° E 04° S	19,554	Cont. Island	500	5	5	100	1	1	X		
Admiralty Is., Manus	Papua New Guinea	147° E 02° S	19,554	High Island	500	4	4	100	0.5	0.5	X		
Gudatsanal, Honiara	Solomon Islands	160° E 10° S	14,942	Cont. Island?	550	3	3	100	1	1	X		
Bougainville, Kina	Papua New Guinea	158° E 06° S	128,890	Cont. Island	500	3	3	100	2	2	X	X?	
Bougainville, N. Coast	Papua New Guinea	155° E 06° S	128,890	Cont. Island	425	2	2	80	1	1	X	X	
Irian Java, Biak	Indonesia	136° E 03° S	128,890	Cont. Island	425	3	3	80	1	1	X	X	
Irian Java, Sorong	Indonesia	132° E 01° S	128,890	Cont. Island?	450	3	3	80	1	1	X	X	
Timor	Indonesia	129° E 08° S	128,890	Cont. Island?	425	3	3	80	1	1	X	X	
Mindanao	Philippines	124° E 07° N	128,890	Cont. Island	550	3	3	80	1	1	X	X	
Luzon, Lingayan	Philippines	120° E 16° N	128,890	Cont. Island	450	2	2	80	1	1	X	X	
Taiwan	Taiwan	122° E 23° N	14,505,400	Cont. Island	500	3	3	80	1	1	X	X?	
Kyushu	Japan	132° E 32° N	13,073,600	Cont. Island	650	3	3	100	1	1	X	X	
Okinawa, Naha	Japan	128° E 26° N	276,380	Cont. Island	1000	40	40	120	13	13	X	X	
				Cont. Island	700	13	13	120	3	3	X		
INDIAN OCEAN													
Bali, Den Pasar	Indonesia	115° E 08° S	2,120,338	High Island	600	3	3	80	1	1	X	X	
Java, Djakarta	Indonesia	106° E 07° S	342,287	Cont. Island?	600	5	5	80	0.5	0.5	X	X	
Sumatra	Indonesia	104° E 05° S	20,812,882	Cont. Island?	550	10	10	80	2	2	X	X	
Ceram	Indonesia	128° E 03° S	20,812,882	High Island?	450	3	3	80	2	2	X	X	
Christmas Island	Australia	105° E 10° S	44,000	Atoll	650	1	1	80	0.2	0.2	X	X	
Columbo	Sri Lanka	80° E 07° N	1,450,000	Cont. Island	800	10	10	80	2	2	X	X	
Tricomealee	Sri Lanka	81° E 08° N	44,000	Cont. Island	800	5	5	80	1	1	X	X	
Diego Garcia	USA/Britain	72° E 07° S	44,000	Atoll	600	2	2	80	1	1	X	X	
Madagascar	Malagasy Republic	49° E 12° S	15,559	Cont. Island	650	2	2	80	1	1	X	X	
Seychelles, Victoria	Seychelles	55° E 04° S	15,559	Cont. Island	1000	10	10	90	2	2	X	X	
Mauritius, Port Lewis	Mauritius	58° E 20° S	141,022	High Island	950	20	20	90	2	2	X	X	
Zanzibar	Tanzania	40° E 06° S	110,000	Cont. Island	950	50	50	90	2	2	X	X?	
Dar es Salaam	Tanzania	39° E 07° S	757,348	Continental	950	40	40	90	2	2	X	X	
Mombasa	Kenya	40° E 04° S	391,000	Continental	950	40	40	90	1	1	X	X	
Mogadishu	Somalia	45° E 02° N	371,000	Continental	950	20	20	90	5	5	X	X	
North Coast	Mozambique	41° E 15° S	22,000	Continental	950	5	5	90	1	1	X	X	
Comoro, Moroni	Comoro Islands	44° E 12° S	22,000	High Island	950	7	7	90	1	1	X	X	
ATLANTIC OCEAN													
Lobito	Angola	13° E 13° S	59,528	Continental	1300	20	20	120	1	1	X	X	
Luanda	Angola	13° E 09° S	540,000	Continental	1100	70	70	100	1	1	X	X	
Monrovia	Liberia	11° W 06° N	204,000	Continental	550	25	25	80	1	1	X	X	
Abidjan	Ivory Coast	04° W 05° N	950,000	Continental	375	20	20	80	1	1	X	X	
Freetown	Sierra Leone	13° W 08° N	274,000	Continental	550	30	30	80	1	1	X	X	
Dakar	Senegal	17° W 15° N	798,792	Continental	1300	45	45	90	1	1	X	X	
Lome	Togo	01° E 06° N	148,443	Continental	575	20	20	80	1	1	X	X	
Sao Tome	Sao Tome	07° E 00° N	82,000	Cont. Island	650	5	5	70	1	1	X	X	
Porto Novo	Benin	02° E 06° N	104,000	Continental	575	30	30	80	1	1	X	X	
Accra	Ghana	00° W 06° N	584,194	Continental	575	20	20	80	1	1	X	X	
Ascension Island	Britain	14° W 08° S	1,046,454	High Island	650	3	3	90	1	1	X	X?	
St. Helena Island	Britain	05° W 16° S	1,046,454	High Island	1400	10	10	120	1	1	X	X?	
Recife	Brazil	35° W 08° S	250,787	Continental	600	10	10	120	1	1	X	X?	
Natal	Brazil	35° W 06° S	250,787	Continental	500	10	10	120	1	1	X	X?	
Barbados, Bridgetown	Barbados	60° W 13° N	279,000	High Island	700	11	11	70	1	1	X	X	
Tobago	Trinidad/Tobago	60° W 11° N	4,006,005	High Island?	700	11	11	70	1	1	X	X	
Hispaniola	Dominican Rep.	70° W 18° N	4,006,005	Cont. Island	700	3.5	3.5	700	2.5	2.5	X	X	
Hispaniola	Haiti	74° W 18° N	4,314,828	Cont. Island	650	2.5	2.5	700	2.5	2.5	X	X	
Nassau	Bahamas	78° W 26° N	105,652	Carb. Platform	1100	7	7	150	1	1	X	X	
Key West, Florida	USA	82° W 25° N	25,000	Carb. Platform	700	70	70	70	1	1	X	X	
Tampa, Florida	USA	83° W 27° N	280,000	Cont. w/Shelf	800	70	70	70	1	1	X	X	
Mobile, Alabama	USA	88° W 31° N	198,000	Cont. w/Shelf	800	70	70	70	1	1	X	X	
CARIBBEAN SEA													
St. Croix, N. Coast	USA	65° W 18° N	49,725	Cont. Is./Trench	700	1	1	100	1	1	X	X	
Puerto Rico, N. Coast	USA	67° W 18° N	2,712,063	Cont. Is./Trench	700	6	6	90	1	1	X	X	
St. Lucia	St. Lucia	63° W 14° N	121,000	High Island	650	6	6	80	1	1	X	X	
Martinique	France	61° W 15° N	310,000	High Island?	675	4.5	4.5	80	1	1	X	X	
Grenada, St. Georges	Grenada	62° W 12° N	106,000	High Island	650	3.5	3.5	80	1	1	X	X	
Dominica, W. Coast	Dominica	62° W 16° N	78,000	High Island?	675	3	3	90	1	1	X	X	
Guadalupe, W. Coast	France	62° W 16° N	312,000	High Island?	675	3	3	90	1	1	X	X	
St. Vincent	St. Vincent	63° W 13° N	111,000	High Island?	650	2.5	2.5	80	1	1	X	X	
Montego Bay	Jamaica	78° W 18° N	50,000	Cont. Island	650	3.5	3.5	80	1	1	X	X	
Kingston	Jamaica	77° W 18° N	600,000	Cont. Island	675	3.5	3.5	80	1	1	X	X	
Guantanamo Bay	USA	75° W 20° N	322,000	Cont. Island	700	3	3	80	1	1	X	X	
Santiago	Cuba	78° W 20° N	322,000	Cont. Island	700	2.5	2.5	80	1	1	X	X	
Isla de Pinos	Cuba	83° W 22° N	322,000	Cont. Island	700	5	5	80	1	1	X	X	
Corrientes	Cuba	84° W 22° N	322,000	Cont. Island	700	5.5	5.5	80	1	1	X	X	
Corumel	Mexico	87° W 20° N	322,000	Carb. Platform	700	8.5	8.5	80	1	1	X	X	
Puerto Cortes	Honduras	88° W 16° N	322,000	Continental	650	10	10	70	1	1	X	X?	
Grand Cayman	Britain	81° W 16° N	10,652	Carb. Platform	650	2.5	2.5	70	1	1	X	X	

LIST of POTENTIAL OTEC SITES

EXPLANATION

This Open-File Report presents compilations of geographic, bathymetric (including morphologic expression), geologic, and physical oceanographic data for the world ocean encompassing all areas with potential for development of Ocean Thermal Energy Conversion (OTEC) power systems. The companion Open-File Report 86-333-A reviews the need for geologic engineering studies and required survey strategies for adequately defining specific OTEC plant sites and providing the data necessary for design of sea floor installations, including anchor and pipeline structures.

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