



Figure S1: Nauru Topside—landscape, 2010



Figure S2: Nauru Topside—Scattered limestone outcrops (or pinnacles), 2010



Figure S3: Nauru Bottomside, 2010

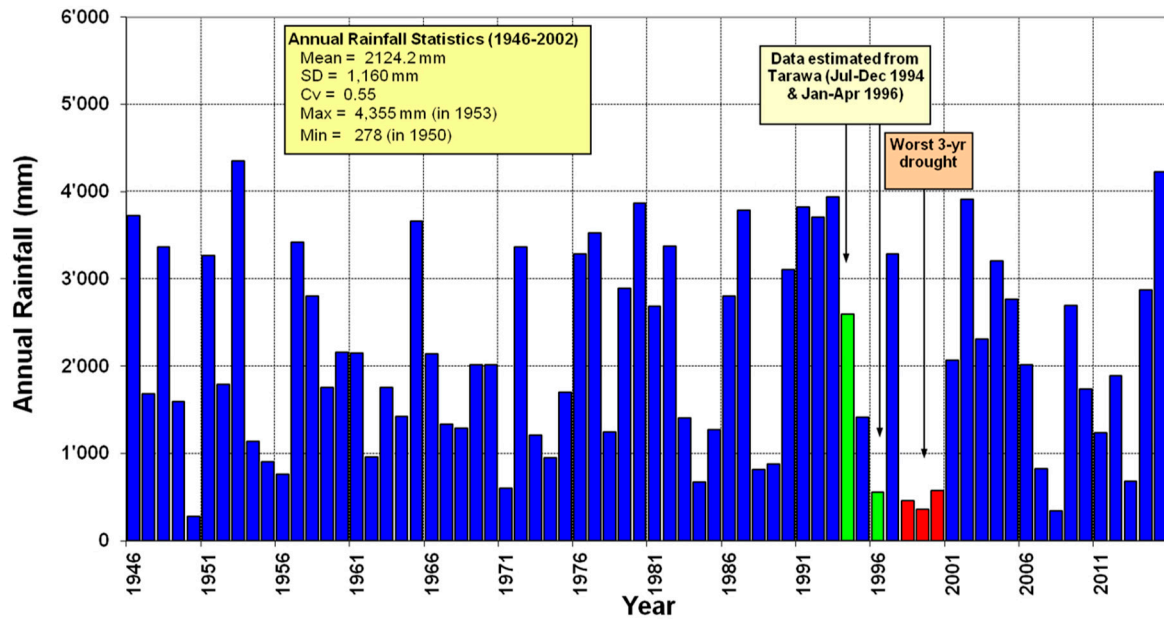


Figure S4: Annual rainfall in Nauru from 1946 to 2015 (data from Nauru Government and Australian Bureau of Meteorology [46])

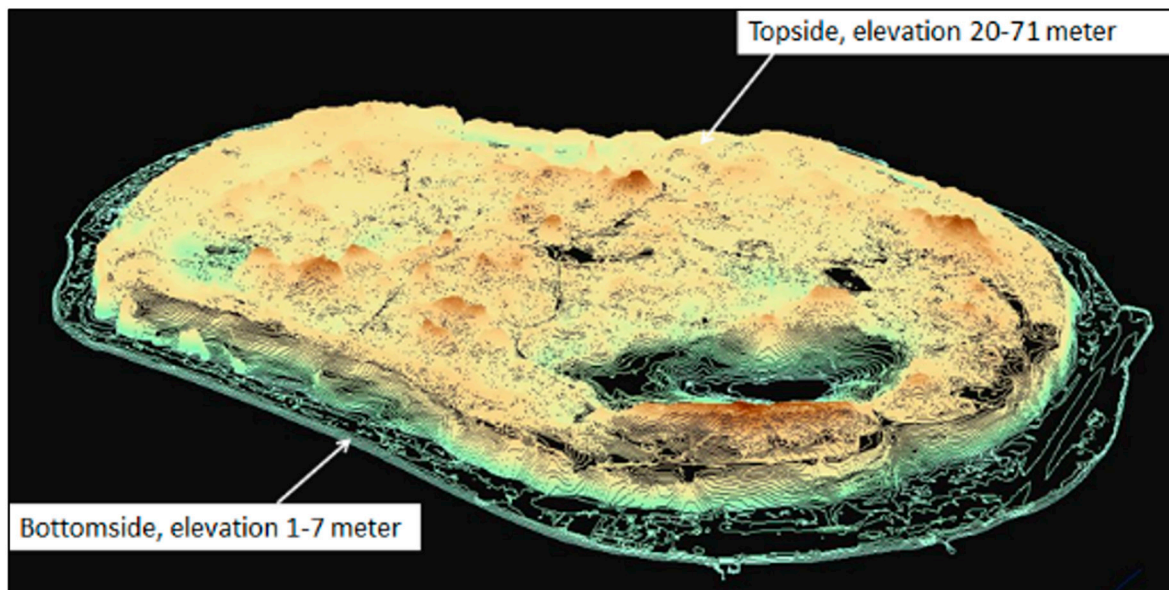


Figure S5: 3D visualization of the DTM elaborated by Politecnico di Milano with the data of the photogrammetric aerial survey carried out in 2010

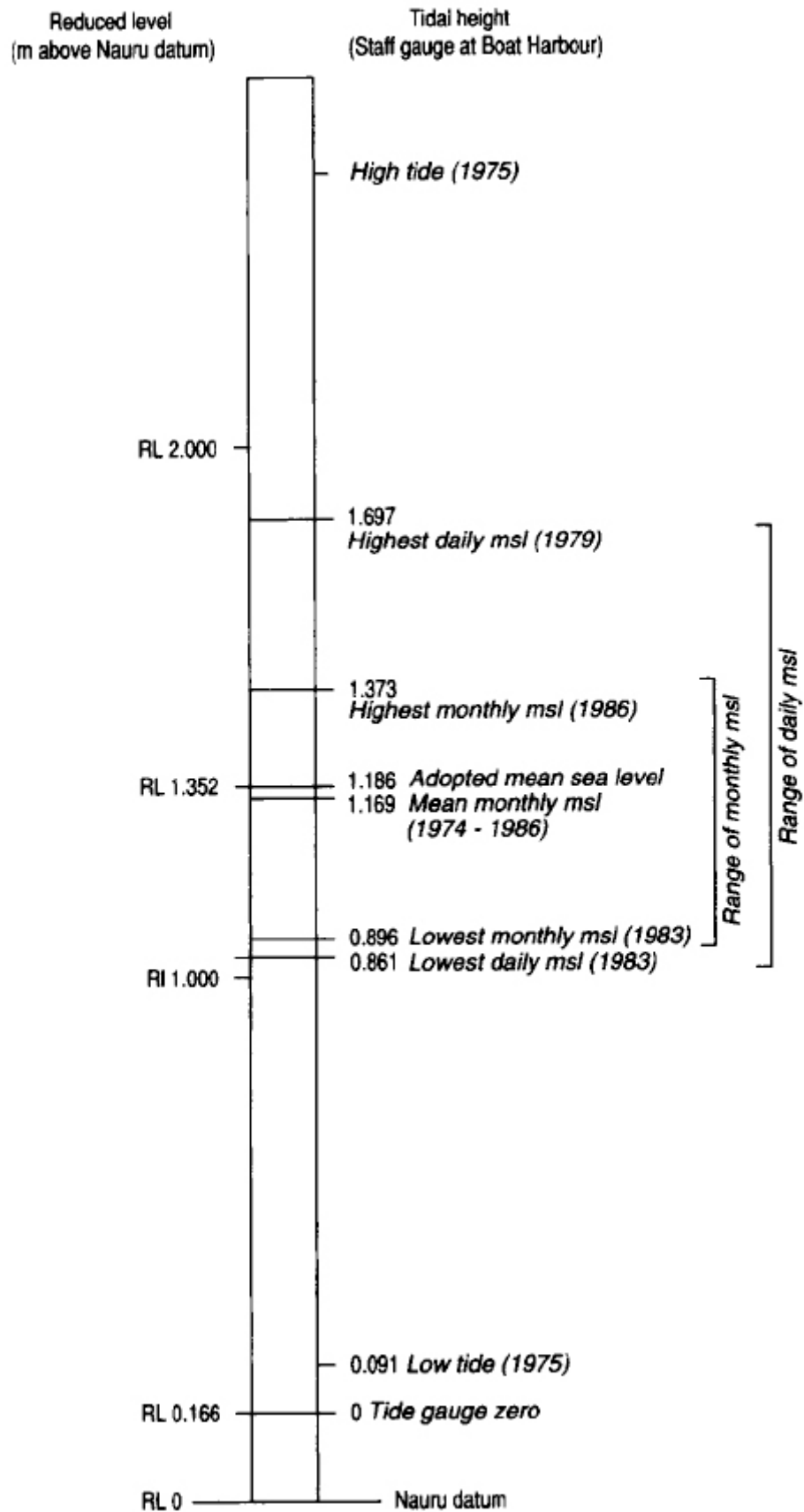


Figure S6: Mean sea level and relationship between Reduced Level (or Nauru Datum) and tidal height (by Jacobson et al. [26])

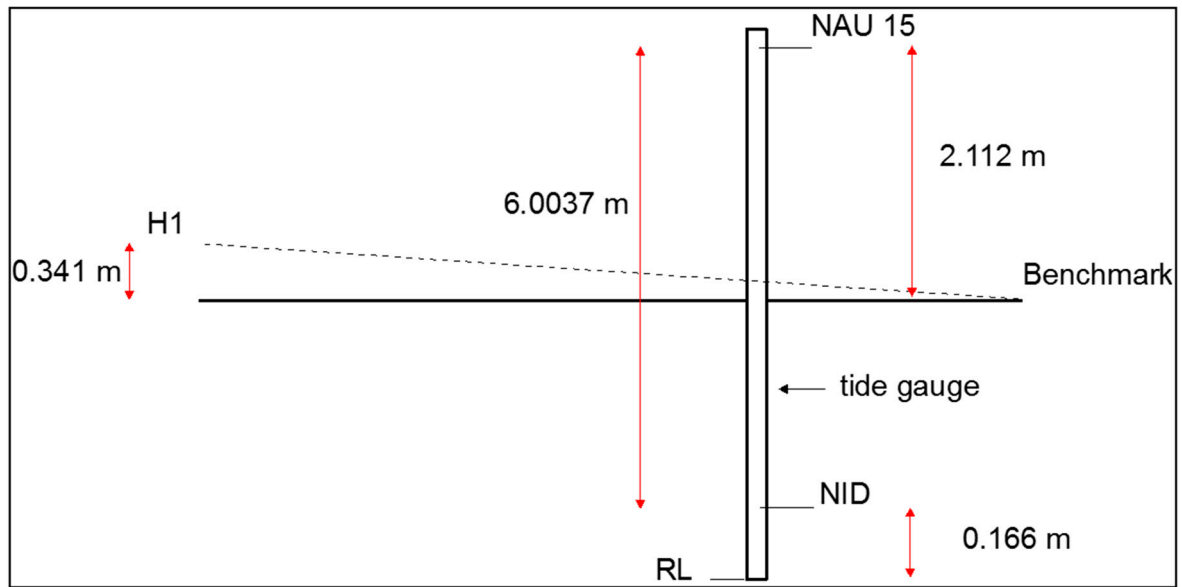


Figure S7: Pattern of the leveling operations in order to obtain the orthometric elevation of RL from H1. The Australian Bureau of Meteorology uses the Nauru Island Datum (NID) as reference level for the tide measurement

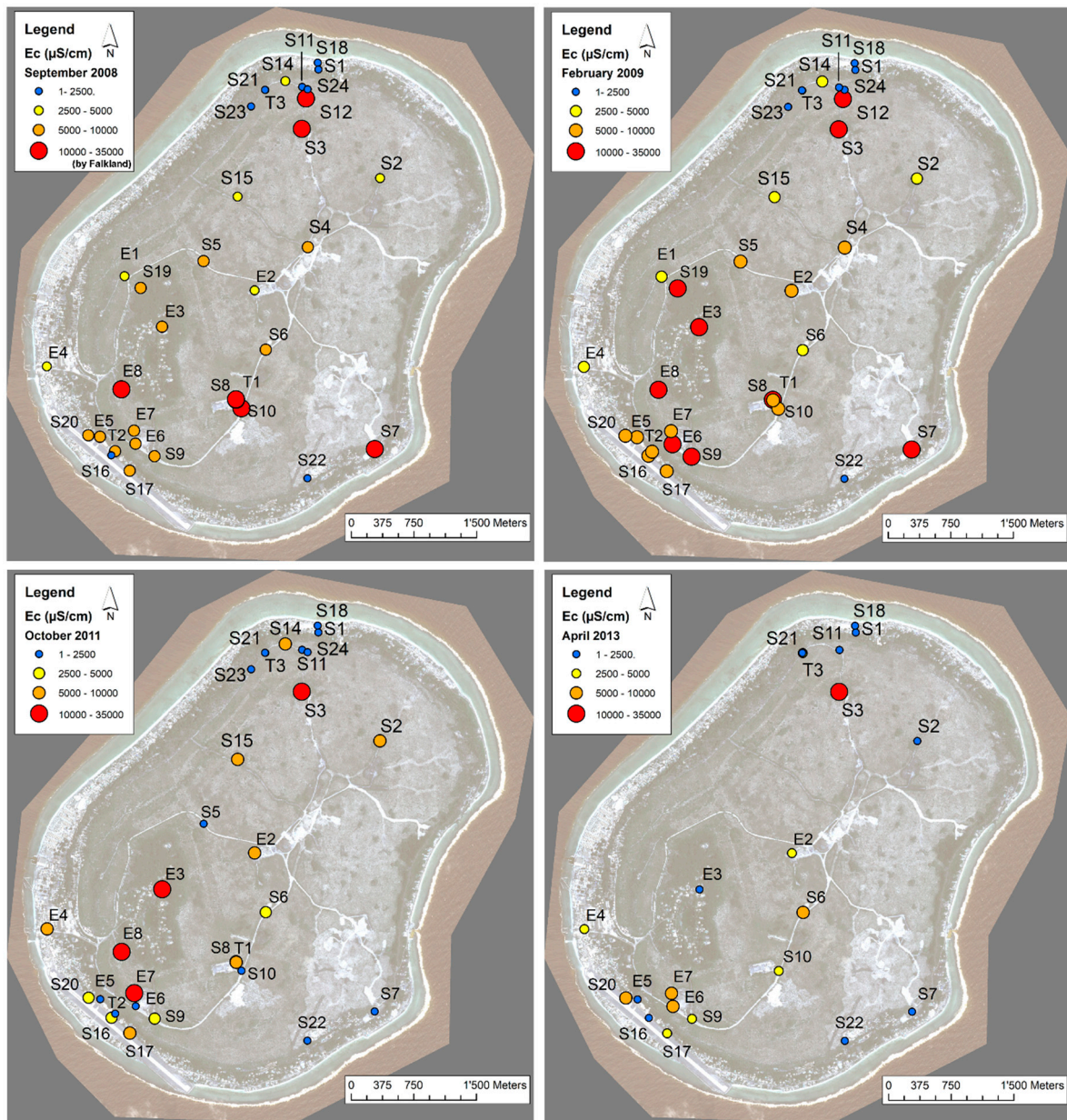


Figure S8: Salt concentration evolution into the Nauru aquifer from 2008 to 2013 at the water table

Table S1: Coordinates of the points directly observed through GNSS receiver. RL stays for the elevation measured above the Reduced Level. Annex 1: Monographs of the surveyed monitoring wells

ID	Geographic coordinates (WGS84) [degrees]		Projected coordinates (UTM 58 South) [m]		Elevation coordinates [m]		
	Latitude (S)	Longitude (E)	North (m)	East (m)	Ellipsoidal	Orthometric	RL
An2	0°30'21.20992"	166°57'1.9413"	9944051.124	717079.996	45.701	8.158	6.154
Anib1	0°31'42.10627"	166°57'6.41386"	9941565.885	717217.543	43.416	5.885	3.881
At1	0°30'16.45443"	166°56'49.62572"	9944197.330	716699.161	45.590	8.040	6.035
Bai1	0°30'30.74912"	166°55'44.70325"	9943758.791	714691.207	47.789	10.204	8.200
Den1	0°31'10.13081"	166°55'3.87024"	9942549.356	713428.096	47.143	9.538	7.534
E2	0°31'41.28449"	166°56'0.77648"	9941591.766	715187.575	72.452	34.883	32.878
E4	0°32'10.82451"	166°54'40.41275"	9940685.065	712702.033	47.952	10.339	8.334
E5	0°32'38.04413"	166°55'1.02844"	9939848.675	713339.316	45.813	8.215	6.210
E6	0°32'40.75531"	166°55'14.75731"	9939765.314	713763.868	77.465	39.876	37.872
E7	0°32'35.73763"	166°55'14.1633"	9939919.402	713745.547	77.963	40.373	38.369
E8	0°32'19.68781"	166°55'9.25267"	9940412.503	713593.845	72.713	35.118	33.113
FIX1	0°32'26.1357"	166°55'50.3579"	9940214.020	714864.997	66.342	28.772	26.767
H1	0°31'45.14407"	166°54'34.62653"	9941474.023	712523.333	44.019	6.400	4.395
Ijw1	0°31'17.72049"	166°57'26.86112"	9942314.838	717850.141	46.052	8.529	6.524
LP1	0°32'5.84037"	166°55'22.95775"	9940837.766	714017.813	42.805	5.217	3.212
S10	0°32'27.04516"	166°55'55.72073"	9940186.028	715030.831	69.022	31.455	29.451
S11	0°30'22.36840"	166°56'19.15440"	9944015.932	715756.733	76.279	38.713	36.708
S12	0°30'26.86694"	166°56'20.69055"	9943877.720	715804.198	71.195	33.630	31.625
S14	0°30'20.09586"	166°56'12.69586"	9944085.805	715557.019	74.631	37.061	35.057
S15	0°31'4.91976"	166°55'51.25903"	9942708.995	714983.641	69.528	31.950	29.945
S16	0°32'45.23902"	166°55'5.40976"	9939627.604	713474.748	45.525	7.931	5.927
S17	0°32'51.24457"	166°55'12.47321"	9939443.043	713693.124	45.390	7.801	5.797
S18	0°30'12.96168"	166°56'25.15734"	9944304.855	715942.467	45.431	7.867	5.862
S2	0°30'57.73695"	166°56'49.34856"	9942929.106	716690.204	76.397	38.851	36.846
S20	0°32'37.53354"	166°54'56.4738"	9939864.405	713198.474	45.455	7.855	5.850
S22	0°32'54.13396"	166°56'21.27783"	9939353.594	715820.945	73.840	36.292	34.288
S23	0°30'29.95214"	166°55'59.44608"	9943783.138	715147.162	74.768	37.191	35.187
S3	0°30'38.63239"	166°56'19.02853"	9943516.295	715752.608	53.203	15.638	13.634
S4	0°31'24.53559"	166°56'21.36181"	9942106.102	715824.422	70.310	32.751	30.747
S5	0°31'29.91931"	166°55'41.02453"	9941941.097	714576.916	67.364	29.783	27.778
S6	0°32'4.32076"	166°56'5.10543"	9940884.040	715321.288	71.057	33.493	31.488
S7	0°32'42.81182"	166°56'47.33099"	9939701.156	716626.785	57.969	20.435	18.430
S8	0°32'23.77374"	166°55'53.68651"	9940286.548	714967.959	66.647	29.079	27.074
S9	0°32'45.65564"	166°55'22.13206"	9939614.640	713991.897	74.402	36.818	34.814
T2	0°32'43.71972"	166°55'6.82156"	9939674.263	713518.417	45.679	8.085	6.080
T3	0°30'23.57008"	166°56'4.81139"	9943979.148	715313.142	71.672	34.098	32.093
X1	0°30'23.46334"	166°56'20.69634"	9943982.280	715804.407	75.636	38.071	36.066
E3	0°31'55.55"	166°55'24.61"	9941154.000	714069.000	43.961	6.373	4.368
S1	0°30'16.18"	166°56'25.046"	9944206.000	715939.000	46.391	8.448	6.824
S19	0°31'39.988"	166°55'17.167"	9941632.000	713839.000	57.654	20.058	18.054
S21	0°30'23.607"	166°56'4.936"	9943978.000	715317.000	71.532	33.958	31.953
S24	0°30'21.82"	166°56'18.1"	9944033.000	715724.000	76.309	38.743	36.738

Table S2: Electrical Conductivity [$\mu\text{S}/\text{cm}$] at water table (data referred to Error! Reference source not found. in the paper and S8),

Electrical Conductivity [$\mu\text{S}/\text{cm}$] at water table (data referred to Figure 10)												
Date	MONITORING WELLS											
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
09-Sep-2008	395	4560	19100	10000	6929	8229	21200	10300	8499	12300	993	15900
15-Feb-2009	440	4929	23000	7032	9222	4372	23100	5342	10800	6258	1349	18700
04-Oct-2011	700	5480	25300		2135	3400	139	6250	3250	1950	1766	
28-Apr-2013	643	477	24800			6347	345		3242	4914	804	
Date	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	
09-Sep-2008	3097	3718	1898	5081	644	8382	6861	1452	378	580	918	
15-Feb-2009	4514	2564	7617	7617	637	11400	8162	1775	312	457	2489	
04-Oct-2011	6325	5260	3297	5360	334		4452	2090	210	682	1150	
28-Apr-2013			1300	3400	338		5498	3799	200			
Date	E1	E2	E3	E4	E5	E6	E7	E8	T1	T2	T3	
09-Sep-2008	3415	4743	6565	2954	6157	9037	8777	12500	10300	8598	730	
15-Feb-2009	4418	6045	10100	3988	8509	12500	9875	14800	13500	6688	1350	
04-Oct-2011		7496	11800	5380	2174	639	15600	18200	6400	1200	1798	
28-Apr-2013		4000	944	4070	1050	6800	6942				2301	