IT ISSN 0391 - 9838

Bollettino del Comitato Glaciologico Italiano - ser. 3

# GEOGRAFIA FISICA e DINAMICA QUATERNARIA

An international Journal published under the auspices of the
*Rivista internazionale pubblicata sotto gli auspici di*

Associazione Italiana di Geografia Fisica e Geomorfologia
and (e) Consiglio Nazionale delle Ricerche (CNR)

recognized by the (*riconosciuta da*)

International Association of Geomorphologists (IAG)

**volume 42 (1)**
2019

COMITATO GLACIOLOGICO ITALIANO - TORINO
2019

# GEOGRAFIA FISICA E DINAMICA QUATERNARIA

A journal published by the Comitato Glaciologico Italiano, under the auspices of the Associazione Italiana di Geografia Fisica e Geomorfologia and the Consiglio Nazionale delle Ricerche of Italy. Founded in 1978, it is the continuation of the «Bollettino del Comitato Glaciologico Italiano». It publishes original papers, short communications, news and book reviews of Physical Geography, Glaciology, Geomorphology and Quaternary Geology. The journal furthermore publishes the annual reports on italian glaciers, the official transactions of the Comitato Glaciologico Italiano and the Newsletters of the Intemational Association of Geomorphologists. Special issues, named «Geografia Fisica e Dinamica Quaternaria - Supplementi», collecting papers on specific themes, proceedings of meetings or symposia, regional studies, are also published, starting from 1988. The language of the journal is English, but papers can be written in other main scientific languages.

*Rivista edita dal Comitato Glaciologico Italiano, sotto gli auspici dell'Associazione Italiana di Geografia Fisica e Geomorfologia e del Consiglio Nazionale delle Ricerche. Fondata nel 1978, è la continuazione del «Bollettino del Comitato Glaciologico Italiano». La rivista pubblica memorie e note originali, recensioni, corrispondenze e notiziari di Geografia Fisica, Glaciologia, Geomorfologia e Geologia del Quaternario, oltre agli Atti ufficiali del C.G.I., le Newsletters della I.A.G. e le relazioni delle campagne glaciologiche annuali. Dal 1988 vengono pubblicati anche volumi tematici, che raccolgono lavori su argomenti specifici, atti di congressi e simposi, monografie regionali sotto la denominazione «Geografia Fisica e Dinamica Quaternaria - Supplementi». La lingua usata dalla rivista è l'Inglese, ma gli articoli possono essere scritti anche nelle altre principali lingue scientifiche.*



Indexed/Abstracted in: Bibliography & Index of Geology (GeoRef); GeoArchive (Geosystem); GEOBASE (Elsevier); *Geographical Abstract*: *Physical Geography* (Elsevier); GeoRef; Geotitles (Geosystem); Hydrotitles and Hydrology Infobase (Geosystem); Referativnyi Zhurnal.
Geografia Fisica e Dinamica Quaternaria has been included in the Thomson ISI database beginning with volume 30 (1) 2007 and now appears in the Web of Science, including the Science Citation Index Expanded (SCIE), as well as the ISI Alerting Services.

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Printed with the financial support from (pubblicazione realizzata con il contributo finanziario di):

– Comitato Glaciologico Italiano
– Associazione Italiana di Geografia Fisica e Geomorfologia
– Ministero dell'Istruzione, Università e Ricerca
– Consiglio Nazionale delle Ricerche
– Club Alpino Italiano

*Geogr. Fis. Dinam. Quat.*
*42 (2019). 3-16, suppl. mat., 1-4*

DOI 10.4461/ GFDQ.2019.42.1

NIKI EVELPIDOU [1*], SATORU KAWASAKI [2], ANNA KARKANI [3], GIANNIS SAITIS [4], GIORGIO SPADA [5] & GEORGIOS ECONOMOU [6]

# EVOLUTION OF RELATIVE SEA LEVEL IN OKINAWA (JAPAN) DURING HOLOCENE. *SUPPLEMENTARY MATERIAL*

| No | Latitude N | Longitude E | Dating material | Type | Lab code | 14C age BP | 14C error | Age cal BP | Age cal BP error | Sample height (m) | Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26°46'40'' | 128°12'57'' | Tridacna sp. | beachrock | NU-1550 | 3950 | 80 | 3920 | 244 | 0.4 | Omoto, 2004; 2005 |
| 2 | 26°44'21'' | 128°09'00'' | coral | beachrock | NU-1601 | 3640 | 70 | 3531 | 191 | -1 | Omoto, 2004; 2005 |
| 3 | 26°44'04'' | 128°10'15'' | coral | beachrock | NU-1602 | 3810 | 70 | 3748 | 205 | -2.9 | Omoto, 2004; 2005 |
| 4 | 26°44'40'' | 128°09'27'' | coral | beachrock | NU-1604 | 2550 | 65 | 2172 | 178 | -2.5 | Omoto, 2004; 2005 |
| 5 | 26°44'40'' | 128°09'27'' | coral | beachrock | NU-1606 | 4620 | 75 | 4802 | 237 | -2.9 | Omoto, 2004; 2005 |
| 6 | 26°42'28'' | 128°08'30'' | Tridacna sp. | beachrock | NU-1551 | 3990 | 85 | 3972 | 261 | 0.8 | Omoto, 2004; 2005 |
| 7 | 26°42'27'' | 128°08'26'' | Tridacna sp. | beachrock | NU-1608 | 1745 | 60 | 1284 | 151 | 0 | Omoto, 2004; 2005 |
| 8 | 26°42'27'' | 128°08'26'' | Tridacna sp. | beachrock | NU-1609 | 620 | 60 | 235 | 178 | -0.2 | Omoto, 2004; 2005 |
| 9 | 26°41'31'' | 128°06'32'' | Tridacna sp. | beachrock | NU-1610 | 2530 | 65 | 2161 | 174 | 0.8 | Omoto, 2004; 2005 |
| 10 | 26°39'38'' | 128°06'03'' | coral | beachrock | NU-1611 | 3530 | 70 | 3395 | 193 | 0 | Omoto, 2004; 2005 |
| 11 | 26°39'38'' | 128°05'44'' | calcarenite | beachrock | NU-1591 | 2710 | 55 | 2459 | 201 | 0.5 | Omoto, 2004; 2005 |
| 12 | 26°39'38'' | 128°05'44'' | calcarenite | beachrock | NU-1592 | 2680 | 70 | 2381 | 233 | 0.5 | Omoto, 2004; 2005 |
| 13 | 26°39'38'' | 128°05'44'' | coral | beachrock | NU-1611 | 3540 | 70 | 3406 | 193 | 0.3 | Omoto, 2004; 2005 |
| 14 | 26°39'38'' | 128°05'44'' | calcarenite | beachrock | NU-1612 | 950 | 60 | 546 | 103 | 0 | Omoto, 2004; 2005 |
| 15 | 26°39'27'' | 128°05'34'' | coral | beachrock | NU-1554 | 3650 | 70 | 3543 | 192 | 0.6 | Omoto, 2004; 2005 |
| 16 | 26°39'00'' | 128°05'15'' | coral | beachrock | NU-1557 | 2800 | 65 | 2520 | 182 | 0.3 | Omoto, 2004; 2005 |
| 17 | 26°42'13'' | 127°58'19'' | calcarenite | beachrock | NU-1594 | 1725 | 60 | 1255 | 148 | 1.4 | Omoto, 2004; 2005 |
| 18 | 26°42'13'' | 127°58'19'' | calcarenite | beachrock | NU-1595 | 1700 | 65 | 1222 | 155 | 1.3 | Omoto, 2004; 2005 |
| 19 | 26°42'13'' | 127°58'19'' | Tridacna sp. | beachrock | NU-1596 | 1390 | 65 | 914 | 171 | 0.6 | Omoto, 2004; 2005 |
| 20 | 26°42'13'' | 127°58'19'' | coral | beachrock | NU-1597 | 1080 | 60 | 629 | 114 | 0.5 | Omoto, 2004; 2005 |
| 21 | 26°42'10'' | 127°52'53'' | Tridacna sp. | beachrock | NU-1549 | 1380 | 60 | 901 | 158 | 1 | Omoto, 2004; 2005 |
| 22 | 26°42'31'' | 127°52'46'' | calcarenite | beachrock | NU-1598 | 7290 | 90 | 7747 | 179 | -0.8 | Omoto, 2004; 2005 |
| 24 | 26°37'36'' | 127°53'13'' | Tridacna sp. | beachrock | NU-1552 | 3905 | 75 | 3858 | 227 | 0.6 | Omoto, 2004; 2005 |
| 24 | 26°37'36'' | 127°53'13'' | coral | beachrock | NU-1556 | 4175 | 80 | 4211 | 240 | 0.2 | Omoto, 2004; 2005 |
| 25 | 26°32'00'' | 127°56'24'' | Tridacna sp. | beachrock | NU-1553 | 3560 | 70 | 3431 | 193 | 0.7 | Omoto, 2004; 2005 |
| 26 | 26°32'00'' | 127°56'24'' | Tridacna sp. | beachrock | NU-1559 | 2730 | 70 | 2474 | 215 | 1 | Omoto, 2004; 2005 |
| 27 | 26°32'16'' | 127°56'12'' | Tridacna sp. | beachrock | NU-1599 | 2500 | 70 | 2133 | 188 | 0.4 | Omoto, 2004; 2005 |
| 28 | 26°23'30'' | 127°43'15'' | Tridacna sp. | beachrock | NU-1544 | 3765 | 80 | 3677 | 225 | 1.3 | Omoto, 2004; 2005 |
| 29 | 26°25'35'' | 127°45'30'' | Tridacna sp. | beachrock | NU-1547 | 1250 | 65 | 787 | 132 | 0.5 | Omoto, 2004; 2005 |

| No | Latitude N | Longitude E | Dating material | Type | Lab code | 14C age BP | 14C error | Age cal BP | Age cal BP error | Sample height (m) | Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 | 26°23'30'' | 127°43'15'' | Tridacna sp. | beachrock | NU-1541 | 1310 | 65 | 826 | 147 | 1 | Omoto, 2004; 2005 |
| 31 | 26°25'03'' | 127°43'09'' | calcarenite | beachrock | NU-1577 | 3210 | 85 | 2998 | 232 | 0.7 | Omoto, 2004; 2005 |
| 32 | 26°25'03'' | 127°43'09'' | Tridacna sp. | beachrock | NU-1578 | 2270 | 65 | 1867 | 187 | 0.1 | Omoto, 2004; 2005 |
| 33 | 26°21'40'' | 127°44'15'' | coral | beachrock | NU-1548 | 4710 | 75 | 5006 | 235 | 0.6 | Omoto, 2004; 2005 |
| 34 | 26°23'48'' | 127°43'32'' | calcarenite | beachrock | NU-1574 | 2315 | 65 | 1916 | 186 | 1 | Omoto, 2004; 2005 |
| 35 | 26°23'48'' | 127°43'32'' | coral | beachrock | NU-1575 | 1830 | 65 | 1381 | 146 | 0.9 | Omoto, 2004; 2005 |
| 36 | 26°23'48'' | 127°43'32'' | Tridacna sp. | beachrock | NU-1576 | 1890 | 75 | 1435 | 169 | 1.1 | Omoto, 2004; 2005 |
| 37 | 26°42'12'' | 127°58'21'' | Tridacna sp. | beachrock | NU-1615 | 4985 | 80 | 5286 | 244 | 1.3 | Omoto, 2004; 2005 |
| 38 | 26°38'59'' | 128°05'24'' | coral | beachrock | NU-1613 | 3680 | 70 | 3582 | 198 | -0.4 | Omoto, 2004; 2005 |
| 39 | 26°28'09'' | 127°58'12'' | Tridacna sp. | beachrock | NU-1662 | 2040 | 55 | 1586 | 171 | 0.7 | Omoto, 2004; 2005 |
| 40 | 26°28'09'' | 127°58'12'' | Tridacna sp. | beachrock | NU-1663 | 1720 | 50 | 1256 | 124 | 0.7 | Omoto, 2004; 2005 |
| 41 | 26°28'09'' | 127°58'12'' | coral | beachrock | NU-1664 | 2090 | 65 | 1660 | 180 | 0.7 | Omoto, 2004; 2005 |
| 42 | 26°28'09'' | 127°58'12'' | calcarenite | beachrock | NU-1665 | 2370 | 65 | 1984 | 189 | 1 | Omoto, 2004; 2005 |
| 43 | 26°28'09'' | 127°58'12'' | coral | beachrock | NU-1666 | 1885 | 70 | 1429 | 159 | 0.8 | Omoto, 2004; 2005 |
| 44 | 26°28'09'' | 127°58'12'' | coral | beachrock | NU-1667 | 2205 | 65 | 1778 | 183 | 1 | Omoto, 2004; 2005 |
| 45 | 26°28'09'' | 127°58'12'' | Tridacna sp. | beachrock | NU-1668 | 2140 | 85 | 1714 | 216 | 0.7 | Omoto, 2004; 2005 |
| 46 | 26°22'00'' | 127°44'11'' | coral | beachrock | NU-1694 | 1400 | 60 | 928 | 164 | -0.1 | Omoto, 2004; 2005 |
| 47 | 26°22'00'' | 127°44'11'' | Tridacna sp. | beachrock | NU-1695 | 1305 | 50 | 823 | 124 | -0.1 | Omoto, 2004; 2005 |
| 48 | 26°22'00'' | 127°44'11'' | coral | beachrock | NU-1696 | 2825 | 55 | 2535 | 174 | -0.1 | Omoto, 2004; 2005 |
| 49 | 26°18'39'' | 127°57'25'' | Tridacna sp. | beachrock | NU-1686 | 5420 | 70 | 5760 | 163 | 1.6 | Omoto, 2004; 2005 |
| 50 | 26°18'39'' | 127°57'25'' | coral | beachrock | NU-1687 | 3285 | 55 | 3104 | 190 | 1.8 | Omoto, 2004; 2005 |
| 51 | 26°18'39'' | 127°57'25'' | Tridacna sp. | beachrock | NU-1688 | 4220 | 60 | 4286 | 195 | 1.5 | Omoto, 2004; 2005 |
| 52 | 26°18'39'' | 127°57'25'' | coral | beachrock | NU-1689 | 3110 | 70 | 2896 | 177 | 1.2 | Omoto, 2004; 2005 |
| 53 | 26°07'12'' | 127°45'03'' | coral | beachrock | NU-1690 | 4050 | 60 | 4056 | 202 | 2.8 | Omoto, 2004; 2005 |
| 54 | 26°07'12'' | 127°45'03'' | Tridacna sp. | beachrock | NU-1691 | 1255 | 65 | 789 | 132 | 2 | Omoto, 2004; 2005 |
| 55 | 26°07'12'' | 127°45'03'' | Tridacna sp. | beachrock | NU-1692 | 1340 | 60 | 863 | 152 | 2 | Omoto, 2004; 2005 |
| 56 | 26°07'12'' | 127°45'03'' | coral | beachrock | NU-1693 | 3540 | 70 | 3406 | 193 | 2.8 | Omoto, 2004; 2005 |
| 57 | 26°07'00'' | 127°45'10'' | Tridacna sp. | beachrock | NU-1542 | 1485 | 70 | 1044 | 174 | 1.5 | Omoto, 2004; 2005 |
| 58 | 26°05'37'' | 127°39'37'' | calcarenite | beachrock | NU-1669 | 2235 | 50 | 1824 | 154 | 0 | Omoto, 2004; 2005 |
| 59 | 26°05'37'' | 127°39'37'' | Tridacna sp. | beachrock | NU-1670 | 2990 | 55 | 2759 | 163 | 0 | Omoto, 2004; 2005 |
| 60 | 26°05'24'' | 127°39'48'' | shell | beachrock | N-2741 | 4400 | 75 | 4565 | 231 | 0.6 | Nitta (MS) |
| 61 | 26°18'19'' | 127°57'33'' | shell | beachrock | N-4262 | 3870 | 90 | 3821 | 256 | 1.55 | Kawana & Pirazzoli, 1983 |
| 62 | 26°06'57'' | 127°45'23'' | shell | beachrock | N-4390 | 3250 | 60 | 3044 | 193 | 0.7 | Kawana & Pirazzoli, 1983 |
| 63 | 26°27'53'' | 127°58'17'' | shell | beachrock | N-3708 | 2050 | 85 | 1601 | 219 | 1 | Kawana, 1981 |
| 64 | 26°23'30'' | 127°53'22'' | shell | beachrock | N-4265 | 1150 | 60 | 692 | 141 | 0.85 | Kawana & Pirazzoli, 1983 |
| 65 | 26°23'30'' | 127°53'22'' | shell | beachrock | N-4264 | 1070 | 55 | 620 | 104 | 0.9 | Kawana & Pirazzoli, 1983 |
| 66 | 26°23'30'' | 127°53'22'' | shell | beachrock | N-4263 | 1010 | 70 | 582 | 111 | 0.6 | Kawana & Pirazzoli, 1983 |
| 67 | 26°42'17'' | 127°52'55'' | shell | beachrock | N-3709 | 790 | 70 | 397 | 126 | 1.05 | Kawana, 1981 |
| 68 | 26°06'20'' | 127°39'37'' | barnacles | biological | GIF-5636 | 3510 | 80 | 3370 | 216 | 1.85 | Kawana & Pirazzoli, 1983; Pirazzoli et al., 1985 |
| 69 | 26°04'35'' | 127°39'57'' | barnacles | biological | GIF-5637 | 2380 | 60 | 1990 | 177 | 3.35 | Kawana & Pirazzoli, 1983; Pirazzoli et al., 1985 |
| 70 | 26°07'00'' | 127°45'17'' | barnacles | biological | Gak-5195 | 2330 | 85 | 1927 | 232 | 2.9 | Machida et al., 1976; Pirazzoli et al., 1985 |
| 71 | 26°21'24'' | 127°44'25'' | barnacles | biological | N-4391 | 2170 | 70 | 1735 | 187 | 2.3 | Pirazzoli et al., 1985 |
| 72 | 26°38'50'' | 127°51'32'' | barnacles | biological | GIF-5638 | 1010 | 60 | 580 | 96 | 1.45 | Pirazzoli et al., 1985; Kawana and Pirazzoli (1983) |

| No | Latitude N | Longitude E | Dating material | Type | Lab code | 14C age BP | 14C error | Age cal BP | Age cal BP error | Sample height (m) | Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 73 | 26°26'06'' | 127°42'51'' | barnacles | biological | N-4382 | 645 | 60 | 258 | 176 | 1.45 | Kawana & Pirazzoli, 1983; Pirazzoli et al., 1985 |
| 74 | 26°22'14'' | 127°59'35'' | barnacles | biological | GIF-5639 | 600 | 50 | 194 | 146 | 1 | Pirazzoli et al., 1985 |
| 75 | | | coral | beachrock | NU-1000 | 5340 | 90 | 5702 | 197 | 0 | Omoto, 2007 |
| 76 | | | calcarenite | beachrock | NU-1598 | 7290 | 90 | 7747 | 179 | -0.8 | Omoto, 2007 |
| 77 | | | Tridacna sp. | beachrock | NU-1615 | 4985 | 90 | 5292 | 261 | 0.5 | Omoto, 2007 |
| 78 | | | calcarenite | beachrock | NU-1782 | 6910 | 90 | 7402 | 170 | -0.8 | Omoto, 2007 |
| 79 | | | calcarenite | beachrock | NU-929 | 5100 | 80 | 5436 | 177 | 0.7 | Omoto, 2007 |
| 80 | | | Tridacna sp. | beachrock | NU-1023 | 4930 | 95 | 5199 | 278 | 0.8 | Omoto, 2007 |
| 81 | | | calcarenite | beachrock | NU-1024 | 4740 | 95 | 5027 | 257 | 0.6 | Omoto, 2007 |
| 82 | | | Tridacna sp. | beachrock | NU-1036 | 5235 | 110 | 5579 | 263 | 0.8 | Omoto, 2007 |
| 83 | | | Tridacna sp. | beachrock | NU-1659 | 4940 | 75 | 5223 | 235 | 0.5 | Omoto, 2007 |
| 84 | | | calcarenite | beachrock | NU-770 | 4950 | 95 | 5237 | 279 | 0 | Omoto, 2007 |
| 85 | | | calcarenite | beachrock | NU-773 | 5050 | 100 | 5333 | 262 | 0 | Omoto, 2007 |
| 86 | | | calcarenite | beachrock | NU-1307 | 4760 | 75 | 5036 | 214 | 2 | Omoto, 2007 |

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*This work was partly supported by JSPS KAKENHI [Grant Number JP16H04404]. The authors also thank two anonymous reviewers, whose constructive comments and suggestions improved the final version of this paper.*

*The contents of this paper have been presented in the framework of the session S16 Coastal Geomorphology and Management (chairs: Prof. G. Mastronuzzi, Department of Earth and Geoenvironmental Sciences, Aldo Moro University, Bari, Italy and Prof. N. Chandrasekar, Manonmaniam Sundaranar University, India) at the 9th International Conference on Geomorphology that was held from 6th to 11th November 2017 at Vigyan Bhawan, New Delhi, India, in agreement with IAG - International Association of Geomorphologists and EGU - European Geosciences Union. Supplementary material on $^{14}C$ calibrated ages is available at: http://gfdq.glaciologia.it/issues/*

Edizioni ETS
Palazzo Roncioni - Lungarno Mediceo, 16, I-56127 Pisa
info@edizioniets.com - www.edizioniets.com
Finito di stampare nel mese di dicembre 2019