

1

The **V**



**NATIONAL
GEOGRAPHIC**

edu

2

WORLD

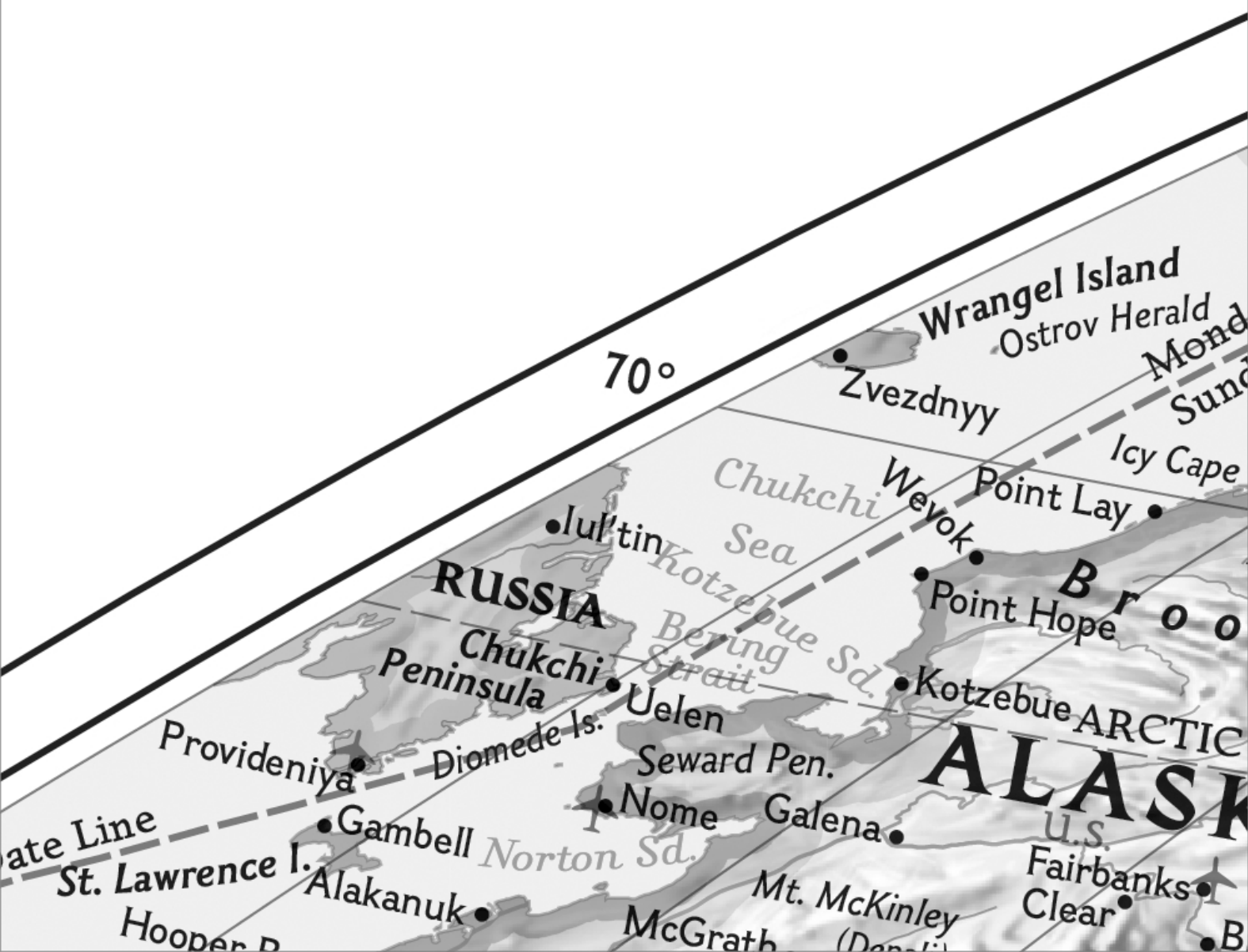
**AL
PHIC**

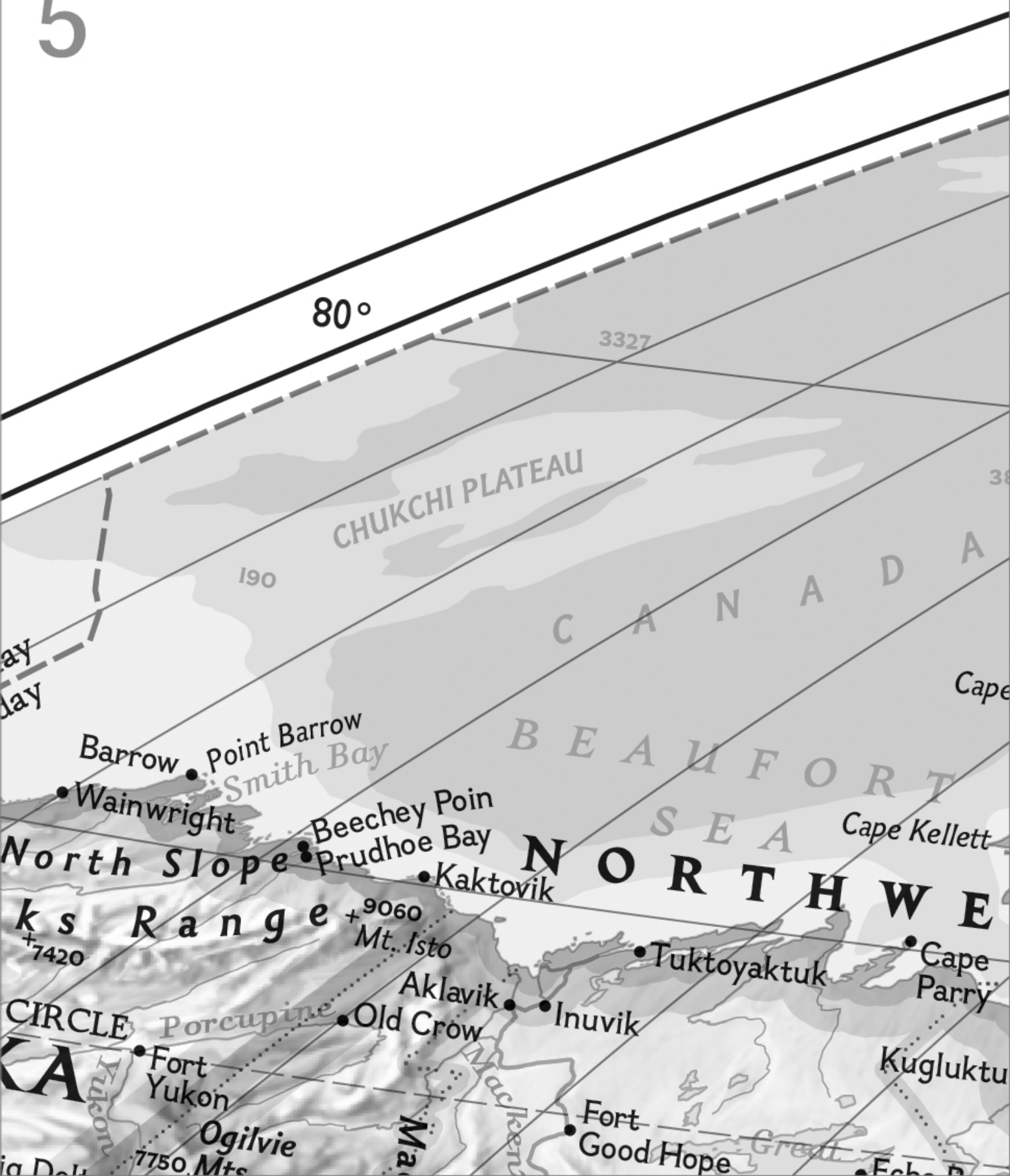
cation  **n**

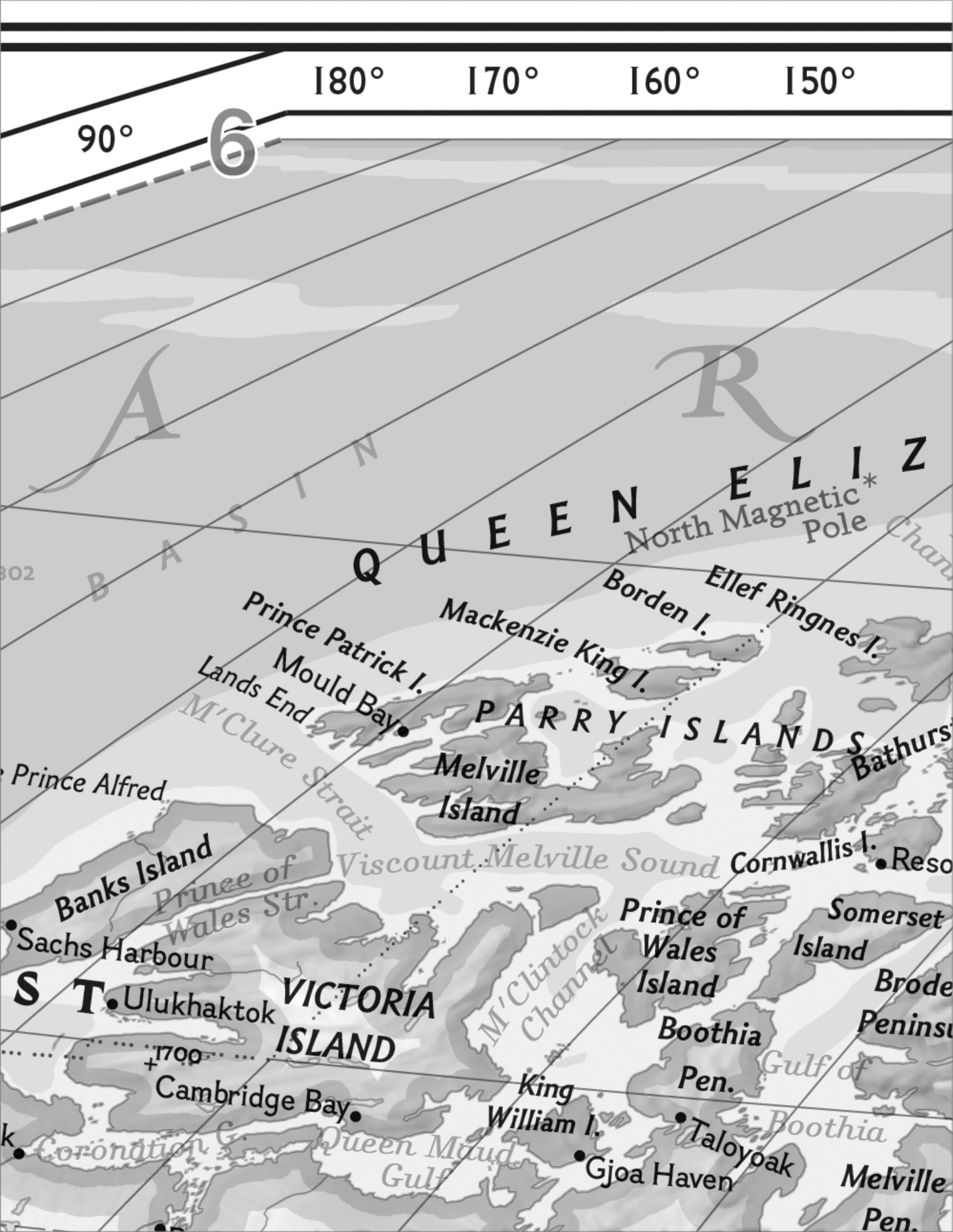
3

D









180°

170°

160°

150°

90°

6

A

R

QUEEN ELIZABETH

North Magnetic Pole*

Prince Patrick I.

Mackenzie King I.

Borden I.

Ellef Ringnes I.

Mould Bay

PARRY ISLANDS

Melville Island

Bathurst I.

Prince Alfred

Banks Island

Prince of Wales Str.

Viscount Melville Sound

Cornwallis I.

Resolute I.

Sachs Harbour

VICTORIA ISLAND

Uluksaktok

Cambridge Bay

M'Clintock Channel

Prince of Wales Island

Somerset Island

Boothia Pen.

Brodeur Peninsula

King William I.

Taloyoak

Coronation G.

Queen Maud Gulf

Gjoa Haven

Gulf of Boothia

Melville Pen.

140° 130° 120° 110° 100° 90°

7



80°

70°

60°

50°

40°

30°

8

Longitude

I

Columbia

Alert

Lincoln Sea

Victoria Fjord

Nares Land

Nansen Land

Lockwood I.

Cape Morris Jesup

Oodaaq I.

Peary Land

Rasmussen Land

Land

Independence Fjord

Danmark Fjord

King

Frederik VIII

Land

suvaq (shavn)

rsuatsiaq (Prøven)

mmannaq

issat (Jakobshavn)

Denmark

+10728
Ice thickness 11188

King
Christian X
Land

Clave

Foster I

Ittoqqorto
(Scoresbysu)

Scoresby Sound

West of Greenwich

Longitude East of Gr

Meridian of Greenwich
(London)

Wandel
Sea

North-east Foreland

Prince Charles Foreland

Spitsbergen

Longyearbyen

Norske Øer

Qeqertaq Prins Henrik

ove Bay

Shannon

ring I.

Bay

ormiit
(nd)

JAN MAYEN
7470⁺
Norway

NORWEGIAN

Storifjord

Tro

30° 40° 50° 60° 70° 80°

10

Greenwich



North East Land

33

Edgeøya

V A L B A R D
Norway

Hopen

Bear Island

Alexandra Land

Kvitøya

George Land

King Charles Land

Jackson I.
Salisbury I.

Rudolph I.

1988

Hooker I.

Hall I.

FRANZ JOSEF LAND
Russia

B A R E N T S S E A

Krestovaya Guba

Matochkin Shar

North Cape

Sørøya

Hammerfest

Lakselv

Vadsø

Murmansk

Alta

Kirkenes

Belush'ya Guba

Mezhdusharskiy

Kolguyev I.

90°

100°

110°

120°

130°

140°

11



12

150°

160°

170°

180°

90°



nd

r Revolution Island

Bol'shevik Island

068+

elyuskin

Vil'kitskiy Strait

+3760

Mys Dika

Kotel'nyy Island

Taymyr Peninsula

Lake Taymyr

Khatanga Gulf

LAPTEV

Gulf of Olenek

Tostuya

Ust' Olenek

Sag

Ary

Starorybnoye

Khatanga

Saskylakh

Staraya

Sk

Agapa

Volochanka

Boyarka

Kayak

Kotui

+2697

Zhilinda

Ku

G

inka

Noril'sk

+5344

Potapovo

Yessey

Kirbey

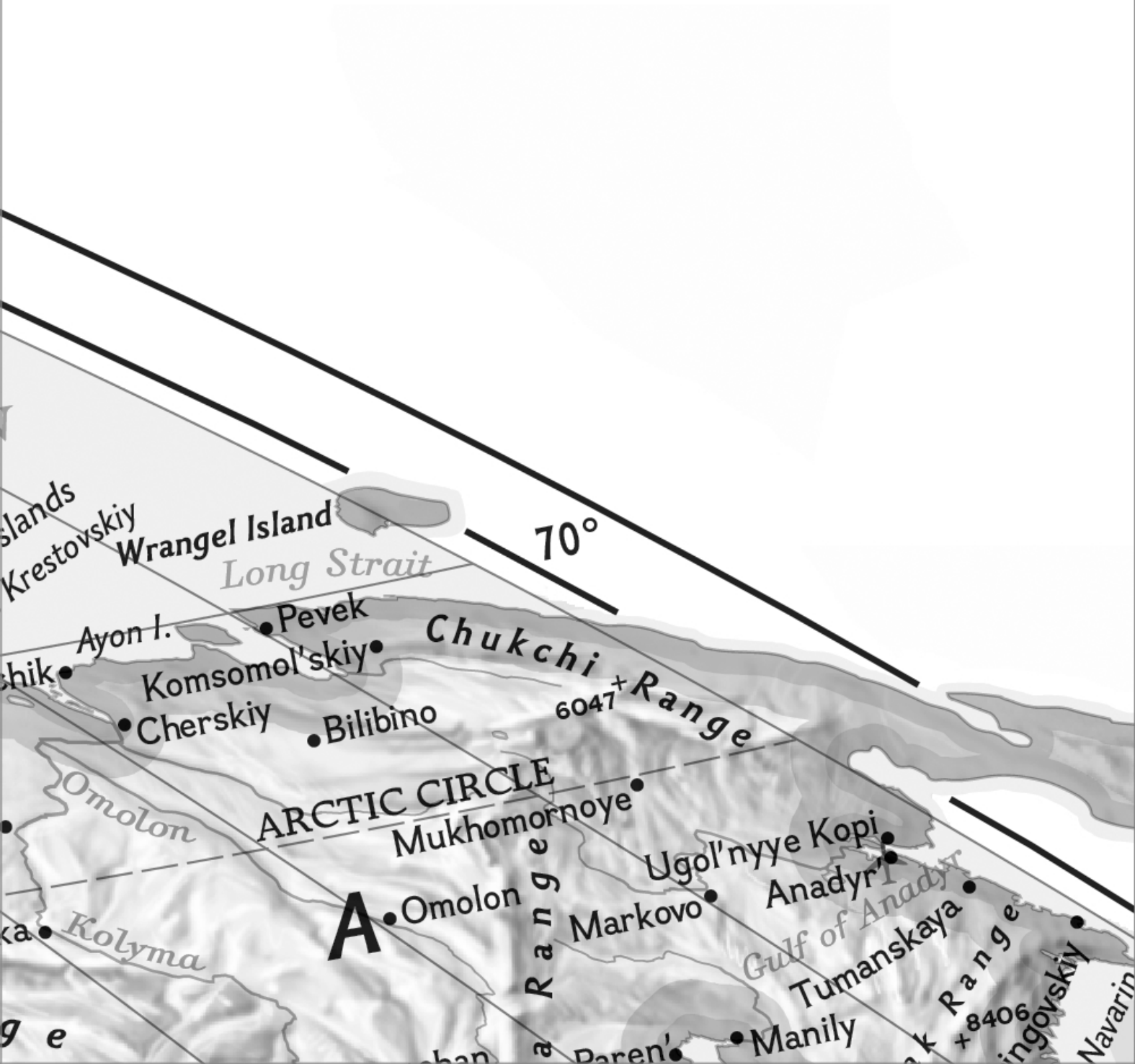
Put' Lenina

Olenek

Igarka

Chirinda





15



GEOGRAPHIC COMPARISONS

THE EARTH

AREA

	Square Kilometers	Square Miles
Total	510,066,000	196,938,000
Water	361,419,000	139,545,000
Land	148,647,000	57,393,000

THE OCEANS

Pacific	169,479,000	65,436,200
Atlantic	91,526,400	35,338,500
Indian	74,694,800	28,839,800
Arctic	13,960,100	5,390,000

THE CONTINENTS

Asia	44,570,000	17,208,000
Africa	30,065,000	11,608,000
North America	24,474,000	9,449,000
South America	17,819,000	6,880,000
Antarctica	13,209,000	5,100,000
Europe	9,947,000	3,841,000
Australia	7,692,000	2,970,000

17

EA

Percent of Earth's Surface

70.9 %

29.1 %

Percent of Earth's Water

46.8 %

25.3 %

20.6 %

3.9 %

Percent of Earth's Land

30.0 %

20.2 %

16.5 %

12.0 %

8.9 %

6.7 %

5.2 %



20

60°

St. Matthew I.

BERING SEA

Pribilof Is. St. Paul I.
St. George I.

ALEUTIAN ISLANDS

3731

Unimak I. 9372+

Unalaska 7050+

Fox Islands

Umnak I.

Is. of Four Mountains

Andreanof Is.

Tanaga I. Kanaga I.
Adak I.

Atka I.

Amlia I.

Seguam I.

Cold Bay

ALEUTIAN TRENCH

NORTHEAST

NORTH



21





23N U N A V U T

A D A

H U D S O N B A Y

TOBA

O N T A R I O

Q U E B E C

M I C H I G A N W I S C O N S I N

O t t a w a

M o n t r é a l

N E W B R U N S W I C K M A I N E



Foxe Basin

Foxe Pen.

Cape Dorset

Hudson Strait

Pingualuit Crater (Cratère du Nouveau-Québec)

Resolution I.

ujjuaq

Reservoir de Maniapiscou

Schefferville

Happy Valley-Goose Bay

Mingan

Île d'Anticosti

Gulf of St. Lawrence

PRINCE EDWARD I.

St. John's

Corner Brook

Gander

Notre Dame Bay

ST.-PIERRE & MICHELON

SLAND

Cumberland Pen.

Hall Peninsula

Mount Caubvick (Mont D'Iberville) +5420

Nain

Hopedale

Makkovik

Hamilton Inlet

Cartwright

Mary's Harbour

Qikiqtarjuaq

Cape Dyer

Pangnirtung

LABRADOR SEA

DAVY'S STRAIT

(Frederikshåb) Paamiut

(Julianehåb) Qaqortoq

(Ilivileq) Nanortalik

ISLAND OF NEWFOUNDLAND

Avalon Pen.

Aasiaat (Egedesminde)

Kange

Sisimiut (Holst)

Maniitsoq (Suk)

Nuuk (Godthåb)

Paamiut (Frederikshåb)

Qaqortoq (Julianehåb)

Nanortalik (Ilivileq)

ISLAND OF NEWFOUNDLAND

Avalon Pen.

Qasi

93

St. John's

Corner Brook

Gander

Notre Dame Bay

Strait of Belle Isle

Mary's Harbour

Cartwright

Hamilton Inlet







NORWAY

FAROE IS.

Tórshavn Denmark

Shetland Is.

Lerwick

Orkney Is.

Wick

Inverness

Aberdeen

SCOTLAND

Dundee

Glasgow Edinburgh

UNITED KINGDOM

Belfast

Dublin

WALES

Leeds

Liverpool

ENGLAND

Birmingham

Cardiff

Calais

London

NETHERLANDS

Amsterdam

BELGIUM

Brussels

FRANCE

Paris

DENMARK

Copenhagen

GERMANY

Bremen

Kiel

Hamburg

Rotterdam

LUX.

Bonn

Cologne

Frankfurt

Nürnberg

Strasbourg

SWITZ.

Bern

Zürich

Munich

NORWAY

Namsos 4560+

Trondheim

Ålesund

Røros

Galdhøpiggen 8100

Lillehammer

Bergen

Oslo

Haugesund

Stavanger

Skien

Kristiansand

Stockholm

Linköping

Göteborg

DENMARK

Århus

Kiel

Hamburg

GERMANY

Rotterdam

Cologne

Frankfurt

Nürnberg

Strasbourg

SWITZ.

Bern

Zürich

Munich



27

WEDEN

FINLAND

Helsinki

St. Petersburg

ESTONIA

LATVIA

LITHUANIA

POLAND

BELARUS

UKRAINE

MOSCOW

Warsaw

Kiev

Budapest

MOLDOVA

Odesa

AUSTRIA

HUNGARY

ROMANIA

CZECH REP.

SLOVAKIA

LOVENIA

AGREB

ANOCA

DNIPRO

MARIUPOL

ODESA

CEROPOL

Stockholm

Jönköping

Malmö

Gdańsk

Berlin

Łódź

Prague

Bratislava

Vienna

Zagreb

ANOCA

Rovaniemi

Luleå

Skellefteå

Umeå

Kölvsvik

Östersund

svall

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Jönköping

borg

Malmö

Gdańsk

rg

Berlin

Łódź

Wrocław

Prague

Bratislava

Vienna

Zagreb

ANOCA

Kemi

Oulu

Kokkola

Vaasa

Kuopio

Joensuu

Petrozavodsk

Lahti

Tampere

Turku

Tallinn

Tartu

Pskov

Valga

Riga

Liepāja

Vilnius

Minsk

Brest

Chernihiv

Kursk

Sumy

Belgorod

Kemijärvi

Kemi

Kajaani

Belomorsk

Segezha

Onega

Vyborg

Cherepovets

Velikiy Novgorod

Rybinsk

Yaroslavl'

Tver'

Ivanovo

Vladimir

Moscow

Ryazan'

Tula

Orel

Lipetsk

Chernobyl'

Zhytomyr

Belgorod

Kharkov

Keret'

Kem'

Belomorsk

Segezha

Onega

Vytegra

Cherepovets

Velikiy Novgorod

Rybinsk

Yaroslavl'

Tver'

Ivanovo

Vladimir

Moscow

Ryazan'

Tula

Orel

Lipetsk

Chernobyl'

Zhytomyr

Belgorod

Kharkov

Umba

Keret'

Kem'

Belomorsk

Segezha

Onega

Vytegra

Cherepovets

Velikiy Novgorod

Rybinsk

Yaroslavl'

Tver'

Ivanovo

Vladimir

Moscow

Ryazan'

Tula

Orel

Lipetsk

Chernobyl'

Zhytomyr

Belgorod

Kharkov

Ponoy

Kamenka

Meze

Archangel

Severodvinsk

Plesetsk

Nyandomsk

Konosha

Cherepovets

Velikiy Novgorod

Rybinsk

Yaroslavl'

Tver'

Ivanovo

Vladimir

Moscow

Ryazan'

Tula

Orel

Lipetsk

Chernobyl'

Zhytomyr

Belgorod

Koyda

Meze

Archangel

Severodvinsk

Plesetsk

Nyandomsk

Konosha

Cherepovets

Velikiy Novgorod

Rybinsk

Yaroslavl'

Tver'

Ivanovo

Vladimir

Moscow

Ryazan'

Tula

Orel

Lipetsk

Chernobyl'

Zhytomyr

Belgorod

Kharkov

Volong

Meze

Archangel

Severodvinsk

Plesetsk

Nyandomsk

Konosha

Cherepovets

Velikiy Novgorod

Rybinsk

Yaroslavl'

Tver'

Ivanovo

Vladimir

Moscow

Ryazan'

Tula

Orel

Lipetsk

Chernobyl'

Zhytomyr

Belgorod

Kharkov





28

R

U

KAZAN

obseda
Indiga
Nar'yan Mar
Yermitsa
Usinsk
Ust' Tsil'ma
Pechora
Selib
Ukhta
Sosnogorsk
Mikun'
Zheleznodorozhnyy
Kotlas
Syktyvkar
Velikiy Ustyug
Gayny
Berezniki
Kirov
Perm'
Izhevsk
Yoshkar Ola
Cheboksary
Kazan'
Birsk
Ufa
Togliatti
Sterlitamak
Meleuz
Penza
Tambov
Gryazi
Voronezh
Saratov
Kamyshin
Balakovo
Engels
Krasnoarmeysk
Oral
Aqtöbe
Oktyabr'sk
Volgograd
Akhtubinsk
Rostov
Elista
Astrakhan'
Atyraū
Ganyushkino
Khal'mer Yu
Novyy Port
Tazo
Labytnangi
Salekhard
Novyy Urengoy
Nadym
Tarko Sale
Sos'va
Igrim
Sergino
Nyagan'
Khanty-Mansiysk
Severoural'sk
Serov
Nizhniy Tagil
Irbit
Yekaterinburg
Zlatoust
Chelyabinsk
Miass
Magnitogorsk
Kurgan
Qostanay
Rüdnyy
Atba
Lake T
Arqaly
Embī
Shalqar
Zho
North Aral Sea
Qulsary
Aral
Qazaly



29

Vilyuy Plateau

Svetlogorsk

Turukhansk

Tura

Kislokan

Kharampur

Noginsk

Uchami

Nizhnyaya Tunguska

Vilyuysk Res

Noyabr'sk

Kuz'movka

Mutoray

urgut

Nizhnevartovsk

Bakhta

Komsa

Podkamennaya Tunguska

Panolil

fteyugansk

Lar'yak

Osinovo

Severo Yeniseyskiy

nskoye

Katal'ga

Kargasok

Yeniseysk

Lesosibirsk

Bogucha

k

Irtysh

Maysk

Kolpashevo

Angara

Bakchar

Tomsk

Achinsk

Krasnoyarsk

Kansk

shim

Tara

Barabinsk

Anzhero

Sudzhensk

Nizhneudi

Omsk

Novosibirsk

Kemerovo

Abakan +95

Petropavlovsk

Kupino

Prokop'yevsk

Novokuznetsk

Kökshetaū

Barnaul

Biysk

Abaza

Sayanogor

sar

Pavlodar

Kulunda

Rubtsovsk

Gorno

Altaysk

Turan

engizy

Astana

Semey

Ridder

14783+ Gora Belukha

KAZHSTAN

Temirtaū

Öskemen

Altay

Ölgiy

Zhezqazghan

Qarqaraly

Ayaköz

Zaysan

Fuhai

Fu

Baykonur

Lake Balkhash

Balqash

Dzungarian Gate

Karamay

Junggar Basin

Üshtëbe

Taldygorghan

Shihezi



330

Terbyas

E

Sangar

Ust' Ner

Oymyakon

Khandyga

nyshevskiy

Krestyakh

Orto Surt

Namtsy

Yakutsk

Mirnyy

Ust' Maya

El'di

Lensk

Olekminsk

Lena

A

Yugore

Vitim

Vitim

Bodaybo

Tommot

Aldan

Aldan

Chag

ny Ust' Ilimsk

Lazareva

Amalyk

Neryungri

Chul'man

Stanovoy R

Tynda

ayshet

Bratsk

Ust' Kut

Novyy Uoyan

Severobaykal'sk

Skovorodino

nsk

Tulun

Lake Baikal

Alla

Bagdarin

Mogocha

Magdagach

Zima

Balagansk

Ust' Barguzin

Romanovka

87

Cheremkhovo

Sibirskoye

Angarsk

Irkutsk

Ulan-Ude

Chita

Sretensk

rsk

Kyzyl

Slyudyanka

Kyakhta

Khilok

Aginskoye

Baley

Olovyannaya

Ivs Nuur

Zakamensk

Suhbaatar

Darhan

Manzhouli

Hailar

Yakes

laangom

Morön

Bulgan

Erdenet

Hulun Nur

Choybalsar

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Uliastay

Ulaanbaatar

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Baruun U

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B

M

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T

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+12474

+12982

Arvayheer

Mandalgovı

Saynshand

Altay

Bayanhongor

Erenhot

MONG



31

Taskan
Susuman
Gora Mus-Khaya
Sinegor'ye
Omsukchan
6004+

Karamken
Talon
Okhotsk
Ul'ya
Mys Enken
Kekra
Tukchi
Selinde
Ayan

Shantar Is.
+2300
Zeynsk
Chumikan
Zeya
Ushumun
Nikolayevsk na Amure

Lazarev
De Kastri
Svobodnyy
Chegdomyn
Komsomol'sk
na Amure
Blagoveshchensk
Nenjiang
Birobidzhan

Qiqihar
Yichun
Hegang
Jiamusi
Ulanhot
Daqing
Baicheng
Harbin
DONG BEI
(MANCHURIA)
Changchun
Jilin
Liaoyuan

Xilinhote
6657+

Evensk
Korya
Korf
Il'pyrskiy
2992+
Karaginsk

Magadan
Siglan
Palana
Ust'Tigil'
Utkholok
Saint Jona I.
KAMCHATKA
PENINSULA
Kirovskiy

Cape Elizabeth
Okha
Nogliki
Aleksandrovsk
Sakhalinskiy
3691+

Vanino
Sovetskaya Gavan'
Yuzhn
Sakha
Kors

Shuangyashan
Kholm'sk
Dal'negorsk
Ussuriysk
Vladivostok
Nakhodka
Sapporo
Muror

Ch'angjiin

Shelikhov Gulf

Uda Bay

SEA OF OKHOTSK

SAKHALIN

HOKKAIDO

Greater Khingan Ra.
GOLIA

Lake Khanka

La Perouse



ape Olyutorskiy
kiy I.

Dzernoy

uchi

Ust' Kamchatsk

84

2e

SK

SK

ero Kuril'sk

alinsk

akov

Str.

akkanai

DO

7513

Asahikawa

Chitose

Hakodate

BERING SEA

Commander Islands

Bering I.

2464+
Mednyy I.

Petropavlovsk
Kamchatskiy

Bol'sheretsk

Cape Lopatka

Paramushir

KURIL ISLANDS

Onkotan

Shiashkotan

Simushir

Urup

4678

Iturup (Etorofu)

5968
Kunashir (Kunashiri)

Shikotan

Kushiro

Asahikawa

Chitose

Hakodate

ALEUTIAN ISLANDS
U.S.

Attu I.

Semisopchnoi I.

Agattu I.

Kiska I.

Near Is.

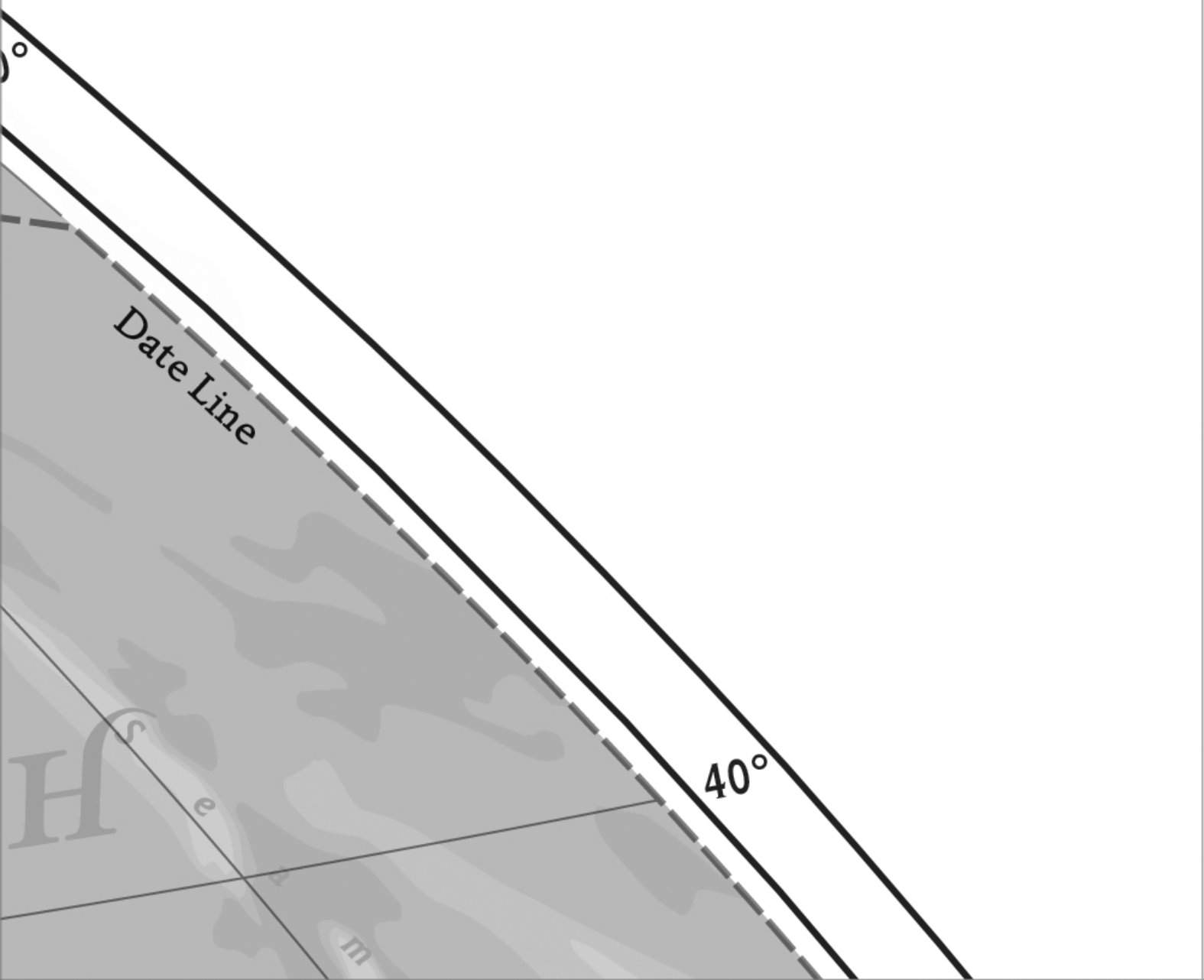
Rat Is. Amchitka I.

50

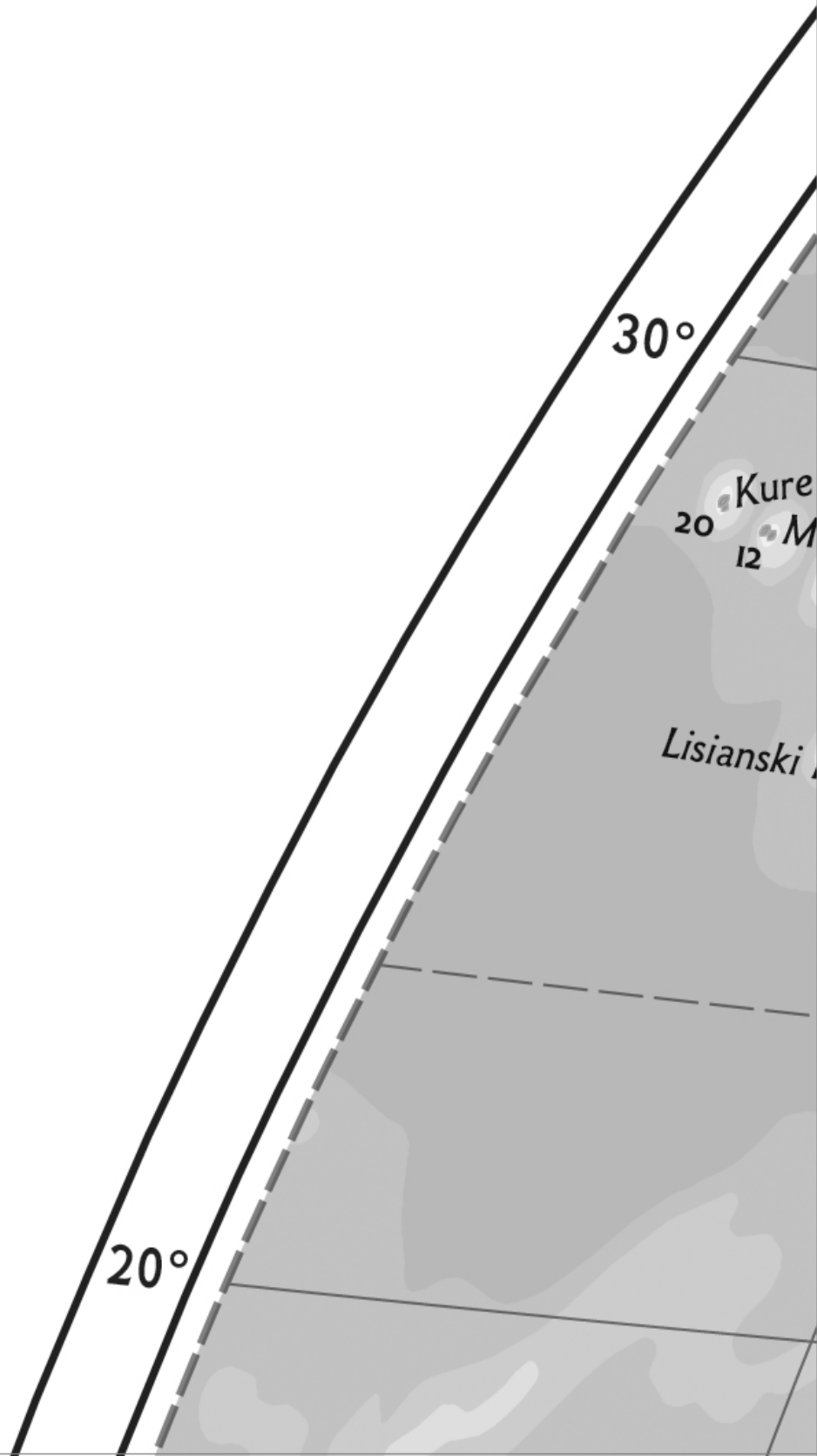
Sunday
Monday

KURIL - KAMCHATKA STRAIT

NORTH



11111



36



Atoll
Midway Islands
Pearl and Hermes Atoll

H

A

W

A

United States

P

A

I

I

T

20
35 Laysan I.

190 Gardner Pinnacles

122 La Perouse Pinnacle
277 Necker I.

910 Nihoa

1281 Ni'ihau
550 Ka'ula

5243 Kaua'i

4046 O'ahu

Honolulu

4970 Moloka'i

3370 Lāna'i
10023 Maui

1476 Kaho'olawe
13796 Mauna Kea

Hilo

37

PACIFIC

I F I C

TROPIC OF CANCER





39

T E D S T A T E S

COLORADO

NEBRASKA

IOWA

Chicago

Denver

Topeka

Kansas City

St. Louis

OKLAHOMA

MISSOURI

Oklahoma City

Tulsa

Nashville

NEW MEXICO

Little Rock

ARK.

TENNESSEE

Wichita Falls

Lubbock

Dallas

MISS.

ALA.

Birmingham

T E X A S

LA.

Jackson

Montgomery

Odessa

Abilene

Waco

Shreveport

Baton Rouge

Tallah

Austin

Houston

New Orleans

FLO.

San Antonio

Victoria

Beaumont

Biloxi

Mobile

Orlando

Guahua

Alice

Port Arthur

Lafayette

Pensacola

Tar

Laredo

Laredo

Corpus Christi

St. Petersburg

ias

Monclova

Kingsville

Brownsville

Ft. Lauderdale

GULF OF MEXICO

ias

Sierra Madre Occidental

Matamoros

Saltillo

Miami

eon

San Antonio

Ciudad Victoria

Tampico

Key West

ngo

San Antonio

Tampico

Chiché

Havana

osí

San Antonio

Tampico

Chiché

Pinar del Río



40

E S

FLORIDA

BAHAMAS

NORTH AMERICA

BERMUDA U.K.

Toronto Ontario
Hamilton
Lansing
Detroit
Cleveland
ND. OHIO
Columbus PA.
Pittsburgh
Baltimore
Cincinnati
W. VA.
Richmond
Norfolk
N.C.
Raleigh
Greensboro
Wilmington
Charleston
Savannah
Jacksonville
FLORIDA
Cape Canaveral
Orlando
West Palm Beach
Grand Bahama I.
Great Abaco I.
Nassau
Eleuthera I.
BAHAMAS
Cat I.
San Salvador (Watling)
Long I.
Samana Cay
Cuba
IND. CAICOS IS. U.K.
BERMUDA U.K.
NEW YORK
Philadelphia
Washington, D.C.
Annapolis, MD.
Dover, DEL.
Trenton, N.J.
Harrisburg
PA.
Penns.
Hartford, CONN.
Providence, R.I.
Boston, MASS.
Concord, N.H.
Montpelier, VT.
Portland
Augusta
Bangor
Yarmouth
John
Bay of

42

4903

Cape

R I D

Corvo Flores
São Jorge
Graciosa
Terceira
Faial

Pico 7713
AZORES
Portugal
São Miguel
Ponta Delgada
Santa Maria

PORTU
Li

Cape Sain

Stro

545

N T I O

Porto Santo
Madeira 6106
Funchal
Ilhas Desertas

MADEIRA ISLANDS
Portugal

Cas

Essa

M

Ag

CANARY ISLANDS
Spain

12198
Santa Cruz
Fuerteventura
Lanzarote
Tenerife
La Palma
Gomera
Hierro
Las Palmas
Gran Canaria

Cape Blanc

Tarfa

Laayo

WESTERN SAHARA
Morocco

Ad Dakhla

5638



Bay of Biscay

Geneva
Mt. Blanc +15780

A Coruña
Finisterre

Santander
Bilbao

Limoges
Toulouse

Marseille

Turin
Genoa

Venice
Pisa
MONACO
VATICAN CITY

Ourense
Vigo

Pamplona
ANDORRA

Barcelona

Salamanca
Coimbra

Madrid

Balearic Is.
Palma
Majorca

Sardinia

IGAL
sbon

SPAIN

Valencia

Cagliari

Setúbal

Córdoba
Seville

Murcia

MEDITERRANEAN SEA
Palerm

t Vincent

Cádiz

Málaga

Cartagena

Algiers

Tun

Strait of Gibraltar
Tangier

GIBRALTAR U.K.
Ceuta Sp.

Oran

Sétif

Constantine

Kenitra

Rabat

Fez

Oujda

Djelfa

Biskra

TUNISIA

ablanc

MOROCCO

Meknès

ATLAS MOUNTAINS

Laghouat

Touggourt

Safi

ouira

arrakech

adir

Jebel Toubkal +13665

Béchar

Beni Abbas

Great Western Erg

Ouargla

Goulimine

Tabelbala

Timimoun

Great Eastern Erg

Hamada de

ya

Tindouf

ALGERIA

I-n-Salah

Aoulef

I-n-Amenas (In Amenas)

Al Farciya

Erg Iguidi

Reggane

Arak

Bir Mogreïn

Erg Chech
Tanezrouft

Ahaggar Mts.
Djanet

Ghā

+Tabat



44

Bucharest

Belgrade

Sofia

Istanbul

Bursa

Ankara

Athens

Izmir

Konya

Tripoli

Miṣrātah

Benghazi

Ajdābiyā

Alexandria

Cairo

Egypt

Ezzān

Sīdi Barrāni

Awjilah

Sīwa

El Minya

Western Asyūt

Thebes

Mūt

Kôm Ombo

Al Jawf

L. Nasser

Boundary claimed by Sudan



45
+18510

-92

Mts.

Sea

UZBEK

CASPIAN

SEA

TURKMENIST

Mt. Ararat
16854+

MESOPOTAMIA
Tigris
Euphrates

+18606

STATUS OF PALESTINE

In November 2012 the UN General Assembly voted to elevate the diplomatic status of the "Palestinian territories to that of a "nonmember observer state." The creation of a formal Palestinian state remains subject to Israeli-Palestinian negotiations.

Persian Gulf

Strait of Hormuz

RED SEA
HEJAZ

N

Manama
Ad Dammām
BAHRAIN

Doha
QATAR

UNITED ARAB EMIRATES

Saudi
Riyadh

Dubai
Abu Dhabi



46

KAZAKHSTAN

Almaty
Bishkek
Karakol
Kyrghyzstan

Yining
Urumqi
Kuqa

Tajikistan
Dushanbe
Mazar-e Sharif
Mashhad

Kashgari
Shule
Kongur Shan
Yecheng
K2
Kunlun

Taklimakan Desert
Hotan
Kunlun

Afghanistan
Kabul
Herat
Kandahar

Peshawar
Islamabad
Rawalpindi
Lahore
Faisalabad
Multan

Kashmir
Srinagar
Gujranwala
Amritsar
Chandigarh

Pakistan
Karachi
Baluchistan
Mirpur Khas
Hyderabad

India
Delhi
New Delhi
Jaipur
Agra
Gwalior
Udaipur
Ajmer
Kota

Gulf of Oman
Muscat
Kandla
Ujjain
Ahmedabad
Indore





Shenyang • Fushun

NORTH KOREA

Duolun • Ulanqab

Zhangjiakou • Dandong • Anshan

Hamhung

SEA OF JAPAN (EAST SEA)

Beijing

Dalian

Pyongyang

Tianjin

Tangshan

Seoul

Shijiazhuang

Yantai

Incheon

SOUTH KOREA

Handan

Zibo

Qingdao

Daegu

Changzhi

Hebei

Tai'an

Yellow SEA

Busan (Pusan)

Luoyang

Heze

Zaozhuang

Gwangju

Zhengzhou

Kaifeng

Xuzhou

Jeju I.

Huainan

Nanjing

Nagasaki

KYUSHU

Wuhan

Hefei

Wuxi

Suzhou

Shanghai

Yichang

Anqing

Hangzhou

Shaoxing

EAST CHINA SEA

Shashi

Huangshi

Quzhou

Ningbo

Luzhou

Changsha

Nanchang

Wenzhou

Zunyi

Zhuzhou

Pingxiang

Amami Tokushima Okino Erabu Okinawa Naha

Shaoyang

Hengyang

Nanping

Fuzhou

Duyun

Guilin

Ganzhou

Quanzhou

Taipei

Shaoguan

Xiamen

TAIWAN RYUKYU

Kunming

Guangzhou

Shenzhen

Tainan

Kaiyuan

Nanning

Hong Kong

Kaohsiung

Gejiu

Jiangmen

Macau

Viet Nguyen

Maoming

Batavia



Misawa
Hachinohe

Akita
Morioka

HONSHU

Sado
Niigata

Sendai

JAPAN

Maebashi
Nagano

Gifu

Kyōto

Kōbe

Hiroshima

Matsuyama

Kyūshū

Kagoshima

Tanega

Yaku

Tokara Islands

Kyūshū Islands

Kyūshū TRENCH

Kyūshū Islands

Kyūshū Islands

Kyūshū Islands

Kyūshū Islands

Kyūshū Islands

Kyūshū Islands

Kyūshū Islands

Kyūshū Islands

Tokyo

Chiba

Yokohama

Nagoya

Osaka

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Shikoku

Miyake

Hachijo

Aoga

Bayonnaise Rocks

Smith Island

Tori

Lot's Wife

Izu Islands

Izu Islands

Izu Islands

Izu Islands

Izu Islands

Izu Islands

Bonin

Islands

Islands

Islands

Islands

Islands

Islands

Islands

Islands

Islands

Islands

Islands

Islands

Parry Group

Beechy Group

Baily or Coffin Group

2630 Kita Iwo To

548 Iwo To (Iwo Jima)

Volcano Islands

Minami Iwo To

Daito

Islands

Japan

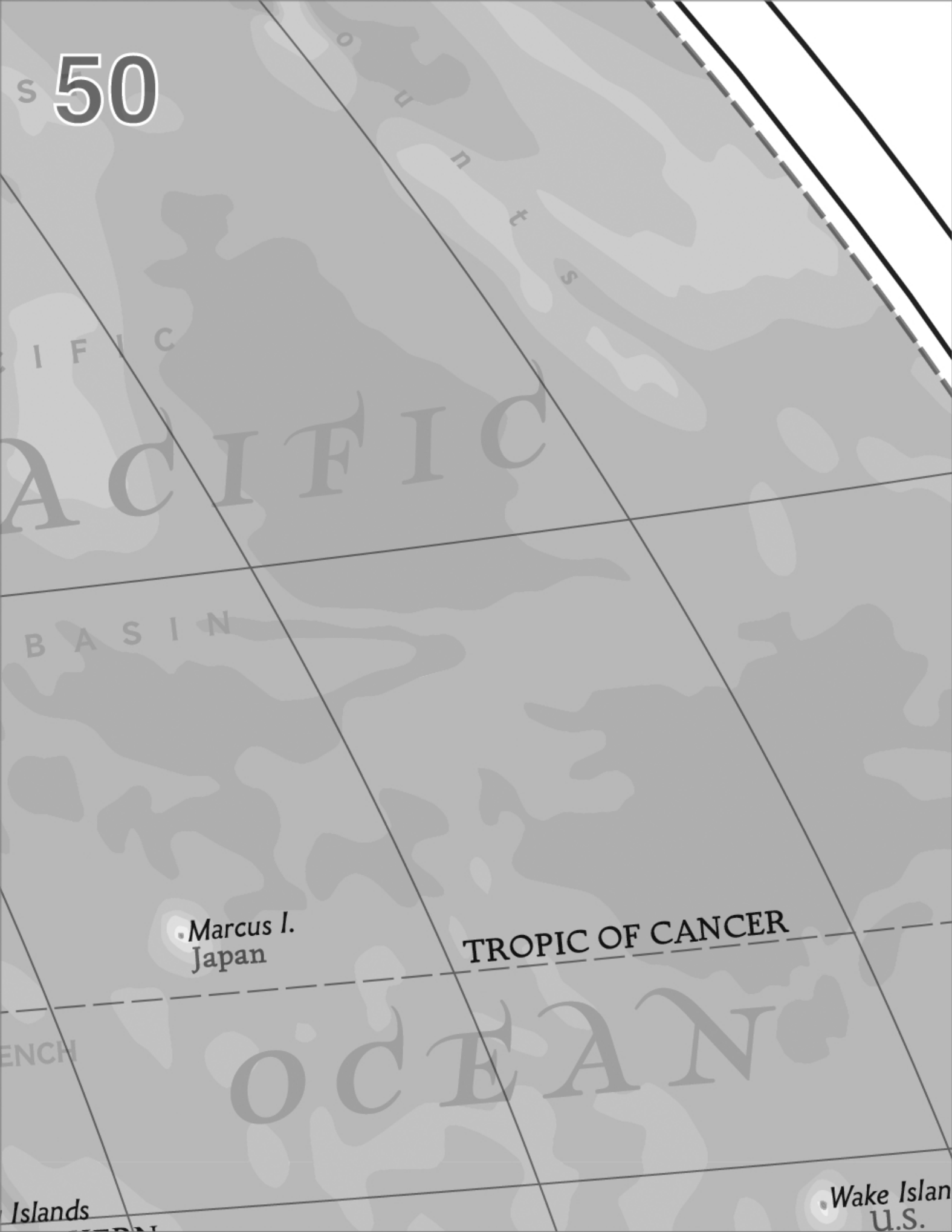
TAIWAN

The People's Republic of China claims Taiwan as its 23rd province. Taiwan maintains that there are two political entities.

Farallon de Pajaros 1096

745 Maug

S 50



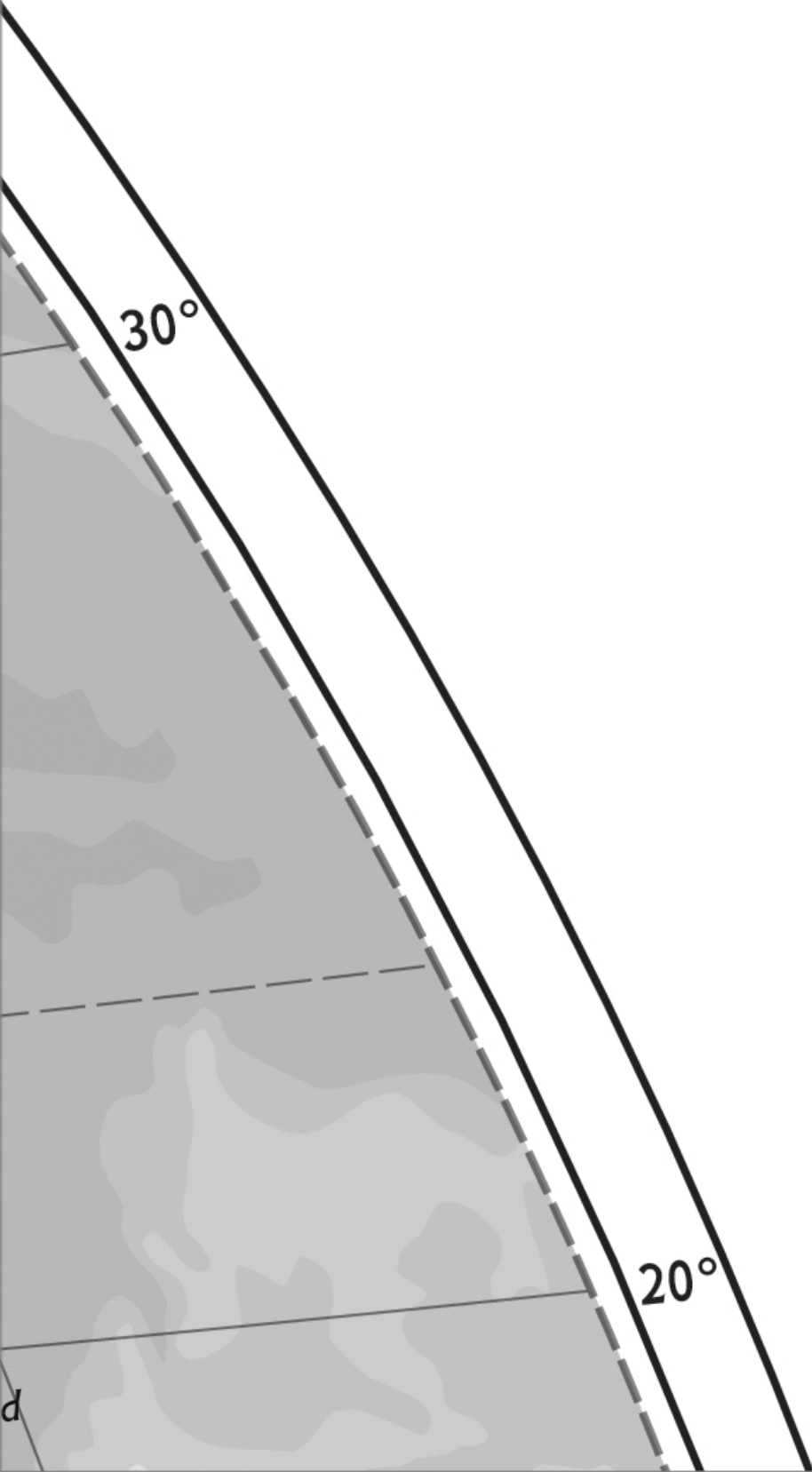
• Marcus I.
Japan

TROPIC OF CANCER

• Wake Island
U.S.

Islands

51



52



10°

2981

5582

0

7

Howland Island
U.S. Baker Island

Johnston U.S.

Palmyra U.S.

EQUATOR

0°

53

ston Atoll
U.S.

13679 Mauna Loa
Hawai'i

O C E A

Kingman Reef U.S.

ra Atoll
U.S.

Teraina (Washington)

10

Tabuaeran (Fanning)

N

Kiritimati
(Christmas I.)

E

4170

OR



54

SIN

N

4610

55

Revillagigedo Islands
Mexico
Clarión I.
Roca Partida I.
San Benedicto I.
Socorro I. 3707

Aguascalientes
Guadalajara
León
Ciudad Guzmán
Morelia
Mexico C
Taj

Acapulco
Omet
Point Mald
Pu
Gulf

Clipperton
France

6661 MIDDLE

E





Greater Antilles
Haiti: Cap-Haïtien, Port-au-Prince
Dominican Republic: Santo Domingo
Puerto Rico: San Juan
Other: Kingston, Guantánamo, Santiago de los Caballeros, Holguín, Camaguey

Lesser Antilles
Leeward Is.: St. Kitts and Nevis, Antigua and Barbuda, Montserrat, Guadeloupe, Dominica, Martinique, St. Lucia, Barbados, St. Vincent and the Grenadines
Windward Is.: Grenada, St. Vincent and the Grenadines

South America
Venezuela: Maracaibo, Barquisimeto, Valencia, Caracas, Maracay, Ciudad Bolívar, Ciudad Guayana, Maturín, Cumaná, Port of Spain, Trinidad and Tobago
Guayana Francesa: Georgetown, New Amsterdam, Linden, Nieuw Nickerie, Cottica
Colombia: Bogotá, Villavicencio, Neiva, Calamar, Mitú

Geographical Features
Gulf of Venezuela
Lake Maracaibo
Caracaras: Pico da Neblina (9823'), Mt. Roraima (8986'), Lethem, Boa Vista, Caracarái, San Carlos de Río Negro
Other: Amuay, Aruba, Curacao, Bonaire, La Guaira, Cúcuta, Mérida, Bucaramanga, Bogotá, Villavicencio, Neiva, Calamar, Mitú



58

Neth. & France

NEVIS

BARBUDA

K.
nce

nce

AND THE GRENADINES

TOBAGO

wn
erdam
ickerie
aramaribo
SURINAME
St.-Laurent du Maroni
Kourou
Cayenne

FRENCH GUIANA France

Oiapoque
erra de
nucumaque
Calçoene
Amapá
C. North
Bailique
Macapá
to Marajó

2961




St. Peter and St. Paul Rocks
 Brazil



S A H

AZAWAD

TANIA

M A L I

N I G E R

BURKINA FASO

E A

T O G O
B E N I N

N I G E R I A

CÔTE D'IVOIRE
(IVORY COAST)

G H A N A

L I B E R I A

A b i d j a n

A c c r a

L a g o s

E Q U A T O R I A L
G U I N E A

S A O T O M E
A N D P R I N C I P E

G U L F O F G U I N E A

Cape Three Points
Sekondi-Takoradi

6640

RÍO MUNI

Lib

Taoudenni

Silet

Tamanrasset

Duadane

Tessalit

Ti-n-Zaouâtene

Iferouâne

Tidjikdja

Boû Djébéha

Kidal

Anefis
I-n-Darane

Tombouctou
(Timbuktu)

Niger

6634
Agadez

Kiffa Néma

Goundam

Gao

Ménaka

Tânout

Nara

Mopti

Tahoua

Nioro du Sahel

Niamey

Maradi

Zinder

Koulikoro

Ségou

Dosso

Sokoto

Katsina

Bamako

Ouagadougou

Gusau

Kano

Sikasso

Bobo Dioulasso

Kandi

Zaria

Kankan

Bawku

Kaduna

abala

Tamale

Parakou

5843
Jos

Beyla

Bouaké

Lake Volta

Ogbomoshó

Abuja

ékoré

Man

Daloa

Iwo

Lagos

Makurá

5748+

Gagnoa

Kumasi

Lagos

Idah

un

Yamoussoukro

Accra

Lagos

Enugu

Harper

Abidjan

Accra

Lagos

Port Harcourt

Cape Palmas

Abidjan

Accra

Lagos

Calabar

Abidjan

Abidjan

Accra

Lagos

Malabo

Abidjan

Abidjan

Accra

Lagos

BIOKO

Abidjan

Abidjan

Accra

Lagos

DOU

Abidjan

Abidjan

Accra

Lagos

Bat

Abidjan

Abidjan

Accra

Lagos

Lib



A R A B I A

62

Mecca

Jeddah

As Sulayyil

Al Ḥadīdah
(meteorite craters)

Rub' al Khali (Empty Quarter)

ERITREA

YEMEN

DJIBOUTI

ETHIOPIA

SOMALILAND

PUNTLAND

SOMALIA

KENYA

UGANDA

TANZANIA

Mt. Kenya

Halayeb
7271

Al Badī'

Abu Hamed

Suakin

Al Qunfudhah

Tokar

Algena

Khamīs

Atbara

Agordat

Mushayṭ

Kassala

8451+

Jīzān

Ṣa'dah

Sennar

Massawa

Sanaa

12336+

Sayhūt

Salālah

Gedaref

Mekele

Al Ḥudaydah

Al Mukallā

15158+

Gonder

Assab

Ta'izz

Aden

Lake Tana

Bahir Dar

Desē

Djibouti

Gulf of Aden

Bure Nile

Debre Mark'os

Berbera

+7900

dok

Dire Dawa

Harar

Hargeysa

Abd al Kūrī

Tamri

Addis Ababa

512+

Djibouti

Boosaaso

So

493

Gorē

Jīma

Āsela

Goba

Ogaden

Domo

Garoowe

Eyl

owot

Yirga 'Alem

14131+

Goba

Īmī

K'orahē

Gaalkacyo

Hilalaya

ba

Majī

Ārba Minch'

Beledweyne

Xarardheere

Boundary claimed by Kenya

Mēga

Dolo Bay

Mereeg

okitaung

Moyale

Baydhabo

Cadale

Lake Turkana

Marsabit

Wajir

Mogadishu

L. Rudolf

Maralal

Dif

Marka

ba

visumu

Jamaame

Baraawe

Kampala

Jinja



64

Kolkata (Calcutta)

MYANMAR (BURMA)

Nagpur

Raipur

Cuttack

Sittwe

Nay Pyi Taw

Chandrapur

Bhubaneswar

Brahmapur

Sandoway

Pyu

Louangphraba

Warangal

Vishakhapatnam

Hinthada

Chiang Vientiane

Kakinada (Cocanada)

Patheingyi

Bago

Vijayawada

(Rangoon) Yangon

Mawlamyine

Phitsanulok

Kurnool

Nakhon Ratchasima

Bangalore (Bengaluru)

BENGAL

Dawei

Bangkok

Chennai (Madras)

ANDAMAN ISLANDS

India

Port Blair

Sattahip

Puducherry (Pondicherry)

Little Andaman I.

Myeik

Hua Hin

Tiruchchirappalli

3601

Isthmus of Kra

Madurai

Car Nicobar I.

NICOBAR ISLANDS

India

Great Nicobar I.

Surat Thani

Jaffna

Trincomalee

SRI LANKA

Phuket

Kandy

Sri Jayewardenepura

Hat Yai

Colombo

Galle

Kotte

Banda Aceh

George Town

Gulf of Manner

1842

Kutanibong

Medan

Simeulue Pematangsiantar

Sibolga

Nias

Pel



65

Hanoi ● **Haiphong**

● **Nam Dinh** ● **Haikou**
● **Thanh Hoa** ● **Dongfang**
● **Vinh** ● **Sanya**

6125+ **HAINAN**

○ **Hue** ● **Dong Hoi**
● **Quang Tri**

● **Da Nang**

VIETNAM

CAMBODIA

● **Qui Nhon**

● **Buon Me Thuot**
● **Nha Trang**

● **Da Lat** ● **Cam Ranh**

● **Bien Hoa**
Ho Chi Minh City

● **Phnom Penh**

● **Can Tho**

● **Nam Can**

Con Son Is.

● **Songkhla**

● **Kota Baharu**

● **Kuala Terengganu**

● **Kuantan**

MALAYSIA
● **Kuala Lumpur**

● **Johor Baharu**

● **SINGAPORE**

Bintan

● **Kuching**

● **Kota Kinabalu**

● **Bandar Seri Begawan**

BRUNEI

● **SABAH**

● **Tawau**

MALAYSIA
● **SARAWAK**

● **Sibu**

BORNEO

9800

● **Sangkulirang**

● **Zamboanga**

13455 **Kinabalu**

● **Sandakan**

● **Tarakan**

● **Tolito**

Pratas I.

Luzon Strait

Paracel Is.

9626+ **Mt. Pinatubo**
4875

● **Batangas**

● **Naga**
Mindoro

Palawan

● **Puerto Princesa**

6890+

Balabac

Spratly Islands

Sulu

Philippines

Babuyan

Apur

Tuguegarao

Baguio

Ang

Mindanao

Naga

Mas

Pan

Iloilo

Bacolod

Negros

Sulu

Zamboanga

Bas

Sandakan

AR

Tarakan

Tolito

G

66



PHILIPPINE

SEA

Manila

PHILIPPINES

Legazpi

Calbayog Samar

Roxas City

Leyte

Cebu City

Cagayan de Oro

MINDANAO

Davao

General Santos

Cotabato City

Sulu Archipelago

Talauud Is.

Sangihe Is.

Siau

Manado

Halmahera

Ternate

Tobi

Helen I.

Morotai

Mapia Is.

PALAU

Babelthuaap

Yap Islands

Ngulu Atoll

Melekeok

Sonsorol Islands

Merir

Ulithi Atoll

Fais

Sorol Atoll

Woleai Atoll

Eauripik Atoll

2923 Asuncion

3166 Agrihan

1870 Pagan

Alamagan

988

1801 Sarigan

2585

1529 Saipan

614 Tinian

1627 Rot

1332

Hagatña

(Agaña)

Challenger Deep -1099

PHILIPPINE

10057

TRENCH

YAP TRENCH

FEDER

C

A

R

O

M

Waigoo

asih

67

NORTHERN
MARIANA
ISLANDS
2441 U.S.

Guguan
Anatahan
Farallon de Medinilla 266
Capital Hill

GUAM
U.S.

NORTHEAST TRADE WINDS

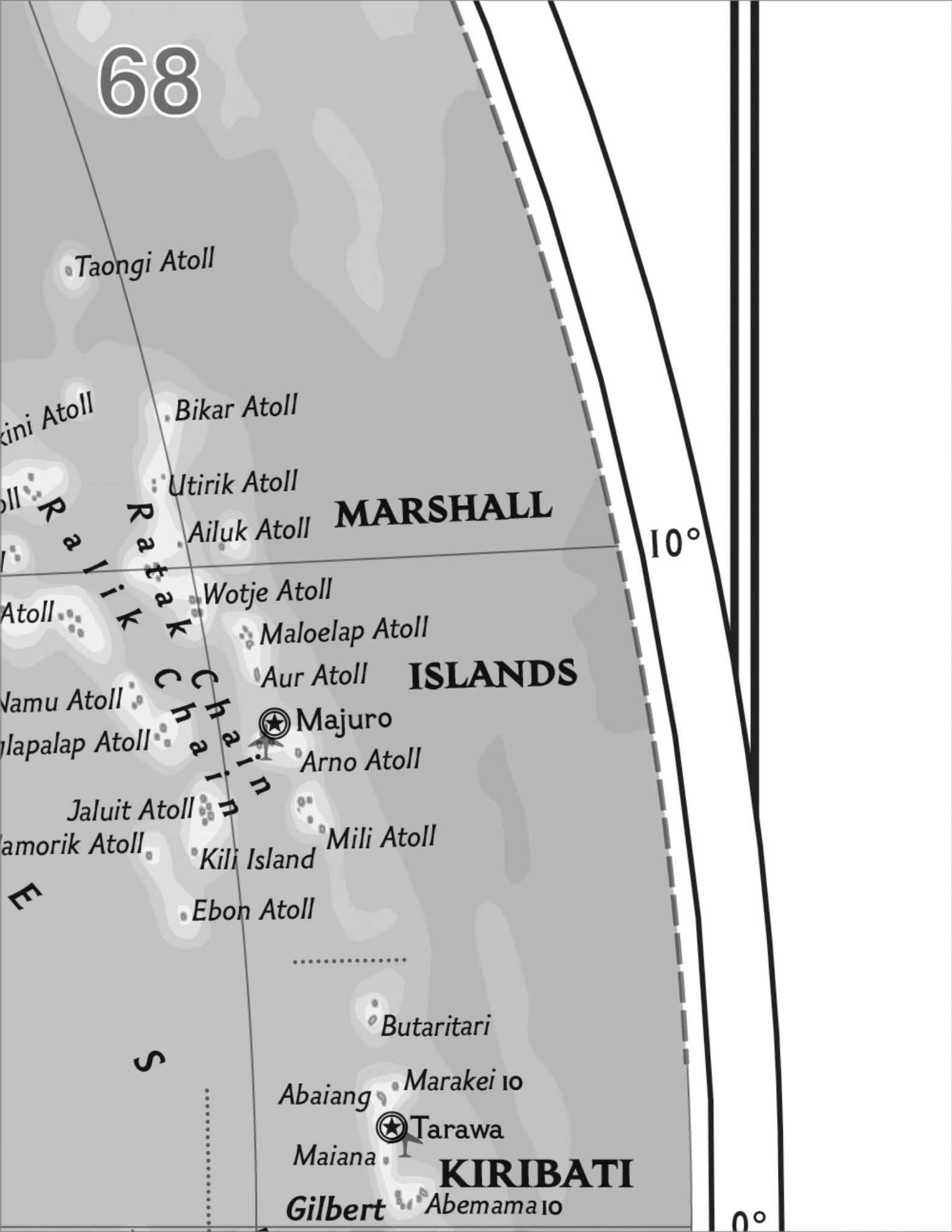
MARIANA TRENCH

Eniwetok Atoll
Ujelang Atoll
Rongelap Atoll
Wotho Atoll
Kwajalein
Ailing
Mokil Atoll
Pingelap Atoll
Kosrae
Palikir
Senyavin Is.
Pohnpei (Ponape)
Oroluk Atoll
Losap Atoll
Namonuito Atoll
Hall Is.
Pulap Atoll
Chuuk (Truk Is.)
Mortlock Is.
Ngatik Atoll
West Fayu
Ifalik Atoll
Satawal
Puluwat Atoll
Pulusuk

UNITED STATES OF MICRONESIA

LINE ISLANDS

Group
Kapingamarangi Atoll
EQUATOR



10°

0°

S

MARSHALL

ISLANDS

KIRIBATI

Gilbert

Taongi Atoll

Bikar Atoll

Utirik Atoll

Ailuk Atoll

Wotje Atoll

Maloelap Atoll

Aur Atoll

Majuro

Arno Atoll

Jaluit Atoll

Mili Atoll

Kili Island

Ebon Atoll

Butaritari

Abaiang

Marakei 10

Tarawa

Maiana

Abemama 10

ini Atoll

Utirik Atoll

Ailuk Atoll

Wotje Atoll

Maloelap Atoll

Aur Atoll

Majuro

Arno Atoll

Jaluit Atoll

Mili Atoll

Kili Island

Ebon Atoll

Butaritari

Abaiang

Marakei 10

Tarawa

Maiana

Abemama 10

ini Atoll

Utirik Atoll

Ailuk Atoll

Wotje Atoll

Maloelap Atoll

Aur Atoll

Majuro

Arno Atoll

Jaluit Atoll

Mili Atoll

Kili Island

Ebon Atoll

Butaritari

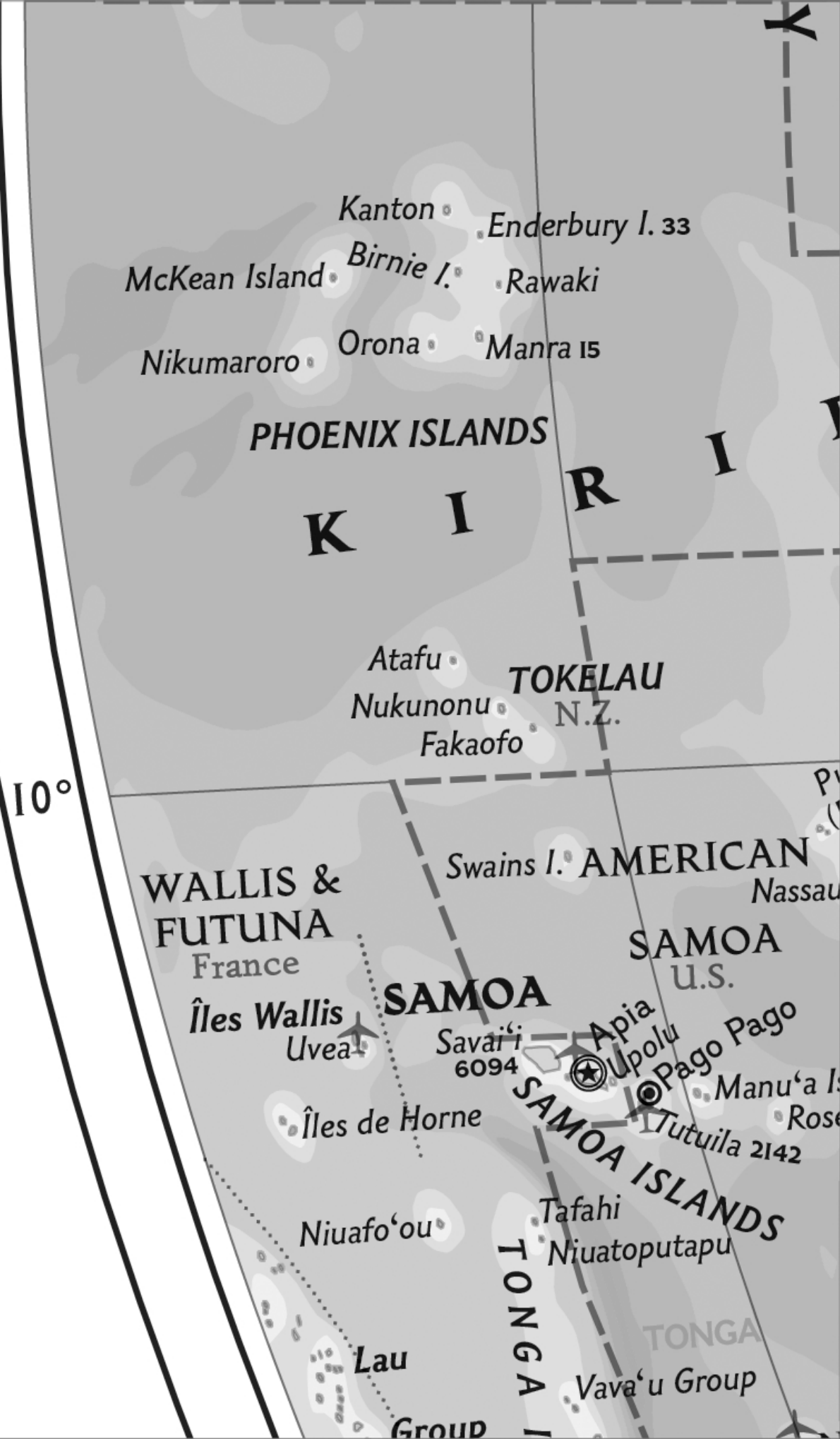
Abaiang

Marakei 10

Tarawa

Maiana

Abemama 10



10°

Kanton • Enderbury I. 33
 McKean Island • Birnie I. • Rawaki
 Nikumaroro • Orona • Manra 15

PHOENIX ISLANDS

K I R I B A T I

Atafu • **TOKELAU**
 Nukunonu • N.Z.
 Fakafo

WALLIS & FUTUNA
 France

Îles Wallis
 Uvea

Îles de Horne

Niuafou'ou

Lau

Swains I. **AMERICAN**
 Nassau

SAMOA
 U.S.

SAMOA

Savai'i 6094

Apia

Upolu

Pago Pago

Manu'a I.

Tutuila 2142

Tafahi

Niutoputapu

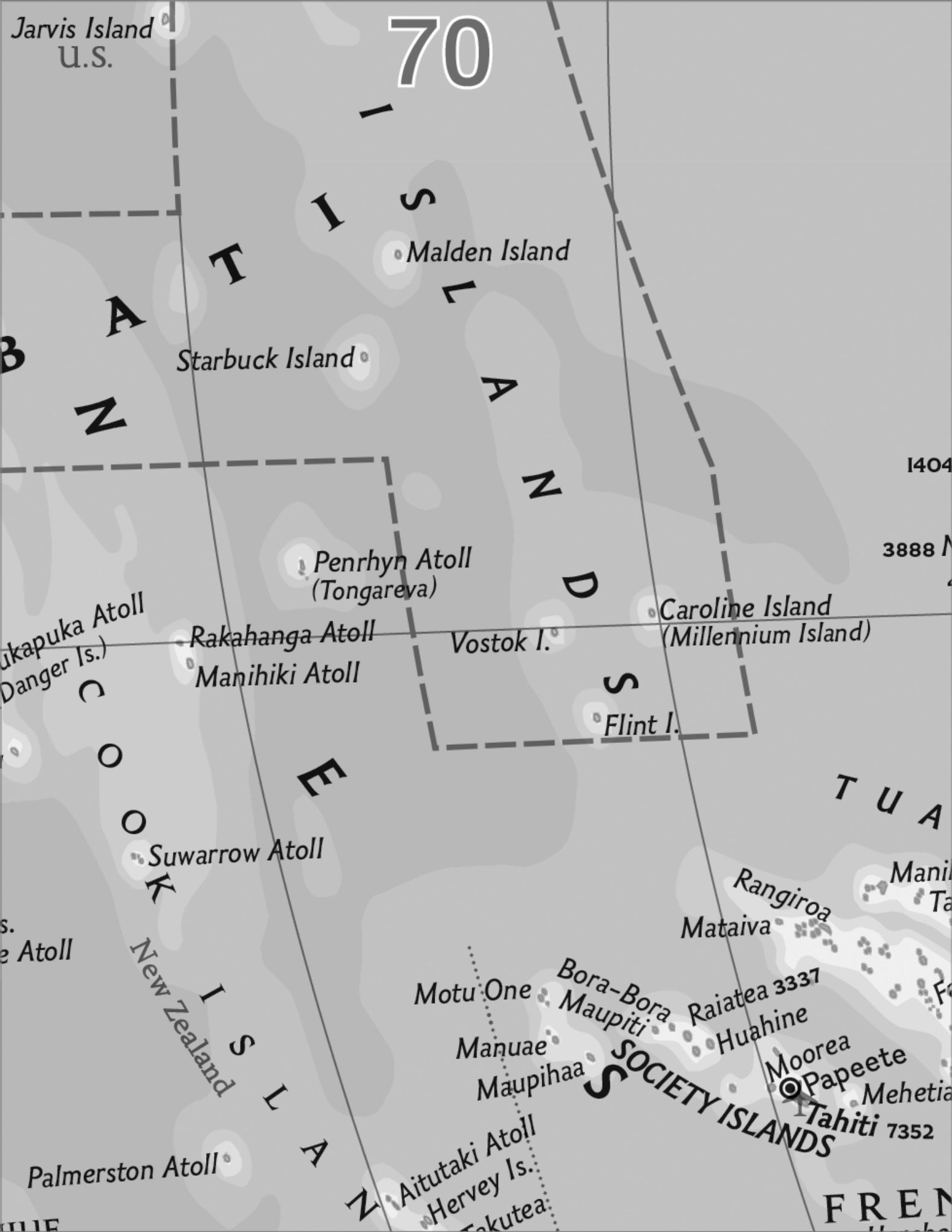
SAMOA ISLANDS

TONGA I

TONGA

Vava'u Group

Group



70

Jarvis Island
U.S.

Malden Island

Starbuck Island

Penrhyn Atoll
(Tongareva)

Caroline Island
(Millennium Island)

Rakahanga Atoll
Manihiki Atoll

Vostok I.

Flint I.

Suvarrow Atoll

Rangiroa
Mataiva

Motu One
Bora-Bora
Maupiti
Raiatea 3337
Huahine

Manuae
Maupihaa
Moorea
Papeete
Mehetia

Tahiti 7352

Palmerston Atoll

Aitutaki Atoll
Hervey Is.
Fakutea

Jarvis Island
U.S.

Nukunono Atoll
Danger Is.

Phoenix Atoll

New Zealand

SOCIETY ISLANDS

FRENCH

Hatutu
Eiao 4527

MARQUESAS ISLANDS France

Nuku Hiva Ua Huka

4042 Ua Pu Hiva Oa 3904

3280 Tahuata Mohotani (Motane)

Fatu Hiva 3150

M O T U

Napuka

Pukapuka

Fangatau

A R C H I P E L A G O

Makemo Raroia

Tatakoto Amanu

Hao Reao

Anaa Reitoru

Nengonengo

N C H P O L Y N E S I A

France

4190

2610

S

O

I

C

U

T

F

R

I

S

I. Fernandina
Isla Isabela

I. Santa Cruz

I. San Cristóbal

Puerto Villamil
Puerto Baquerizo Moreno

GALAPAGOS ISLANDS
Ecuador

Manta
Portoviejo
Guayaquil

Chimborazo
Riobamba

Machala
Tumbes

Cuenca

Pariñas Point
Talara
Loja

Paita
Piura

Aguja Point

Chiclayo
Tarapoto

Pacasmayo
Cajamarca

Trujillo

Salaverry
Chimbote

Huaraz

Huánuco

Cerro de Pasco

Callao
Lima

Huancayo

P E R U

B A S I N

C A R I D G E



74 Negro

Manaus

B R

BOLIVIA

P A C R

Iquitos

Rio Branco

Porto Velho

Príncipe da Beira

Machu Picchu

Arequipa

La Paz

Oruro

Santa Cruz

Iquique

Potosí

Sucre

Calama

Coru

Can

Gran

Mariscal Estigarribia

Tocopilla

Aguaray

Camiri

San José de Chi

Cáce

San Matías

Mato Grosso

Trinidad

Vilhena

Riberalta

Mirim

Guajar

Ji-Paraná

Boca do Acre

Lábrea

Prainha

Canutama

Eirunepé

Pucallpa

Cruzeiro do Sul

Humaitá

Coari

Tefé

São Paulo de Olivença

Fonte Boa

Carvoeiro

Japurá

Barcelos

Parintins

Monte Alegre

Óbidos

Itai

Borba

Manicoré

Jacareaca

Barra do

São Manu

Pa

Pa

C

San

Coru

Can

Gran

Can

Gran

Can

Gran

to
razo
mba
a
marca
2205
evado
co
co
cavelica
isco
Ica
Nasca
Nevado
Matarani
Moquegua
Pisagua
Tocopilla

Güepipi
Pedrera
Caquetá
Putumayo
Napó
Ucayali
Javari
Cuzco
Huancayo
Ayacucho
Abancay
Coropuna
Matarani
Moquegua
Tacna
Arica
Pisagua
Iquique
Tocopilla

74
Fonte Boa
São Paulo
de Olivença
Jutaí
Eirunepé
Contamana
Cruzeiro do Sul
Pucallpa
Boca do Acre
Rio Branco
Cobija
Puerto
Maldonado
Machu Picchu
Cusco
Juliaca
La Paz
Arequipa
Matarani
Moquegua
Tacna
Arica
Pisagua
Iquique
Tocopilla

Manaus
Tefé
Coari
Manicoré
Canutama
Lábrea
Humaitá
Calama
Porto Velho
Guajar
Mirim
Riberalta
Príncipe da Beira
Trinidad
Mato Grosso
Vilhena
San Matías
Cochabamba
Oruro
Sucre
Potosí
Camiri
Mariscal Estigarribia
Tarija
Calama
Aguaray

Barcelos
Carvoeiro
Japurá
Fonte Boa
São Paulo
de Olivença
Jutaí
Eirunepé
Contamana
Cruzeiro do Sul
Pucallpa
Boca do Acre
Rio Branco
Cobija
Puerto
Maldonado
Machu Picchu
Cusco
Juliaca
La Paz
Arequipa
Matarani
Moquegua
Tacna
Arica
Pisagua
Iquique
Tocopilla

Monte Alegre
Óbidos
Parintins
Itacoatiara
Borba
Manicoré
Jacareaca
Barra do
São Manu
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Gran

76

ROMANCHE GAP

7729

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Fernando de Noronha Brazil

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Brazil

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77

5097

São Tomé

Port-Gentil

GA

Annobón

Equatorial Guinea

Iguéla

Fra

Setté Cama

Mayumba

Br

Pointe-Noir

Angola CABIN

2802

5391

Lua

Porto

Ben

Lu

Namib

A N G O L A

2700 ST. HELENA
U.K.

B A S I N

Baía dos Tigres
Foz do Cunene

Cape Fr

Ses

T H

Palgrave

G E

Sw

W



78 DEM. REP.

OF THE CONGO

Kinshasa

ANGOLA

Lubumbashi

ZAMBIA Lusaka

ZIMBABWE

NAMIBIA

BOTSWANA

Lake Mai-Ndombe

Lake Tanganyika

Lake Mweru

Lake Kariba

Victoria Falls

Okavango Delta

Etosha Park

Mitumba Mts.

Zambezi

Namib

Mossaka

Inongo

Ikela

Mbarara

Goma

nceville

Tchibanga

Bandundu

Kindu

Bukavu

Kigali

Bujumbura

azzaville

re

ND

Matadi

Kikwit

Mweka

Kasongo

Kigoma

TAN

Bembe

Kahemba

Mbuji-Mayi

Kalemie

ambriz

Uige

Chitato

Manono

nda

Catete

Malanje

Saurimo

KATANGA

Pweto

Mbala

Dondo

Calulo

Cacolo

Sandoa

Kolwezi

Likasi

Mansa

Amboim

Sumbe

Luena

Lubumbashi

Mpika

obito

guela

8597+

Kuito

Huambo

Macondo

Chingola

Kitwe

Ndola

cira

Kuvango

Mussuma

Mongu

Kabwe

Lilongwe

be

Lubango

Menongue

ZAMBIA

Lusaka

s

Humbe

Mavinga

Mongu

Kabwe

Lusaka

e

Xangongo

4396+

Dirico

Mongu

Kabwe

Lusaka

ia

Ondangwa

Livingstone

Kariba

Muta

fontein

Tsumeb

Grootfontein

Livingstone

Kariba

Muta

e Point

Brandberg+8442

NAMIBIA

Francistown

Bulawayo

kopmund

Walvis Bay

Windhoek

Gobabis

BOTSWANA

Francistown

Massangena

Palapye

Thoboyandou



Nakuru
17058

Nairobi

Mwanza
19340

Tanga

TANZANIA

Dodoma

Mbeya

MALAWI

MARRUPA

Mozambique

Beira

Mambone

Mozambique Channel

Bura

Kismaayo

Kaambooni

Lamu

Malindi

Mombasa

Pemba I.

Zanzibar

Zanzibar

Dar es Salaam

Mafia I.

Kilwa Kivinje

Lindi

Songea

Negomano

Marrupa

Lichinga

7936

9843

Moma

Quelimane

Chinde

Beira

Nova

Mambone

Bassas da India Fr.

Île Europa

Mtwara

Cabo Delgado

Moroni

COMOROS

MAYOTTE

Mamoudzou

France

Nacala

Moçambique

Nampula

Mahajanga

Marovoay

Maintirano

Belo-Tsiribihina

Manja

Morombe

Fianarantsoa

Aldabra Is.

Cosmoledo Is.

Glorioso Is.

France

Cap d'Ambre

Antsirañana

Andoany (Hell-Ville)

9436

Massif du Tsaratana

Antalaha

Maroantsetra

Nosy Ste. Marie

Ambatondrazaka

Toamasina

Antsirabe

Port Lo

SEYCHELLES

Providence I.

Farquhar Gro

France

Cap d'Ambre

Antsirañana

Andoany (Hell-Ville)

9436

Massif du Tsaratana

Antalaha

Maroantsetra

Nosy Ste. Marie

Ambatondrazaka

Toamasina

Antsirabe

Port Lo

St.-Denis

France

4609

France

France

France

France

France

France

France

France

France

France

France

France

France

France

France

France

Victoria

Amirante

Isles

Alphons

Providence I.

Farquhar Gro

France

Cap d'Ambre

Antsirañana

Andoany (Hell-Ville)

9436

Massif du Tsaratana

Antalaha

Maroantsetra

Nosy Ste. Marie

Ambatondrazaka

Toamasina

Antsirabe

Port Lo

St.-Denis

France

Seychelles

Praslin I.

Mahé I.

Platte I.

Coetivy I.

Agalega Is.
Mauritius

France

Cargados

Carajos

Bank

Mauritius

Rodrigues
Mauritius

MAURITIUS

MASCARENE ISLANDS

Addu Atoll
Gan I.

Peros Banhos

Three Brothers
Danger I.

Egmont Is.
Diego Garcia

Salomon Is.

Nelsons I.

CHAGOS ARC

(OIL ISLA

British In

Ocean Te

M I D - I N D I A N I R I D
M A S C A R E N E P L A T E A U



CHIPELAGO
(ISLANDS)
Indian
territory

4547

Pacific
Siberut
Mentaw
Islands

5421

Cocos (Keeling)
Islands

D I A N
N E T Y E A S T I A N
W H A T
B A S



82

Archipelago
 Pontianak Samarinda
 Balikpapan
 Ketapang
 Banjarmasin Kandangan
 Laut
 Palembang
 Billiton
 Palembang
 Kotabumi
 Java Sea
 Sunda Str.
 Bogor Cirebon
 Semarang
 Bandung Tasikmalaya
 Yogyakarta
 Surakarta
 Surabaya
 Malang
 Jember
 Denpasar
 Lombok
 Bali
 Raba
 Sumbawa
 LESSER SUNDA
 Christmas I.
 Australia
 (Keeling) Islands
 Australia
 TRENCH
 King Sound
 Dampier Land
 Broome
 Eighty Mile Beach
 Dampier
 Barrow I.
 Port Hedland
 Dampier



SOUTHEAST ASIA

Wageo
+9843
Sorong
Obi
Manokwari
Biak
Sarmi
Jaya
Fakfak
Nabire
Jaya Peak +16502
Amamapare
Kendari
Ambon
Tual
Aru Is.
Kai Is.
Tanimbar Islands
Dolak
Muting
Merauke
Mt. Ha
P
NEW
Daru
Torres S

NEW GUINEA

TIMOR-LESTE (EAST TIMOR)

Wetar
Alor
Flores
Tuteng
Baingapu
Umba
Roti
Kupang
Timor
Dili
Baquia
Melville I.
Cobourg Pen.
Wessel Is.
Darwin
Pine Creek
Jabiru
Oenpelli
ARNHEM LAND
Alyangula
Groote Aurukun
Eylandt
Katherine
Ngukurr
Wyndham
Kununurra
Borroloola
Newcastle
Waters
Burketown
Croydon
Georgetown
Kowanyama
Weipa
Cairns
Innisfail
5321+

NORTHERN TERRITORY

Banda Sea
Arafura Sea
Timor Sea
Gulf of Carpentaria
Joseph Bonaparte Gulf
Cape Talbot Gulf
L. Argyle
Mt. Ord
+3074
Derby
Fitzroy Crossing
Halls Creek
Tennant Creek
Camooweal



NAURU 230

85

Banaba
(Ocean I.) 265

Nonouti
8 Beru

Tabiteuea
ISLANDS
Tamana
Arorae
15

Nanumea
Nanumanga
Niutao

TUVALU
Nui
Vaitupu
Nukufetau
Funafuti
Vaiaku
Nukulaelae

**LOMON
ISLANDS**

Is.
Duff Is.

Nendö
Vanikolo Is.
Tikopia

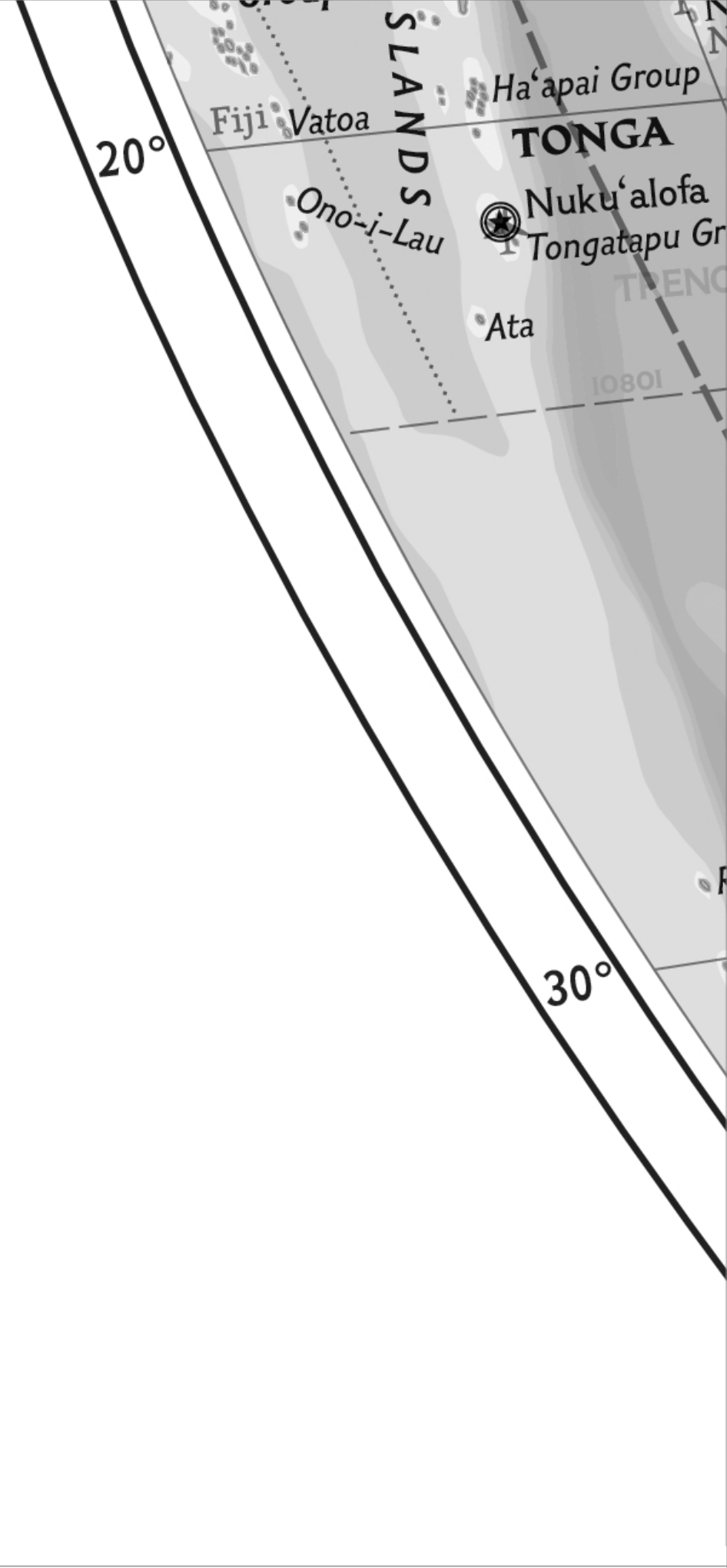
Banks Is.

Maéwo
Pentecost
Ambrym
Épi

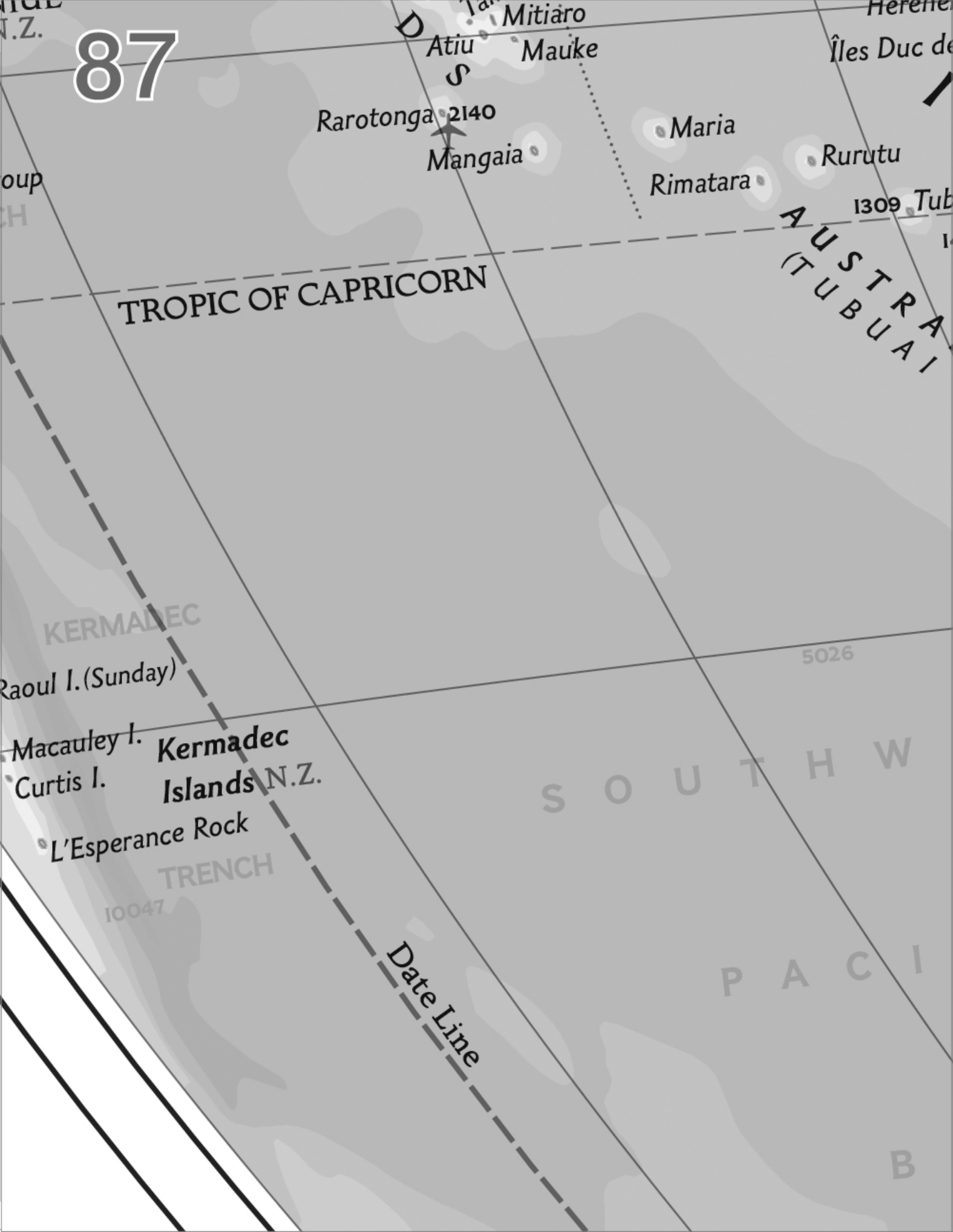
Port Vila

FIJI
Labasa
Vanua Levu
Lautoka
Nadi
Viti Levu
Suva

10°



87



N.Z.

oup
CH

Raoul I. (Sunday)

Macauley I.
Curtis I.

**Kermadec
Islands** N.Z.

L'Esperance Rock

TRENCH
10047

Date Line

S O U T H

P A C I

B

Mitiaro
Atiu
Mauke

Rarotonga 2140
Mangaia

Maria
Rimatara

Rurutu
1309 Tubuai

**A U S T R A L I A N
(T U B U A I)**

5026

Îles Duc de



88

Gloucester

ouai

434 Raivavae

WEST ISLANDS

WEST

F I C

A S I N

Tematangi

Mururoa
Fangataufa

Groupe Actéon

A

Morane

Mangareva

1447

Îles Gambier

Temoe

1100

Pitcairn

PITCAIRN
United States
3839

Neilson Reef

2077 Rapa

Marotiri
(Îlots de Bass)

Tureia

Marutea

Oeno

Henderso

on
Ducie

KN ISLANDS
d Kingdom

1969 Easter Island
(Isla de Pascua,
Rapa Nui)
Chile

Isla Sa

P A C

279

T

90

Isla y Gómez
Chile

Isla San Félix
Chil

I F I C

Isla Róbi
Isla Alejandro S
JUAN FER

C H I L E



Mejillones • San Salvador de Jujuy • Antofagasta

Llullaillaco Volcano: 22057

Isla San Ambrosio

Taltal • Diego de Chañaral • Almagro

Caldera • Cerro Ojos del Salado: 22572 • Huasco • Cerro del Toro: 20932

La Serena

Ovalle

Los Vilos • San Juan • Cerro Aconcagua: 22831

Valparaíso

Santiago

Rancagua

Talca

Chillán

Concepción

Los Ángeles

Temuco

Valdivia

Osorno

Puerto Montt

Ancud

Isla Grande de Chiloé

Esquel

Chonos

Salta

San Miguel de Tucumán

Belén

Santiago del Estero

Catamarca

La Rioja

Córdoba

Santa Fe

Mendoza

San Luis

Paraná

Río Cuarto

San Rafael

Curicó

Volcán Domuyo: 15449

Neuquén

Zapala

Chivilcoy

Pehuayán

Olavarría

Río Colorado

San Carlos de Bariloche

General San Martín

Puerto

Camarc

3991

NANDEZ ISLANDS Chile



Concepción

Londrina

92

Y

Armosa
rrientes

Passo Fundo

Mercedes

Uruguaiana

Salto

Paysandú

URUGUAY

ario

La Plata

Azul

idil

Tres Arroyos

Blanca

Madryn

ones

Campinas

Sorocaba

Curitiba

Iguazú Falls
Joinville

Posadas

Santa Maria

Uruguaiana

Salto

Paysandú

URUGUAY

La Plata

Azul

idil

Tres Arroyos

Blanca

Madryn

ones

Santos

Iguape

São Paulo

Paranaguá

Florianópolis

Imbituba

Tubarão

Caxias do Sul

Porto Alegre

Pelotas

Rio Grande

Treinta y Tres

Colonia del Sacramento

Rocha

Montevideo

La Plata

Azul

idil

Tres Arroyos

Blanca

Madryn

Nova Iguaçu

Rio de Janeiro

Santos

Iguape

São Paulo

Paranaguá

Florianópolis

Imbituba

Tubarão

Caxias do Sul

Porto Alegre

Pelotas

Rio Grande

Treinta y Tres

Colonia del Sacramento

Rocha

Montevideo

La Plata

Azul

idil

Tres Arroyos

Uberlândia

Rio de Janeiro

Santos

Iguape

São Paulo

Paranaguá

Florianópolis

Imbituba

Tubarão

Caxias do Sul

Porto Alegre

Pelotas

Rio Grande

Treinta y Tres

Colonia del Sacramento

Rocha

Montevideo

La Plata

Azul

idil

Tres Arroyos

Uberlândia

Rio de Janeiro

Santos

Iguape

São Paulo

Paranaguá

Florianópolis

Imbituba

Tubarão

Caxias do Sul

Porto Alegre

Pelotas

Rio Grande

Treinta y Tres

Colonia del Sacramento

Rocha

Montevideo

La Plata

Azul

idil

Tres Arroyos

638

RIO GRA

5421

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TRIST
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T I W A L V I S R I D C

Tristan da Cunha Island
Pightingale I.

5115

AN
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2986° Gough

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95



KALAHARI DESERT Polokwane (Pietersburg) + 6980

Rehoboth
Maltahöhe

Gaborone
Pretoria (Tshwane)
Johannesburg

Mbabane
SWAZILAND
Lobamb

Keetmanshoop
Lüderitz
Warmbad
Upington + 7224

Bloemfontein
Kimberley

Welkom
Vryheid
Cape St

Alexander Bay
Port Nolloth
Springbok
Garies

Prieska
De Aar
Maseru + 11425
LESOTHO

Pietermarit
Durban
Port Shepston

Calvinia
Lambert's Bay
Cape Columbine
Saldanha
Paarl

Mthatha
Umzimvubu
Queenstown
Bhisho

Cape Town
Cape of Good Hope

Grahamstown
East London
Port Alfred

George
Mossel Bay
Cape Agulhas

Port Elizabeth

5372

2365

S



96

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AND
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Lucia
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INDIA

638

Îles des Apôtres

Possession 3064

4654

1372

Barra Point
Inhambane

Toliara
Ampanihy
Androka
Bekily
Tolaïaro

Cap Ste. Marie

Vangaindrano

Fr.





Île Amsterdam
France 1423

Île St.-Paul

4000

374

966

E

A

N

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44

4572

6602

T



Cape Inscription

Steep Point

Geraldton

Dongara

Perth

Fremantle

Geographe Bay

Cape Naturaliste

Cape Leeuwin

Manjimup

West Cape Howe

Mullewa

Wubin

Merredin

Northam

Rockingham

Bunbury

Katanning

Albany

Meekatharra

A U S T R A L I A

Mount Magnet

Leonora

Laverton

Southern Cross

Kalgoorlie

Kambalda

Norseman

Esperance

Cape Pasley

Salisbury I.

Carnarvon

Denham

Meekatharra

Wiluna

Tom Price

4104+

Newman

Exmouth

Onslow

WESTERN AUSTRALIA

Mt. Meharry

Lake Disapp

L. Carnegie

Great V Des

Nullarbor

Rawlinna

Eucl

GREAT AUSTRALIAN

BIGHT

Por

SOUTH

AUSTRALIAN

BASIN



100
N

Barrow Creek

Mount Isa

Cloncurry
Hughenden

Lake Mackay

Dajarra

Mt. Leisler 2955

Macdonnell Ranges

QUEENSLAND

Alice Springs

Winton
Longreach

STRALIA

Yulara

Simpson
Desert

Birdsville

Charleville

Emerald

Mount 4723

Woodroffe

Oodnadatta

Lake Eyre -52

Cooper
Cr.

Quilpie

Roma

Cunnamulla

Toowoomba

SOUTH

Goondiwindi

Marree

Collarenebri

Plain Lake Torrens

Leigh Creek

Bourke

Walgett

AUSTRALIA

Ceduna

Broken Hill

Darling

NEW

Whyalla

Port Augusta

SOUTH

Port Pirie

Dubbo

Wallaroo

Mildura

WALESE

Port Lincoln

Adelaide

Wagga
Wagga

Orange

Sydney

Spencer Gulf
St. Vincent

Adelaide

Albury

Goulburn

Wollongong

Kangaroo I.

Bendigo

Albury

Cooma

Canberra, A.C.T.

Mount Gambier

VICTORIA

7310+
Mt. Kosciuszko

Ballarat

Melbourne

Warrnambool

Geelong

Traralgon

King Island

Bass Strait

Wilson's Promontory

Burnie

Furneaux Group



101

NEW CALEDONIA
France

Mt. Panié
5341+

Loyalty Is.

Nouméa
Île des Pins

TROPIC OF CAPRICORN

S O U T H

P A C I F I C

Australia
NORFOLK ISLAND
Phillip Island

O C E A N

Three Kings Is.

NORTH ISLAND

North Cape

Whangarei

Great Barrier I.

Auckland

Manukau

Tauranga

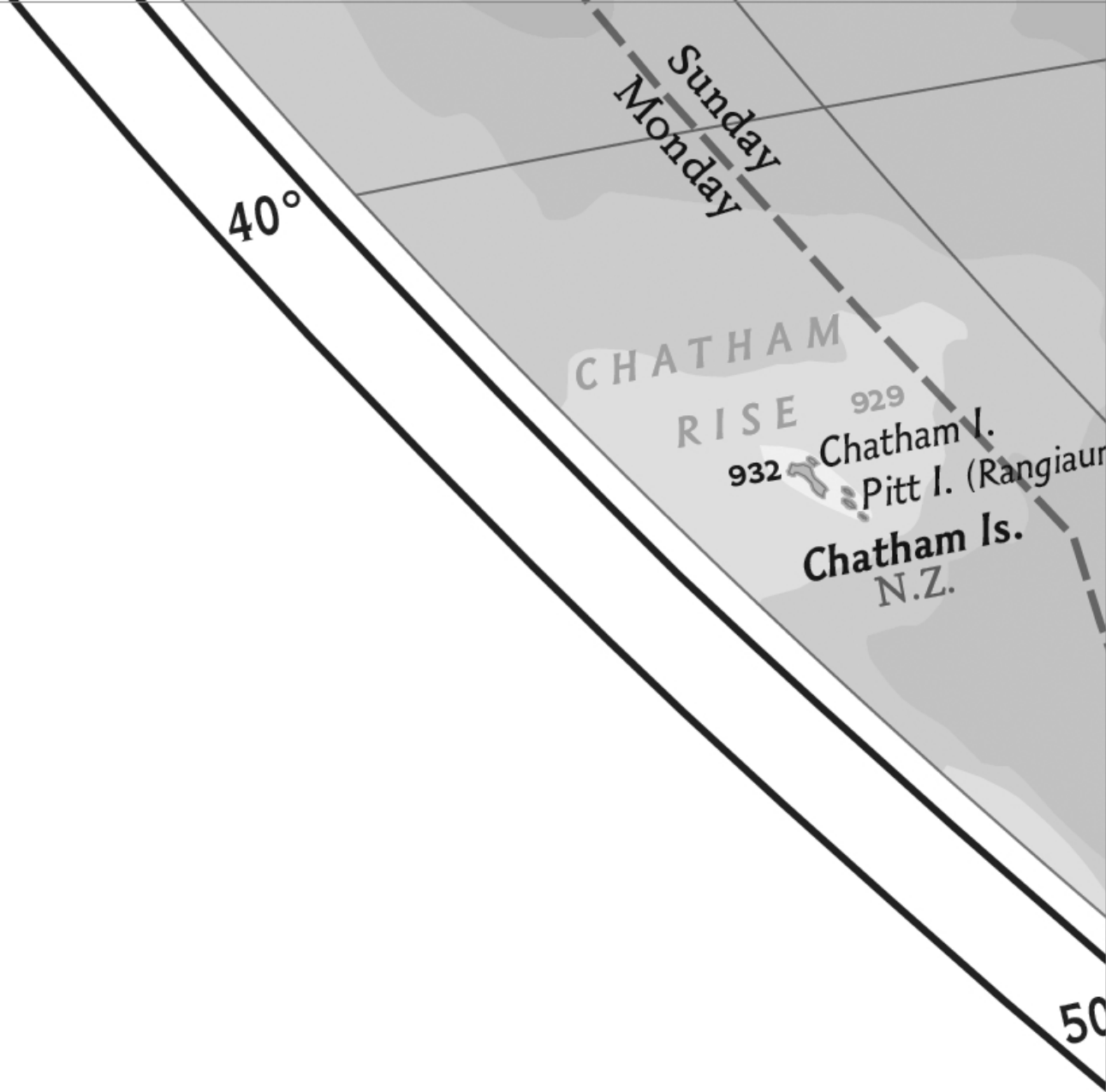
Hamilton

Bay of Plenty

New Plymouth

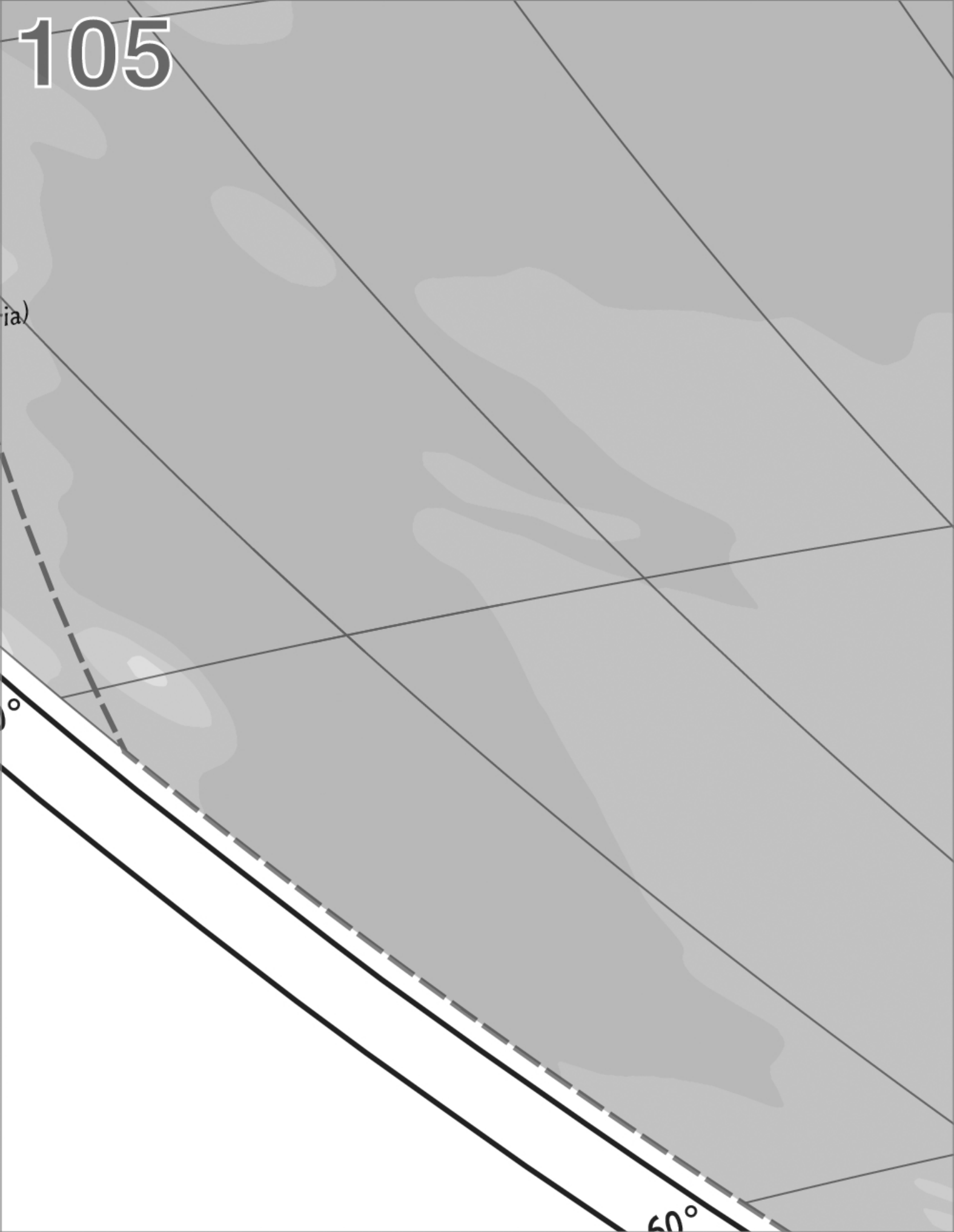
M A N



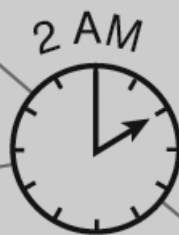


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106



107

4371

3323

AM

4 AM

5 AM



S O U T H E A S T P





Rivadavia
San Jorge
Puntas
erto Deseado

o San Julián
Santa Cruz
Coig
llegos

. of Magellan

Río Grande
TIERRA DEL FUEGO
Staten Island
Puerto Williams
Cape Horn
Is.

FALKLAND PLATEAU

Stanley ● **FALKLAND ISLANDS**
(ISLAS MALVINAS)
U.K.

Shag Rocks · Bla
U.K.
Cape D

Drake Passage



SOUTH SHETLAND ISLANDS

Livingston Island
Smith Island
Palmer
Brabant Island
Archipelago
Anvers I.
Biscoe Islands
Elephant Island
Clarence I.
King George Island
Joinville Island
James Ross Island
Snow Hill Island
Larsen
Jason Pen.

Adelaide Island
ANTARCTIC
Ice Shelf

Roth... Marguerite
Graham Land
PENINSULA



111

2539

ATLANTIC

Bouvet 3068
Norway

NOON



ATLANTIC

Jelbart Ice Stream

ström Ice Stream

112

Prince Edward Island
Marion Island
**Prince Edward
Islands**
South Africa

- INDIAN RIDGE

5373

PM



2 PM



INDIAN BASIN

Amundsen

Case Bay

Erskine Iceport

Riiser-Larsen
Peninsula

Lützow-Holm
Bay

Prince Olav

END

390

113

Île aux Cochons
Îles des Pingouins

Île de la Possession
Île de l'Est 3576

CROZET ISLANDS
France

Îles
Île de
Îles de

4271



Cape Ann

Cape Borley

Cape Boothby

Edward VIII Bay

ERBY LAND

Kemp Coast

Mawson Coast

Bjerko Pen.

MacKenzie Bay

Glacier

KERGUELEN ISLANDS

France

Nuageuses

Île Kerguelen

de l'Ouest

Port-aux-Français

de Boynes

6070

1710

4181

KERGUELEN

McDonald Is.

Shag Island

Australia Heard Island 9005

PLATEAU

SOUTH

5 PM

6 PM



West Ice Shelf

Masson Island

Shackleton

Ice Shelf

Leopold and

Wilhelm II Coast

Queen Mary Coast

Knox Coast

Vincennes

Budd

115

INDIAN

INDIAN BASIN



Cape Pointsett
Moscow University
Ice Shelf
Toyeykov Ice Shelf
Goodenough
Morse

116

R
I
D

G 3568

M

MACQUAR

10 PM



11 PM



Devonport
 Queenstown +5305
 Hobart
 Cape Pillar
 South East Cape
TASMANIA
 St. Helens
 Launceston

ZEALANDIA
 (Mt. Cook) Aoraki 1231
SOUTH ISLAND

Queenstown
 Puysegur Point
 Foveaux Strait
 Invercargill
 Stewart I. (Rakiura) 3214
 The Snares 620
 Dunedin
 Otago
 Bounty Island
 N.Z.

Auckland Islands
 N.Z. 2200
CAMPBELL PLATEAU
 Antipodes Islands
 N.Z.
 Campbell Island 1831
 (Motu Ihupuku)
 N.Z.

THE RIDGE

Macquarie Island
 Australia

LARGEST URBAN

Tokyo, Japan
 Delhi, India

60°

5



AREAS, 2011

37,000,000
 23,000,000

LARGEST URB

Tokyo, Japan
 Delhi, India

URBAN AREAS, projected 2025

39,000,000

33,000,000

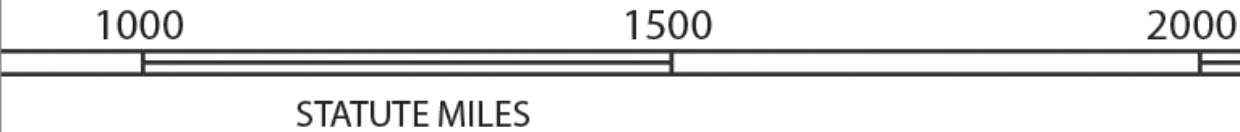
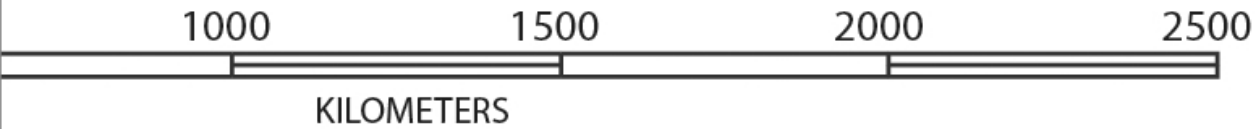
22,000,000

WIN



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WINKEL TRIPEL PROJECTION, CENTRAL MERIDIAN 0°

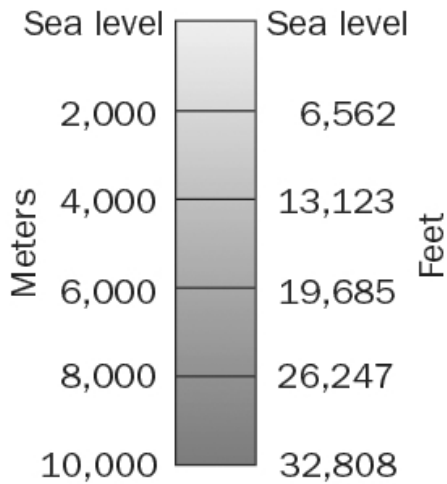


Dry salt lake



Glacier

Depths (soundings) in meters



National Geographic Society, Washington, D.C.

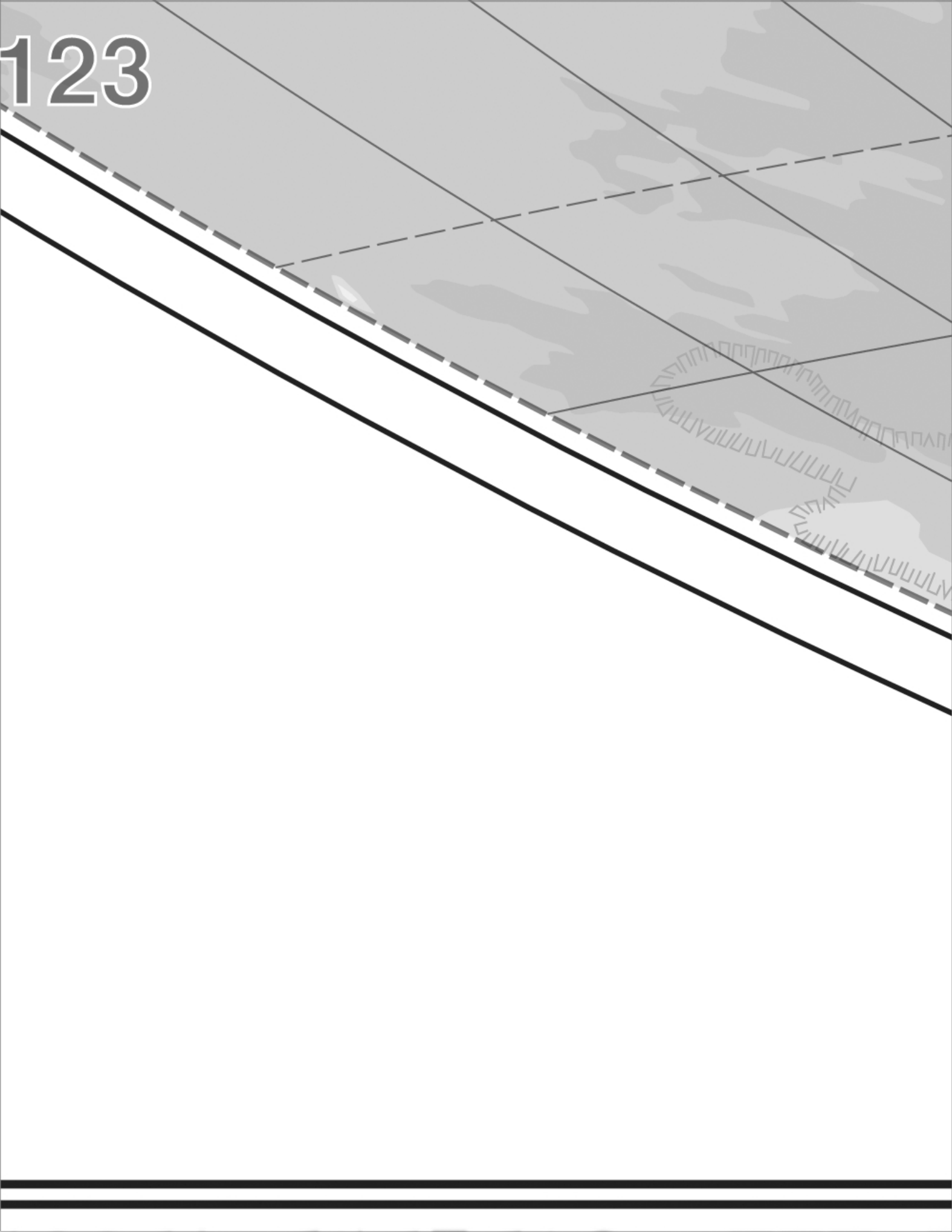
122

80

2500

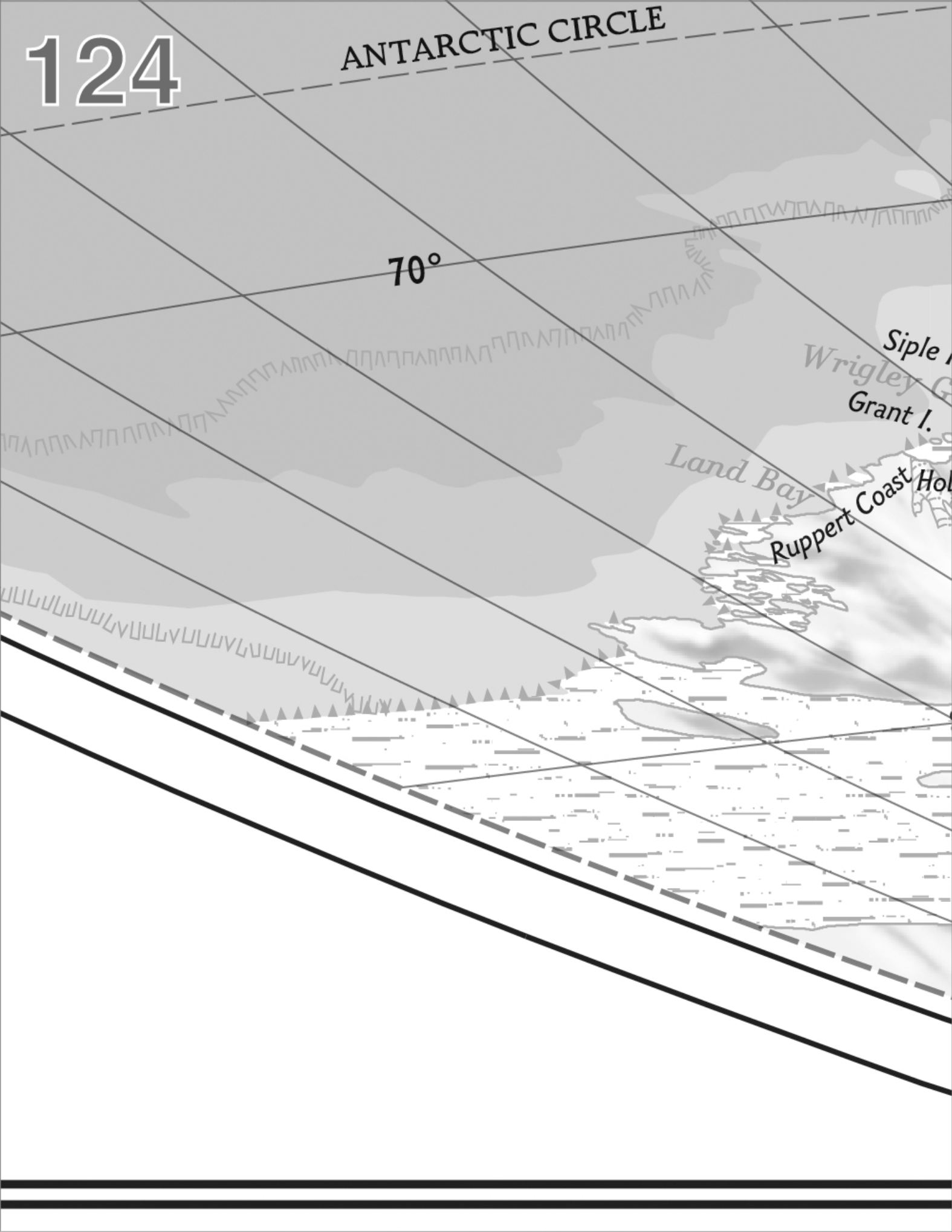


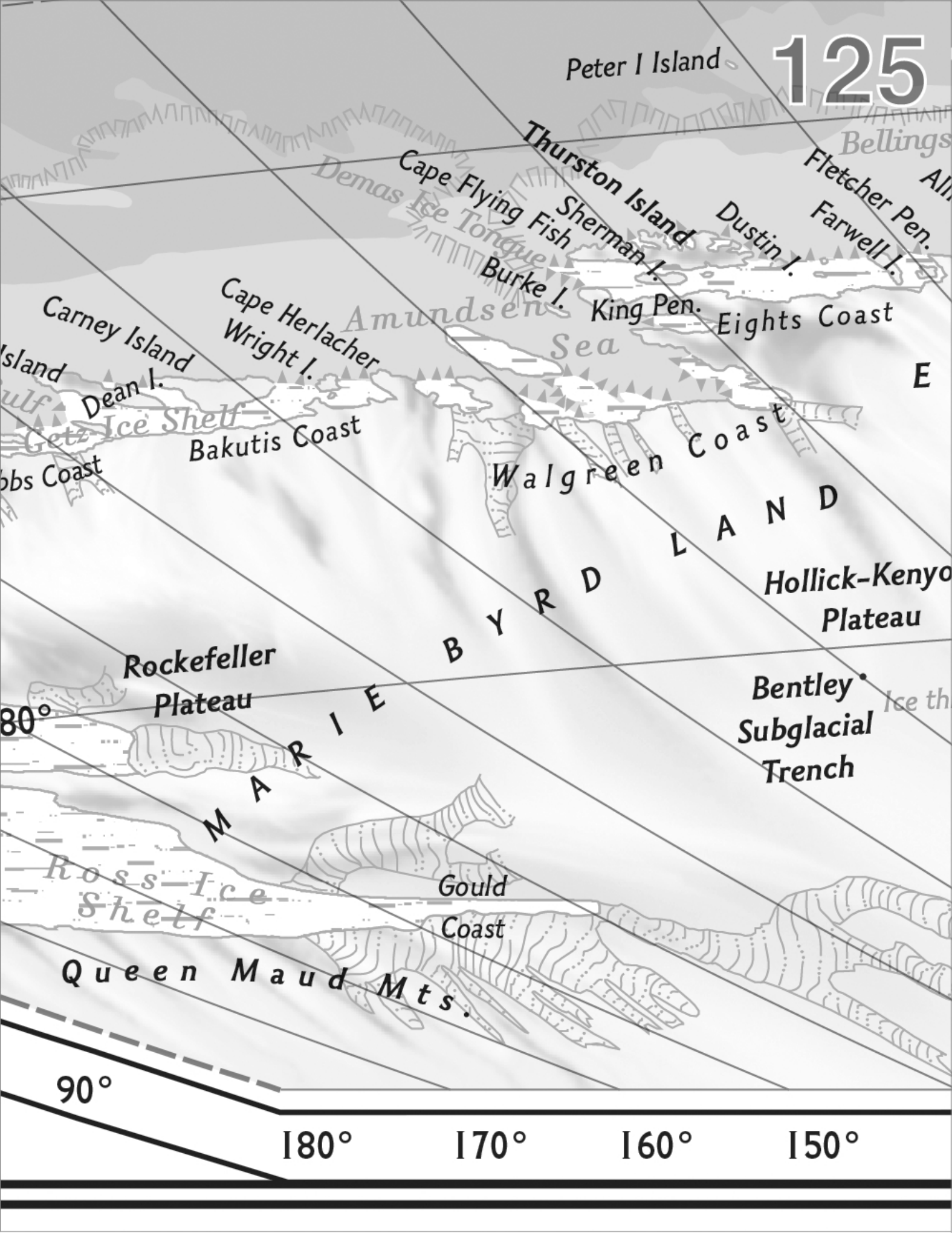
123



ANTARCTIC CIRCLE

70°







DDELL

127

SEA

Rüser-L
Ice Shee

Lyddan I.

Brunt Ice Shelf

Caird Coast

of Ice Shelf

Gould Bay

COATS LAND

ice Shelf

Berkner Island

Filchner Ice Shelf

Support Force Glacier

N

T

A

Foundation Ice Stream

80°

70°

60°

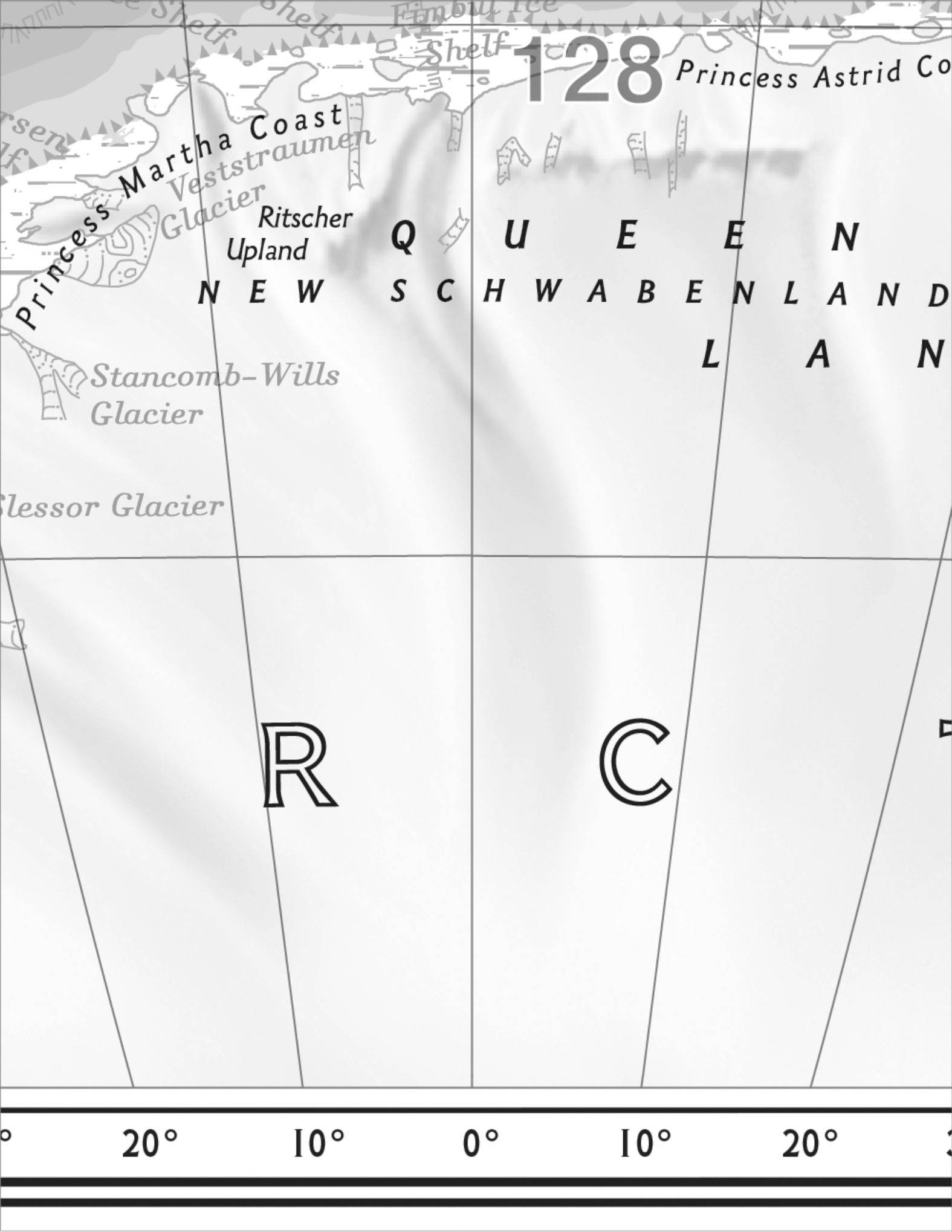
50°

40°

30°

128

Princess Astrid Co



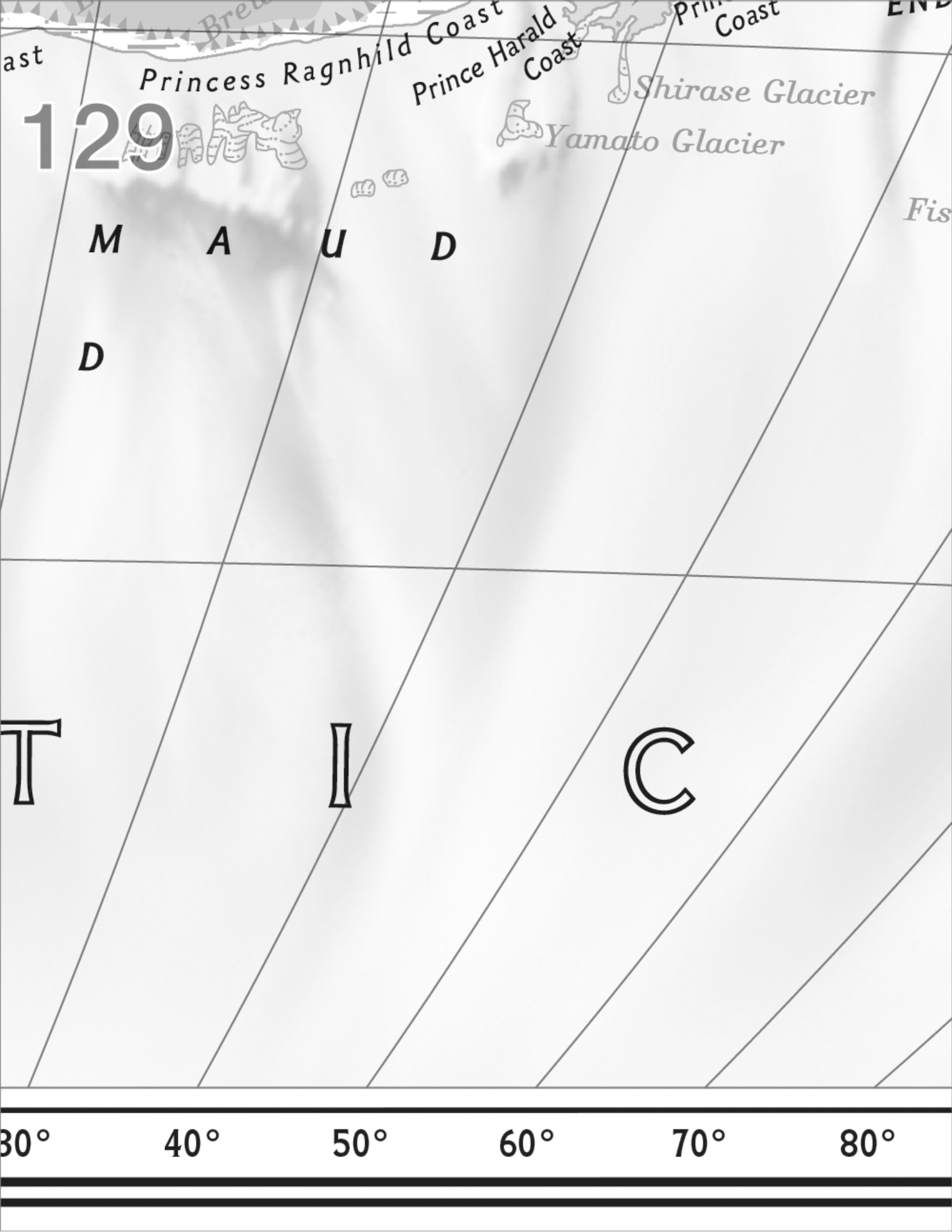
20°

10°

0°

10°

20°



129

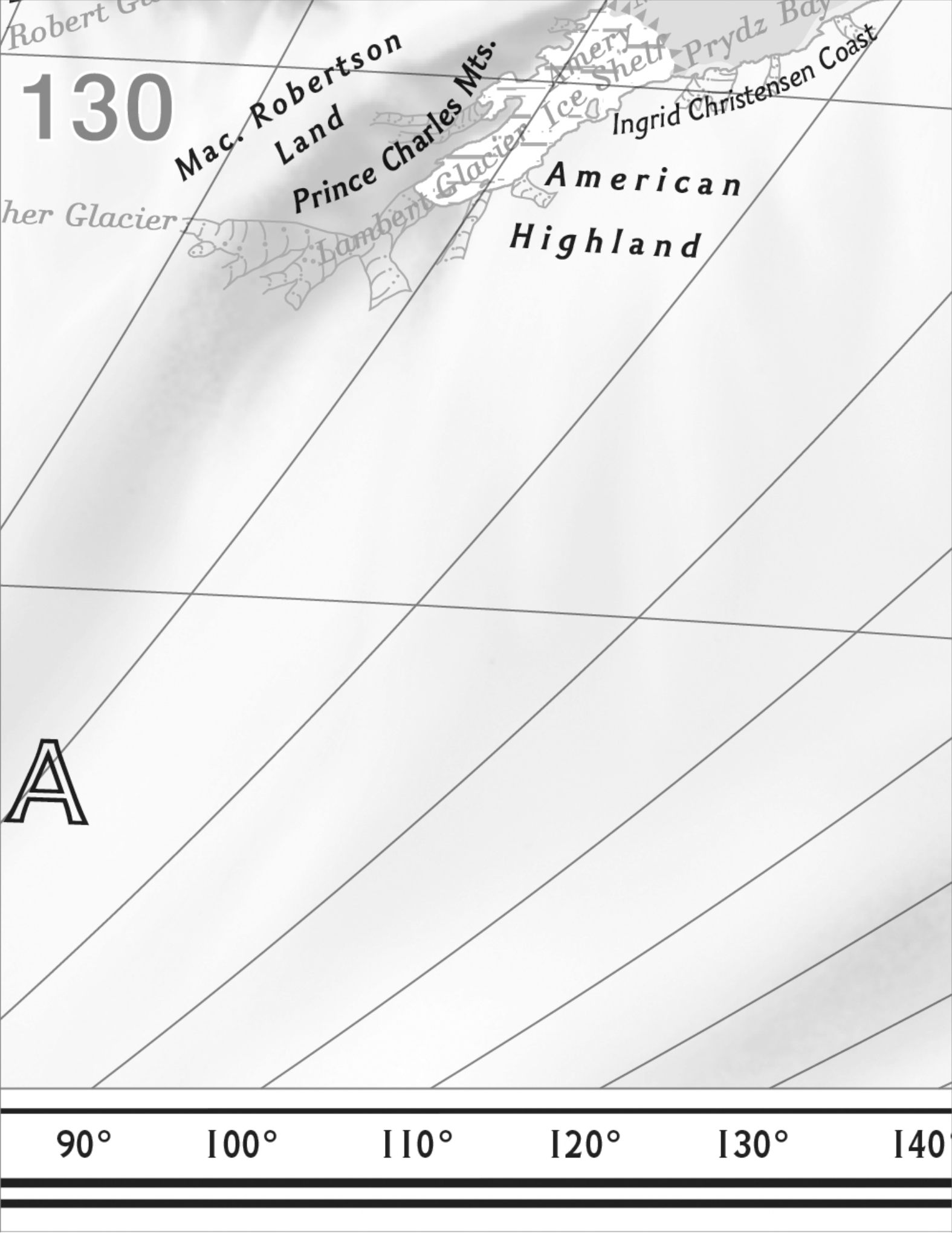


M A U D

D

T I C

30° 40° 50° 60° 70° 80°



130

Mac. Robertson
Land

Prince Charles Mts.

American
Highland

90°

100°

110°

120°

130°

140°

A

Astrid Coast

131

Philippi Glacier

W I L K E S L A

Scott Glacier

Coast

ED

80°

Nimrod Glacier

Marsh Glacier

Lennox-King Glacier

Beardmore Glacier

90°

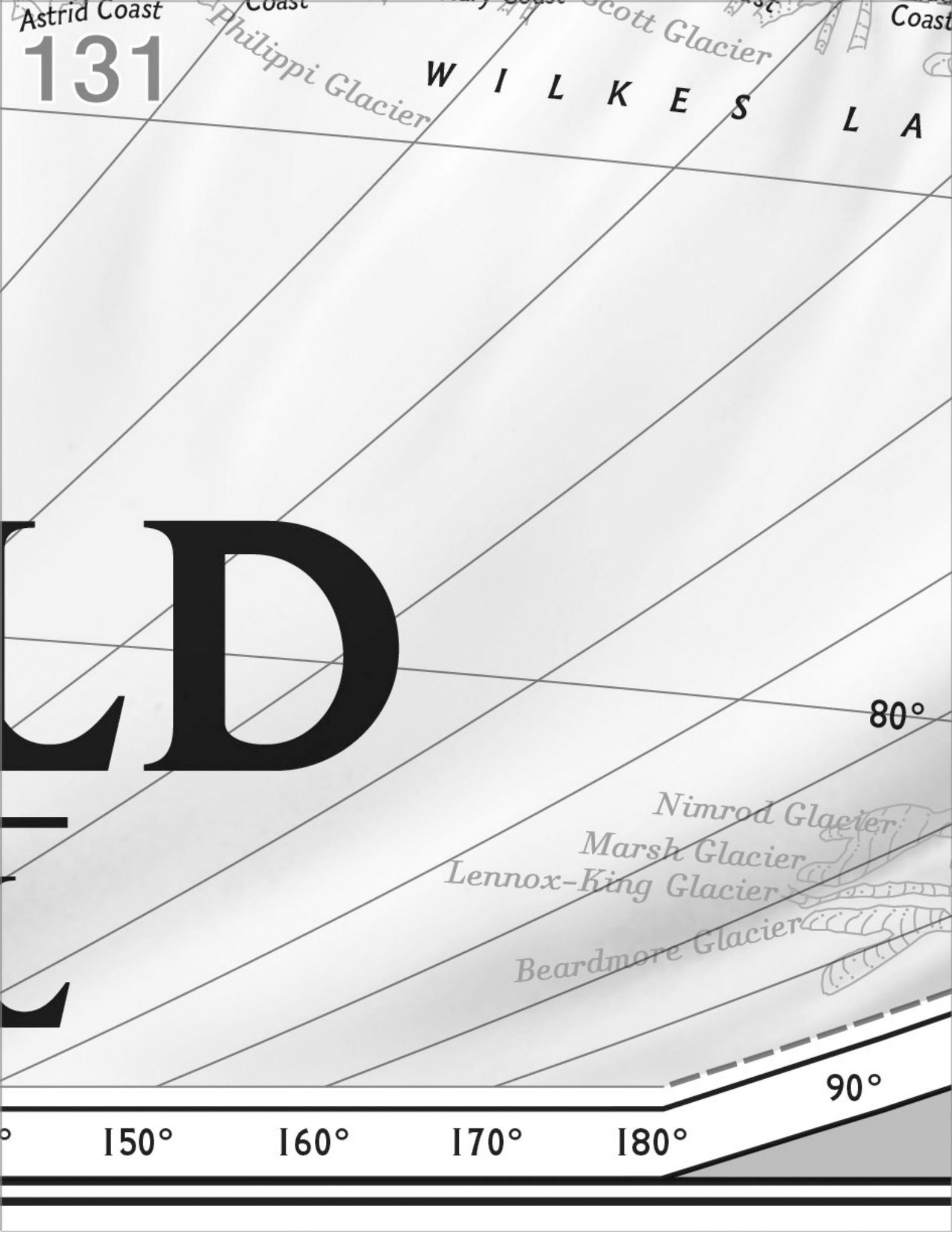
150°

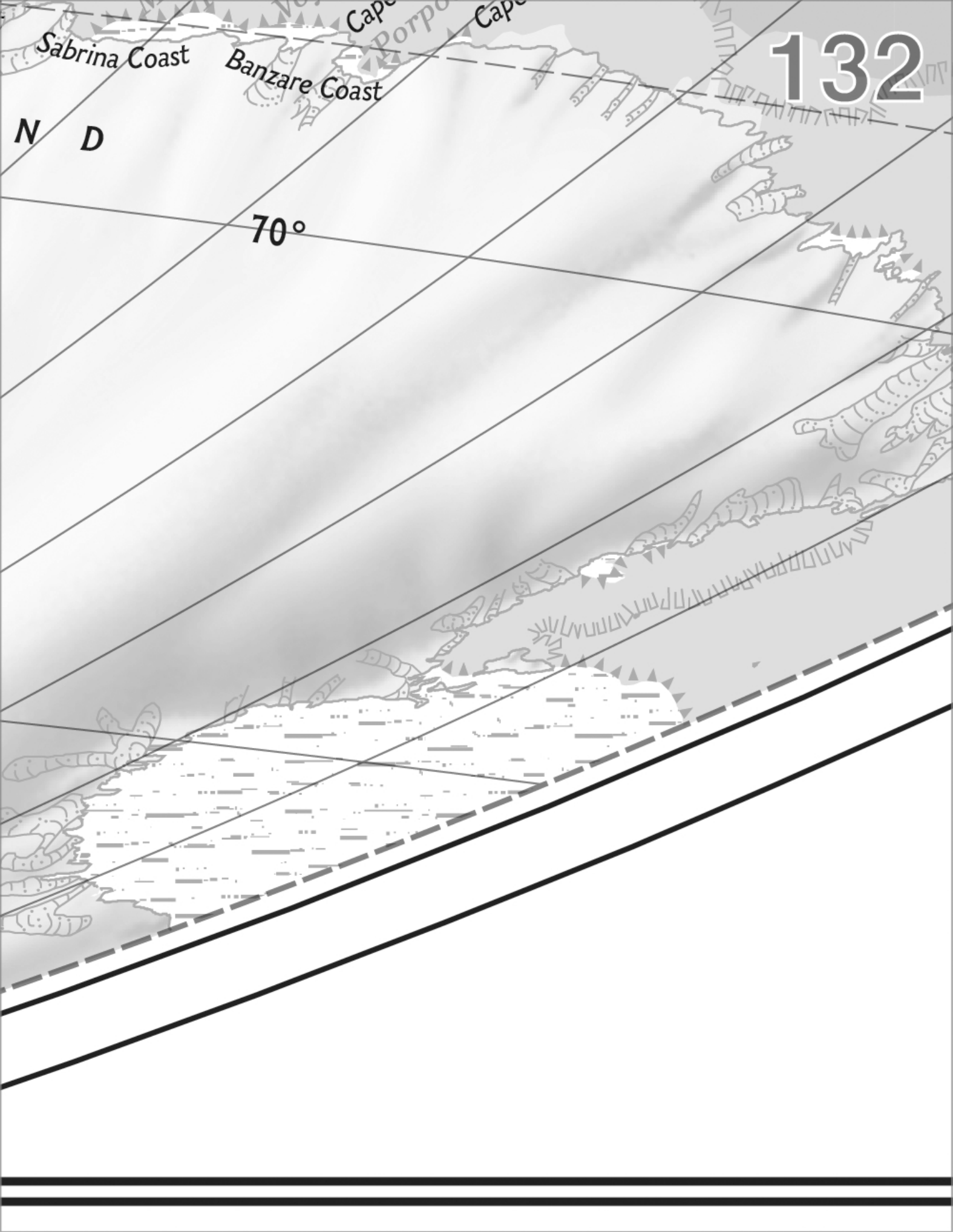
160°

170°

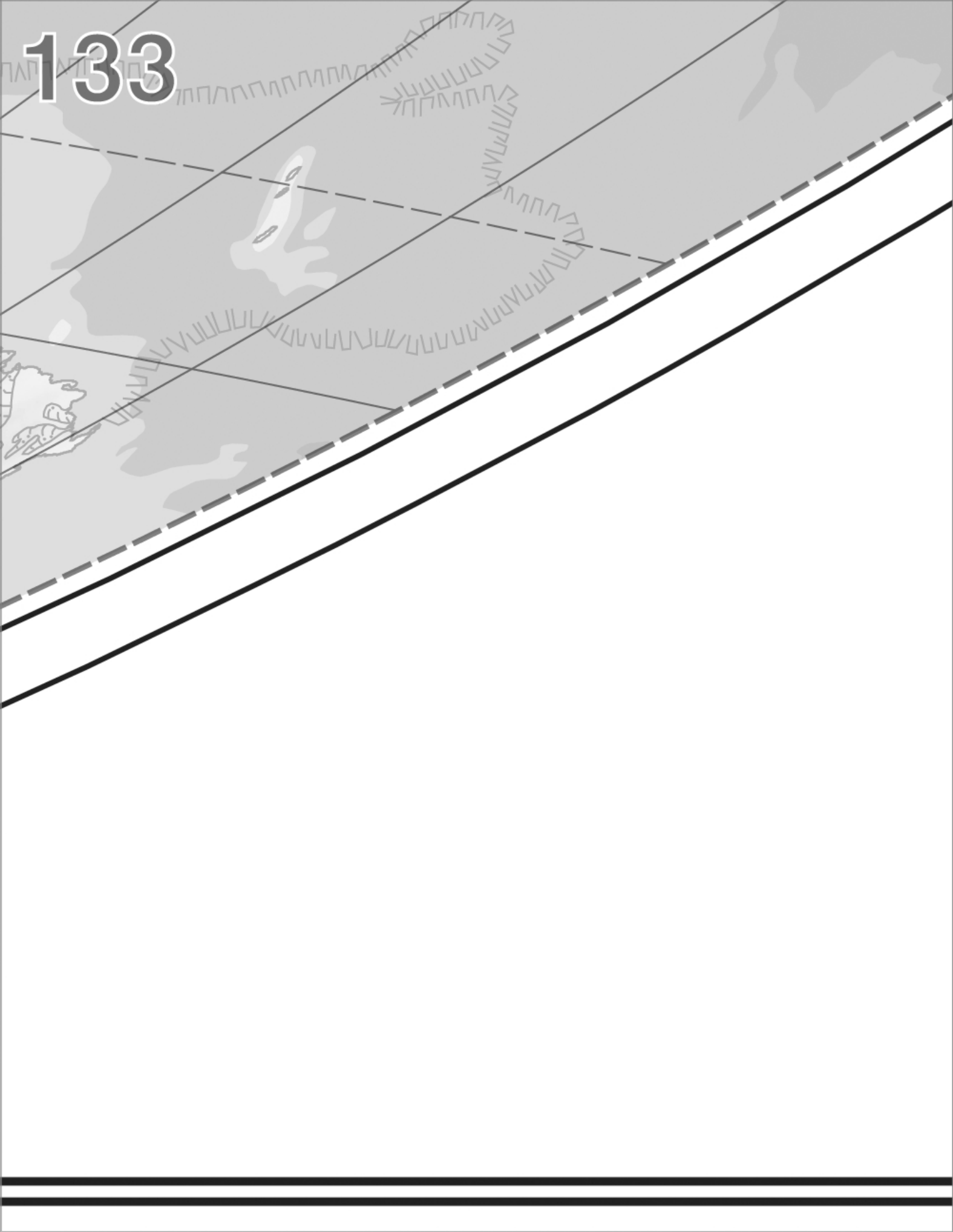
180°

°





133



Ciudad de Mexico (Mexico)
New York-Newark, U.S.
Shanghai, China
São Paulo, Brazil
Mumbai (Bombay), India
Beijing, China
Dhaka, Bangladesh
Kolkata (Calcutta), India
Karachi, Pakistan
Buenos Aires, Argentina
Los Angeles-Long Beach-
Rio de Janeiro, Brazil
Manila, Philippines
Moskva (Moscow), Russia
Osaka-Kobe, Japan
Istanbul, Turkey
Lagos, Nigeria
Al-Qahirah (Cairo), Egypt

Data is from the most recent year
and is published by the United Nations
Economic and Social Affairs, Population

City), Mexico

135

Santa Ana, U.S.

r available, 2011,
ations Department of
ulation Division.

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 Lagos, Nigeria
 Kolkata (Calcutta), I
 Manila, Philippines
 Los Angeles-Long B
 Shenzhen, China
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 Guangzhou, Guangd
 Istanbul, Turkey
 Al-Qahirah (Cairo),
 Kinshasa, Democrati
 Chongqing, China
 Rio de Janeiro, Braz
 Bangalore, India
 Jakarta, Indonesia
 Chennai (Madras), I
 Wuhan, China
 Moskva (Moscow), R
 Paris, France

United Nations Departme
Population Division is from

136
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