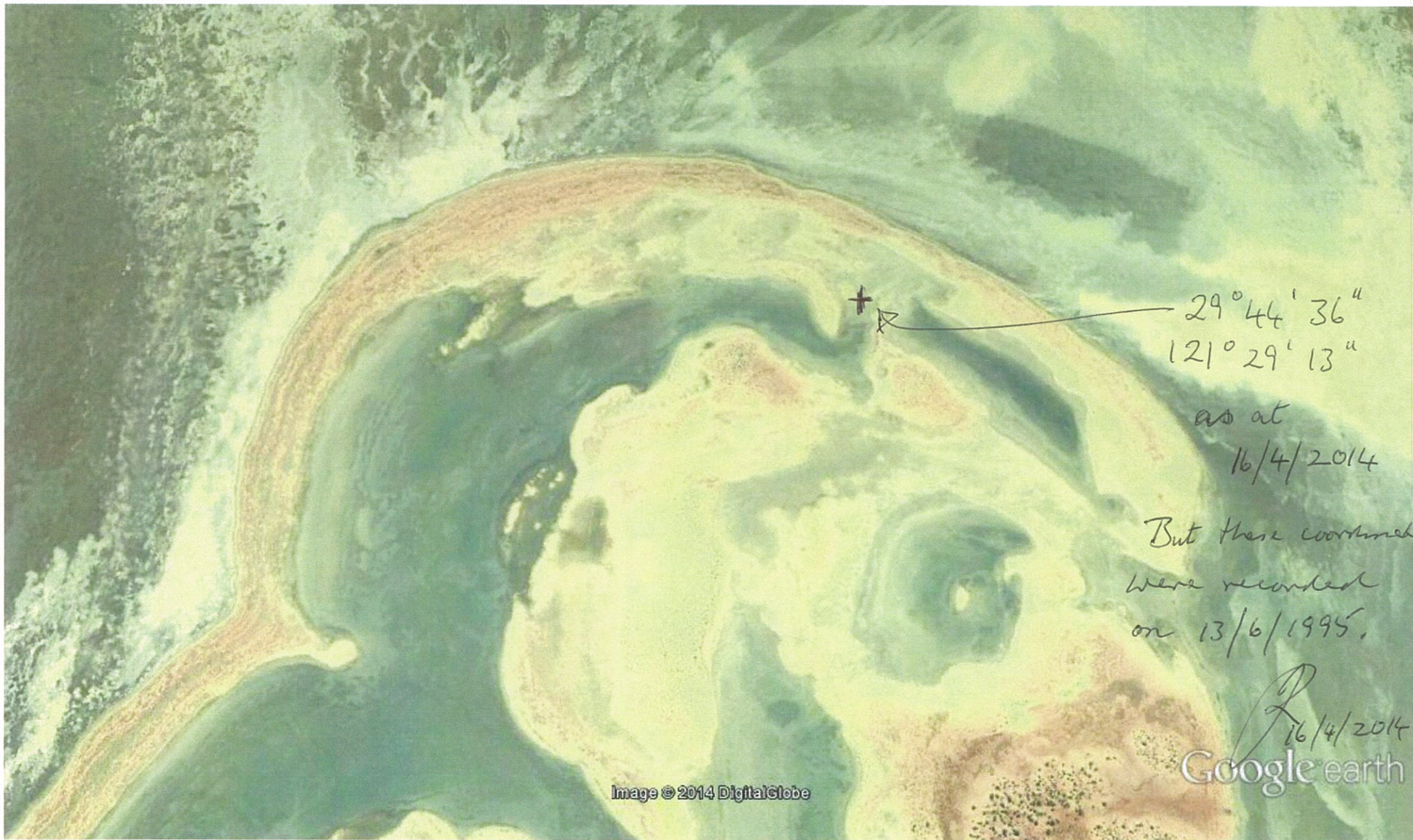


Need to re-do all
those with corrected
(1995 → 2014) coordinates
Corrections - 16/4/2014



Google earth

miles
km



Imagery Date 31/10/2005.

Pointed 10/4/2014 J



Google earth

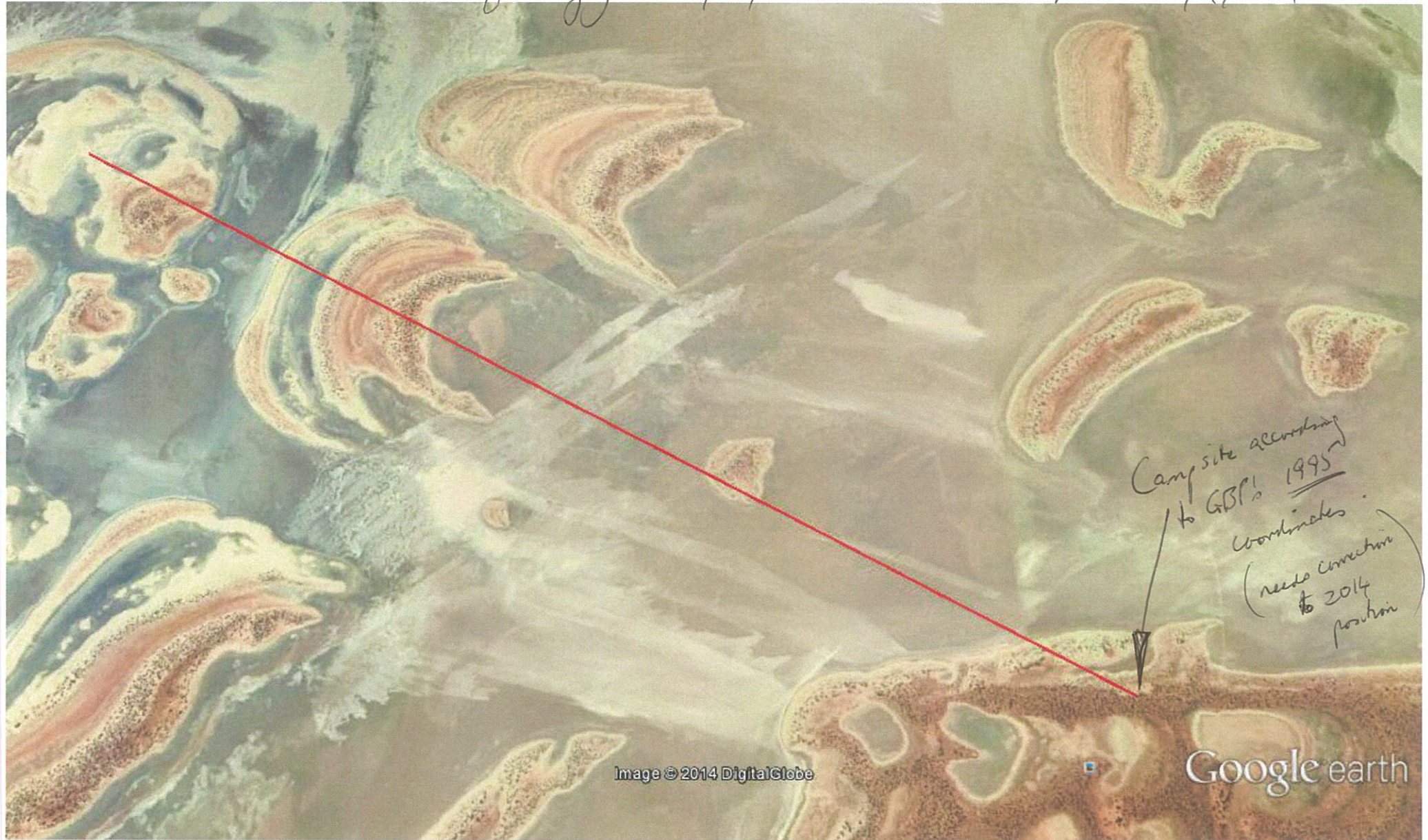
miles
km



Imagery Date 31/10/2005 . Printed 10/4/2014 gr .

Date of Emergency: 20/9/2005.

Printed 16/4/2014



Google earth

miles
km



This red line is at an angle of 300 degrees. (and is 7.5 km long)
^ "True", not magnetic.

16/4/2014

Printed 16/4/2014

http://www.ngdc.noaa.gov/geomag-web/#decl NGDC Geomagnetic Calcul...

File Edit View Favorites Tools Help

Estimated Value of Magnetic Declination

Declination is calculated using the current International Geomagnetic Reference Field (IGRF) model. Declination results are typically accurate to 30 minutes of arc.

Declination results are based on the International Geomagnetic Reference Field (IGRF) model. Declination results are typically accurate to 30 minutes of arc.

latitude and longitude, try your state below, or visit the USGS National Magnetic Field Data Center or try the Getty Thesaurus.

E, latitude 90S to 90N).

Country-

City-

Questions: geomag.models@noaa.gov

NOAA > NESDIS > NGDC > MGG & STP > G

16/4/2014

Latitude: 30° S
Longitude: 122° E
Date: 1995-06-13
Declination: 1.01° E changing by 0.06° E per year

Map Satellite

Boomerang Lake
Lake Rebecca

MIN

Google
Map data ©2014 Google Terms of Use Report a map error

Calculate


Result
* Result format: HTML

Location
* Latitude: 30
* Longitude: 122

Model
* Model: IGRF 11

Date
* Date: Year 1995

Calculate Declination



The screenshot shows a web browser window with the address bar displaying the URL http://en.wikipedia.org/wiki/Magnetic_declination. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The page content is partially visible, showing the title "Magnetic declination" and the beginning of the introductory paragraph.



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Magnetic declination

From Wikipedia, the free encyclopedia

"Magnetic North" redirects here. For other uses, see Magnetic North (disambiguation).

Magnetic declination or **magnetic variation** is the angle on the horizontal plane between magnetic north (the direction in which the north end of a **compass** needle points, corresponding to the direction of the **Earth's magnetic field lines**) and **true north** (the direction along a **meridian** towards the geographic **North Pole**). This angle varies depending on one's position on the Earth's surface, and over time.

Somewhat more formally, [Bowditch](#) defines variation as “the angle between the magnetic and geographic meridians at any place, expressed in degrees and minutes east or west to indicate the direction of magnetic north from true north. The angle between magnetic and grid meridians is called grid magnetic angle, grid variation, or grivation.”^[1]

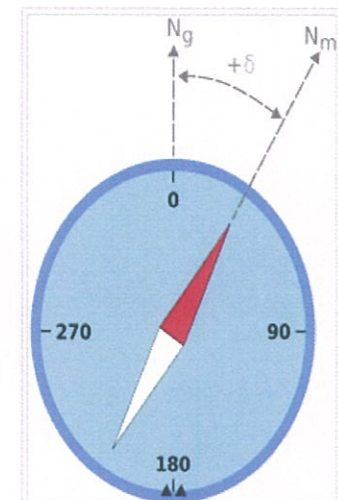
By convention the declination is positive when magnetic north is east of true north, and negative when it is to the west. *Isogonic lines* are lines on the Earth's surface along which the declination has the same constant value, and lines along which the declination is zero are called *agonic lines*. The lowercase Greek letter δ (delta) is frequently used as the symbol for magnetic declination.

The term **magnetic deviation** is sometimes used loosely to mean the same as magnetic declination, but more correctly it refers to the error in a compass reading induced by nearby metallic objects, such as on board a ship or aircraft.

Magnetic declination should not be confused with **magnetic inclination**, also known as magnetic dip, which is the angle that the Earth's magnetic field lines make with the horizontal plane (i.e. upwards or downwards).

Contents [hide]

- 1 Change of declination over time and space
- 2 Determining declination
 - 2.1 Direct measurement
 - 2.2 Determination from maps and models
- 3 Using the declination



Example of magnetic declination showing a compass needle with a "positive" (or "easterly") variation from geographic north. N_g is geographic or true north, N_m is magnetic north, and δ is magnetic declination

Imagery Date 20/9/2008.

Point 16/4/2014



Google earth

miles
km



Magnetic declination for this location in 1995 was 1.01°E (see attached)
Therefore 300° magnetic was 299° true.

16/4/2014

Date of Image 20/9/2005

Printed 16/4/2014



Image © 2014 DigitalGlobe

Google earth

Google earth

miles
km



See page 23
of GBRP
field notebook (6/95).

$29^{\circ}47'46''S$, $121^{\circ}29'13''E$ as at 16/4/2014

But these coordinates were recorded in June 1995.

R 16/4/2014.

Imagery Date = 26/10/2005

Printed 16/4/2014



Image © 2014 DigitalGlobe

Google earth

Google earth

feet
meters

1000

400

121° 32' 54"
29° 47' 00"

(Andy Chapman
coords of
campsite)

29° 47' 01"
121° 33' 06"

as at 16/4/2014. But these coordinates were recorded
in June 1995.

16/4/2014

Imagery Date : 26/10/2005

Printed 16/4/2014



Image © 2014 DigitalGlobe

Google earth

Google earth

miles 3
km 5



Imagery Date: 26/10/2005

Pink 16/4/2014



Google earth

feet
meters

1000

500

121°
~~121°~~ 32'54" E
29°47'00" S

(Andy Chapman's
coordinates of
Campsite)

as at 16/4/2014. But these coordinates were
recorded in June 1995.

[Handwritten signature]