

# AEROMAGNETIC SURVEY SPECIFICATIONS

## Introduction

Below reflects some of the specifications used in carrying out our aeromagnetic survey with a nigeria index map showing the areas that have been covered;

### MAGNETIC SURVEY SPECIFICATIONS

Magnetic Data Recording Interval	0.1 seconds or less (≈7m)
Sensor Mean Terrain Clearance	80 meter
Flight Line Spacing	500 meters
Tie Line Spacing	5000 meters
Flight Line Trend	135 degrees
Tie Line Trend	45 degrees

### EQUIPMENT SPECIFICATIONS

Magnetometers	3 x Scintrex CS3 Cesium Vapour
Data Acquisition System	FASDAS
Magnetic Counter	FASDAS
Radar Altimeter	KING KR405/KING KR405B
Barometric Altimeter	ENVIRO BARO/DIGIQUARTZ

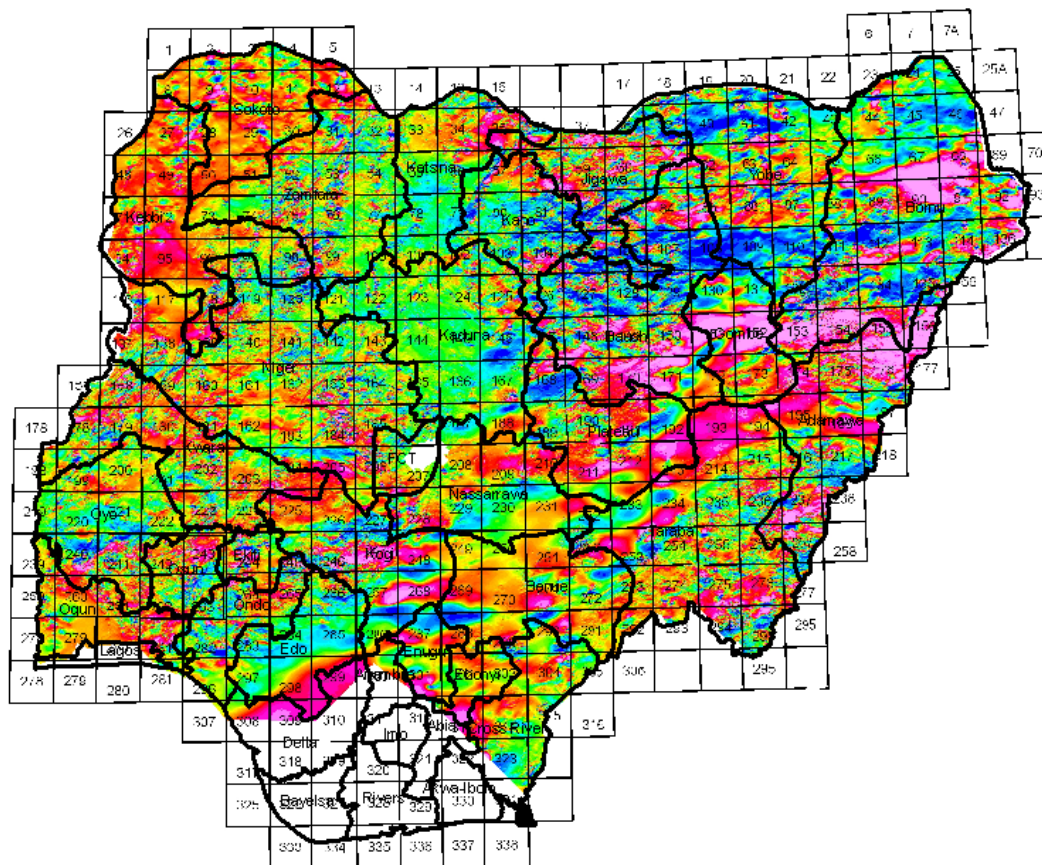
### NAVIGATION SPECIFICATIONS

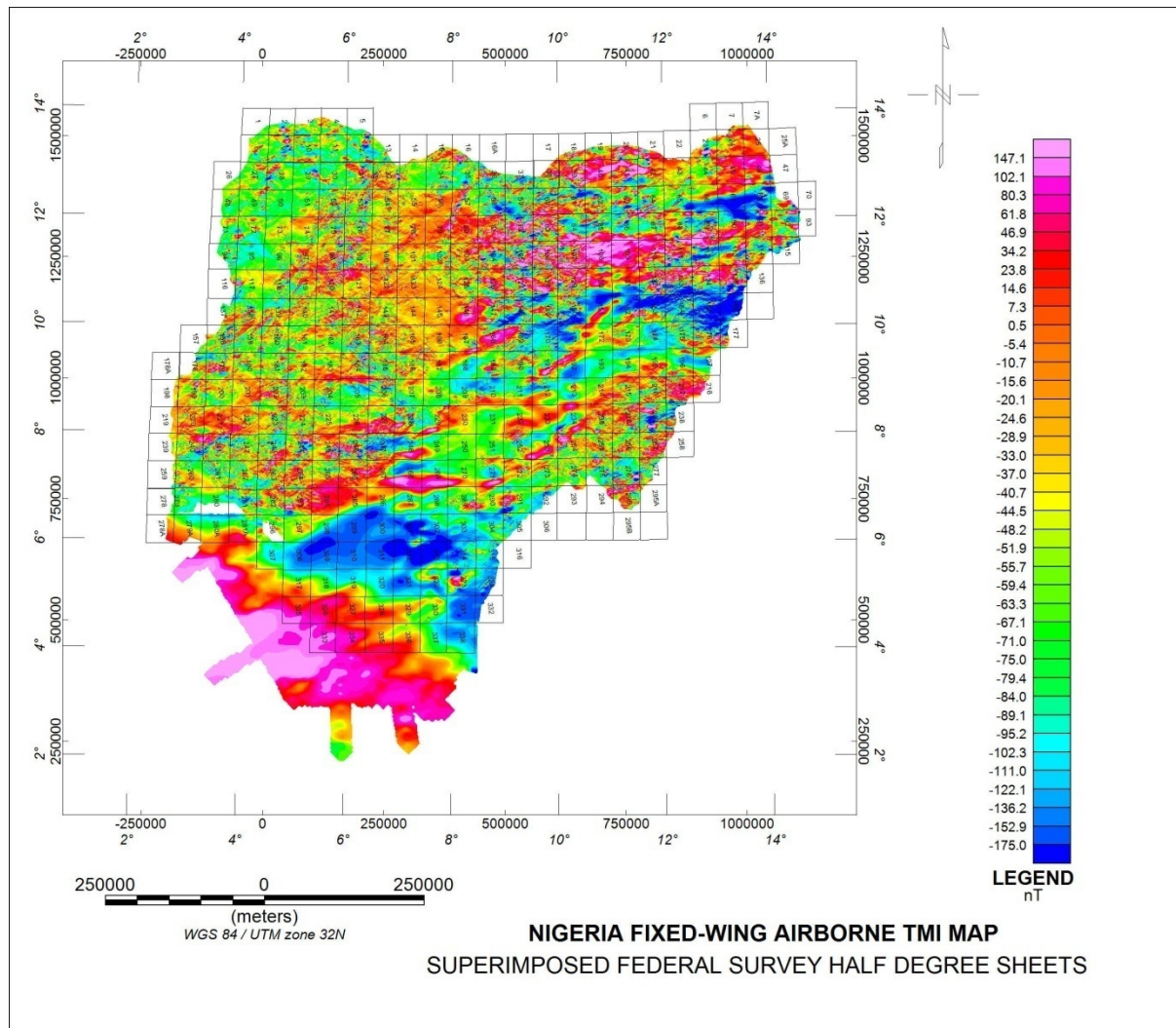
Flight Path Tracking	Digital
Flight Path Navigation	Novatel 3151R/Omnistar RTDGPS
Flight Path Recovery	Digital
Flight Path Processing	Real Time Differential GPS
Aircraft Supplied by	Fugro Airborne Surveys
Aircraft	Cessna Caravan 208B ZS-FSA
Aircraft	Cessna Caravan 208 ZS-MSJ
Aircraft	Cessna 406 ZS-SSC

## **PLOTTING SPECIFICATIONS**

Projection	Universal Transverse Mercator
Spheroid	Clarke 1880 (Modified)
Central Meridian	33 Degrees East
Central Scaling Factor	0.9996
Datum	Arc 1960
X Bias	500 000 meters
Y Bias	0 meters
Grid Mesh Size	50 meters
Survey Date	07/12/06 - 31/05/07
Data Acquisition by	Fugro Airborne Surveys
Data Processing by	Fugro Airborne Surveys.

# MAGNETIC INDEX MAP





## PRODUCTS

Magnetics;

- Magnetic Total field, shaded relief (nT)
- (Horizontal gradient enhanced and IGRF removed),
- Reduced to Pole magnetic shaded relief image (nT)
- (horizontal gradient enhanced and IGRF removed)
- Magnetic vertical gradient (nT/m) (calculated)
- Magnetic horizontal gradient (nT/m) (measured)
- Analytical signal (nT) (calculated)

The enhanced products both measured and calculated help to:

1. Identify Basement faults and structural features
2. Calculate total thickness of the sedimentary loads which can be equated to the depth-to-Basement especially where there are few or no volcanic and intrusive features