

Gravity & Magnetism

Teamwork will consist of:

Summary/Presentation of learning points **previous** day

Day 1

- 09:00-09:30 Biography, Program, Moodle, 52 Things, Teams
- 09:30-11:30 Geophysical Methods, Gravity JDF I
- 10:30-11:00 **Exercise: Depth Sphere**
- 11:00-11:15 Refreshments
- 11:15-13:00 **Exercise: Depth Anticline**
- 13:00-14:00 Lunch
- 14:00-14:30 **Videos: Gravity**
- 14:30-15:00 **Exercise: Gravity Sphere**
- 15:00-15:15 Refreshments
- 15:15-16:00 Gravity JDF II
- 16:00-17:00 **Exercise: Grav2dc 4D, Swing**
- 17:00-17:30 Quiz 1
- 17:00-17:30 Team a: Preparation Summary of day 1

Day 2

- 09:00-09:30 Team a: Summary of day 1
- 09:30-10:00 Gravity JDF III
- 10:00-11:00 **Exercise: Depth Estimation**
- 11:00-11:15 Refreshments
- 11:15-13:00 **Exercise Olympic, Tapei Tower**
- 13:00-14:00 Lunch
- 14:00-14:30 **Videos: Tokyo Skytree, Gravity Train**
- 14:30-15:30 **Exercise: Grav2dc Inv**
- 15:30-15:45 Refreshments
- 15:45-16:15 Introduction Machine Learning
- 16:15-17:00 **Exercise: Gravity Resolution**
- 17:00-17:30 Quiz 2
- 17:00-17:30 Team b: Preparation Summary of day 2

Day 3

- 09:00-09:30 Team b: Summary of day 2
- 09:30-10:00 Magnetism
- 09:30-11:30 **Exercise: Magnetism**
- 10:30-11:00 Magnetism JDF I
- 11:00-11:15 Refreshments
- 11:15-12:00 **Exercise: Mag2dc Incl, Mag Anomaly**
- 12:00-13:00 Magnetism JDF III
- 13:00-14:00 Lunch
- 14:00-15:00 **Videos: The North**
- 15:00-15:30 Grav-Mag Sign
- 15:30-15:45 Refreshments
- 15:45-16:15 **Exercise: Resolution Basement**

16:15-17:00 Seis-Grav-Mag-Grad
17:00-17:30 Quiz 3
17:00-17:30 Team c: Preparation Summary of day 3

Day 4

09:00-09:30 Team c: Summary of day 3
09:30-10:15 Magnetism JDF IV
10:15-11:00 **Exercise: Mag2dc Inv**
11:00-11:15 **Refreshments**
11:15-12:00 Local Magnetism
12:00-13:00 **Exercise: Magnetic Latitudes**
13:00-14:00 Lunch
14:00-14:30 **Videos: Magnetic Dangers, PGK Machine learning**
14:30-15:30 **Exercise: Grav-Mag**
15:30-15:45 **Refreshments**
15:45-16:00 ML Keras, TensorFlow
16:00-16:30 **Exercise: Geomodel Inv**
16:30-17:00 Supervised, Unsupervised and Semi-Supervised learning
17:00-17:30 Quiz 4