圖片出自: 顏鴻選

Introduction to Dep. of Earth Sciences, NTNU

Kate Huihsuan Chen

Chairman



Development goal



Be critical thinkers and doers!

地質組 Geology

地物組

海洋

大氣組 Geophysics Oceanography Atmospheric Sciences

天文組 Astronomy







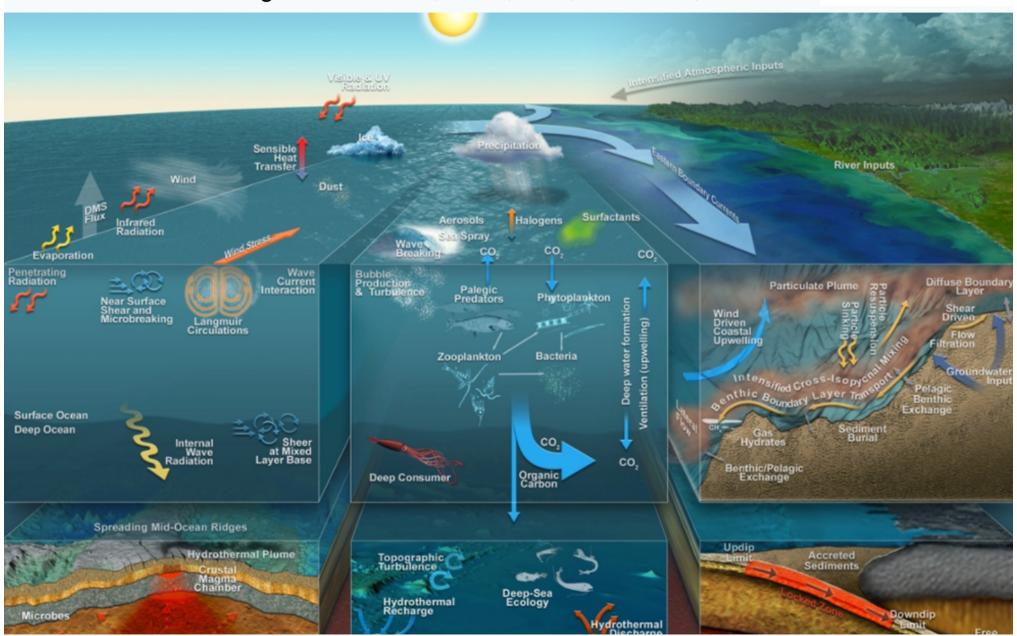




Through development and application of new tools and technologies, we pursue field, lab, experimental, and modeling studies of Earth and other solar system bodies.

Science of Earth and beyond is everything

Controlling our live: food, water, heat, resources, and the future



Astronomy

師大地球科學系 Dep. of Earth Sciences, NTNU







multiscale astrophysical phenomena

Star formation, Planetary Science, Radio astronomy, Astrochemistry, X-ray and extragalactic astronomy, Formation and evolution of galaxies

圖片出自:星天日和工作室

Geology

multiscale geological phenomena

Geodynamics plate reconstruction, Sequence seismic stratigraphy Regional tectonics of southeast As Stable isotope geology. Paleoenvironmental change Geochemistry, Core analysis, Igneous Petrologys

Petrology













Atmospheric Science





Li-Shan Tseng

multiscale weather phenomena

Climate modeling. Mesoscale, mountain, synopticm, monsoon meteorology, Severe weather system Cloud-radiation interaction, Air-sea interaction



Oceanography







multiscale physical oceanography

Physical oceanography, Numerical modeling, Semote sensing, Typhoon-ocean Interaction, Regional geology, Science education

Geophysics

multiscale geophysical phenomena

Environmental seismology







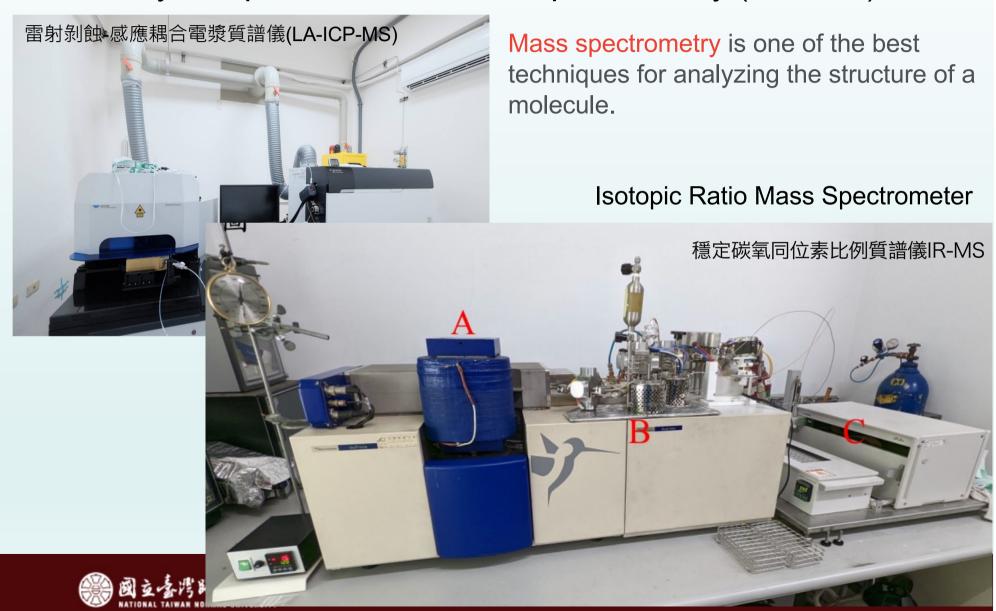


: NASA / IPI - Caltan

Lab and facilities: MS



Inductively Coupled Plasma Mass Spectrometry (ICP-MS)



Lab and facilities: MS



VG1200S MS VG3600 MS Nu Noblesse MS

⁴⁰Ar/³⁹Ar aging lab











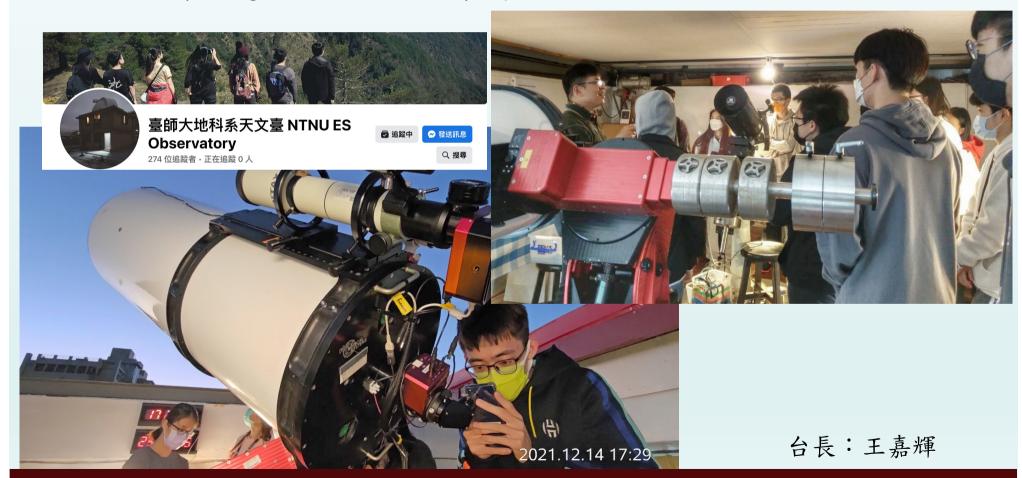


They are very powerful analytical instruments that allow the users to obtain the best quality of any data samples.

Lab and facilities: Observatory



Optical Telescopes on campus: 40cm RC16 \ Paramount ME, Schmidt— Cassegrain 40cm telescope, GOTO 15cm, refractory telescope \ Collaboration: Optical & Infrared - Lulin 1m telescope, CFHT, Subaru; Radio - SMA, JCMT, ALMA (through EAO and ASIAA); Spacecraft missions





This is a department that you have plenty of opportunities to do outdoor surveys!



Oceanography fieldtrips





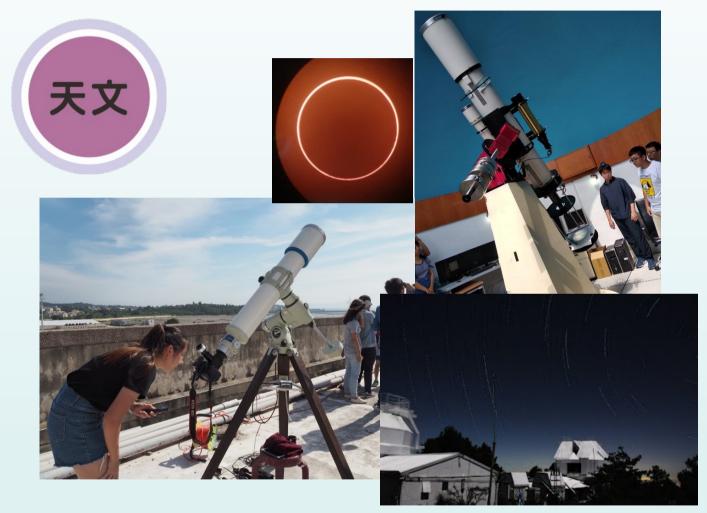
Geophysical fieldtrips





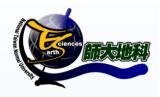
Atmospheric Science fieldtrips





天文觀測課程—110學年度鹿林天文台實習紀實

Geophysical fieldtrips



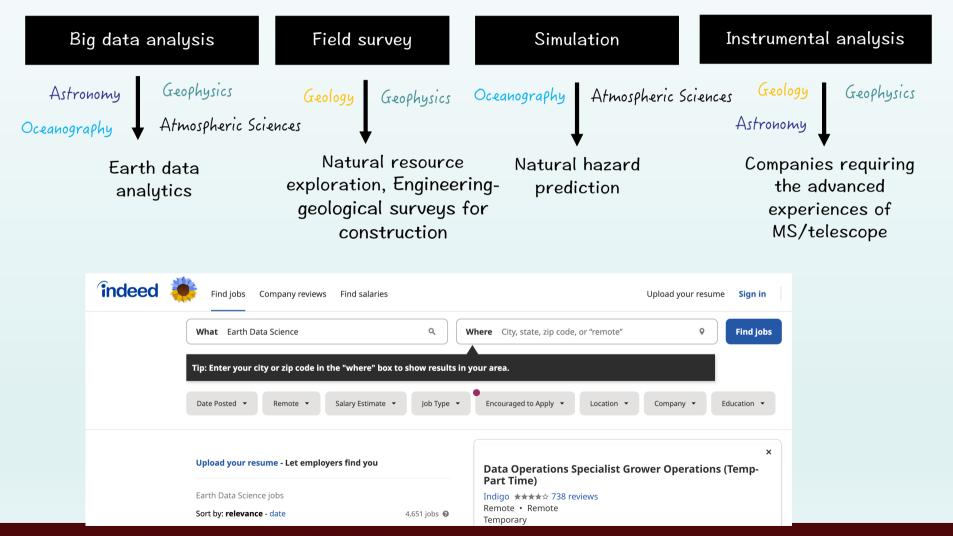


Geological fieldtrips

From core ability to future career



The course and project training in individual fields allow the student to be qualified to do these:





Excursion Introduction



Research Cooperation?



Lab Tour



Welcome Party







Trip



Discussion



Presentation



Culture Exchange







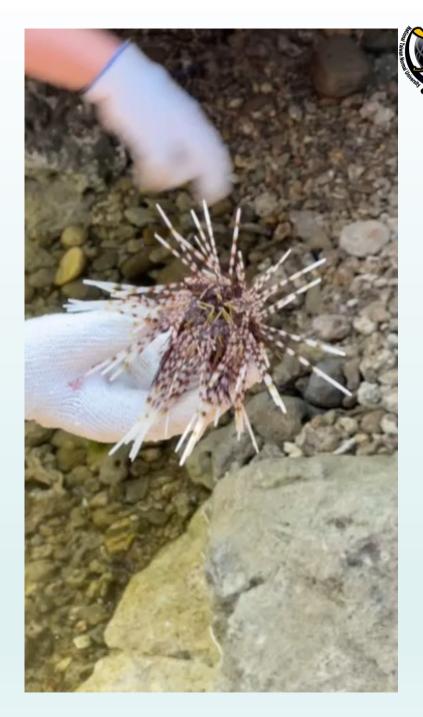














Tatun Volcano Observatory



HsiaoYuKeng



DragonPhenix Valley



Sulfur Valley

