

Scientific Competence

CURRICULUM VITAE

Family name : **Alaoui**
Personal name : **Mustapha**
Date and place of birth : **04 April 1966 in El Ksiba. Morocco**
Phone / email : **0662331785/alaouimustapha0@gmail.com**



MAIN ACQUIRED QUALIFICATIONS

Tests and Geotechnical Control of Materials in Civil Engineering. *LPEE. BENI MELLAL*
Study on the Movements of Terrain / PFE of the Specialized Master. *GTGG.FSJ*
Realization of Geological and Geochemical Maps: Mining potential of the sites. *LPEE/USG*
Studies and Exploration of the mines: Mining permit Precious metal deposits. *MANAGEM*
Measurement of Hydraulic Parameters: Hydrology, Hydrogeology and Inventories. *CID*
Water Quality Control: Processed Water and Sewage Water. *ONEP/HYDRO AGENCY*
Environmental Protection Study: Impact Study of Quarries and Mines. *ANZAR ADVICE*
Acquisition of Geophysical Measurements: Electrical Tomography, Magnetism. *FST/USMS*
Animation of Geoforums and Scientific Round Tables. *ENMR, FMS. Rabat*
Geology of Morocco at all scales and GPS Navigation Professional Geology
Supervision of Students on Land-Higher Education Morocco and elsewhere
- ENSA Khouribga. FST-FP Beni Mellal: Licenses and Masters in Geosciences
- UNMSM Lima-Peru / CUSUR Guadalajara. Mexico: Licenses and Masters
Ascension and Geological Survey / Environment of Huascaran National Park 6768 m
Conference, Excursions and Ascent of the active volcano Colima 4280 m, Mexico
Speleology and Geotourism Course: Geosites and Geotopes Mountains and Hills
Cartography and Topographic Profiles of Caves and Valorization in Geotourism
Design and Cartography of Geotourism Tours: Slope, Average speed, Explanation
Individual Consultant in Geosciences and Environment Arab Sector UNESCO 2021

TRAINING AND DIPLOMAS OBTAINED

2014/2018: PhD: Geohazards and Environment 2018. FST. SMSU. Beni Mellal
2010/2012: Master Sp: Geotechnical and Engineering Geology: FSJ-CD/ El Jadida
1998/1999: Application Engineer first degree: Equivalence of the Ministry of Public
1989/1993: Bac + 4: Structural Geology: FSSM-Cadi Ayyad University. Marrakech
1988/1989: Bachelor's degree: Option: Experimental Sciences: Tarik. El Ksiba High School

PROFESSIONAL AND TECHNICAL EXPERIENCE

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2020-2021: GERMAN GROUP OF GYPSIFE SITES

Mapping at 1/2000 and 1/5000 and realization of interpretive geological sections of Jurassic lands between the coastal soft of Safi and the phosphate basin of Youssoufia

2012-2019: GEOLOGIST PHD-STUDIES AND MINING RESEARCH

Geological studies of future deposits of copper, lead, iron, and manganese

Teaching: Courses, TD, TP: FST, FP, ENSA, UNMSM, Morocco, Peru and Mexico

Expert Title International: Landslides and Natural Hazards Congress Lima-Peru 2013/2014

2010-2012: END OF STUDY PROJECT MASTER 2 ON GEORISC / M2

Landslides Between Fez and Taza: Sliding Hazards and Development of the Motorway Fez-Oujda A2 Embankment of a PV113 Vehicle Crossing of the Oued Amlil-Taza Section

2011: GEOLOGIST - ATLAS CEMENT: MASTER 1 / M1-STAGE

Study on the stability of the quarry front of Karst limestone quarry -Travertine of Dir Ksiba

2010-2016: SUPERVISOR - OFFICE OF STUDIES: ANZAR CONSEILS-RABAT

Hydrogeology and Environment: Inventory of Berrechid Tablecloth samples and regions

Protection of water catchment points in the Sbou / Bourgreg basin North Central Morocco

2010: ENGINEER: CONSULTING ENGINEERING AND DEVELOPMENT /CID

Rural drinking water / Project-ONEP / Hydrogeology of the region Oum Rbia /Loukous basin

Companion of sampling and inventory of hydraulic structures (Piezometry, Conductivity ,pH)

2002-2003: GEOLOGIST-PROJECT MINISTRY OF ENERGY AND MINES

National Geological Mapping Plan: Geological Maps on High Atlas and Anti-Atlas (USG Project: P.N.C.G). Taroudant, Ighrem, Tafraout, Taliouine, Toubkal, Houz south...Morocco

1997: GEOLOGIST PROSPECTOR-O.N.A GROUP: MINING - MANAGEM

Exploration and Mining Research and Geological and Geochemical Mapping of Sites with mineralized structures and formations (Au, Ag, Zn, Cu, Ba, Fe, Sb and Pb)

1997: AGENT OF THE NATIONAL DRINKING WATERBOX OFFICE - SAFI

Control and daily treatment of drinking water from the regions of the city of Safi-ONEP

1996: AGENT OF LABO-AGENCY BASIN OF OUM R'BIÂ BÉNI MELLAL

ABHO: Hydrogeology, Hydrology and Water Treatment in Beni Mellal-Khenifra Region

1996: LABORATOR - PROVINCIAL LABORATORY OF BÉNI MELLAL

Tests and geotechnical control on the quality of materials used in civil engineering construction , Roads and control of asphalt in the Beni Mellal city and areas environment

1995: STAGEIC GEOLOGIST-NOYED AREA OF YOUSOUFIA-OCF

Critical analysis of the different methods of flow measurement and stripping of the

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measurements in the galleries drainage channels in the Gantour drowned area Youssoufia.

NATIONAL CONGRESSES AND GEOFORUMS

M. Alaoui¹. Geoforum 2014: Animation of a round table entitled. The Contribution of the Geotechnical Engineer for Exploration and mining research/Higher School of Mines-Rabat

M. Alaoui¹. Geoforum 2015: Vulnerability of Infrastructures against Landslides of areas

Mustapha Alaoui¹. Role of Geotourism in the Promotion and Popularization of the M'goun Geoparc: Research, Trends and Perspectives. 7th National Forum of Speleology. Afourar-Beni Aayat and Azilal September 2018.

Mustapha Alaoui¹. Mapping and design of topographic profiles of caves and Karst terrains in the pleated Middle Atlas. 8th National Forum of Speleology. Sefrou regions November 2019.

INTERNATIONAL CONGRESS: COMMUNICATIONS AND POSTERS

Mustapha Alaoui¹. Magistral Confrencia: Land Movements between FES and TAZA.

Studies on the Slip and Adjustment of the Embankment of a Passage Vehicles PV113

Highway A2. Rabat-Oujda / Kingdom of Morocco. International Communication November 2013. 1st International Symposium of Essayos de Campo, Laboratorio, and Instrumentacion Geotécnica Lima-Peru / 2013-2014. International Congress.

Mustapha Alaoui¹. International and National Congress of Geotourism: Planning of Geoturismo in Marruecos (Arequipa) Investigation in Tourism. Tacna-Peru.

Mustapha Alaoui¹. Housni, FE Najine, A. Impact of Climate Change on Landslide in the Central High Atlas of Morocco: Case of Tabaroucht. "IX Colloquio Internacional de Investigación Universitaria CIIU", Centro Universitario Del Sur: Ciencias, Exactas, Naturales and Tecnologia, Universidad de Guadalajara - Guzman State of Jalisco -Mexico. (Nov. 2017)

Mustapha Alaoui². Contribution of Sentinel-1 data and geophysical prospecting for lineament mapping. Case of Beni Mellal Atlas and Beni Moussa Plain. 9th International Symposium on Eastern Mediterranean Geology, Turkey. (Poster May 2018) I. Boutiram.

Mustapha Alaoui¹. Impact of climate change on landslides in the Central Middle Atlas with confirmation of the results of soil mechanics by X-ray diffraction: case of Tit N'Ziza-El Ksiba. Beni Mellal-Khenifra. Morocco. International conference I2CNP. World Environment Day.5th June 2021. Zoom

Mustapha Alaoui². Impact of Mining Quarrying on the Environment in the Khenifra region. Morocco. International conference I2CNP. World Environment Day.5th June 2021. Zoom

Mustapha Alaoui². Impact of geology and climate change on Westland: case of Aguelmam Azegza Lake". Morocco. International conference I2CNP. World Environment.5th June 2021.

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Mustapha Alaoui¹. 'Implications of Geosciences & Earth Sciences in the development sector- Maghreb Region'. Geoconference 19/20-2021-Arab Region/UNESCO Cairo Office.

Mustapha Alaoui¹. Structural and Mining Geology of a Copper site with Epigenetic-type auriferous levels in the region of Imi Nisk in M'goun, Central High Atlas. Rural town of Abachkou, Azilal. Morocco. Environment and Natural Resources : Challenges and Solutions (ENRSC2021-Scopus). Expositor and Moderator. 24-25th, November 2021 (Webinar).

INTERNATIONAL ARTICLES AND PUBLICATIONS

Mustapha Alaoui¹. F. Housni. A. Najine. Bracamontes Humberto. A. Wafik. Impact of Climate Change on the Landslide of Tit N'Ziza Atlas Dir El Ksiba, Environments. Copy Right, IJAR, December 2017.10.21474 / IJAR01 / 5996.

Mustapha Alaoui². Application of Geophysics for the Detection of Derangement of Phosphate Layers in the Oulad Abdoun Basin in Morocco. European Scientific Journal October 2018 edition Vol.14, No.30 ISSN: 1857-7881 (Print) - ISSN 1857-7431.

Mustapha Alaoui². Landslides Susceptibility Mapping in the Municipality of Oudka Taounate, North Morocco. Full author [S. Benchalha JISRS], Hasna Chennaoui Aoudjehane. XLII-4 / W12.2018. Geo-Advances 2018, 10–11 October 2018.

Mustapha Alaoui². Landslides Susceptibility Mapping in the Municipality of Oudka Taounate, North Morocco. Full author [S. Benchalha JISRS], Hasna Chennaoui Aoudjehane. International Journal of Geotechnical and Geological Engineering Vol: 13, No: 5, 2019

Mustapha Alaoui². Mapping in the community of Oudka, Taounate Province North Morocco: A Comparative Analysis of Logistic Regression, Multivariate Adaptive Regression Spline, and Artificial Neural Network Models. GSA Newspaper December 2019.

Benchalha, Hasna Chennaoui Aoudjehane. The Geological Society of America. GSA

Mustapha Alaoui². Geophysical Characterisation of Disturbances in the Phosphates Series of the Oulad Abdoun, Morocco: Relationship with Atlasic tectonics. European. Scientific. Journal. 2020 Editions. S. Zerouali. Doi:10.19044/esj. 2020.v16n2p49.

Mustapha Alaoui¹. Field Movements between Fes and Taza Risk of Landslides of an Embedded Passage of Highway Vehicles PV113 of the Oued Amlil -Taza section. Morocco Expertise and Stabilization Methodology. ID-I0150071. Volume 11, Issue 5, May 2020

Mustapha Alaoui¹. - Impact of climate change on the landslide in the Central High Atlas of Morocco-Confirmation of the results of soil mechanics by X-ray diffraction. Case: Tabaroucht. Azilal. Morocco.IJSER.ID-I0149122 Volume 11, Issue 6 June 2020

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Mustapha Alaoui¹. Geological Characterization of Gravity Instabilities in the Northern Gradins of the Atlas of Beni Mellal Cases of Landslides: Tit N'Ziza and Tabaroucht. Morocco. Expertise and Stabilization Methodology. ACUUS 2020. ID.14 Scientific Track.

Mustapha Alaoui¹. Impact of climate change on landslides in the Central Middle Atlas with confirmation of the results of soil mechanics by X-ray diffraction: case of Tit N'Ziza-El Ksiba. Beni Mellal-Khenifra. Morocco. International conference I2CNP. World Environment Day.5th June 2021.Scopus 2021.

Mustapha Alaoui². Impact of geology and climate change on wetlands: case of Aguelmam Azegza Lake". Morocco. International conference I2CNP. World Environment.5th June 2021

FUTURE PENDING ARTICLES

Mustapha Alaoui². Interpretation of Gravimetric and Aeromagnetic data in the Hydro-structural Analysis in the Beni Mellal Atlas and the Beni Moussa Plain. Beni Mellal Khenifra region. (Ikrame Boutiram, FST / USMS Beni Mellal).

Mustapha Alaoui¹. The Role of Geotourism and Ecotourism in the Promotion and Popularization of Geoparc M'goun. Azilal. Kingdom of Morocco. Unesco Geoparc

Mustapha Alaoui². The vein field of the Zenaga buttonhole comparative analysis with other Proterozoic buttonhole: Geochronological dating and geochemistry. Field mission 2020

INTERNATIONAL INTERNSHIPS

Mustapha Alaoui. International Practical Internship of two months in the Research Center in Behaviour (CICAN), Centro Universitario del Sur/CUSUR: Department of Ciencias, Exactas, Naturales and Tecnologia, Guzman-Universidad de Guadalajara-Mexico. October-Nov.2017

FUTURE CHALLENGES

Ascent of Mountains: Montblanc 4809m (France), Kilimanjaro 5895m (Tanzania), Everest 8848m Nepal. Ampato volcano 6288m (Peru)

CERTIFICATES OUTSIDE THE KINGDOM OF MOROCCO

- Certificate of geologist lecturer of the University Center of South Guadalajara
- International Internship Certificate at CUSUR Guzman Guadalajara - Mexico
- Graduate Visiting Professor of Geology from the National Major University of San Marcos, Decanate of America, Department of Geology. 2013/2014.
- Certificate of the 1st International Congress of Geotechnics and Geo-instrumentation and Field Application in Lima-Peru
- Certificate of International Expert in Georisc: International Geotechnical Congress

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- Certificates of the School of Geological Engineers of Lima "CIP", as a speaker and exhibitor of field work in Andes Mountains

ASCENSION AND STUDIES OF MASSIFS AND MOUNTAINS

- Morococha Copper and Gold Mine 5200 m / Andes Mountains Peru. 2013-2014

Study on the geological environment of the Morococha mine and mineral prospecting

- Landslide of the Costa Verde on the Pacific. Lima-Peru 2014.

Study on the risk of sliding of the geological formation of the channel cliffs of the [Rimac] river which crosses Lima and which dominates the Pacific Ocean of Peru.

- Huascarán National Park 6768 m / Andes Mountains Peru. April 2016

Glacier study in the face of climate change at 6200 m, the highest gaseous lake the blue lake in the world at over 4400 m altitude. Study on endemic plants in Peru and Bolivia such as the genus [Puya Raymondii] of the ananaceae family flora, and fauna Camel [Llama] of Andes.

Study on the rest of the dinosaurs highest in the world 4600 m, so the glacial lake [Pastoruri] the highest in the planet 5400 m in the Andes Mountains of Peru.

- Active Volcano National Park of Colima- Guzman Guadalajara- Mexico 2017

Study on the Guzman fault in volcanic context, visit the volcanic craton. Magmatic Petrology of the Two Volcanoes (Andesite and Volcanic Andesite) and Colima National Park.

ACADEMIC HIGH EDUCATIONAL COURSE

2018-2021: Supervision of doctoral students in the field, with publication of articles as author on the High Atlas of Béni Mellal, the Anti Atlas, the phosphate basin and the Rif mountains

2017-2018: Course and field supervision on the geology of the Colima volcanic massif and methodology for structural mapping of tectonic accidents that affected the volcanic arc and its environment, sedimentology and petrography of the site and types of endemic vegetation of this part of the globe between 1500m and 4200m above sea level. University Center of the South CUSUR Guzman, University of Guadalajara-Jalisco Mexico.

2016-2017: Practical work of the course of Geological Cartography of cycle1 of the department of Earth and Sciences-FST/Sultan Moulay Slimane University Béni Mellal.

2015-2016: Course and Tutorials Master Engineering and Management of Water Resources and Environment IGR2E-FST Sultan Moulay Slimane University / Béni Mellal: Mathematical Hydrogeology and Methodology of Investigation of Water Resources. Evaluation Test.

2014-2015: Course and Practical Work Polydisciplinary Faculty Sultan Moulay Slimane University Béni Mellal- Geological and topographic mapping Cycle1 of the Department of Earth and Life Sciences. Evaluation Test

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2013-2014: Classes, Lectures and Supervision of students in the Field: La Costa Verde landslide and the Morococha Mine National University of San Marcos UNMSM and School of Geological Engineers CIP Lima-Peru. Geological and Mining Prospecting, Geotechnics and soil mechanics, Geotourism in rural areas. Practical work-Geological petrography for cycle1- Geology Department, San Augustin University Arequipa Peru.

2012-2013: Course and Tutorials - Geology and Geotechnics Professional License Civil Engineering and Environment. National School of Applied Sciences ENSA Khouribga-Hassan1st University Department of Process Engineering.

2000-2001: Support course Primary and Secondary Level- Mathematics, Natural Sciences, Physics-Chemistry and French Language. Development and Environment Association. El Ksiba Béni Mellal Morocco.

MAIN USUAL LANGUAGES

Arabic : Read, Written and Spoken (Level 3)

Amazigh: Read, Written and Spoken (Level 3)

French: read, written and spoken (Level 3)

English: read, written and spoken (Level 2)

Spanish: read, written and spoken (Level 2)

Portuguese: read, written and spoken (Level 1)

OTHER ACTIVITIES & HOBBIES

Sport and Hiking Geotourism / Ecotourism: Congresses and Forums

Publication of crossed-arrow words and scientific subjects in the Opinion Journal

Computer Tool: Paint Net, GIS, Illustrator, Autocad, Excel, PPT, GPS Navigation Field.

Zatero Software: Training at FST Beni Mellal February 2016/2017

Driving license (Feb.1999): Field Hydrogeology missions. 2009/2010/2016

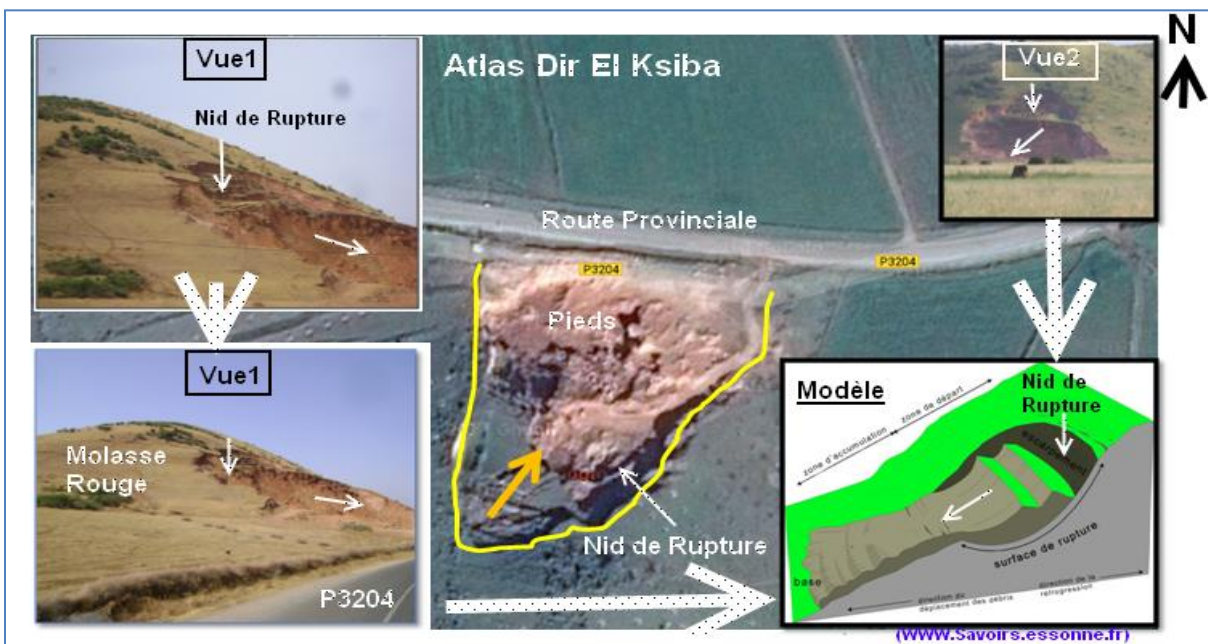
Training and Animation in Speleology and Mountain Geotourism Trekking

Member Scientific Committee at the Moroccan Federation of Speleology 2019-2023

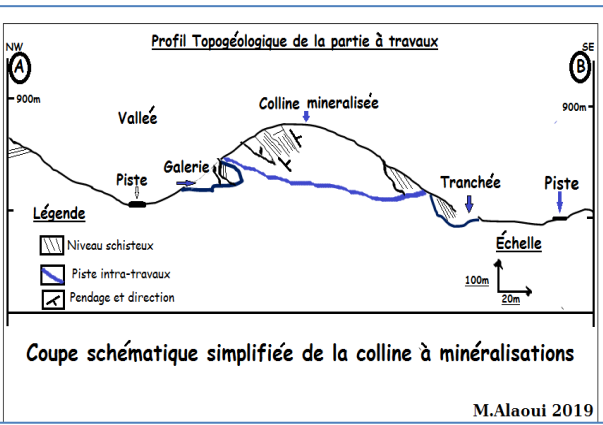
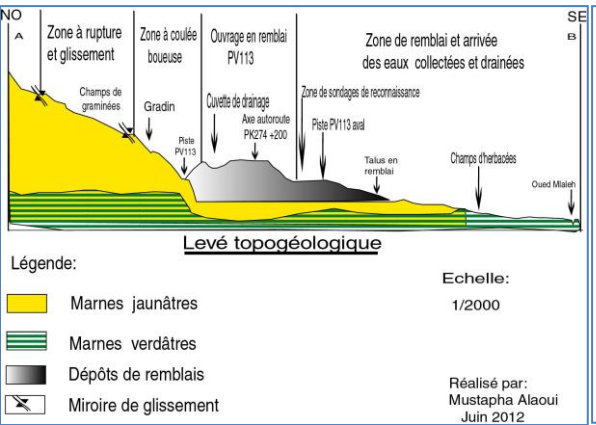
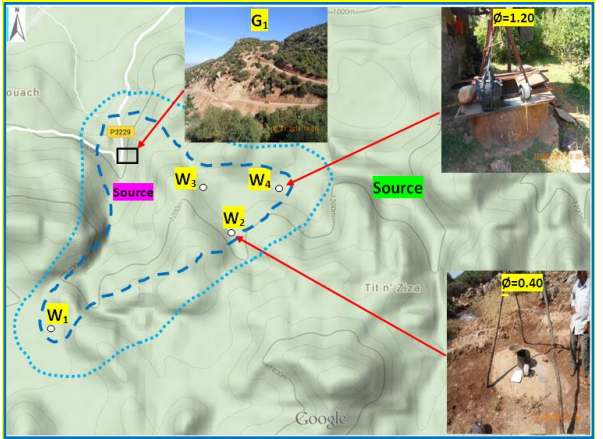
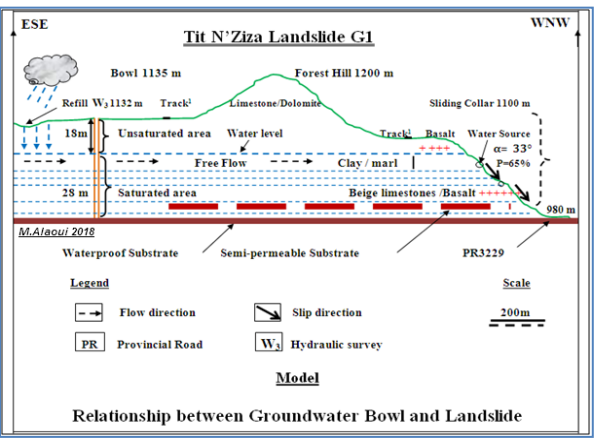
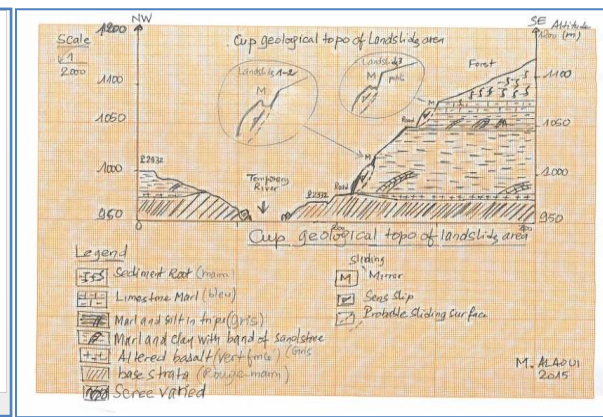
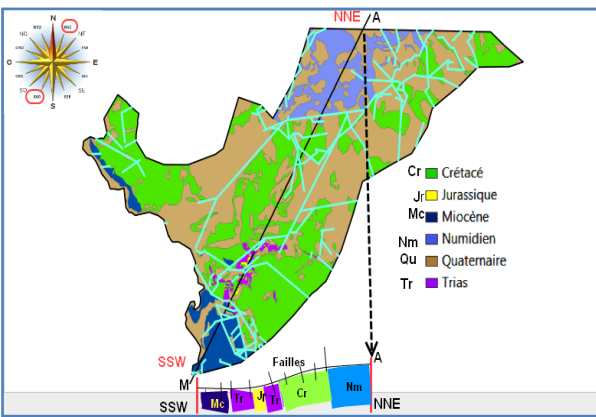
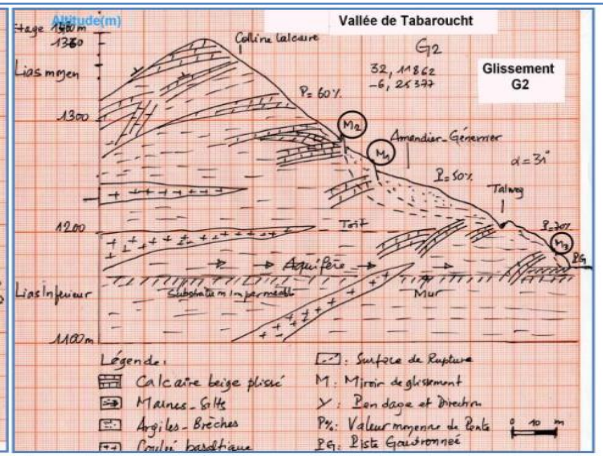
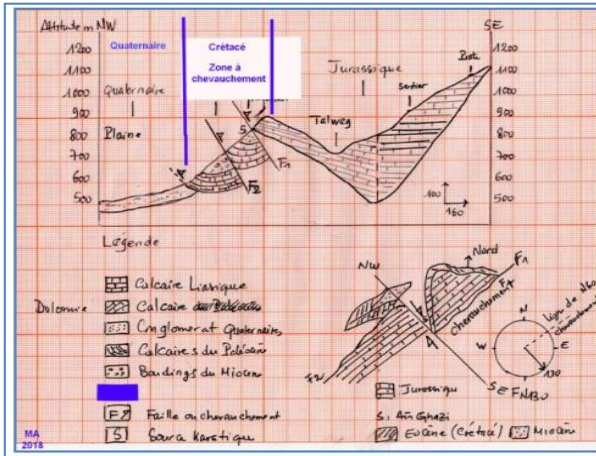
Census of Inhabitants and Habitats / Morocco: High Commissioner for Plan / 2014

PHOTOS AND RESEARCH METHODOLOGY [MASTER AND DOCTORATE]

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