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Geoscience Bulletin Board – 25 February 2019 – compiled by Elaine J. Hanford

Essay on the history of geology and the Earth

- <https://aeon.co/essays/when-geology-left-solid-ground-how-mountains-came-to-be>

Climate cycles vs climate mania – an excellent video!

- <https://www.youtube.com/watch?v=phaBUQ3NU1w&feature=youtu.be>

The massive Daguangbao landslide – largest non-volcanic terrestrial rockslide

- <https://blogs.agu.org/landslideblog/2019/02/18/daguangbao-landslide-1/>

The 660-km boundary topography between upper and lower Mantle

- <https://www.popularmechanics.com/science/environment/a26409144/underground-mountain-ranges/>

Bluestones of Stonehenge traced to 5,000-year-old quarries in Wales

- https://www.upi.com/Science_News/2019/02/19/3831550595484/?si=1
- <https://arstechnica.com/science/2019/02/these-quarries-supplied-the-stones-that-built-stonehenge/>

Ram’s Horn specimen of wire gold to be probe using neutron characterization technique

- <https://phys.org/news/2019-02-world-finest-gold-specimen-probed.html>

Deep-sea mining: plundering & pillaging the minerals on the sea floor

- <https://eandt.theiet.org/content/articles/2019/02/deep-sea-mining-plundering-the-seafloor-s-minerals/>

Tide gauge records reveal tremor episodes in Cascadian Subduction Zone

- <https://phys.org/news/2019-02-tide-gauges-capture-tremor-episodes.html>

Modeling short-term variations in upwelling Kuroshio waters into the East China Sea shelf

- <https://eos.org/editor-highlights/route-for-upwelled-kuroshio-waters-into-east-china-sea-shelf>

exactEarth real-time maritime tracking system is now fully deployed

- http://www.spacedaily.com/reports/exactEarths_Revolutionary_Global_Real_Time_Maritime_Tracking_and_Information_System_now_Fully_Deployed_999.html

The North Sea, O&G exploration, and dismissed “phantom volcano” – fissure fed volcanism

- <https://www.bbc.com/news/uk-scotland-north-east-orkney-shetland-47292357>
- <https://uk.reuters.com/article/uk-britain-oil-north-sea-volcanoes/phantom-volcanoes-may-hide-more-oil-and-gas-in-the-north-sea-study-idUKKCN1Q81KG>

Cretaceous dinosaur species recognized in southwestern Tanzania – a large, long-necked titanosaur

- https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=297651&org=GEO&from=news
- <http://www.sci-news.com/paleontology/mnyamawamtuka-moyowamkia-06910.html>

USGS using rapid deployment gauge to monitor potential flooding following ice jam on South Branch Piscataquog River, New Hampshire

- <https://www.usgs.gov/news/usgs-monitors-potential-flooding-following-ice-jam-south-branch-piscataquog-river-new-boston>

Fossil record shows land animal biodiversity has been fairly steady for 60 million years

- <http://www.sci-news.com/paleontology/land-animal-diversity-06925.html>

Trace fossils suggest multi-cellular organism may have already existed 2.1B years ago

- <http://www.sci-news.com/paleontology/multicellular-life-06919.html>

DARPA PALS program to detect undersea activity by analyzing behaviors of marine organisms

- http://www.terraily.com/reports/Five_teams_will_help_DARPA_detect_undersea_activity_by_analyzing_behaviors_of_marine_organisms_999.html

Unnuakomys hutchisoni – “night mouse” was small marsupial lived among dinosaurs in the Arctic

- http://www.terraily.com/reports/Newly_discovered_marsupial_lived_among_Arctic_dinosaurs_999.html

Major volcanic event may have triggered the Gaskiers glaciation 580 myo

- <https://www.sciencedaily.com/releases/2019/02/190220112240.htm>

Simulated ocean mesoscale structures induce interaction of ocean and atmosphere (MASI)

- https://www.eurekalert.org/pub_releases/2019-02/ioap-som022019.php

Improved understanding of river flows and sediment transport under ice cover

- https://www.eurekalert.org/pub_releases/2019-02/uoef-nii022019.php

Travels in Geology: The calderas & caldieras of the mid-ocean ridge in the Azores

- <https://www.earthmagazine.org/article/travels-geology-mid-ocean-volcanic-excursion-calderas-and-caldeiras-azores>

Arkansaurus fridayi now the official State Dinosaur of Arkansas

- <https://www.earthmagazine.org/article/benchmarks-february-17-2017-arkansas-gets-state-dinosaur>

Dinosaur teeth and skills reveal much about their feeding habits

- <https://www.technology.org/2019/02/19/new-diet-new-teeth/>

New smelting process to produce soluble phosphate for fertilizers from low value ores more economically & environmentally friendly

- <https://www.technology.org/2019/02/18/firing-up-phosphate-production/>

Mount Etna volcanic eruption of ash clouds followed by 4.8M EQ

- <https://www.ibtimes.com/mount-etna-volcano-eruption-sends-ash-clouds-sicily-causes-flight-disruptions-2766194>

AAMA updates 2 specifications for test methods related to seismic drift

- <https://www.bdcnetwork.com/aama-updates-two-specifications-test-methods-related-seismic-drift>

Icebreaker Polarstern crew to observe ocean hidden under the Antarctic ice for 100,000 years

- <https://www.nature.com/articles/d41586-019-00588-x>

Chionoecetes crabs found feeding vigorously on seafloor methane seep off coast of British Columbia

- https://www.upi.com/Science_News/2019/02/20/Scientists-find-tanner-crabs-feeding-on-seafloor-methane-vent/4511550691353/

Mars Exploration Rover Opportunity gathered much geologic information over 14 years

- <https://blogs.scientificamerican.com/rosetta-stones/goodnight-opportunity-so-long-and-thanks-for-all-the-geology/>

Finding treasure in an old geology book for \$1

- <https://www.theava.com/archives/96879>

“The key to the future is found in the past” as the geology of Kilauea reveals past eruptive behavior

- <https://www.westhawaii.com/2019/02/10/hawaii-news/volcano-update/geology-of-the-past-how-long-will-the-eruption-last/>

San Benito Geology: Part 5: San Benito underwater – Pleistocene Lake San Benito

- <https://benitolink.com/features/san-benito-geology-san-benito-underwater>

Geology of rare-earth minerals

- https://dailyjournalonline.com/news/local/rare-earths-geology-discussed/article_32084b08-b038-5364-9920-ebaabe5d627d.html

Contemplating events that could mark the beginning of the Anthropocene

- <https://www.e-flux.com/journal/97/252226/white-utopia-black-inferno-life-on-a-geologic-spike/>

In memoriam: Peter Robinson (1936-2019)

- <https://www.thescarboroughnews.co.uk/news/local-naturalist-peter-robinson-who-wrote-geology-trails-for-scarborough-and-forge-valley-has-died-aged-83-1-9600818>

Don White (1914-2002) led USGS hydrothermal studies in Yellowstone

- https://billingsgazette.com/outdoors/caldera-chronicles-usgs-researcher-led-hydrothermal-studies-in-yellowstone/article_e93b6215-7d8a-5e0f-b4ad-f376584bde40.html

Historical fossils collected by Sir Charles Lyell now accessible online

- https://www.eurekalert.org/pub_releases/2019-02/pp-scl022019.php

U of Kansas buys 600 acres to ensure continuing access to summer field geology site

- <https://koaa.com/news/covering-colorado/2019/02/04/university-of-kansas-buys-600-acres-near-canon-city-for-geology-department/>

\$3.2M mineral collection donated to Colorado School of Mines Mineral Museum

- <https://patch.com/colorado/golden/mineral-collection-worth-3-2m-donated-mines-geology-museum>
- Museum: <https://www.mines.edu/geology-museum/>

ARkStorm Scenario includes flooding of Biblical proportions in California

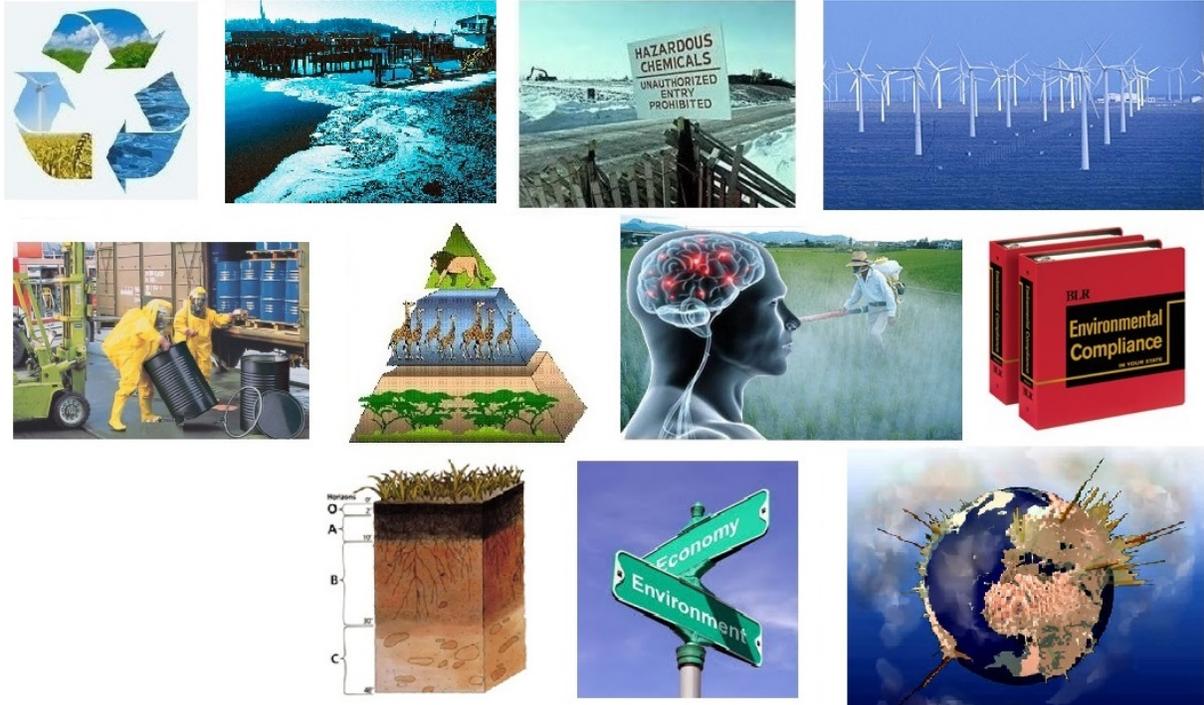
- <https://www.10news.com/news/local-news/devastating-ark-storm-envisioned-for-california-by-u-s-geological-survey>
- USGS ARkStorm Scenario: https://pubs.usgs.gov/of/2010/1312/of2010-1312_text.pdf

Siting of oar fish in Japan raises concerns about imminent tsunami

- <https://www.mirror.co.uk/news/weird-news/japan-tsunami-fears-after-earthquake-14030038>

Land slip closes roads and access to Franz Josef and Fox glaciers

- <https://www.radionz.co.nz/news/national/383099/massive-slip-closes-main-road-to-franz-josef-and-fox-glaciers>



Environmental Science Bulletin Board – 25 February 2019 – compiled by Elaine J. Hanford

Grand Canyon National Park celebrating 100th anniversary

- <https://www.nps.gov/grca/getinvolved/centennial.htm>
- <https://www.grandcanyontrust.org/100-years-grand-canyon-national-park>
- https://www.dailyamerican.com/news/usa_today/in-grand-canyon-national-park-opened-with-a-shrug-now/article_8ee74e5d-5711-5005-89e6-0867229c447f.html

Prevention & Control Initiative identifies cases of Chagas disease in the Yucatan – note that Chagas is not just a tropical disease – triatomine bugs are also endemic across much of the US

- <https://www.theyucatanimes.com/2019/02/over-20-cases-of-chagas-disease-confirmed-during-february-in-yucatan/>

Arizona will miss US deadline for Colorado River water plan

- <https://www.apnews.com/eb6dc868a34c4fa8b0440d7d9963d5a9>
- Drought contingency plan commentary: <https://fas.org/sqp/crs/misc/IN10984.pdf>

SCOTUS to hear case considering groundwater & pollution under Clean Water Act

- <http://www.ncsl.org/blog/2019/02/20/supreme-court-to-decide-groundwater-clean-water-act-case.aspx>
- <https://www.eenews.net/stories/1060121405>
- <https://www.natlawreview.com/article/scotus-will-review-portion-county-maui-case-involving-clean-water-act-citizen-suit>

Consequences of aging demographics – older people still working in Alcona, Michigan

- <https://www.msn.com/en-us/money/retirement/the-town-where-retirees-cant-retire/ar-BBTEfDW>

A refuge for rescued foxes in Minnesota

- <https://www.nationalgeographic.com/animals/2019/02/fur-fox-rescue/>

Animals turn white for winter camouflage

- <https://news.nationalgeographic.com/2018/02/animals-climate-change-winter-evolution/>

Indiana has its first National Park – Indiana Dunes National Park is number 60

- <https://www.yahoo.com/lifestyle/indiana-officially-gets-first-national-park-193405229.html>

Typhoon Nell flood waters caused Banqio Dam to fail in 1975 – killed 230,000 – China kept secret

- <https://www.msn.com/en-us/news/world/230000-died-in-a-dam-collapse-that-china-kept-secret-for-years/ar-BBTHP8B>

What a year for snow - a great snowpack in the Sierra - but also telling skiers to stay home

- <https://www.msn.com/en-us/weather/topstories/cali-officials-to-would-be-skiers-stop-coming-to-the-sierra/ar-BBTlzLp>
- <https://weather.com/news/news/2019-02-17-skiers-ski-resorts-too-much-snow>
- [Las Vegas: https://www.msn.com/en-us/weather/topstories/it-just-snowed-in-vegas-and-likely-will-again-this-week-that-isnt-normal/ar-BBTMa1l](https://www.msn.com/en-us/weather/topstories/it-just-snowed-in-vegas-and-likely-will-again-this-week-that-isnt-normal/ar-BBTMa1l)

Federal Appeals Court ruling may spur removal of dams on the Klamath River system

- <https://www.enr.com/articles/46386-court-clarifies-long-muddled-state-enviro-permit-issue>

What will the New Savannah Fluff Lock & Dam really cost?

- <https://www.augustachronicle.com/news/20190216/cost-differences-in-options-for-lock-and-dam-project-questioned>

NSF International sets standards for how all animals are kept, raised & responsibly managed

- <https://globenewswire.com/news-release/2019/02/14/1725494/0/en/NSF-International-Introduces-Global-Animal-Wellness-Standards.html>

Cases of Salmonella sickening in New Jersey traced to raw turkey – 279 cases across 24 states

- <http://nj1015.com/nj-cases-of-salmonella-sickening-from-raw-turkey-grows/>

Here we go again: Expecting the government to protect Texans from flooding

- <https://www.statesman.com/opinion/20190218/commentary-flood-control-infrastructure-should-be-priority-in-legislature>

Reservoirs may promote false sense of water security leading to waste

- <https://www.scientificamerican.com/article/do-dams-increase-water-use/>

Biodiversity on land is not a new phenomenon

- <https://www.sciencedaily.com/releases/2019/02/190218123129.htm>

Measles epidemic in China has implications for global infection control

- http://www.terradaily.com/reports/China_measles_Study_has_implications_for_worldwide_epidemic_control_999.html

US military could build the wall along Southern Border to fight “invasions” – smart tech questions

- http://www.terradaily.com/reports/How_the_US_military_could_build_Trumps_border_wall_999.html
- http://www.terradaily.com/reports/Amid_border_wall_debate_smart_tech_raises_questions_too_999.html

Bramble Cay melomys – little brown rat – recognized as first mammal extinction attributed to “probable human-led climate change”

- <https://www.canberratimes.com.au/environment/climate-change/our-little-brown-rat-first-climate-change-caused-mammal-extinction-20190219-p50yry.html>

Court ruling protects European bison released (re-established) in Rothaargebirge

- <https://www.treehugger.com/endangered-species/european-bison-free-remain-wild-after-court-decision.html>

Perspective: Bottled water isn’t safer than tap water

- <https://www.treehugger.com/plastic/mythbusting-bottled-water-isnt-safer-tap-water.html>

Controversial CRISPR genetically modified mosquitoes with “gene drive” released in high-security lab

- <https://www.npr.org/sections/goatsandsoda/2019/02/20/693735499/scientists-release-controversial-genetically-modified-mosquitoes-in-high-security-lab>

Lack of environmental water flows in northern Murray-Darling Basin was “root cause” of massive fish kills – in other words: humans take too much water

- <https://www.canberratimes.com.au/environment/sustainability/shocking-lack-of-preparation-exposed-darling-river-to-fish-kills-study-20190218-p50ygb.html>

9 iconic animals that humans did not quite drive to extinction – conservation efforts appear to be working

- <https://www.treehugger.com/conservation/9-iconic-animals-recovering.html>

Every stage of plastic lifecycle (from production to waste) poses significant risks to human health

- <https://www.ehn.org/plastic-pollution-and-human-health-2629322391.html>
- Report: <https://www.ciel.org/wp-content/uploads/2019/02/Plastic-and-Health-The-Hidden-Costs-of-a-Plastic-Planet-February-2019.pdf>

Human-associated bacteria and viruses detected in Menomonee River watershed in Milwaukee, Wisconsin

- <https://www.usgs.gov/news/human-bacteria-viruses-sewage-found-some-milwaukee-streams>

A week after 52 Polar Bears entered homes & public buildings looking for food – “invasion” now over

- http://www.spacedaily.com/reports/Invasion_of_polar_bears_in_Russian_Arctic_over_999.html

Once idyllic Inle Lake in Myanmar is being poisoned by pesticides & fertilizers

- http://www.spacedaily.com/reports/The_race_to_save_Myanmars_Inle_Lake_999.html

Indigenous hunters are improving health of food webs in Australian desert – slowing species decline

- http://www.seeddaily.com/reports/Indigenous_hunters_improve_health_of_food_webs_in_Australian_desert_999.html

Neanderthal diet was primarily meat-based

- http://www.terradaily.com/reports/Neandertals_main_food_source_was_definitely_meat_999.html

Global map of tree species richness

- https://www.eurekalert.org/pub_releases/2019-02/gcfi-cwm022019.php

Why do Zebras have stripes? Seems they deter horse flies from landing (and biting)

- https://www.eurekalert.org/pub_releases/2019-02/p-zsa021319.php
- https://www.eurekalert.org/pub_releases/2019-02/uoc--hzs021419.php
- Paper: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0210831>

A novel argument for building hydroelectric dams – stopping natural flood processes

- <https://www.nature.com/articles/d41586-019-00616-w>

Members of 2020 Dietary Guidelines Advisory Committee to review evidence on nutrition

- <https://www.fns.usda.gov/pressrelease/2019/002219>
- USDA Guidelines: <https://www.dietaryguidelines.gov/>
- EAT-Lancet Commission: <https://www.foodpolitics.com/tag/dietary-guidelines/>

Have you ever seen a treehopper?

- <https://www.nationalgeographic.com/magazine/2019/03/treehoppers-could-be-worlds-weirdest-insects/>

Another good use to recycle some of the millions of used tires – improve fire-resistance of concrete

- <https://www.newcivilengineer.com/latest/recycling-tyres-into-concrete-improves-fire-resistance/10040166.article>

If you build it, they will come – but is that necessarily a good thing?

- <https://libn.com/2019/02/21/schumer-to-faa-macarthur-airport-needs-more-funding/>



Coastal Zone Management Bulletin Board – 25 February 2019 – compiled by Elaine J. Hanford

MV Solomon Trader bulk carrier stranded on coral reef off Solomon Islands – potential oil spill

- http://www.spacedaily.com/reports/Oil_spill_fears_for_ship_stranded_on_Pacific_reef_999.html

Sonoma County, California, to develop two new segments of California Coastal Trail

- <https://www.sonomanews.com/lifestyle/9303982-181/sonoma-county-to-develop-two>

New research suggests coastal communities losing ground on planning for coastal erosion

- <https://phys.org/news/2019-02-coastal-ground-climate.html>

CRPA studies possible expansion of \$800M east bank project for coastal restoration in Louisiana

- <http://www.fox8live.com/2019/02/19/state-plans-river-diversions-spark-mud-fight-over-coastal-restoration/>

Book review: “Coasts and Estuaries: The Future”

- <https://phys.org/wire-news/312107702/Isu-researchers-collaborate-on-new-book-about-coastal-threats.html>

Controversy: coastal wetlands, protection, and commercial interests

- <https://www.coastalreview.org/2019/02/wotus-rollback-no-wetlands-no-seafood/>

Governor of Alaska wants to repeal law requiring revenue sharing from fisheries with coastal communities

- <https://www.ktva.com/story/39983478/dunleavy-proposes-repealing-fish-tax-share-to-coastal-communities>

Center for Coastal Studies first to track southbound whale migration using satellite-monitoring radio tags

- <https://www.capecod.com/newscenter/center-for-coastal-studies-becomes-first-ever-to-track-southbound-whale-migration/>

Case study in Annapolis, Maryland, assesses effects of high-tide flooding on local revenue

- <https://eos.org/articles/brief-repetitive-floods-in-coastal-cities-cause-economic-losses>

On-going debate between US Army Corps of Engineers and local residents on Lake Okeechobee and coastal impacts

- <https://www.tcpalm.com/story/opinion/columnists/gil-smart/2019/02/19/nothing-fake-coastal-residents-lake-okeechobee-concerns/2913534002/>

Beachfront community of Surfridge disappeared decades ago to make way for LAX – “priceless coastal real estate” for rare owls and other protected & endangered species

- <https://www.latimes.com/local/california/la-me-ln-lax-ghost-town-preserve-20190218-story.html>

Florida coastal real estate still booming – still prone to flooding from hurricanes

- <https://www.theguardian.com/environment/2019/feb/15/florida-climate-change-coastal-real-estate-rising-seas>

Environmental groups seek injunction until lawsuit decided on seismic exploration on Atlantic Coast

- <https://www.seafoodsource.com/news/environment-sustainability/environmental-groups-seek-injunction-on-air-gun-blasting-until-lawsuit-decided>
- <https://www.c-ville.com/for-the-love-of-the-south-as-he-prepares-to-step-down-the-founder-of-the-southern-environmental-law-center-looks-back-on-three-decades-of-defending-the-regions-natural-treasures/>

Difference in gender perspectives on ecosystem services in coastal Kenya & Mozambique

- <https://www.sciencedaily.com/releases/2019/02/190219111651.htm>

COA releases quarterly Public Access Report detailing safety & status of 50 public right-of-way across Aquidneck Island

- <http://www.thenewportbuzz.com/clean-ocean-access-releases-quarterly-report-detailing-the-safety-and-status-of-50-public-rights-of-way-across-aquidneck-island/17962>
- Report: https://drive.google.com/file/d/1E_2k33OtRz9gWMY84x4TbMkjR8H4CIZN/view

Preliminary results of inlet modeling to be presented for Pleasant Bay to Nantucket Sound

- <https://capecodchronicle.com/en/5408/chatham/4110/Preliminary-Results-Of-Inlet-Modeling-Study-To-Be-Presented-Erosion-North-Beach.htm>
- <https://95wxtk.iheart.com/content/2019-02-20-chatham-harbor-study-continues-with-study-presentation/>

Using native shellfish to restore Pearl Harbor Estuary

- <https://www.estormwater.com/plants-aquatic-native-wetland/partnership-uses-native-shellfish-restore-pearl-harbor-estuary>

North Carolina wants to become the “Napa Valley of Oysters”

- <https://www.coastalreview.org/2019/02/oyster-summit-to-spotlight-mariculture/>
- <https://www.nccoast.org/event/charting-the-future-of-oysters-in-north-carolina/>
- Blueprint: <https://ncoysters.org/>
- Shellfish Initiative: <https://www.nccoast.org/2018/08/north-carolina-signs-on-to-noaas-national-shellfish-initiative/>
- Strategic Plan: <https://www.nccoast.org/wp-content/uploads/2019/01/NC-Strategic-Plan-for-Shellfish-Mariculture-Final-20181230.pdf>

Wishing for more fish in the sea

- <https://queenseagle.com/all/2019/2/20/wishing-for-more-fish-in-the-sea-as-queens-marine-wildlife-dwindles>

No shortage of cigarette butt waste on Marco Beaches

- <https://www.coastalbreezenews.com/articles/no-shortage-of-cigarette-butts-on-marcos-beaches/>

New bridge in Corpus Christi is lagging behind construction schedule

- <https://www.apnews.com/93c0965a74424bbb85ee6252358b9f3f>
- Ship Channel project: <https://www.apnews.com/e1ca4b26f7424914b7d25db5d42657ad>