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08.11.20

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Israel's national library to freeze all operations due to major income loss

Budget cuts and the economic upheaval caused by coronavirus pandemic force the cultural institution to stop all public services and put some 300 employees on unpaid leave

i24NEWS| Published: 08.11.20 , 21:12

The National Library of Israel announced on Tuesday it will suspend indefinitely all operations starting August 17.

Services to the public will be frozen and 300 of its employees will go on unpaid leave.

The library's board chair, David Blumberg, and Library Director Oren Weinberg submitted on Tuesday an emergency request to the Education and Finance Ministries to help balance the library's budget, which took a heavy blow due to large government cuts.

Another factor for the library's deficit is the country's dire economic situation caused by the coronavirus pandemic.

Much of its income, particularly from donors, has been cut drastically as a result. In the letter, Blumberg and Weinberg urged the ministries' chiefs to "help the National Library as was done for other bodies and institutions, so that the library can return quickly to its important and essential activity as the National Library of the State of Israel and the Jewish people."

The library, situated on the Givat Ram campus of the Hebrew University in Jerusalem, is reportedly experiencing a shortfall of NIS 11 million (\$3.2 million).

With some four million physical items stored in the complex, 100,000 of those considered rare - as well as 60 million digitized items - the closure of Israel's National Library could be the Jewish state's most prominent cultural loss due to the pandemic.

08.11.20

Eshkol Region had 60 wildfires from Gaza Strip terrorist incendiary balloons

08.11.20

Israel threatens harsh response after Gaza incendiary balloons light up south  
PM cautions 'Iranian proxies' continued acts of aggression will carry 'heavy toll'; Gantz says Israel ready to pursue harsher measures after transfer of goods to coastal enclave through major border crossing halted

Matan Tzuri, Elinor Levy| Published: 08.11.20 , 20:44

Israel has launched a warning to terrorist factions in the Gaza Strip on Tuesday after over 60 wildfires broke out in areas near the Hamas-ruled territory due to balloon-borne explosives.

Prime Minister Benjamin Netanyahu said that the **Gaza Strip will pay a heavy toll** if terrorists continue to fly incendiary balloons into Israeli soil.

"The balloon terror will carry a heavy price. We will not put up with it. We will act and the toll will be high," said Netanyahu. "I want to make it clear to all of Iran's proxies, including Gaza. We did it before, and they better not forget it because we will do it again."

Defense Minister Benny Gantz said that **Israel halted the transfer of goods** to the coastal enclave **through a major border crossing** as a result of the ongoing tensions and cautioned Hamas that Israel will act harshly if these acts of aggression against it carry on.

"Hamas allows arson balloons and explosive balloons to be flown into the State of Israel and we are not ready to accept it," said Gantz. "We closed the Kerem Shalom Crossing as a result. They would do well to stop disturbing the security and peace in Israel. If that does not happen, we will respond."

Most **fires** broke out **near border towns** in the **Eshkol Regional** Council. Firefighting teams extinguished the fires alongside IDF forces and locals.

Nearly 500 acres of forests and agricultural lands have burned since Gaza terror faction renewed the launch of incendiary balloons last Wednesday. There were no casualties reported.

"We're **working around the clock and run around from one fire to another**, and we are not always able to keep up," said Hagai Avni - a local firefighter.

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"This is an **intolerable situation** and the State of Israel must act to restore peace to the residents of Gaza border towns. While there are no human casualties, hundreds of animals are simply burned to death. Reptiles, turtles and even bird nests - everything burns and it breaks our hearts. They cannot escape and burn alive. Unfortunately, nothing has changed in the area. The **Gaza Strip disrupts** our lives."

**08.11.20**

**Egypt allows Gazans to leave strip for three-days, Israel closed its crossing point**

**08.11.20**

**Egypt allows Gazans to leave strip for first time in months**

Egyptian authorities reopen Rafah Crossing, allowing Gaza residents holding Egyptian passports, foreign passports and patients seeking treatment abroad to leave the enclave until Friday

Associated Press | Published: **08.11.20**, 19:31

**Egypt** on Tuesday **reopened Gaza's main passenger crossing** point for the first time in months for thousands of Palestinians who have been stranded on both sides of the border due to the coronavirus crisis.

Gaza residents holding Egyptian passports, foreign passports and patients seeking treatment abroad were to leave through the Rafah crossing point during its **three-day opening**, the Hamas-run interior ministry in Gaza said. Some 500 people were scheduled to exit Tuesday, the **first time** the crossing has allowed departures **since March**.

Palestinians stranded in Egypt and abroad will be allowed to return home, the ministry added. Traffic for arrivals had been shut since May.

Kanye West suggests Israel pays African mothers \$1 million per child  
Gaza appears to have managed to keep the pandemic in check — in part because of an Israeli-Egyptian blockade that severely restricts movement in and out of the territory. Israel and Egypt imposed the blockade after the Islamic militant group Hamas seized control of Gaza in 2007.

Gaza has reported 81 cases of the coronavirus, but all of the cases were people who were in mandatory quarantine centers set up by Hamas for anyone returning to the territory. There have been no reported cases of community transmission inside Gaza.

To prepare for thousands of Palestinians expected to return via Rafah, Hamas has opened more isolation facilities across the Gaza Strip.

Life in Gaza has returned to normal with the virus at bay. Last week, schools reopened normally. Mosques, wedding halls, cafes and gyms are also open.

Israel and Hamas are bitter enemies that have fought three wars and numerous skirmishes since 2007. On **Tuesday, Israel closed its only commercial crossing point with Gaza** in **response to explosives-laden balloons** being launched by Palestinians into Israel. The balloons started dozens of fires in Israeli farmland near Gaza.

Israel said the Kerem Shalom crossing will be closed until further notice, but the **passage of fuel, food and humanitarian goods is not affected**.

The balloons have broken a months-long lull that prevailed during the pandemic. Palestinian media reports suggested that **Hamas is allowing the resumption of the balloon launches to press Israel into further easing its restrictions** on Gaza and allow large scale economic projects.

**08.10.20**

**Palestinian family in existing cave faces eviction for construction without permit**

**08.10.20**

**Palestinian family in cave home faces Israeli eviction**

Civil engineer Ahmed Amarneh receives demolition notice from Israeli authorities for his cave home, which he built after being **refused a construction permit twice**

AFP| Published: **08.10.20** , 22:51

Ahmed Amarneh's home, with a wooden door opening onto cushion-lined rooms, is not the first Palestinian residence in the West Bank to receive a demolition notice from Israel.

But it may be the first built inside a cave which the Jewish state has threatened to destroy. Ahmed Amarneh and a neighbor chat outside his home, built in a cave in the village of

Amarneh, a 30-year-old civil engineer, lives with his family in the northern West Bank village of Farasin, where Israel insists it must approve any new residential construction and can tear down homes built without permits.

"I tried twice to build (a house), but the occupation authorities told me it was forbidden to build in the area," Amarneh told AFP, using a term for Israel used by some Palestinians. The Oslo peace accords of the 1990s gave the Palestinians self-rule in parts of the West Bank.

However, some 60 percent of the territory dubbed Area C, where Farasin is located, remains under full Israeli civil and military control.

The United Nations considers Area C as Palestinian Territory.

But Israel has increasingly allocated land there for construction of Jewish settlements -- communities considered illegal under international law.

Convinced he would never get Israeli approval to build a home in his village, Amarneh set his sights on a cave in the foothills overlooking Farasin.

Amarneh said he figured that as an ancient, natural formation, Israel could not possibly argue that the cave was illegally built, while the Palestinian Authority (PA) agreed to register the land in his name.

Amarneh, whose handyman skills are considerable, sealed the entrance to the cave with a stone wall and installed a wooden door at its center.

He fashioned a kitchen, a living room and sleeping areas for himself, his pregnant wife and their young daughter. There is even lodging for guests.

He told AFP he had been living there for a year and half, but received a demolition notice from Israeli authorities in July, along with 20 other Palestinian families in Farasin.

The Israeli military branch responsible for civilian affairs in the West Bank, COGAT, told AFP demolition notices were served to some Farasin residences because of "structures that were illegally built, without the necessary permits and approvals".

Amarneh told AFP he was "surprised" to learn that he had built anything illegally.

"I didn't make the cave. It has existed since antiquity," he said, holding his young daughter in his arms.

"I don't understand how they can prevent me from living in a cave. Animals live in caves and are not thrown out. So, let them treat me like an animal and let me live in the cave."

Arab residents established the village of Farasin in 1920, said local council head Mahmud Ahmad Nasser.

It was abandoned during the 1967 Six-Day War, but from the 1980s, former residents began to return to the area. Nasser put its current population at around 200.

Farasin looks less like a village than a small collection of houses spaced widely apart.

The PA officially recognized the community of Farasin in March, but the coronavirus crisis has prevented it from providing electricity to the area, the local council said. COGAT had indicated in April that it might suspend some scheduled demolitions due to the pandemic.

But, according to the Israeli anti-settlement campaign group B'Tselem, Israel in June demolished 63 Palestinian structures.

Roughly 450,000 Jewish settlers live in the West Bank, alongside some 2.7 million Palestinians.

Farasin residents, aside from fearing the possibly imminent arrival of bulldozers, said they have spotted a caravan belonging to a Jewish settler in the area, who appeared to be setting up a home.

"The settler arrived here some time ago with his sheep," said Nasser, the local council head, asking why a settler would arrive at the moment they have been asked to leave.

08.10.20

Hamas launched explosives balloons to stir aid from Qatari next month

08.10.20

Israeli military strikes Hamas target in northern Gaza Strip

Hamas informs officials of Egyptian Intelligence, mediating between the sides, relative calm on the border will end, their warning coincides with concerns Qatari aid to the Strip will not arrive next month

Associated Press, Ynet| Updated: 08.10.20 , 07:46

The Israeli military said late Sunday that it struck a Hamas target in the northern Gaza Strip in response to the continued launches of explosives-laden balloons from the Palestinian territory into Israel.

On Sunday two fires broke out believed caused by incendiary devices attached to balloons that were dispatched from Gaza towards border area communities.

Some of the balloons had explosive devices attached to them one exploding mid-air alarming residents.

In a brief statement, the army said an aircraft struck a Hamas observation post in northern Gaza.

There were no immediate reports of injuries on either side.

Israel and Hamas have fought three wars and numerous smaller flareups since the Islamic militant group seized control of Gaza in 2007.

The enemies have largely observed an unofficial truce in recent months. Israel holds Hamas responsible for all fire out of the coastal enclave.

The Lebanese Al Akhbar newspaper considered close to the Hamas organization reported on Saturday that the Gaza rulers had informed Egyptian intelligence officials, mediating

between Israel and the terror group, that the relative calm along the border would end because of what they called Israel's attempts to foil infrastructure projects that could improve the humanitarian situation in the Strip. Sources told the paper said the Gaza factions would respond to any Israeli action including retaliatory attacks following the dispatch of incendiary and explosive devices.

Hamas' threats coincided with the projected arrival of periodic Qatari aid to the besieged enclave, which Hamas worries may end next month after it was extended by Qatar in March for a period of six months. But that extension is due to run out.

08.11.20

Russia inoculation becomes first of four Phase III vaccines approved, amid skepticism

08.11.20

Russia becomes first country to approve COVID vaccine, amid skepticism

Putin says vaccine is safe and was even administered to one of his daughters despite not completing trials on humans; WHO last week urged Moscow to go 'through all the stages' to develop safe vaccine

Reuters| Published: 08.11.20 , 13:41

Russian President Vladimir Putin said on Tuesday that Russia had become the first country in the world to grant regulatory approval to a COVID-19 vaccine after less than two months of human testing, a move hailed by Moscow as evidence of its scientific prowess.

The speed at which Russia is moving to roll out its vaccine highlights its determination to win the global race for an effective product, but has stirred concerns that it may be putting national prestige before sound science and safety.

The development paves the way for the mass inoculation of the Russian population, even as the final stage of clinical trials to test safety and efficacy continue.

Speaking at a government meeting on state television, Putin said the vaccine, developed by Moscow's Gamaleya Institute, was safe and that it had even been administered to one of his daughters.

"I know that it works quite effectively, forms strong immunity, and I repeat, it has passed all the needed checks," said Putin.

He said he hoped the country would soon start mass producing the vaccine.

Its approval by the health ministry foreshadows the start of a larger trial involving thousands of participants, commonly known as a Phase III trial.

Such trials, which require a certain rate of participants catching the virus to observe the vaccine's effect, are normally considered essential precursors for a vaccine to receive regulatory approval.

Regulators around the world have insisted that the rush to develop COVID-19 vaccines will not compromise safety. But recent surveys show growing public distrust in governments' efforts to rapidly produce such a vaccine.

Russian health workers treating COVID-19 patients will be offered the chance of volunteering to be vaccinated soon after the vaccine's approval, a source told Reuters last month.

More than 100 possible vaccines are being developed around the world to try to stop the COVID-19 pandemic. At least four are in final Phase III human trials, according to WHO data.

08.11.20

Lebanese PM Diab and his Hezbollah cabinet resigned over Beirut blast Monday

08.11.20

Lebanese demand change after government quits over Beirut blast

Despite PM Diab and his cabinet resigning, many in Lebanon believe that unless serious changes are done to the corrupt political system, no real change will come to the beleaguered nation

Reuters| Published: 08.11.20 , 17:34

Angry Lebanese said the government's resignation on Monday did not come close to addressing the tragedy of last week's Beirut explosion and demanded the removal of what they see as a corrupt ruling class to blame for the country's woes.

The blast at the Beirut port left a crater more than 100 meters across on dock nine, the French ambassador said on Twitter following a visit to the site by French forensic scientists supporting an investigation into the disaster.

A protest with the slogan "Bury the authorities first" was planned near the port, where highly explosive material stored for years detonated on Aug. 4, killing at least 171 people, injuring 6,000 and leaving hundreds of thousands homeless.

Prime Minister Hassan Diab, announcing his cabinet's resignation, blamed endemic graft for the explosion, the biggest in Beirut's history and which compounded a deep financial crisis that has collapsed the currency, paralyzed the banking system and sent prices soaring.

"I said before that corruption is rooted in every juncture of the state but I have discovered that corruption is greater than the state," he said, blaming the political elite for blocking reforms.



Talks with the International Monetary Fund have stalled amid a row between the government, banks and politicians over the scale of vast financial losses.

"It does not end with the government's resignation," said the protest flyer circulating on social media. "There is still (President Michel) Aoun, (Parliament Speaker Nabih) Berri and the entire system."

For many Lebanese, the explosion was the last straw in a protracted crisis over the collapse of the economy, corruption, waste and dysfunctional government.

Sectarian system

The Beirut port mirrors the sectarian power system in which the same politicians have dominated the country since the 1975-90 civil war. Each faction has its quota of directors at the port, the nation's main trade artery.

"It's a good thing that the government resigned. But we need new blood or it won't work," silversmith Avedis Anserlian told Reuters in front of his demolished shop.

Diab formed his government in January with the backing of the powerful Iranian-backed Hezbollah group and its allies, more than two months after Saad Hariri, who had enjoyed the backing of the West and Gulf states, quit as premier amid anti-government protests against corruption and mismanagement.

Aoun is required to consult with parliamentary blocs on who should be the next prime minister, and is obliged to designate the candidate with the most support. The presidency has yet to say when official consultations will take place.

Forming a government amid factional rifts has been daunting in the past. Now, with growing public discontent and the crushing financial crisis, it could be difficult to find someone willing to be prime minister.

A week after the blast, residents of Beirut were picking up the pieces as search operations continued for 30 to 40 people still missing.

"Our house is destroyed and we are alone," said Khalil Haddad. "We are trying to fix it the best we can at the moment. Let's see, hopefully there will be aid and, the most important thing: hopefully the truth will be revealed."

World Health Organisation spokesman Tarik Jarasevic said eight emergency international medical teams were on the ground to support overwhelmed health facilities, under strain even before the blast due to the financial crisis and a surge in COVID-19 infections.

Officials have said the blast could have caused losses of \$15 billion, a bill Lebanon cannot pay.

Ihsan Mokdad, a contractor, surveyed a gutted building in Gemmayze, a district a few hundred meters from the port.

"As the prime minister said, the corruption is bigger than the state. They're all a bunch of crooks. I didn't see one MP visit this area. MPs should have come here in large numbers to raise morale," he said.

08.11.20

Potentially dangerous chemicals tossed around remain at zones of the Beirut port

08.11.20

French expert: Dangerous chemicals remain at Beirut port

Special unit is identifying potential leaks and securing an area of the seaport where at least 20 containers holding unsafe materials are still situated, including some that were damaged by the massive blast

Associated Press| Published: 08.11.20 , 14:06

Chemical experts and firefighters are working to secure at least 20 potentially dangerous chemical containers at the explosion-shattered port of Beirut, after finding one that was leaking, according to a member of a French cleanup team.

Some of the containers were punctured when last week's deadly blast ripped through the port and the Lebanese capital, said Lt. Anthony, a French chemical expert at the site who was not authorized to be identified by his full name according to government policy.

French and Italian chemical experts working amid the remains of the port have so far identified more than 20 containers carrying dangerous chemicals, Anthony said. "We noted the presence of containers with the chemical danger symbol. And then noted that one of the containers was leaking," he told The Associated Press in a TV interview on Monday.

The experts are working with Lebanese firefighters to secure all of the containers and analyze their contents, he said. "We need to clean everything and put all in security." Earth moving equipment and rescue workers search for victims in Beirut, Lebanon, near the site of last week's explosion that hit the city's seaport

He didn't identify what chemicals were involved or provide further details. Lebanese officials have not commented on the potential chemical risks at the port. "There are also other flammable liquids in other containers, there are also batteries, or other kind of products which could increase the risk of potential explosion," Anthony said, describing huge containers tossed around the port by the powerful force of the blast. It is unclear whether there could be additional potentially dangerous containers in other zones of the port. The French and Italian experts were assigned to a specific zone to examine and secure that section, Anthony said.

The explosion last Tuesday in the port killed at least 160 people and injured about 6,000 others.

It is believed to have been caused by a fire that ignited a 2,750-ton stockpile of highly volatile ammonium nitrate.

The material had been stored at the port since 2013 with few safeguards despite numerous warnings of the danger.

The chemical experts are among scores of French emergency workers who arrived to help search for bodies, aid the sick and clean up after the blast.

08.10.20

## Lebanon Cabinet & nine members of parliament resign over Beirut blast

08.10.20

Lebanon health minister: Cabinet resigns over Beirut blast

Lebanese lawmakers resign en masse after days of violent demonstrations that saw clashes between security forces and protesters; PM Diab will head to presidential palace to hand resignation in name of all ministers

Associated Press | Published: 08.10.20, 18:18

Lebanon's Cabinet has resigned over last week's devastating blast at the Beirut port, the health minister said on Monday, a decision that was made under pressure as several ministers quit or expressed their intention to step down.

The minister, Hamad Hassan, spoke with reporters at the end of a Cabinet meeting, which came after two days of demonstrations over the weekend that saw clashes with security forces firing tear gas at protesters.

"The whole government resigned," Hamad said. He added that Prime Minister Hassan Diab will head to the presidential palace to "hand over the resignation in the name of all the ministers."

The massive blast on Aug. 4 which decimated Beirut port and devastated large parts of the city has brought a new wave of public outrage at the government and Lebanon's long-entrenched ruling class. Protests were planned outside the government headquarters to coincide with the Cabinet meeting after large demonstrations over the weekend that saw clashes with security forces firing tear gas at protesters.

The explosion is believed to have been caused by a fire that ignited a 2,750-ton stockpile of explosive ammonium nitrate. The material had been stored at the port since 2013 with few safeguards despite numerous warnings of the danger.

The result was a disaster Lebanese blame squarely on their leadership's corruption and neglect. The blast killed at least 160 people and wounded about 6,000, in addition to destroying the country's main port and damaging large parts of the capital. Losses from the blast are estimated to be between \$10 billion to \$15 billion, and nearly 300,000 people were left homeless in the immediate aftermath.

Prime Minister Diab was expected to address the nation later Monday. His Cabinet now assumes caretaker role until a new government is formed.

A Lebanese judge on Monday began questioning the heads of the country's security agencies. Public Prosecutor Ghassan El Khoury questioned Maj. Gen. Tony Saliba, the head of State Security, according to state-run National News Agency. It gave no further details, but other generals are scheduled to be questioned.

State Security had compiled a report about the dangers of storing the material at the port and sent a copy to the offices of the president and prime minister on July 20. The

investigation is focused on how the ammonium nitrate came to be stored at the port and why nothing was done about it.

About 20 people have been detained over the blast, including the head of Lebanon's customs department and his predecessor, as well as the head of the port. Dozens of people have been questioned, including two former Cabinet ministers, according to government officials.

Meanwhile, Justice Minister Marie-Claude Najm on Monday handed in her resignation, the third Cabinet minister to resign over the blast. She felt the brunt of protesters' anger when she tried to visit a damaged neighborhood and was met by shouted insults, sprayed by water hoses and forced to leave.

If a total seven ministers of the 20 Cabinet ministers resign, a new government must be formed. At least nine members of parliament have also resigned.

On Sunday, world leaders and international organizations pledged nearly \$300 million in emergency humanitarian aid to Beirut in the wake of the explosion but warned that no money for rebuilding the capital would be made available until Lebanese authorities commit themselves to the political and economic reforms demanded by the people.

Iran meanwhile expressed concern that Western countries and their allies might exploit anger over the explosion to pursue their political interests. Iran supports the Hezbollah militant group, which along with its allies dominates the government and parliament.

Iranian Foreign Ministry spokesman Abbas Mousavi said "it is natural for people to be frustrated." But he said it would be "unacceptable if some individuals, groups and foreign countries use the incident as a pretext for their purposes and intentions."

Defense Minister Benny Gantz drew a line Monday between the blast and claims that Hezbollah stores its rockets and weapons deep inside civilian areas.

While he did not accuse Hezbollah and its arms of being linked to the blast, Gantz said villages and towns across Lebanon were packed with Hezbollah arms that if set off - whether by Israeli operations or by accident - would destroy homes. He said Hezbollah was Lebanon's biggest problem.

08.10.20

Weird 'boomerang' 7.1 earthquake under the Atlantic Ocean 650 miles off Liberia

08.10.20

Weird 'boomerang' earthquake detected under the Atlantic Ocean

The temblor shot eastward across a deep gash in the seafloor, and then zipped back to where it started at incredible speeds. It moved so fast it created the geologic version of a sonic boom.

PUBLISHED AUGUST 10, 2020

A magnitude 7.2 earthquake bolted past Rosario García González's house in Baja California on a spring afternoon in 2010. González, an elder of the indigenous Cucapah community, later recounted the remarkable sight to scientists: As the quake cracked open the surface, it kicked up a cloud of dust, like a car racing across the shrubby landscape

But the car, it seemed, was going the wrong way.

Earthquakes usually crack the surface traveling in a single direction, like the tip of a tear through a piece of paper. But according to González, the dust cloud from the progressing quake was rushing back to where the temblor originated—the exact opposite direction scientists expected.

This eye-witness account of a backward-racing quake thrilled scientists. Orlando Teran, who at the time was working toward his Ph.D. at the Ensenada Center for Scientific Research and Higher Education, called the description “spectacular.” But precisely what happened that day remains unconfirmed, because seismic evidence couldn't verify what González had seen.

Now, an international team of researchers have finally caught one of these “boomerang” quakes in glorious detail, documenting the temblor racing in one direction and then back the way it came.

Ocean-bottom sensors detected a powerful earthquake in the Romanche Fracture Zone—an active fault where two tectonic plates slide side-by-side. The quake showed clear evidence of a mysterious seismic mechanism.

Tectonic plate boundaries

RILEY D. CHAMPINE, NG STAFF. SOURCES: PETER BIRD, UCLA; USGS; GEBCO

This magnitude 7.1 earthquake started deep underground, in a gash on the Atlantic seafloor, a little more than 650 miles off the coast of Liberia, in western Africa. It rushed eastward and upward, then did an about-face and boomeranged back along the upper section of the fault at incredible speeds so fast it caused the geologic version of a sonic boom.

The ferocity of shaking from an earthquake is usually focused in the direction the temblor is traveling. But a boomerang quake, or a “back-propagating rupture” in scientific terms, may spread the intense shaking across a wider zone. It remains uncertain how common boomerang earthquakes are—and how many travel at such great speeds. But the new study, published today in the journal *Nature Geoscience*, is a major step toward

untangling the complex physics behind these events and understanding their potential hazards.

“Studies like this help us understand how past earthquakes ruptured, how future earthquakes may rupture, and how that relates to the potential impact for faults near populated areas,” says Kasey Aderhold, a seismologist with the Incorporated Research Institutions for Seismology, via email.

A kick in the ground

The latest boomerang was recorded near the mid-ocean ridge in the Atlantic, where the South American and African tectonic plates slowly inch apart. In spring 2016, scientists placed 39 seismometers near the ridge to collect the rumbles of distant quakes in an effort to visualize the base of the tectonic plate.

Several months later, the magnitude 7.1 quake rumbled by. The temblor struck on a nearby fault in **what’s known as the Romanche Fracture Zone**, says Stephen Hicks, an earthquake seismologist at the Imperial College London and first author of the new study.

The fleet of seismometers faithfully recorded the shaking ground in a series of squiggles, including what seemed to be a pair of pulses. Intrigued, Hicks and his colleagues looked closer, identifying what seemed to be two steps of the quake. By examining the position of the epicenter and the energy released by each rumbling phase, the team connected the geologic dots: The **quake initially headed eastward, but then turned back west**. “This was a weird sort of configuration to see,” he says.