EARTH FROM ABOVE
OUR PLANET AS YOU’VE NEVER SEEN IT BEFORE

MOUNTAINS
SUPERSCRAPERS
VOLCANOES
ICONIC LANDMARKS
METROPOLISES
ANCIENT SITES

EXPLORE THE WORLD THROUGH INCREDIBLE IMAGES
**FROM THE MAKERS OF FOCUS MAGAZINE**

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Whether you’ve travelled the world in person, or from an armchair via a good book or the remote control, you’re unlikely to have ever seen Earth like in this special issue of *BBC Focus* magazine.

I challenge you not to be genuinely intrigued by bird’s-eye views of human-made icons such as the Pyramids of Giza, the Burj Khalifa or the Eiffel Tower, or not to marvel at the drone shots of bustling Manhattan or the make-believe world of Disneyland China, or satellite views of whole continents lit up at night.

It’s through images such as these that we begin to understand the true magnitude of our engineering achievements, but also the impact of our species on the planet. However, when you see shots of the vast expanse of the Sahara Desert, the long chain of the Rocky Mountains and the sprawling wetlands of the Pantanal, it really hits home just how small and insignificant we human beings are compared to the immensity and majesty of the natural world.

Astronaut Jim Lovell summed it up well after he returned from orbiting the Moon in 1968: “The Moon is nothing but shades of grey and darkness. But the Earth – you could see the deep blues of the seas, the whites of the clouds, the salmon pink and brown of the land masses.” At one point on Lovell’s trip, the Earth was so far away that he could cover the whole globe with his thumb: “I realised how insignificant we all are if everything I’d ever known is behind my thumb.”

So, if you’re not lucky enough to be on a trip to the Moon or the next Tim Peake destined for the International Space Station, DSLR in hand, then over the next 90-plus pages sit back and enjoy this tour of Earth from above. From mountain ranges to metropolises, deserts to dockyards, rainforests to vintage car rallies, explore our planet continent by continent. Prepare to be amazed...

Daniel Bennett, Editor
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Explore our awe-inspiring planet, continent by continent, through incredible images captured from the air by the likes of drones and satellites...

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Find out what scientists believe is causing the Wilkins Ice Shelf to break apart.

Discover how the dry Arizona climate is the perfect place for stashing aircraft.

Explore the Itaipu Reservoir and find out about the reforestation efforts.
DID YOU KNOW
The peninsula derives its name from the ancient inhabitants whom the Greeks called Iberians.
From a window on the International Space Station an astronaut captures all 582,000km² of the Iberian Peninsula, which is made up of Spain, Portugal, Gibraltar and Andorra. Although it may look like the Northern Lights (aurora borealis) hovering above Europe, the green shell of otherworldly light is actually ‘airglow’ (also known as ‘nightglow’) – a photochemical reaction that occurs when ultraviolet radiation from the Sun excites atoms in the upper atmosphere.
A drone hovers above the tessellated spire of Hallgrímskirkja Church in Reykjavík – a design inspired by the interesting shapes formed from cooling lava. Below Earth’s surface lava is known as magma. Iceland sits atop a pocket of magma. Steam rising off the magma can be used to spin a turbine, generating electricity. Geothermal energy supplies 25 per cent of Iceland’s power, with the remaining 75 per cent coming from other forms of renewable energy.

**Did You Know**

2.5cm

The distance that the tectonic plates below Iceland pull apart at the Mid-Atlantic Ridge every year.
The Eiffel Tower casts a long shadow over the River Seine, transforming Paris into a city-sized sundial. At 300m, it was the world’s tallest structure when it opened in 1889. It was built using 7,300 tons of iron and 2.5 million rivets. To protect it from the elements, it is painted roughly once every seven years with 60 tons of paint.

PHOTO: GETTY/DIGITAL GLOBE

Parisian icon

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PHOTO: GETTY/DIGITAL GLOBE

Ville des lumières

‘The City of Lights’ lives up to its name in this photo snapped from onboard the International Space Station. After the Opéra Comique burnt down in 1887, Paris decided to replace all its public gas lights with electric ones. By the turn of the century, its streets were illuminated by over 50,000 electric lamps.

PHOTO: NASA
DID YOU KNOW

580,000
The number of kWh of electricity the Eiffel Tower's 20,425 light bulbs use every year.
The red roofs of Venice stand out against the azure lagoon waters. Using satellite data, scientists have been able to measure the speed at which the city is sinking – about 1mm every year. The situation is made worse by construction, waves from boats and cruise ships eating into building foundations, and the fact that the surrounding North Adriatic Sea is also rising around 1mm per year due to climate change. To protect against flooding a barrier is being built, consisting of 80 huge steel flaps that lie on the lagoon bed.

PHOTO: GETTY/DIGITAL GLOBE
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Cold snap

The UK came to a halt on 7 January 2010 when temperatures reached a nippy -18°C and snow covered the majority of the country. The cold snap started in November, with December being the coldest ever for that month for 100 years. The lowest ever temperature in the UK was -27.2°C, which was recorded on both 10 January 1982 and 30 December 1995 in East Scotland and North Scotland respectively.

PHOTO: NASA / JEFF SCHMALTZ

Vintage rally

A drone captures a sea of classic cars gathered for the 19th Rallye Monte Carlo Historique in Monaco on the French Riviera. Only vehicles that competed in the Monte Carlo Rally between 1955 and 1980 are eligible for the event, racing from various start towns across Europe to the finish line in Monaco. The first rally was in 1911 when only 16 out of 23 cars completed the race.

PHOTO: GETTY

DID YOU KNOW

In the 1966 rally, Mini Cooper claimsthe top three places before being disqualified for illegal headlights.
Speckled across the Thames Estuary stand the 175 wind turbines of the London Array, which covers an area of over 100km². Since 2013, the world’s largest wind farm has generated enough energy to power an estimated 1.2 million UK homes for a year, preventing some two million tonnes of CO₂ from being released into the atmosphere. Each turbine has been engineered to run continuously for over 20 years.

PHOTO: PLANET LABS INC

**Powering the UK**

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PHOTO: PLANET LABS INC
The Colosseum in Rome was the largest amphitheatre in the ancient world. This view shows the remains of the hypogeum – a network of chambers beneath the central arena. It housed slaves, stage props and wild animals, which were released into the arena via trap doors, operated by a complex system of pulleys and ramps. Until being excavated in the 1930s, the hypogeum was buried beneath more than 12m of rubble and soil that had built up since the collapse of the Roman Empire.
Motorway maze

The A-3 and M-50 motorways converge in an ornate knot on the outskirts of Madrid, Spain. The system was built to accommodate commuters travelling to and from Rivas-Vaciamadrid, one of the most populous areas outside the city centre. Similar ‘spaghetti junctions’ exist in cities around the world, the term originating from Birmingham’s Gravelly Hill Interchange on the M6.

Wind power

Components of a wind turbine are assembled like a model rocket kit in the fields of Jacobsdorf in eastern Germany. The country is installing more wind farms as it phases out its 17 nuclear reactors and its dependence on coal power. Around a third of the country’s energy needs currently come from renewables, and it aims to cut carbon emissions by 40 per cent by 2020.
100,000
The number of people estimated to work inside Almeria's greenhouses.
Daybreak highlights the curvature of the Earth, as Italy slumbers in the foreground. Sicily lies at the bottom of the image, where Mount Etna’s fiery glow can just be seen surrounded by a circle of darkness. The volcano is one of the most active on the planet, with around 200 eruptions dating back as far as 1500BC.

PHOTO: NASA

A patchwork of plastic greenhouses covers more than 450km² outside the city of Almeria in Spain. With the highest density of greenhouses in the world, this unconventional oasis makes it possible to cultivate land otherwise unsuitable for crops, and provides more than half of Europe’s fruits and vegetables all year round.

PHOTO: GETTY/DIGITAL GLOBE

A new day dawns

Plastic harvest

Daybreak highlights the curvature of the Earth, as Italy slumbers in the foreground. Sicily lies at the bottom of the image, where Mount Etna’s fiery glow can just be seen surrounded by a circle of darkness. The volcano is one of the most active on the planet, with around 200 eruptions dating back as far as 1500BC.

PHOTO: NASA
Architectural vision

The Avinguda Diagonal strikes a path across the grid of Barcelona’s L’Eixample region, like a bishop slicing across a chessboard. Designed by city planner Ildefons Cerdà in the mid-1800s, each square is a cocktail of Spanish architecture with missing corners to leave room for wide-turning tram lines that were never built.

DID YOU KNOW

7.5m
The number of people that visit Barcelona every year.
Centre-pivot irrigation has transformed arid desert into circular fields of wheat, near the city of Ha’il in Saudi Arabia. But this system is unlikely to last. The underground aquifer that supplies water to these crops has been drained by as much as 80 per cent over the last few decades and, with less than 20cm of rain a year, the aquifer is unlikely to be replenished anytime soon.
The pearls of Bahrain

Shaped like an ornate necklace, the Durrat Al-Bahrain islands are an artificial archipelago, whose name translates as ‘the most perfect pearl’. To create the 20km² of new land off the south-east coast of Bahrain, 34 million cubic metres of material was dredged from the seafloor of the Persian Gulf. The islands are like mini towns with luxury homes, shopping malls and schools.

DID YOU KNOW

£4.8bn
The cost of building Durrat Al-Bahrain.
Captured by the International Space Station, this night-time view showcases the inhabited areas that have built-up around the Mediterranean over the centuries. Running down the Med’s east coast lies Beirut, Haifa, Tel Aviv and the Gaza Strip. Set back from the south coast is Cairo, with the Nile snaking down into East Africa.

PHOTO: NASA

MIDDLE EAST

Bright lights
Standing at over 828m tall, the Burj Khalifa is the highest building in the world. It took over five years to construct and cost $1.5bn. It holds many world records, including the world’s highest nightclub on the 144th floor.

36km/h
The speed of the elevators in the Burj Khalifa.

DID YOU KNOW
Rows of modern homes outline the hilly contours of Jerusalem. The patch of lighter coloured buildings huddled around the golden dome on Temple Mount is the Old City (highlighted in red). An important religious site for Jews, Muslims and Christians alike, the city has been continuously inhabited for nearly 5,000 years.

PHOTO: PLANET LABS INC
Without topsoil or plant life, marbled light and dark bands of rock are clearly evident in this image of central Iran’s Great Salt Desert (Dasht-e Kavir). While much of the area appears to be bone dry, it was once a prehistoric ocean. Over time, the water evaporated and layers of salt beneath the surface have slowly risen through soft, overlying rock to form domes called diapirs, such as the eye-like feature staring out from the centre of the image.

PHOTO: NASA

DID YOU KNOW

70°C

The difference in day and night temperatures during a year.
The world’s oldest, continuously active lava lake bubbles inside the Erta Ale volcano, known as Smoky Mountain, in the Afar region of Ethiopia. The volcano last erupted in 2005, killing livestock and forcing locals to flee. Hence, the photographer who captured this image did so remotely via a drone.

PHOTO: BARCROFT MEDIA
The population in Malawi’s capital, Lilongwe, has grown substantially in the last half century. In 1966 it was around 19,000. Today, it is almost a million. NASA’s satellite ASTER took this image. The rich red colouration is due to its camera capturing data from visible to thermal infrared wavelengths.

The Namib Desert’s rolling red-orange sand dunes are some of the world’s tallest at over 300m high. Despite its scorching temperatures, which can reach up to 50°C, it supports diverse wildlife. One animal unique to the area is the desert elephant, mainly found in Namibia’s Damaraland region, which can go for days without drinking water and has larger feet making it easier to walk through sand.
The great desert

This shot of part of the Sahara in Western Libya was captured by EarthKAM – a NASA programme where students from all over the world can ask for images to be taken from the International Space Station of specific locations on Earth. The Sahara is the largest hot desert in the world, with north-easterly winds that can reach hurricane levels, and as little as 2.5cm of rain on average each year.

PHOTO: NASA
The rich red-orange sand dunes of the Namib Desert stretch inland towards the Naukluft Mountains. Most moisture from the Atlantic falls as rain near the coast, yet some rolls across the arid desert as fog, quenching wildlife and oxidising the iron in the sand dunes to create their red colour. Highland water flows down the Kuiseb River greening the land to the north. In the south, as the Tsondab River hits the desert, water evaporates, leaving behind white salt and mineral deposits.
Three huge pyramids and the Great Sphinx make up the Giza Necropolis. The Great Pyramid (top) is the oldest of the Seven Wonders of the Ancient World. Built around 2580-2560BC, it was also the world’s tallest human-made structure for over 3,800 years.

PHOTO: GETTY/DIGITAL GLOBE
The 40km-wide Richat structure is a giant geological wonder in the Sahara Desert. Since early space missions it’s been a familiar sight to astronauts. Initially, it was thought to have been the product of a meteor impact, but geologists now think it formed when a large dome of molten rock lifted up, followed by centuries of weathering to create the roughened landscape.

**Desert eye**
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**Dust storm**
Rich with minerals, these Saharan dust plumes will land in the Mediterranean — feeding microscopic organisms, known as phytoplankton, which sit at the bottom of the food chain.
At the heart of green energy

Over 4,000 mirrors direct sunlight to a boiler in a central tower at the Khi Solar One power plant in the Northern Cape, South Africa. At full capacity the boiler heats up to a toasty 530°C. The plant began commercial operation in February 2016, and supplies energy to around 45,000 homes.

PHOTO: PLANET LABS INC
In 1966, prisoners formed a football league, adhering strictly to FIFA rules.

About 7km off the coast of Cape Town lies Robben Island. Now a World Heritage Site, it was once an infamous prison, where former South African President Nelson Mandela was incarcerated for 18 of the 27 years he served behind bars. Just inland from the harbour on the east coast is the Maximum Security Prison, where the B Section housed influential leadership figures. Guards, other workers and their families lived in the settlement on the south-east of the island.
Sections of a Liquified Natural Gas (LNG) tanker stand under construction at the Hyundai Heavy Industries Co. shipyard in Ulsan, South Korea. Stretching over 4km along the coast of Mipo Bay, the shipyard is one of the largest in the world, with 10 massive dry docks and nine huge ‘goliath cranes’. Since opening in 1972, it has produced almost 2,000 ships for companies in 52 countries. The vast size of the tanker is evident against the tiny mopeds lined up to the right of the central crane.
Island birth

The world’s youngest island, Nishinoshima, is made up of two sections which formed over 60 years apart. The lower section was created in 1973 when an underwater volcano erupted, while the upper part first broke through the ocean’s surface in November 2013, merging with its neighbour soon after. Every day, the island produces 80 Olympic-sized swimming pools worth of lava.

Patchwork farms

A grid of vast fields stretches across the Russian plains at the feet of the Caucasus Mountains, near Stavropol Krai. The region’s temperate climate makes it ideal for growing grape and grain crops, which are fed by water trickling down from the mountains.
Rows and rows of brand new cars sit awaiting delivery at the Hyundai factory in Asan, South Korea. The 1.78km² site produces up to 260,000 vehicles every year.

PHOTO: GETTY

DID YOU KNOW

4,228,509

The number of vehicles produced in South Korea in 2016, making it the world’s sixth largest producer.
The iconic diamond-patterned facade of the Bank of China Tower reaches for the stars among the glitzy lights of Hong Kong’s central business district. At 367m high, it is the city's fourth tallest skyscraper. The tower has been nicknamed 'One Knife', as some people think its profile from certain angles resembles a meat cleaver. Using a tilt-shift lens, the photographer was able to keep the building in sharp focus and blur the surroundings.
The ancient city of Kashgar (bottom right) was once a major trading post on the Silk Road. Tucked away in a remote western corner of China, much closer to Delhi and Kabul than Beijing, much of the old city is being bulldozed to make way for modern life. NASA’s satellite ASTER took this image. The rich red colouration is due to its camera capturing data from visible to thermal infrared wavelengths.

PHOTO: NASA

Silk Road stop off

The ancient city of Kashgar (bottom right) was once a major trading post on the Silk Road. Tucked away in a remote western corner of China, much closer to Delhi and Kabul than Beijing, much of the old city is being bulldozed to make way for modern life. NASA’s satellite ASTER took this image. The rich red colouration is due to its camera capturing data from visible to thermal infrared wavelengths.

PHOTO: NASA
With over 100 mountains exceeding 7,200m, the Himalayas are the world’s highest mountain range. Topping them all is Mount Everest, at a staggering 8,848m tall. If approaching from Tibet, climbers travel along the East Rongbuk Glacier to Advanced Base Camp, before ascending the North Col, reaching progressively higher camps along the North Face, before making the final push to the summit.

PHOTOS: NASA

The number of stacked London buses equal to the height of Mt. Everest.
On this stretch of Bangladesh coastline, just north of the town of Chittagong, ships from around the world come to die. Bangladesh recycles more ships than any other country in terms of tonnage. Once a ship is beached, fuel and other liquids are siphoned off and sold, then all machinery is stripped out and sold to salvage merchants. The ship’s hull is then sliced apart and melted down to be re-used in construction. But, unlike in the developed world, the process is not strictly regulated, so environmental damage and lethal accidents are common.
Terraces of rice paddies climb the mountainsides in an area of Yuanyang County in Yunnan, southern China. Rising to elevations of up to 2,000m above sea level, the local Hani people crafted many of the terraces over 1,000 years ago. The crop is harvested in the autumn, before the terraces fill with water over the winter, and then planting begins again in the spring.

PHOTO: GETTY/DIGITAL GLOBE
Shallow waters, high hydrogen sulphide levels, and temperatures plummeting from 40°C in summer to -35°C in winter, made developing the Kashagan Field oil facility in the Caspian Sea a real challenge. Discovered in 2000, and named after a 19th-Century Kazakh poet, its construction was plagued by delays, and cost around $50bn to build. Production started last year, with crude oil piped out through the Caspian Pipeline that links to the Black Sea.
A drone captured this intriguing image of Disneyland under construction in Shanghai, China. Costing £3.8bn in total, and five years in the making, it is the sixth Disneyland resort to be built around the world. Since opening in June 2016, around 20,000 people visit per day. Just left and above centre sits the Enchanted Storybook Castle, while top right is Tomorrowland, housing the TRON Lightcycle Power Run, the Star Wars Launch Bay, Buzz Lightyear Planet Rescue and the Stitch Encounter.

PHOTO: GETTY

Casting a spell

A drone captured this intriguing image of Disneyland under construction in Shanghai, China. Costing £3.8bn in total, and five years in the making, it is the sixth Disneyland resort to be built around the world. Since opening in June 2016, around 20,000 people visit per day. Just left and above centre sits the Enchanted Storybook Castle, while top right is Tomorrowland, housing the TRON Lightcycle Power Run, the Star Wars Launch Bay, Buzz Lightyear Planet Rescue and the Stitch Encounter.

PHOTO: GETTY
Rivers and tributaries snake across the land, hunting for a route to the coast. This image shows part of the Sundarbans, which bridges the border of Bangladesh and the western Indian state of Bengal, an area of 10,000 km² – about the size of 170,000 football pitches. The Sundarbans is one of the largest mangrove forests in the world, where few other plants can survive the harsh salty conditions. The lighter green land is where the forest has been cleared for agriculture and human settlement.

**DID YOU KNOW**

The Sundarbans is one of the largest reserves for the Bengal tiger.

PHOTO: ESA
The stylish international terminal at Beijing Airport, designed by architects Foster + Partners, belies the turmoil that circles the surrounding skies. With commercial airlines allowed to use less than 30 per cent of China’s airspace (the military controls the rest), the country’s airports are some of the worst in the world when it comes to punctuality. In 2015, only 64 per cent of flights at Beijing airport were on time. At major US and European airports flights land on average every 30 seconds, but in China it can stretch to three times that. So a major new terminal is being planned that will accommodate 45 million passengers a year.
Astronauts aboard the International Space Station (ISS) see amazing night views like this on every orbit – that’s 16 times every crew day. This shot was taken as the ISS passed over the island nation of Kiribati, about 2,600km south of Hawaii. Clearly visible is the Milky Way above the curvature of the Earth. The story goes that people believed the planet to be flat until Columbus sailed to the Americas. But way back in ancient Greek times, the likes of Pythagoras thought it was round.
Bone dry

Lake Carnegie is one of several "ephemeral" lakes in the Australian outback. At around 5,700km², it is one of the country's largest lakes. Usually dry, it fills up during monsoon season, only to dry up again in the hot summer months and periods of drought.

PHOTO: PLANET LABS INC

Sacred rock

Rising up from the arid Australian outback is Ayers Rock, or Uluru as it's known to the Aboriginal people. Climbing the rock is frowned upon due to its spiritual significance to the local Anangu. At 348m high and 3.6km long, it is claimed by many to be the largest rock in the world. At dawn and sunset, it appears to glow a deep shade of red.

PHOTO: NASA
DID YOU KNOW

2.5km

The distance that Uluru stretches underground.
Frozen planet

This chilly scene shows part of the Wilkins Ice Shelf in Antarctica. The pale blue circles in the centre of the image are melt pond scars, where meltwater once pooled on top of the ice then refroze. The icebergs and sea ice floating off the coast are evidence that the ice shelf is gradually breaking apart. Experts think the most recent breakup may not be directly due to global warming, but possibly caused by a previous event changing the shelf’s shape, leaving the edges vulnerable to the action of ocean waves.

PHOTO: NASA/EARTH OBSERVATORY
The dry desert air around the 309th Aerospace Maintenance and Regeneration Group (AMARG) in Tucson, Arizona, makes it the ideal place to store aircraft. Nicknamed 'The Boneyard', this 10km² site contains over 4,000 aircraft awaiting either repairs for possible future service or destruction for scrap parts. At the bottom of the image, B-52 nuclear bombers look like dismembered flies, providing proof to Soviet satellites during the Cold War that they were out of commission.

PHOTO: GETTY/DIGITAL GLOBE
With 200km² of frozen surface for up to four months a year, it is easy to see why Lake Simcoe is considered the ice fishing capital of Canada. Left behind by melting glaciers, it once merged with some of the Great Lakes to form the vast Ice Age Lake Algonquin. There are over 25,000 lakes in the province of Ontario, holding roughly one-fifth of Earth’s fresh surface water.

PHOTO: PLANET LABS INC

Ice fishing capital
DID YOU KNOW

15

The average number of stars visible above Manhattan on any given night due to light pollution.
In the left-hand image of New York, Third Avenue slices through the bright lights of Manhattan, towards the Chrysler Building, glowing out of focus in the distance. In the image below, the darker shaded area to the south of Central Park is the Financial District. The scenes are very different from when the first Europeans arrived in the 1600s. At that time the area was inhabited by native Algonquian, Iroquois and Lenape tribes, who sold ‘Mannahatta’ to Dutch settlers for around $1,000 in today’s money.

PHOTO: GETTY, PLANET LABS INC

The city that never sleeps

In the left-hand image of New York, Third Avenue slices through the bright lights of Manhattan, towards the Chrysler Building, glowing out of focus in the distance. In the image below, the darker shaded area to the south of Central Park is the Financial District. The scenes are very different from when the first Europeans arrived in the 1600s. At that time the area was inhabited by native Algonquian, Iroquois and Lenape tribes, who sold ‘Mannahatta’ to Dutch settlers for around $1,000 in today’s money.

PHOTO: GETTY, PLANET LABS INC
Dusty lanes connect the oil well pads of Wasson Field in Texas. Improved drilling technologies, such as hydraulic fracturing (better known as fracking), have created a new fossil fuel boom in America, providing access to hard-to-reach natural gas and oil like that buried deep within western Texas’ Permian Basin.
The Columbia Glacier in Alaska is known for moving quickly (flowing up to 10m per day), but is gaining a reputation for receding fast too. This false-colour satellite image was taken in 2016. In 1986, the edge of the glacier almost reached Heather Island (near the bottom of the image) – a difference of roughly 16km over a period of 30 years.

PHOTO: GETTY

**A hasty retreat**

The Columbia Glacier in Alaska is known for moving quickly (flowing up to 10m per day), but is gaining a reputation for receding fast too. This false-colour satellite image was taken in 2016. In 1986, the edge of the glacier almost reached Heather Island (near the bottom of the image) – a difference of roughly 16km over a period of 30 years.

PHOTO: GETTY
The Capitol, which was started in 1793, has been through many construction phases. It houses the United States Senate in the North Wing (left) and House of Representatives in the South Wing (right). The building has its own underground tube system to shuttle politicians between the Capitol to the Senate offices (top left).
4,041
The weight in tons of cast iron used to make the central dome.

DID YOU KNOW
The Rocky Mountains formed about 70 million years ago. Usually mountain ranges are created close to the coast, but geologists think that in this case the Pacific Plate ‘subducted’ at a shallow angle beneath the North American Plate, causing the Rockies to form further inland.

Arranged like flower beds, over 3,300 homes make up the Desert Shores Community in the shadow of the foothills of northwest Las Vegas. The city is not only the driest in the country, but also one of the highest consumers of water. The green strips at the bottom of the image are artificial lakes, while at the top is an irrigated golf course.
Rail mounted gantry cranes stack cargo containers like LEGO blocks between their tracks. The Port Jersey Marine Terminal in New York is the busiest dockyard in the United States, handling over three million containers and 25 million tons of imported cargo each year.

PHOTO: GETTY
50
The weight in tonnes that each 34m-tall crane can lift.
The shallow lakes and winding rivers of Canada’s Old Crow Flats in Yukon, northwest Canada, provide a haven for wildlife – particularly the migrating herd of caribou on which the local Gwich’in natives depend. The wetlands are also a treasure trove of prehistoric fossils including mammoths, American lions, ground sloths and giant beavers. Altered mammoth bones dated to between 25-40,000 years may be Canada’s oldest human artifacts.

PHOTO: PLANET LABS INC

Frozen wetlands

DID YOU KNOW

-63°C

The temperature of Canada’s coldest ever day, recorded in Snag, Yukon, in 1947.
Lake Powell is a reservoir on the Colorado River, straddling the border of Utah (top) and Arizona (bottom). Flooded by the Glen Canyon Dam in 1963, it has been suffering from low water levels in recent years due to extended droughts. Covering 658km², at full capacity the lake holds over 30 billion cubic metres of water.

**DID YOU KNOW**

20 million

The number of people who rely on the lake for their water supply.
When the torrential rains come, thousands of lakes form across the flat basin of the Pantanal – the world's largest tropical wetland. Covering over 180,000km², it is twice the size of Portugal. The vast floodplain is home to wildlife, such as jaguars, caimans and toucans, as well as “pantaneiros” – local cowboys who shift their cattle as the waters ebb and flow.

PHOTO: PLANET LABS INC
The world's biggest swamp

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PHOTO: PLANET LABS INC
SOUTH AMERICA
Part of Brazil’s ‘Arc of Deforestation’, Rondonia has become one of the Amazon’s most deforested areas. Over 25 per cent of its trees have been cleared since the 1970s to make way for cattle and soybeans. Yet without nutrients from the plant matter that lines the rainforest floor, the soil is only fertile for a few years.

Gold and silver mines pepper the Andean Plateau (Altiplano). The bulk of it lies in Bolivia at an average altitude of 3,750m. Silver mining in the area began around 1,000CE, before the time of the Incas. The plateau’s geological heritage has left it rich with precious minerals. The Andes started forming 6-10 million years ago when the Nazca Plate began ‘subducting’ beneath the South American Plate, forcing it upwards.
Created nearly 2,000 years ago, the meaning behind the Nazca Lines in the Ica region of Peru remains unknown. Made by removing the pebbles that covered the surface to expose the pale ground beneath, the lines form all sorts of shapes. There are about 900 ‘geoglyphs’ from straight lines to triangles to spirals, and 70 ‘biomorphs’ of birds and beasts, including a hummingbird, monkey and spider.

PHOTOS: GETTY/MARTIN BERNETTI
Quilted fields protrude into the smooth waters of the Itaipu Reservoir, which runs along the border between Brazil and Paraguay. The warm, tropical climate makes the area ideal for growing sugar cane, coffee, tea and cotton. Agriculture covers over 50 per cent of the landscape, but thanks to reforestation efforts, a green strip of vegetation now lines the banks.

PHOTO: PLANET LABS INC
Despite its name, the eroded hills of Valle de la Luna in Chile look more like the surface of Mars than the Moon. Located in the Atacama Desert, this region is regarded as one of the driest places on Earth – some years no rain falls at all. When experiments used by the Viking Mars rovers were duplicated here, some soil samples contained no signs of life.

PHOTO: PLANET LABS INC
Martian landscape
CHILE
Valle de la Luna
CHILE
SOUTH AMERICA
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