

MT AGUNG ACTIVITY REPORT

Date: 08-12-2017 09:00 WITA from Gaia-Oasis Tejakula.

SITUATION AT GAIA-OASIS

Visually, the air is clear. No smoke or ash has been seen or smelt. No noise or quakes from Mt Agung have been felt or reported.

SITUATION AT AIRPORT

Bali Airport is open and all facilities are 100% available and running.

An eruption occurred at 07:59 WITA, thick grey smoke, medium pressure, height 2100m above the summit, leaning west.

The ash is expected to dissipate in a few hours.

A new VONA (Volcano Observatory Notice for Aviation) was issued this morning, 20171208/0030Z

Code remains at ORANGE.

The Darwin VAAC (Volcanic Ash Advisory Centre) has issued an advisory:

SMALL INTERMITTENT DISCRETE VOLCANIC ASH ERUPTIONS OCCURRING AT VOLCANO.

VOLCANIC ASH NOT OBSERVED ON SATELLITE IMAGERY.

LAST VONA FOR ERUPTION TO 2100M ABOVE SUMMIT MOVING WEST AT 07/2359Z.

VOLCANIC ASH EXPECTED TO DISSIPATE WITHIN A FEW HOURS.

NEXT ADVISORY: NO FURTHER ADVISORIES

SITUATION AT MT AGUNG

Volcano is estimated to be in a critical phase, increasing again after a slowdown in activity.

An eruption occurred at 07:59 WITA, thick grey smoke, medium pressure, height 2100m above the summit, leaning west.

Eruptions are characterized by new magma brought to the surface, fragmented and broken up by the eruption.

Yesterday, 22 volcanic gusts (“hembusan”) were recorded, with smoke attaining heights of 2600m.

“Gusts” are dominated by gas, and may contain ash from lava already on the surface without new magma fragments.

Gusts generate little ashfall impact, as the ash tends to fall near the peak.

Volcanic glow was observed last night above the crater peak.

Concentration of SO₂ (sulphur dioxide) gases remain high.

Continuous microtremor recorded with amplitude 1-2 mm (dominant 1 mm)

44 low frequency quakes, 6 volcanic quakes and 4 tectonic quakes were recorded.

These indicate pressure is continuing to accumulate within the volcano, and that the epicenter of the quakes is becoming more shallow as magmatic fluids and gases move up to the surface.

Current eruptions have not exceeded VEI 2 (volcanic eruptive index 2), however government models are allowing for a VEI 3.

This time, Mt Agung has been dormant 50 years, as opposed to the last eruption where the volcano was dormant for over 120 years.

The longer the dormant period, the stronger the expected eruption. The last eruption was at VEI 5.

The scale is logarithmic viz. a VEI 2 is 10 times smaller than a VEI 3, and so on. VEI 3 is 100 times weaker than VEI 5.

The largest volcanic eruptions in recorded human history are VEI 7, occurring in cycles of 10,000+ years.

Yellowstone National Park was formed and sits atop a volcano estimated to erupt every 600,000 – 700,000 years at VEI 8.

OTHER:

Current figures show 66,805 refugees spread in 225 camps in 9 regencies throughout Bali.

The number of refugees in Buleleng regency, North Bali, now stands at 10,759 persons. (Tejakula district : 8,751 persons)

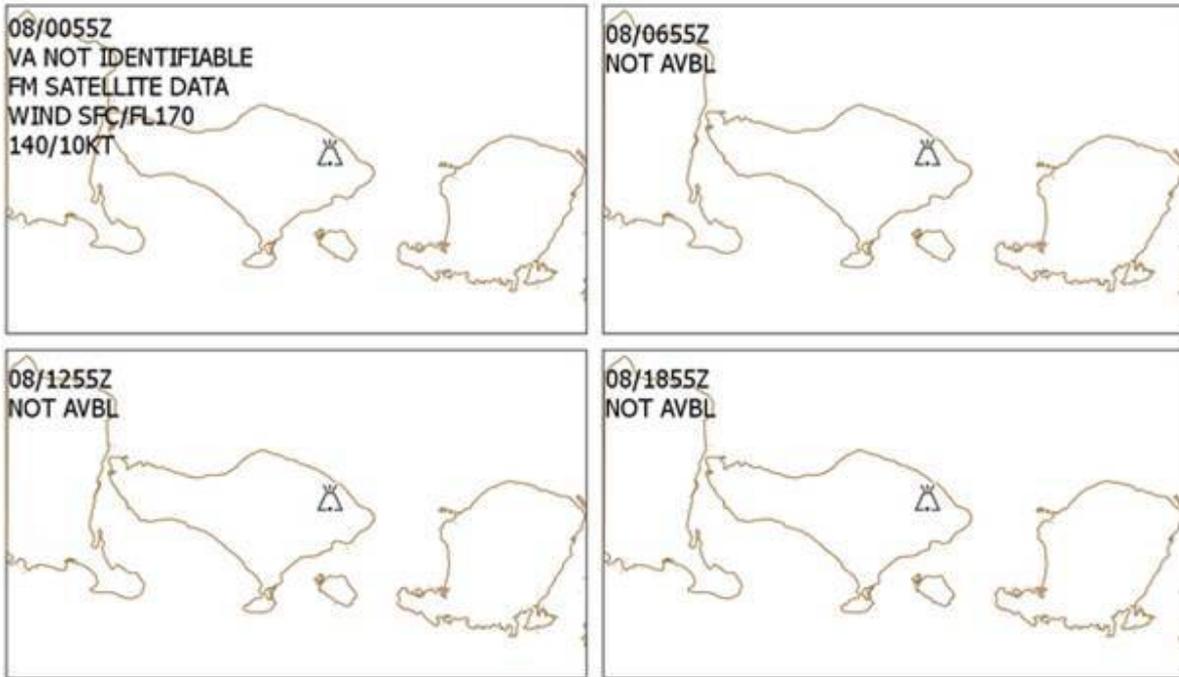
Approximately 10% are children 0-5 years, about 20% are elderly or frail.

Evacuation efforts continue slowly. Farmers interviewed still living in the 6 km Danger Zone, have described large stones the size of buckets raining down upon the area during the last eruption in 1963. They point out they survived, and see no reason to move now they are older.

Indonesia's disaster mitigation agency has launched a call centre to offer information on the eruption, + 62 361 234 099

We thank you for your incredible generosity; we will gratefully pass on any and all contributions.

Darwin VAAC latest advisory



VOLCANIC ASH ADVISORY			
DTG:	201712060855Z	ADVISORY NR:	201708
VAAC:	DARWIN	INFO SOURCE:	VONA, WSCAH, PREP
VOLCANO:	AGUNG 29420	AVIATION COLOUR CODE:	ORANGE
PN:	9801 E1130	ERUPTION DETAILS:	DISCRETE ERUPTION TO FL170 MOV NW AT 0600HSE.
AREA:	INDONESIA	RPK:	SHALL INTERMITTENT DISCRETE VA ERUPTIONS OCCURRING AT VOLCANO. VA NOT OBS ON SAT PNGREY. LAST VONA FOR ERUPTION TO 2000H ABOVE SUMMIT MOV W AT 010200Z. VA EXPECTED TO DEGRATE WITHIN A FEW HOURS. WINDS BASED ON MODEL, GUIDANCE AND GROUND REPORT.
SUMMIT ELEV:	3142M	NXT ADVISORY:	NO FURTHER ADVISORIES

MT AGUNG ACTIVITY REPORT

Date: 07-12-2017 09:00 WITA from Gaia-Oasis Tejakula.

SITUATION AT GAIA-OASIS

Visually, the air is clear. No smoke or ash has been seen or smelt. No noise or quakes from Mt Agung have been felt or reported.

SITUATION AT AIRPORT

VONA (Volcano Observatory Notice for Aviation) remains at ORANGE.

Bali Airport is open and all facilities are 100% available and running.

Himawari satellite and Denpasar Meteorology Class 1 Station have not detected or observed volcanic ash.

The Darwin VAAC (Volcanic Ash Advisory Centre) is no longer issuing further advisories, as no volcanic ash has been detected.

Some individual airlines have chosen to cancel or decrease flights to Bali, due to the uncertainty surrounding flying conditions.

At 3000 feet and 5000 feet, wind direction is from the west, running 5-15 knots heading east.
At 14.000 feet, wind direction is variable at 00 – 03 knots.

SITUATION AT MT AGUNG

Volcano is estimated to be in a critical phase, increasing again after a slowdown in activity.

At 06:00 WITA, white-grey crater smoke under low-medium pressure, thin-medium intensity, height 500-2000m observed.

Volcanic glow was observed last night above the crater peak.

Concentration of SO₂ (sulphur dioxide) gases are estimated at 1300 tons per day.

Continuous microtremor recorded with amplitude 1-24 mm (dominant 3mm)

1 overscale tremor were recorded (> 24 mm) at 14:46-15:06 WITA

Increasing tremors were recorded (3-24 mm) at 14:40 – 17:00 WITA, also 1-20 mm around 01:00 WITA

40 low frequency quakes, 25 volcanic quakes and 6 volcanic puffs (“hembusan”) were recorded. These indicate pressure is continuing to accumulate within the volcano, and that the epicenter of the quakes is becoming more shallow as magmatic fluids and gases move up to the surface.

Satellite imagery has revealed a side swelling in the walls of the crater of Agung. The magma is visible within 100 meters of the edge of the 200 metre deep bowl-shaped crater. A felt earthquake at 4.1 SR was recorded at 11:58:28 WITA, Loc: 7.91 S, 115.51 E, 48 km Northeast of Karangasem; depth 10 km.

A team of 16 scientists are working six-hour shifts around the clock, to monitor seismic stations on Mt Agung that record tremors deep inside the mountain, GPS trackers that record changes in land features and CCTV cameras that provide 24-hour surveillance. Equipment include 3 CCTVs, 11 seismic stations, 5 GPS stations, 3 tiltmeters to measure deformation, geochemical equipment, seismographs and others tools, many supplied from Germany, Japan and the USGS. Unfortunately, the volcano has often been covered in cloud/fog, which makes it harder to correlate seismic with visual data.

Current indicators point to a relatively small eruption of VEI 2 (volcanic eruptive index 2). The largest volcanic eruptions in recorded human history are VEI 7. The scale is logarithmic viz. a VEI 2 is 10 times smaller than a VEI 3, and so on.

OTHER:

Current figures show 66,716 refugees spread in 225 camps in 9 regencies throughout Bali. The number of refugees in Buleleng regency, North Bali, now stands at 10,759 persons.

Major General Simanjuntak is urging the government to temporarily close the sand mines at Mt Agung.

These mines are still operating even though many are within the 6 km zone.

The army considers that ongoing mining activity will disrupt the process of evacuation in the event of an eruption.

An estimated 20,584 people are still within the 10 km Danger Zone, which can be reached by destructive pyroclastic flows within 2.5 minutes in the event of an explosive eruption.

The National Disaster Mitigation Board has raised the possibility of forced evacuations with the help of the Indonesian Armed Forces.

They have not done so yet, but are not ruling out this option should the PVMGB's instruments indicate it is necessary.

Indonesia's disaster mitigation agency has launched a call centre to offer information on the eruption, + 62 361 234 099

Over 1000 hotels primarily in South Bali have halved the hours of their daily workers.

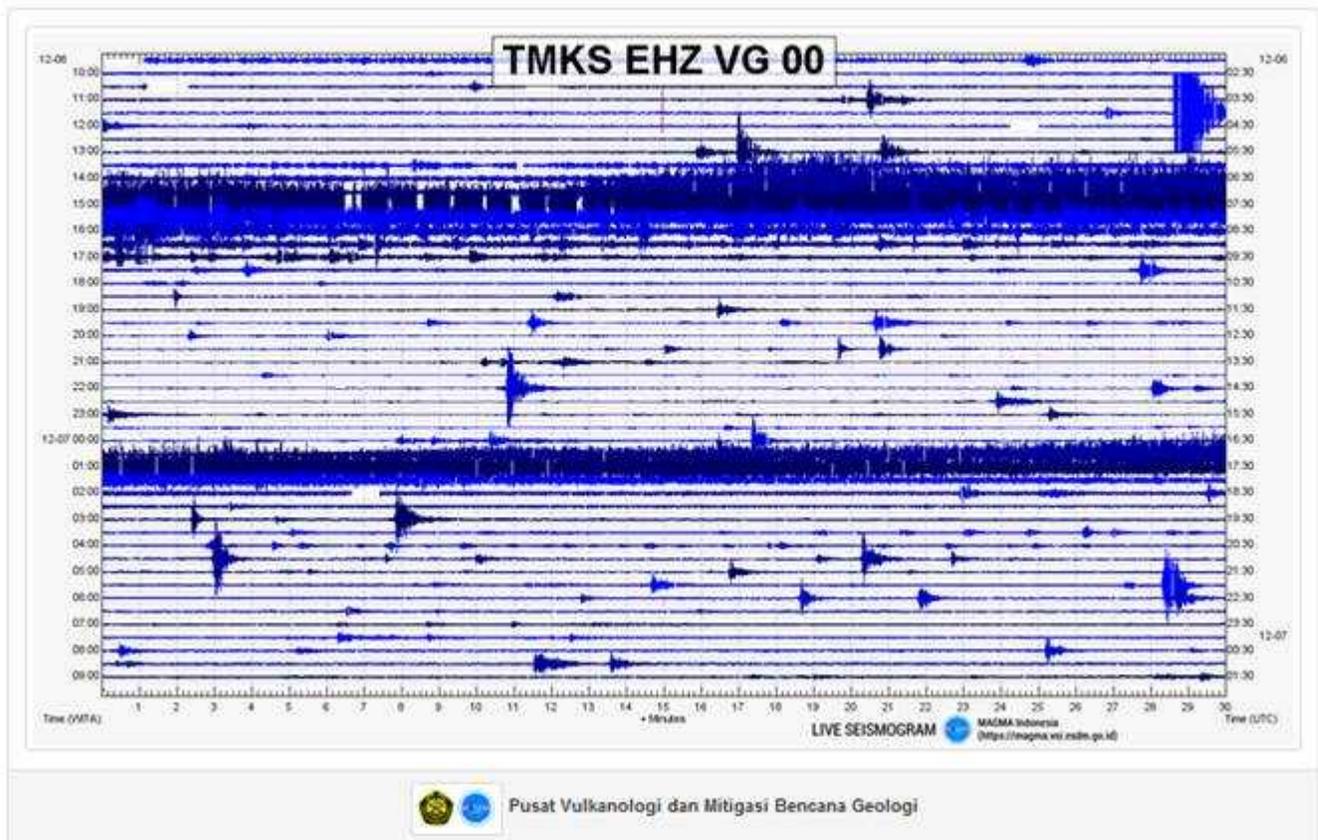
The Unda River authorities report a doubling of visitors, come to witness the waterfalls of volcanic mud that has taken over the river.

Enterprising locals have started to offer 'boating' in disused sand mining pools filled with cold volcanic mud & rainwater, using makeshift rafts cobbled together from old tyres and petrol drums. Police have shut these down.

Our Gaia-Oasis Foundation continues to work in the field; we are looking to prepare hygiene kits for babies and children at the request of the Red Cross, depending on budget. We thank you for your incredible generosity; we will gratefully pass on any and all contributions.

Live seismogram showing continuous overscale & increasing tremors

Seismogram G. Agung



MT AGUNG ACTIVITY REPORT

Date: 06-12-2017 09:00 WITA from Gaia-Oasis Tejakula.

SITUATION AT GAIA-OASIS

Visually, the air is clear. No smoke or ash has been seen or smelt. No noise or quakes from Mt Agung have been felt or reported.

SITUATION AT AIRPORT

VONA (Volcano Observatory Notice for Aviation) remains at ORANGE.

Bali Airport is open and all facilities are 100% available and running. Yesterday, the airport moved 32.079 passengers on 352 flights, international & domestic.

Paper tests at the airport (runway, roof, open spaces) show no volcanic ash. The Darwin VAAC (Volcanic Ash Advisory Centre) is no longer issuing further advisories, as no volcanic ash has been detected.

Some individual airlines have chosen to cancel or decrease flights to Bali, due to the uncertainty surrounding flying conditions.

Wind direction is from the west/southwest, running 5-10 knots at 5000 feet heading east/southeast.

SITUATION AT MT AGUNG

Volcano is estimated to be in a critical phase, increasing again after a slowdown in activity.

This morning 00:00 WITA, white crater smoke under medium pressure, medium-high intensity, height 2000 m above the crater was observed.

Volcanic glow was observed last night above the crater peak.

Concentration of SO₂ (sulphur dioxide) gases are approaching 2000 tons per day.

Continuous microtremor recorded with amplitude 2-24 mm (dominant 7mm)
2 overscale tremors were recorded (> 24 mm) at 14:41-14:59 WITA and 16:26-16:50 WITA

6 volcanic puffs (“hembusan”) were recorded; these are the result of movement of magmatic fluids (gas) manifest as smoke to the surface.

They are recorded when they produce sufficient pressure; they indicate movement near the surface.

The eruption appears to be entering a more effusive stage with viscous lava accumulating in the summit crater as a new lava dome.

Indonesia's PVMBG indicate the new lava dome is now over 20 million cubic metres in volume, and has filled 80cm of the 200cm crater.

Should lava start to spill over the crater, the viscous, blocky lava may generate pyroclastic flows and hot avalanches.

Current indicators point to a relatively small eruption of VEI 2 (volcanic eruptive index 2).

The largest volcanic eruptions in recorded human history are VEI 7. The scale is logarithmic viz. a VEI 2 is 10 times smaller than a VEI 3, and so on.

OTHER:

Current figures show 62.330 refugees spread in 214 camps in 9 regencies throughout Bali.

The number of refugees in Buleleng regency, North Bali, now stands at 10.281 persons.

Cattle and livestock have been evacuated to 14 points in 5 regencies, and efforts are continuing.

As at 1 December, 10.013 heads out of an estimated 14.000 heads of cattle have been moved.

Many farmers will not move if their cattle is not moved.

Volunteers are going into the abandoned areas, to feed dogs still guarding their owners' homes and other domestic animals left behind.

An estimated 24.970 people are still within the 10 km Danger Zone, which can be reached by destructive pyroclastic flows within 2.5 minutes in the event of an explosive eruption.

The National Disaster Mitigation Board has raised the possibility of forced evacuations with the help of the Indonesian Armed Forces.

They have not done so yet, but are not ruling out this option should the PVMGB's instruments indicate it is necessary.

Available data shows that on average, 18.000 tourists are cancelling their visit to Bali per day.

Daily workers in the hotel industry are being impacted; most hotels work with a 70: 30 (staff: daily worker) ratio; some work to 50:50.

Today, Gaia Oasis staff join the Red Cross building more toilets for a camp housing 115 refugees.

The last camp was on beachfront land housing an aquarium fish farm; the owner gave the space.

This camp is a converted waste sorting facility near a children's kindergarten; the Desa Adat (traditional village) offered the space.

Each village hall or civic centre is allowed to host 300 refugees, but we are seeing so many other people offering space within the villages.

Having smaller camps located within the villages themselves, makes it easier to integrate – the children can join the local schools, the refugees can make use of the public health system in their host village. It makes sense not just for disease vectors (less crowding & cross-infection), but also for a sense of being a person, not a number; essentially it says, you are welcome amongst us.

We have been asked to fund multi-vitamins and supplements for the elderly and for children. Should anyone wish to contribute to this, please let us know.

We thank you for your incredible generosity; we will gratefully pass on any and all contributions.

Volcanic mudflows along the Yeh Sah river (notice red & blue human figures for scale)



MT AGUNG ACTIVITY REPORT

Date: 05-12-2017 09:00 WITA from Gaia-Oasis Tejakula.

SITUATION AT GAIA-OASIS

Visually, the air is clear. No smoke or ash has been seen or smelt. No noise or quakes from Mt Agung have been felt or reported.

SITUATION AT AIRPORT

VONA (Volcano Observatory Notice for Aviation) remains at ORANGE.

Bali Airport is open and all facilities are 100% available and running.

The Himawari Satellite shows no volcanic ash detected. Paper tests at the airport (runway, roof, open spaces) also show no volcanic ash.

The Darwin VAAC (Volcanic Ash Advisory Centre) is no longer issuing further advisories, as no volcanic ash has been detected.

Some individual airlines have chosen to cancel or decrease flights to Bali, due to the uncertainty surrounding flying conditions.

Each day the airport is closed costs about \$5 million in combined lost flight revenue for the 42 airlines that fly there.

Flight cancellations cost airlines in terms of refunds to passengers and paying fixed costs of aircraft and crew that are not flying, as well as for relief flights to return travellers home.

Virgin Airlines and Jetstar resumed flights on Monday; AirAsia will operate limited flights.

Several airlines have offered to reroute passengers to other holiday destinations like Thailand, Vietnam and Fiji instead of Bali.

Travel agents report that many of those travelling between now-early December are choosing to reroute; those travelling from mid-December are largely adopting a "wait and see" attitude.

Wind direction is from the west/southwest, running 5-15 knots at 3000 feet heading east/southeast.

SITUATION AT MT AGUNG

Volcano is estimated to be in a critical phase, increasing again after a slowdown in activity.

This morning 06:00 WITA, white and grey crater smoke under low-medium pressure, thin-medium intensity, height 1000 m above the crater was observed (previous peak 4000 m), after a period when no smoke was observed.

Volcanic glow was observed again last night above the crater peak.

Concentration of SO₂ (sulphur dioxide) gases have recovered from 300 tons (2 Dec), to 1300 tons yesterday (peak 2000-3000 tons)

In the last 24 hours to 06:00 WITA, 42 low frequency tremors were recorded, compared to 20 yesterday.

22 volcanic quakes were recorded, as well as continuous tremor at amplitude 1-2 mm

Volcanic quakes indicate there is still excess pressure accumulating in Mt Agung, while low frequency quakes indicate infusive magma flow is still trying to move to the surface.

The increasing dominance of low frequency quakes may indicate the epicenter of the quakes is becoming more shallow viz. moving up in the crater.

Indonesia's PVMBG point out that the slowing rate of magma infusion may indicate a plug in the magmatic pipe, as fresh magma moving up is stopped by cooling lava in the surface that has hardened, rather than any real slowdown in activity.

They warn that Mt Agung may be following past patterns of an initial phreatic eruptions, followed by sporadic eruptions interspersed with rest periods, before a peak magmatic eruption. They warn residents not to underestimate the danger, and to evacuate from the 10km zone.

Current indicators point to a relatively small eruption of VEI 2 (volcanic eruptive index 2).

The largest volcanic eruptions in recorded human history are VEI 7. The scale is logarithmic viz. a VEI 2 is 10 times smaller than a VEI 3, and so on.

OTHER:

Current figures show 60,049 refugees spread in 214 camps in 9 regencies throughout Bali. An estimated 27,251 people are still within the 10 km Danger Zone, which can be reached by destructive pyroclastic flows within 2.5 minutes in the event of an explosive eruption. Evacuation efforts are slow as people remain unwilling to move, although most elderly and younger children have evacuated.

The Karangasem regency, where Mt Agung is located, has allocated a daily food allowance excluding rice of Rp 2000 (= 15 cents) for 3 meals per day for each refugee. One free range egg costs Rp 2000. Adult, child or elderly, the allowance is the same.

80 bridges may be threatened by volcanic mudflows should Mt Agung have a major eruption; the Disaster Mitigation Board is urging the regency Public Works department to take preventive action as soon as possible.

Popular tourist spots like Jatiluwih and Bratan Lake have reported drops in foreign tourists of between 50% – 90%; local tourists remain constant.

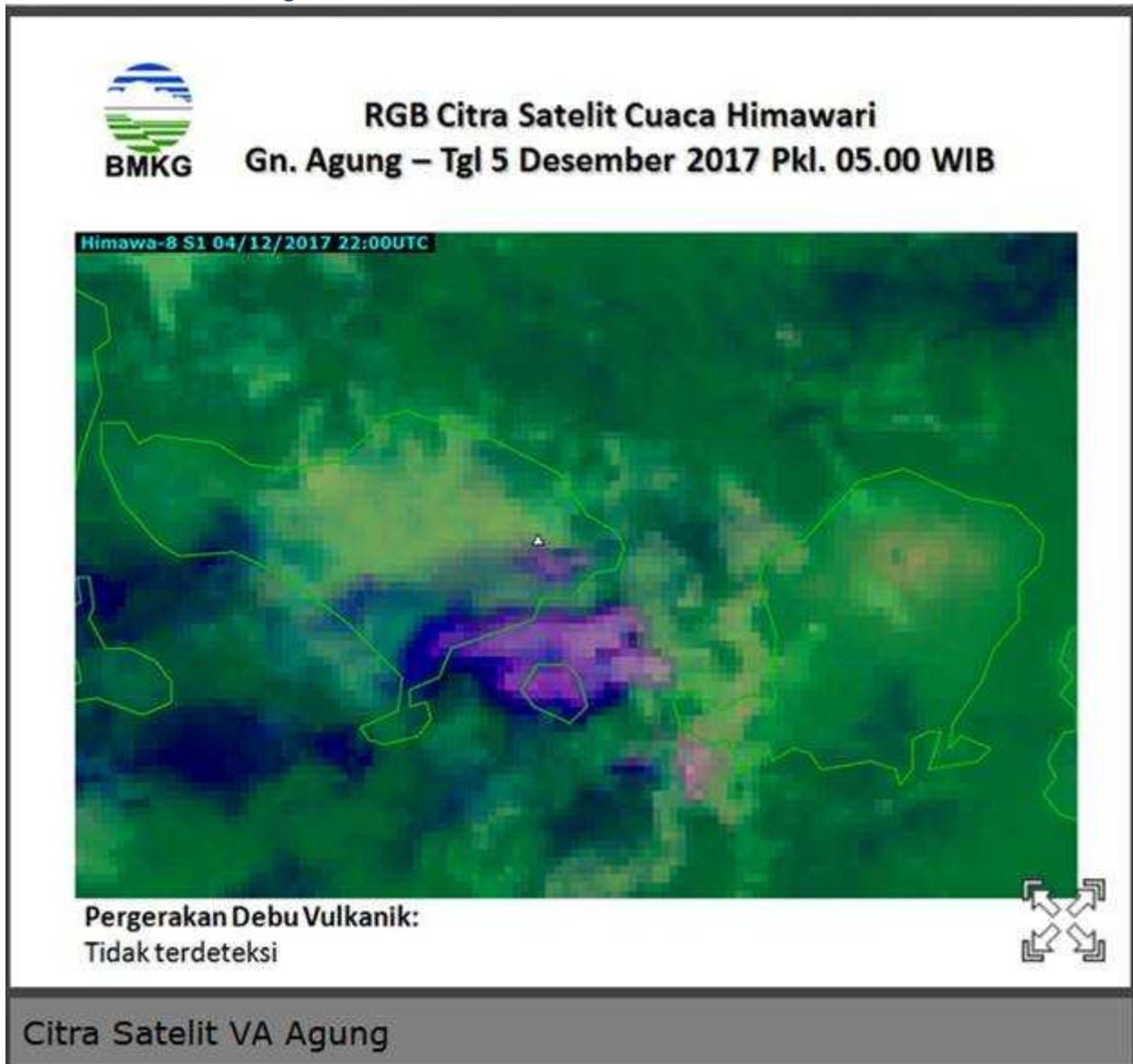
Some hotels in South Bali are reportedly asking staff not to turn up for work.

Yesterday, Gaia Oasis staff joined the Red Cross building another 4 toilets for a camp housing 160 refugees.

We also dropped off fresh vegetables and plant proteins to the Tejakula Logistics Post servicing over 7000 refugees.
The heart breaks that we cannot do more.

We thank you for your incredible generosity; we will gratefully pass on any and all contributions.

Himawari satellite showing no movement of Volcanic Ash detected



MT AGUNG ACTIVITY REPORT

Date: 04-12-2017 09:00 WITA from Gaia-Oasis Tejakula.

SITUATION AT GAIA-OASIS

Visually, the air is clear. No smoke or ash has been seen or smelt. No noise or quakes from Mt Agung have been felt or reported.

SITUATION AT AIRPORT

VONA (Volcano Observatory Notice for Aviation) remains at ORANGE.

Bali Airport is open and is running close to normal. 27,153 passengers were recorded on 330 flights.

18 international arrivals and 17 departures were cancelled yesterday by mainly Australian airlines; Jetstar resumed flights to Bali as at 8.00 am today.

Relief flights continue to clear the backlog of passengers delayed.

The Darwin Volcano Ash Advisory Centre has stopped issuing volcano ash advisories, as the latest webcam shows minor steam/smoke near the summit, ground reports indicate no volcanic ash present and no other information sources indicate the presence of ash.

They note the Indonesia Volcanology Board indicate that further eruptions remain possible.

Wind direction is from the west/southwest, running 5-15 knots at 5000 feet, and 15-20 knots at 14.000 feet.

Latest reports places the airport over 29 nautical miles (NM) outside the area of ash spread.

SITUATION AT MT AGUNG

Volcano is estimated to be in a critical phase, despite a significant slowdown in activity.

This morning 06:00 WITA, white and grey crater smoke under medium pressure, thin intensity, height 500-1000 m above the crater observed (previously to 4000 m)

Volcanic glow has decreased significantly, indicating the likelihood of a drastic drop in the surface temperature of magma (previous est 900 -1200 degrees Celsius).

Concentration of SO₂ gases have dropped to 20 times below the peak of 26-27 November.

The above signs can indicate that the magma rising to the surface is weakening due to decreasing magmatic gasses.

If so, the potential for eruption will decrease.

Or, they can indicate a plug in the magmatic pipe, as fresh magma moving up is stopped by cooling lava in the surface that has hardened.

If so, the potential for eruption will increase, as pressure builds up.

Indonesia's PVMBG warn that Mt Agung may be following past patterns of an initial phreatic eruptions, followed by sporadic eruptions interspersed with rest periods, before a peak magmatic eruption; and not to assume the mountain will stop erupting.

They point out that low-frequency quakes, volcanic quakes and continuous tremors continue to be recorded, indicating accumulation of pressure; that (Agung's) "face is peaceful but inside the heart is agitated"

Magma is estimated to be 5kms below the surface. Crater capacity is estimated at 60 million cubic metres of lava.

Approx 20 million cubic metres of lava has accumulated in the crater; the crater is estimated to be full in 10 days.

Current indicators point to a relatively small eruption of VEI 2 (volcanic eruptive index 2).

The largest volcanic eruptions in recorded human history are VEI 7. The scale is logarithmic viz. a VEI 2 is 10 times smaller than a VEI 3, and so on.

OTHER:

The Emergency Services have "sterilized" the 5 km zone and are persuading people to leave the 7.5km - 10km Danger Zone.

Over 30,000 people are still within the Danger Zone, which can be reached by destructive pyroclastic flows within 2.5 minutes in the event of an explosive eruption. Evacuation efforts are slow as people remain unwilling to move, although most elderly and younger children have evacuated.

Over 5000 people evacuated voluntarily yesterday.

The armed forces are guarding the 60 entrances to Mt Agung; even so pilgrims were allowed to enter and pray at Kiduling Kereteg Temple for full moon yesterday.

The Public Works department has started to 'normalise' rivers by deepening and widening them, to cope with anticipated mud flows and lahars.

Cracks have been noticed at bridge posts, government is advising caution.

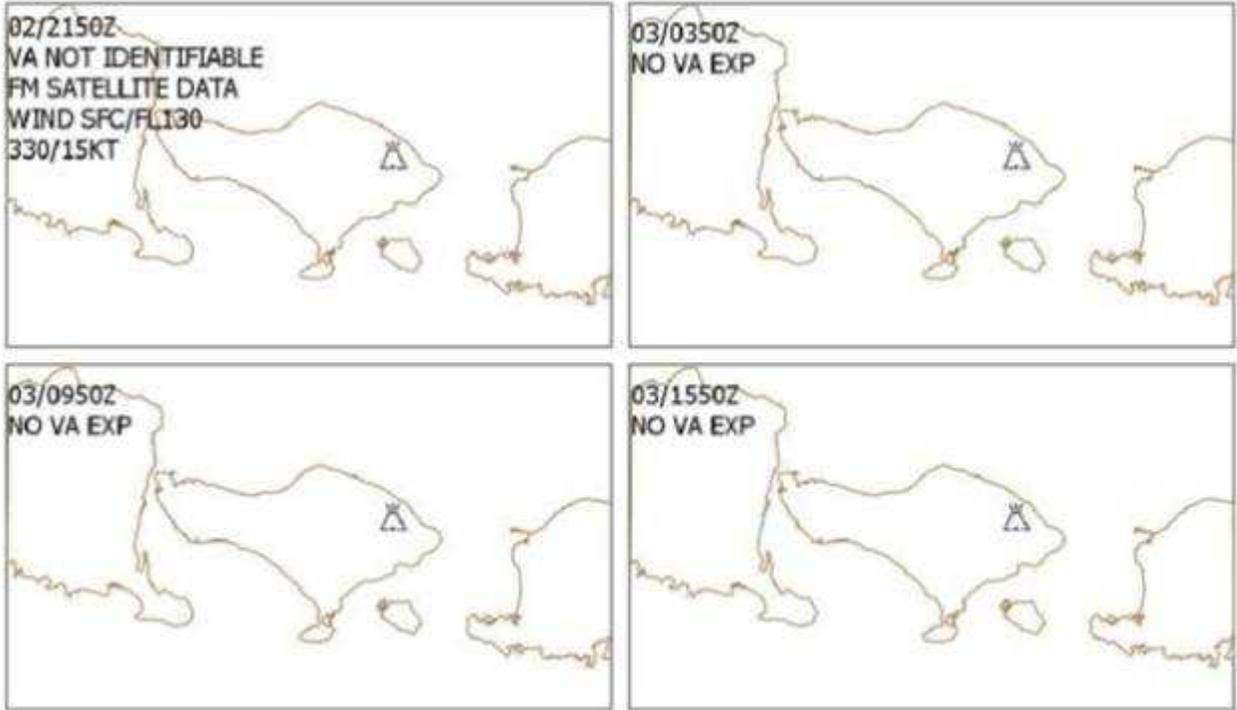
Local & international tourists continue to post selfies on Instagram with Mt Agung in the background, some in questionable taste.

The Les Evacuation Camp near Tejakula is being prepared to host the expected thousands of refugees that will flood into the area should magmatic eruption commence.

Yesterday, Gaia Oasis staff joined the Red Cross building toilets for over 100 people in 2 camps; today we build another 4 toilets for a camp housing 160 refugees.

We thank you for your incredible generosity; we will gratefully pass on any and all contributions.

Ash advisory stating no Volcano Ash exposure from Darwin Volcano Ash Advisory Centre, working with the PVMBG (Indonesia's Volcanology board)



VOLCANIC ASH ADVISORY

DTG:	ZULUTS0300Z	ADVISORY NO:	ZULOM
VRC:	DARWIN	INFO SOURCE:	REPUNDA & WRCOM, OZMFI
VOLCANO:	ASUNG 2400	AVIATION COLOUR CODE:	UNKNOWN
PSW:	8801 0210	ERUPTION DETAILS:	MINOR ERUPTIONS OBSERVED TO FL100
AREA:	INDONESIA	WVC:	CRITICAL WARNING SHOWS MINOR DISRUPTIONS ERUPTION LOCATED 8801 0210. LATEST UNRAID REPORTS INDICATE NO VA PRESENT. NO OTHER INFORMATION SOURCES INDICATE THE PRESENCE OF VA.
SLPDET:	3424		CRIM: INDICATE THAT FURTHER ERUPTIONS REMAIN POSSIBLE. ADVISORY TERMINATED.
ELI:		NOT ADVISED:	NO FURTHER ADVISORY

MT AGUNG ACTIVITY REPORT

Date: 02-12-2017 09:00 WITA from Gaia-Oasis Tejakula.

SITUATION AT GAIA-OASIS

Visually, the air is clear. No smoke or ash has been seen or smelt. No noise or quakes from Mt Agung have been felt or reported.

SITUATION AT AIRPORT

VONA (Volcano Observatory Notice for Aviation) remains at ORANGE.

Bali Airport remains open. The situation will be reevaluated every 6 hours.

458 flights took place as scheduled yesterday.

33 recovery/relief flights have occurred to move passengers delayed.

Indonesia continues to offer free visa extension Stay On Force Majeure for those awaiting a rescheduled flight.

9 embassies have set up counters at Denpasar Airport.

Government buses continue to run from Bali Airport to Surabaya.

Wind direction is from the north/northwest at 10 knots, with volcanic ash moving south-southeast within the airspace 24.000 feet above the airport.

Latest reports places the airport 29 nautical miles (NM) outside the area of ash spread.

SITUATION AT MT AGUNG

Volcano is estimated to be entering a critical phase. Eruption and ash emission is continuing, even so activity has slowed.

Last night, white smoke at medium pressure, thick intensity, height 2000 m above the crater observed.

This morning to 06:00 WITA, no smoke has been observed.

Seismic, satellite and geochemical readings and volcanic glow indicate magma continues to accumulate.

Current estimate is 20 million cubic metres of lava collected in the crater.

Continuous tremor at max scale 23mm recorded 16:42 - 17:16 WITA yesterday

A felt earthquake at 3.5 SR was recorded 17 kms northeast of Karangasem yesterday at 21.54 WITA, related to the intrusion of magma to Mt Agung.

SO₂ (Sulfur Dioksida) around the volcano crater has been detected at rates of 2000-3000 tons.

Current indicators point to a relatively small eruption of VEI 2 (volcanic eruptive index 2).

The largest volcanic eruptions in recorded human history are VEI 7. The scale is logarithmic viz. a VEI 2 is 10 times smaller than a VEI 3, and so on.

OTHER:

Within the 5 km zone, woody plants like coffee, champak, mngosteen are dropping their leaves and some have died. Grass from Sogra hamlet thru to the Pasar Agung temple has totally dried. Abandoned animals in the zone have died from starvation or overcome by sulphurous fumes.

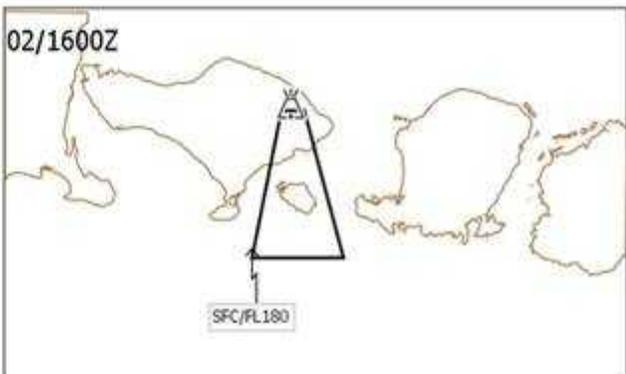
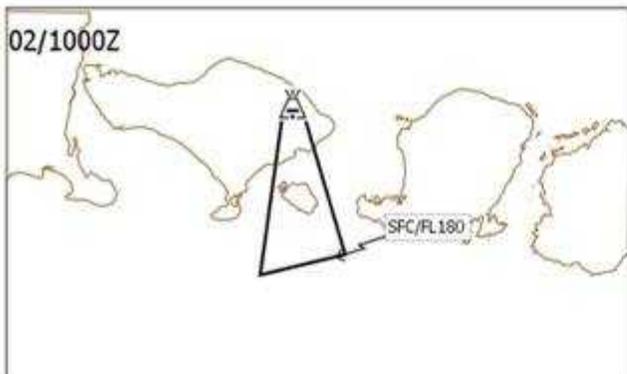
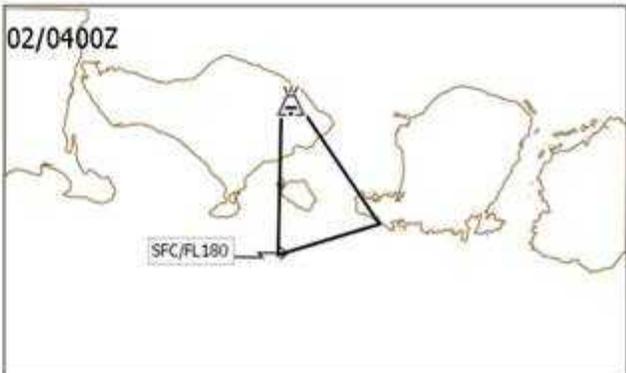
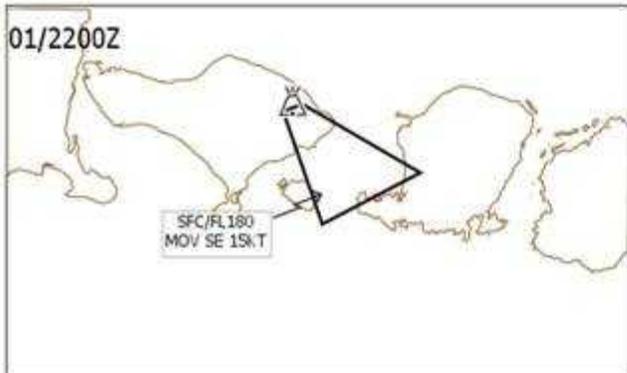
Temple ceremonies at Kiduling Kereteg Temple in the Danger Zone are going ahead at Full Moon tomorrow, albeit shortened from 3 days to 1 day. The ceremonies are for balance in the universal flow, and that the fires in the belly of the earth (karma agni) will be ordered in keeping with natural law.

Mudflows at the headwaters have caused water pipes to break, disrupting water supply to 15.000 people in Klungkung area. Local tourists are crowding onto bridges above the mudflows to witness the event. Government is advising caution and asking people to avoid the bridges.

An estimated 30.000 to 60.000 people are still within the Danger Zone, which can be reached by destructive pyroclastic flows within 2.5 minutes in the event of an explosive eruption. Evacuation efforts are slow as people remain unwilling to move. Some have sent their elderly parents and young children to the camps, but the adults themselves remain waiting at home until the sirens sound indicating 2 hours before a magmatic eruption.

The Les Evacuation Camp near Tejakula is being prepared to host the expected thousands of refugees that will flood into the area should magmatic eruption commence. Gaia-Oasis is working to build toilets with the North Bali Red Cross, and to provide weekly vegetables and plant proteins to refugees, with the Social Department. Yesterday, we joined the Red Cross to distribute baby kits and to give out vitamins for children; we thank our donors for their incredible generosity. We will gratefully pass on any and all contributions.

[Ash movement forecast from Darwin Volcano Ash Advisory Centre, working with the PVMBG \(Indonesia's Volcanology board\)](#)



VOLCANIC ASH ADVISORY

DTG:	2017201/2200Z	ADVISORY NR:	201750
VACC:	DARWIN	INFO SOURCE:	HMSWARJ 8, WEBCAM
VOLCANO:	AGUNG 29420	AVIATION COLOUR CODE:	RED
PRR:	3003 011530	ERUPTION DETAILS:	ASH/STEAM EMISSION TO FL180
AREA:	INDONESIA	40K:	VA CURRENTLY NOT IDENTIFIABLE ON SATELLITE IMAGERY AND COVERED IN CLOUD ON WEBCAM, BUT STILL DIRECTED IN AREA, THEREFORE POLYGON ESTIMATED BASED ON MODEL WINDS. NO EVIDENCE TO SUGGEST ERUPTION HAS CEASED. FORECAST BASED ON CONSENSUS MODEL GUIDANCE.
QAPRT:	240M	NBT ADVISORY:	NO LATER THAN 2017202/0130Z
BLV:			

MT AGUNG ACTIVITY REPORT

Date: 01-12-2017 09:00 WITA from Gaia-Oasis Tejakula.

SITUATION AT GAIA-OASIS

Visually, the air is clear. No smoke or ash has been seen or smelt. No noise or quakes from Mt Agung have been felt or reported.

SITUATION AT AIRPORT

VONA (Volcano Observatory Notice for Aviation) remains at ORANGE.

Bali Airport remains open at this point in time. The situation will be reevaluated every 6 hours. 399 scheduled flights took place yesterday, 213 departures and 186 arrivals. Several airlines have put on recovery flights and 9 embassies have set up counters at Denpasar Airport.

There is heavy traffic towards Surabaya, as visitors choose not to wait at the airport, or take advantage of the free visa extension Stay On Force Majeure to explore Java. Government buses continue to run from Bali Airport to Surabaya.

Wind direction is from the west/northwest at 5-10 knots, with volcanic ash moving east-southeast within the airspace 24.000 feet above the airport.

SITUATION AT MT AGUNG

Volcano is estimated to be entering a critical phase. Eruption and ash emission is continuing. Although activity has slowed in the past 24 hours, a senior volcanologist has concluded that "Mt Agung is having a rest between contractions".

White and grey crater smoke, low pressure, medium intensity, height 1500-2000 m above the crater observed.

Continued deformation and volcanic glow indicate the accumulation of lava at the surface.

2 overscale continuous tremors was recorded yesterday; 1 overscale tremor was recorded this morning.

SO₂ (Sulfur Dioksida) around the volcano crater has been detected at rates of 2000-3000 tons.

Current indicators point to a relatively small eruption of VEI 2 (volcanic eruptive index 2). The largest volcanic eruptions in recorded human history are VEI 7. The scale is logarithmic viz. a VEI 2 is 10 times smaller than a VEI 3, and so on.

OTHER:

Volcano viewing tours are being promoted. Photos & selfies of tourists with Mt Agung erupting in the backdrop are circulating in the media.

There are 7106 refugees in Tejakula District as of 15:50 WITA 30 November.

Government is still trying to determine the number of people in the Danger Zone that must be evacuated; estimates range from 63.000 to 140.000.

Evacuation efforts continue; a brother & sister pair suffering from physical and mental handicaps were moved by the Search & Rescue Team yesterday.

Should there be an explosive eruption, pyroclastic flows can reach the Danger Zone in 2.5 minutes before stopping, leaving nothing standing.

Sirens within the 10km Danger Zone will sound when the volcano reaches a critical phase and is expected to erupt within 2 hours.

8.200 out of an estimated 14.000 heads of livestock have been evacuated from the Danger Zone (no update).

Different shades of ash

You can also learn a lot from the different shades of ash that rise up from the surface of a volcano. It's possible that pictures showing two distinct ash colours could point to two vents in the crater - one that is producing more ash and another that is producing more steam.



Ash movement forecast from Darwin Volcano Ash Advisory Centre, working with the PVMBG (Indonesia's Volcanology board)



MT AGUNG ACTIVITY REPORT

Date: 30-11-2017 09:00 WITA from Gaia-Oasis Tejakula.

SITUATION AT GAIA-OASIS

Visually, the air is clear. No smoke or ash has been seen or smelt. No noise or quakes from Mt Agung have been felt or reported.

SITUATION AT AIRPORT

VONA (Volcano Observatory Notice for Aviation) remains at ORANGE, downgraded from RED.

Bali Airport was reopened at 15:00 WITA on 29/11 and remains open at this point in time. The situation will be reevaluated every 6 hours.

117 tourists have been issued visas for Stay On Force Majeure, valid for 14 days, at no charge. Member hotels of the Bali hotel & restaurant associations (BHA, PHRI) including Gaia-Oasis, will offer free stay for 1 night for any passenger unable to depart, and extension of stay at best available rate until the passenger can depart.

Government buses continue to run from Bali Airport to Surabaya.

Wind direction is from the west/northwest at 5-10 knots, with volcanic ash moving east-southeast within the airspace 24,000 feet above the airport.

Garuda Airlines has put on 7 extra flights from Bali airport to other airports in Java, to assist onward movement of passengers.

Tropical Cyclone CEMPAKA has weakened and is no longer affecting the direction of ash towards the south.

Tropical Cyclone DAHLIA is forming but will have no impact on Bali as it is in South West Bengkulu moving Southeast away from Indonesian waters.

SITUATION AT MT AGUNG

Volcano is estimated to be entering a critical phase. Eruption and ash emission is continuing. Grey crater smoke, medium pressure, thick intensity, height 2000 m above di crater observed. The body of the volcano is showing significant deformation (swelling)

Volcanic glow has been recorded at the crater. Thermal values show an increase in Volcanic Radiatif Power (VPR) from 51 megawatt 3 days ago, to 97 megawatts last night, indicating the accumulation of lava at the surface.

A second overscale continuous tremor was recorded yesterday evening.

So₂ (Sulfur Dioksida) around the volcano crater has been detected at rates of 2000-3000 tons.

A shake of 3.1 was felt at Kubu, at the foot of the volcano. Indonesia terms earthquakes under 5.0 SR as minor and “felt shakes”.

Current indicators point to a relatively small eruption of VEI 2 (volcanic eruptive index 2). The largest volcanic eruptions in recorded human history are VEI 7. The scale is logarithmic viz. a VEI 2 is 10 times smaller than a VEI 3, and so on.

OTHER:

A further estimated 4500 people have been evacuated. Efforts are hampered by people refusing to leave.

Reasons cited include reluctance to leave livestock, land, houses, shrines and family temples, and seeing the eruption as God’s will.

Sirens within the 10km Danger Zone will sound when the volcano reaches a critical phase and an eruption is expected to occur within 2 hours.

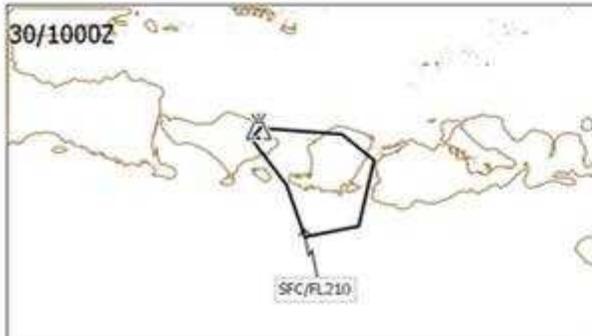
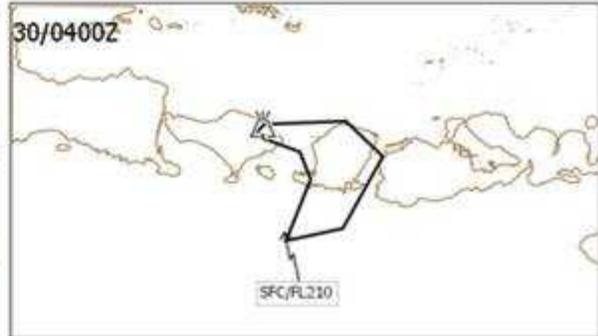
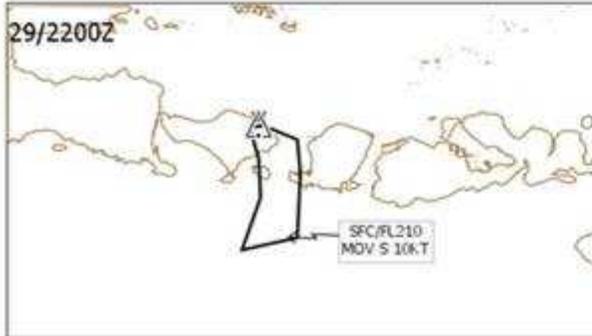
Gaia staff have family members in the area, who are waiting for the sirens to sound before evacuating.

8.200 out of an estimated 14.000 heads of livestock have been evacuated from the Danger Zone (no update).

[Ash movement forecast from Darwin Volcano Ash Advisory Centre, working with the PVMBG \(Indonesia’s Volcanology board\)](#)



Volcanic Ash Advisory 7



VOLCANIC ASH ADVISORY

DTG:	30/10/2002	ADVISORY NR:	30/10
VAAC:	SARWIN	INFO SOURCE:	REPARANG & MISCAL CIVILS PIREF
VOLCANO:	AGUNG 28420	AVIATION COLOUR CODE:	RED
PN:	3902 01000	ORIGIN DETAILS:	CONTINUOUS VA DEGREE TO FL210
AREA:	INDONESIA	AKN:	VA CURRENTLY NOT IDENTIFIABLE ON SATELLITE IMAGERY. BURSTION IS STILL ONGOING. HOT SPOT IDENTIFIABLE ON MULTISPECTRAL IMAGERY. VA HEIGHT AND MOVEMENT BASED ON REPARANG 6 IMAGERY
SUPPRT:	302R	MOBL:	MOBL: GLEANCE, MISCAL, PIREF, SAMATA 26/10/02 SOUNDING AND GROUND REPORT.
RLD:		EXT ADVISORY:	NO LATER THAN 30/10/2002

MT AGUNG ACTIVITY REPORT

Date: 29-11-2017 09:00 WITA from Gaia-Oasis Tejakula.

SITUATION AT GAIA-OASIS

Visually, the air is clear. No smoke or ash has been seen or smelt. No noise or quakes from Mt Agung have been felt or reported.

SITUATION AT AIRPORT

Airport closure has been extended until 07:00 WITA on 30/11/2018, evaluated 6 hourly.

Wind direction is from the east/northeast at 10 knots, with volcanic ash moving west-southwest (28/11) and southwest (29/11) within the airspace 24.000 feet above the airport.

23 buses have ferried passengers from Bali to Surabaya since yesterday.

Tropical Cyclone CEMPAKA is passing East Java over the next 2 days. The low pressure zone at the eye of the cyclone will pull winds to the South West from Bali to Java, drawing volcanic ash from Mt Agung past Bali airport for the duration of the cyclone.

SITUATION AT MT AGUNG

Volcano is estimated to be entering a critical phase. Eruption and ash emission is continuing.

Grey crater smoke, medium pressure, thick intensity, height 3300 m above di crater observed.

Booming sounds followed by roars that sounded like plane engines audible 12km from the peak. Ashfall has blanketed a few houses in Sebudi Village, 5km from the peak.

An overscale continuous tremor was recorded between 13.30 to 14.00, which can be a precursor to an explosive (blasting up) vs effusive (safer gentle down-flowing) eruption.

OTHER:

An estimated 90.000 - 100,000 people in 22 villages within the Danger Zone will be impacted.

To date, 40.000 people have been evacuated. The National Search & Rescue team have evacuated 52 villages who refused to move.

8.200 out of an estimated 14.000 heads of livestock have been evacuated from the Danger Zone.

Ash movement forecast at 25.000 feet. Released by Pacific Disaster Centre (PDC), USGS

Volcano Ash Movement Forecast

Forecast Time: 2017/11/28 00:15 UTC



Forecast Time: 2017/11/28 06:15 UTC



Forecast Time: 2017/11/28 12:15 UTC



Forecast Time: 2017/11/28 18:15 UTC

