

possibility that the hobbit exhibited traits that are consistent with individuals suffering Down syndrome. The study concludes that the human skeletons from Liang Bua Cave are coeval with only *Homo sapiens* populations worldwide and no other previously known hominins. They report that the brain size of LB1, the principal specimen unearthed from Liang Bua Cave, is in the range predicted for an individual with Down syndrome in a normal small-bodied population from the geographic region that includes Flores. Among additional diagnostic signs of Down syndrome and other skeletal dysplasias are abnormally short femora combined with disproportionate flat feet. LB1 femora match interlimb proportions for Down syndrome, and predictions based on corrected LB1 femur lengths show a stature normal for other *H. sapiens* populations in the region. In reality, this means that the Flores hobbit is an “abnormal” modern human that suffered from maladies that stunted its growth and/or reduced its lifespan. In a response to this, Westaway et al. (2015) claims that there remain more than sufficient evidence in the mandibular structures to put the hobbit in its own species category.

This interesting and important debate continues unabated, and one can only hope that more work is being put into excavating more specimens that can possibly bring this case to conclusion.

Henneberg, M., Eckhardt, R.B., Chavanaves, S. and K.J. Hsü (2015). Evolved developmental homeostasis disturbed in LB1 from Flores, Indonesia, denotes Down syndrome and not diagnostic traits of the invalid species *Homo floresiensis*. *PNAS* **111(33)**: 11967–11972, doi: 10.1073/pnas.1407382111

Robert B. Eckhardt, Maciej Henneberg, Alex S. Weller and Kenneth J. Hsü (2014). Rare events in earth history include the LB1 human skeleton from Flores, Indonesia, as a developmental singularity, not a unique taxon. *PNAS* **111(33)**: 11961-11966

Westaway, M.C., Durband, A.C., Groves, C.P. and M. Collard (2015). Mandibular evidence supports *Homo floresiensis* as a distinct species. *PNAS* **112(7)**: E604-E605

Sumatran rhino returning to Indonesia

The Sumatran rhino, *Dicerorhinus sumatrensis*, has been listed as “Critically endangered” on the IUCN red-list since 1996, but the population continues to decline. Already declared “extinct” in West Malaysia, and with nothing but a handful left in captivity in Sabah, East Malaysia (Fig. 1), the World’s hope rests on the few wild individuals that still roam remote areas of Sumatra. Despite costly captive breeding efforts in the late 1990s,



Figure 1. One of the few Sumatran rhinos, *Dicerorhinus sumatrensis*, in captivity in Sabah, East Malaysia.

only one institution enjoyed modest captive breeding success. The Cincinnati Zoo managed to breed the species merely three times. One of these, *Harapan*, is the only Sumatran rhino left in the Western Hemisphere, after its elder brother was returned to Sumatra in 2007, and its sister died from disease in 2014. *Harapan* will be returned to its ancestral origin on Sumatra, Indonesia, where it will be paired with a female and given a chance to mate at the Sumatran rhino centre at Way Kambas National Park.

The decision to return *Harapan* to Sumatra was made, because he could no longer contribute to efforts to breed the species if kept alone in the USA. Earlier, it was believed that Indonesia would send another rhino to pair up with *Harapan*, but recently, Indonesia's authorities made it clear that they never plan to send another Sumatran rhino out of the country again. At the same time, receiving potential mates from Malaysia, the only other country with captive Sumatran rhinos, was not an option, since all the Malaysian females are infertile.

Harapan is expected to undergo a short adaptation period for his travel crate, before he commences on his

long journey back to Sumatra. He is expected to arrive at Way Kambas National Park in the last quarter of 2015.

NASA predicts high risk of El Niño effect in 2015

After a record warm and 2014, NASA climate model forecast shows that 2015 will likely be even worse, with an El Niño effect expected to go “off the charts”. Making use of the world's best-established dynamical climate models, the 2015 El Niño is set to peak in the second and third quarter of 2015, and possibly stretch into the Paris climate summit. Whereas the 2014-2015 El Niño was slow to develop and increased over months, the 2015 version may set to increase to monster proportions, possibly up to +3°C Pacific temperature anomalies. In practice, this means that Southeast Asia will suffer extreme dry conditions (Fig. 2), with elevated risks of wildfires. One can only hope that landuse managers across the region learned from the smoke disaster that engulfed the entire region in 1997-1998 that cost regional nations billions in direct, as well as collateral damages.

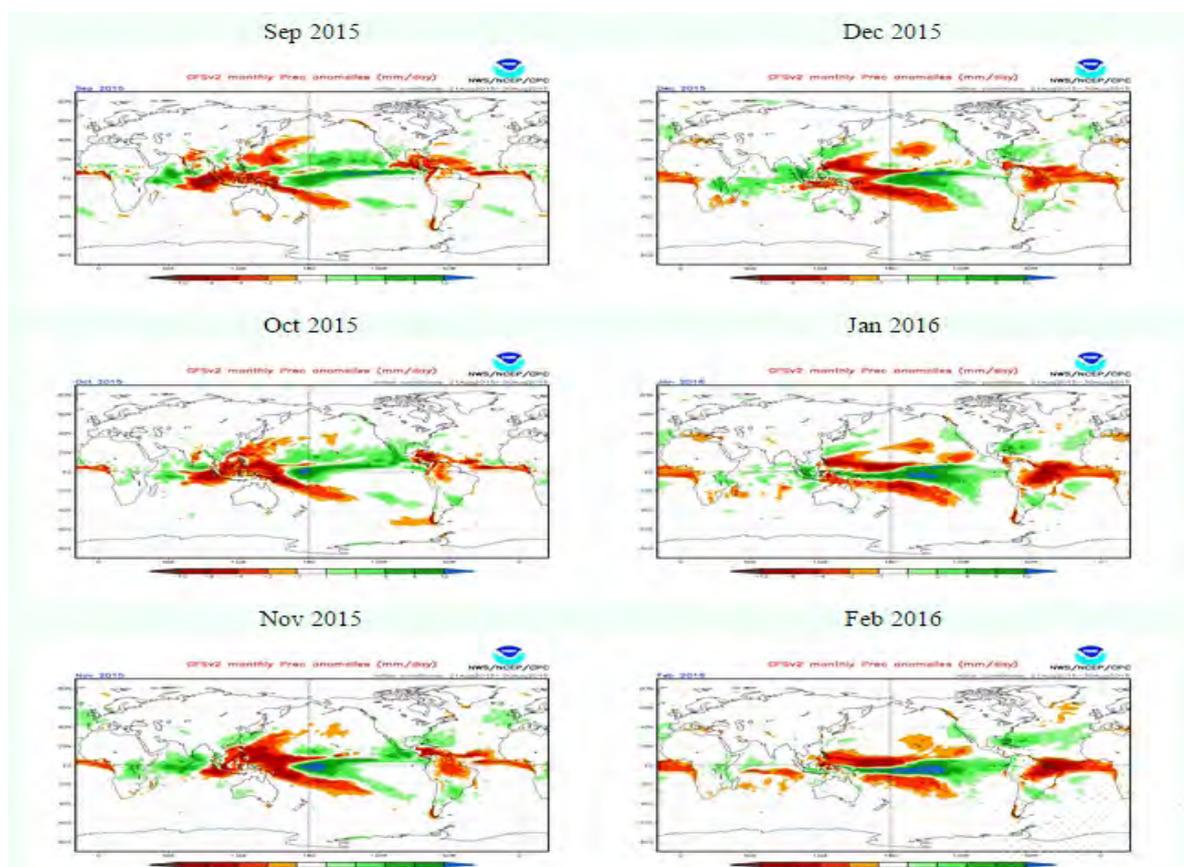


Figure 2. The red areas are likely to experience below-average rainfall during the end-2015 super El Niño. Green areas are likely to experience above-average precipitation © NOAA NCEP