

SUBMISSION TO THE FSC:

Olam Rubber Gabon – deforestation in the past 5 years

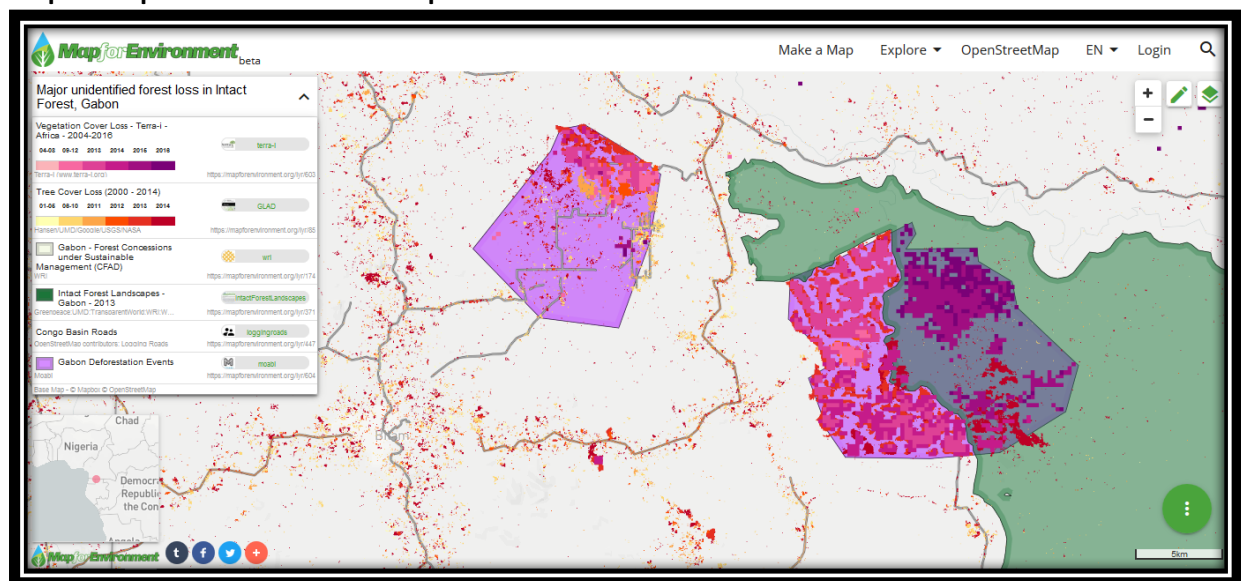
Mighty is formally submitting this additional evidence and analysis for consideration as part of our complaint against Olam International Ltd for violation of the FSC Policy for Association.

In the original formal complaint, Mighty stated that we have received ‘*videos of deforestation in the Bitam area: The Gabonese NGO Brainforest submitted video evidence to Mighty, regarding what appears to be ongoing deforestation in the area of Batouri, Gabon. Brainforest staff who collected the videos in an undercover investigation, reported that the deforestation it filmed was taking place in Olam’s rubber concessions, as well as palm oil areas. These videos are available via a dropbox link.*’

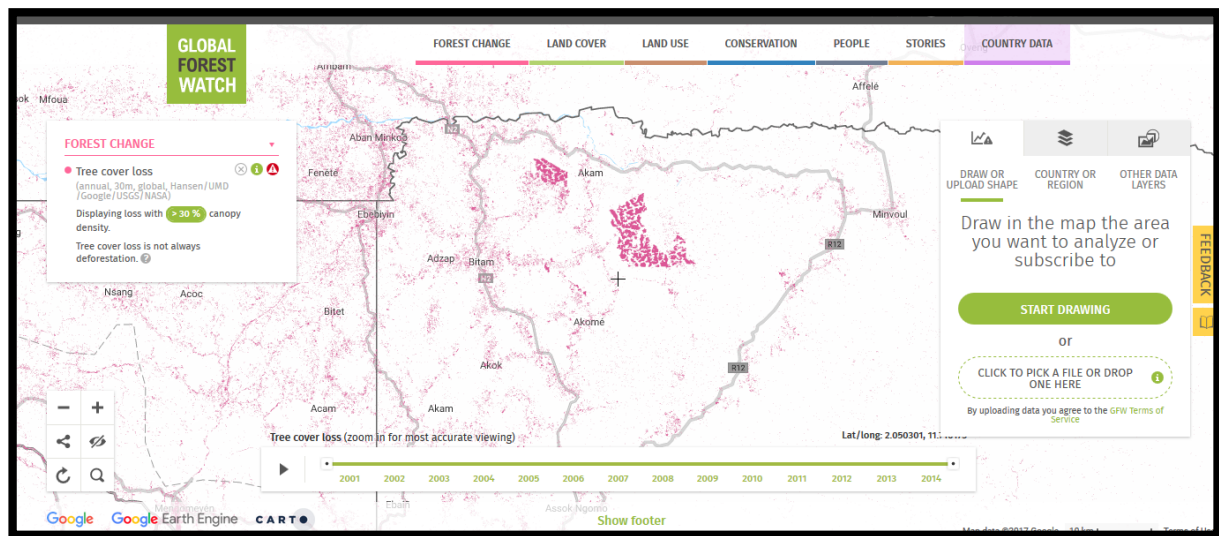
Mighty has now received further information from another NGO that identifies two possible boundaries for concessions in the north Gabon. The maps show two areas of extensively land cover change in the north of Gabon, in the area around Bitam, where Olam’s rubber plantation development is located. We there assume that that these areas are two of Olam’s rubber concessions.

This information comes in the form of an online mapping analysis indicating vegetation loss (using I-Terra data) up until 2016 and tree cover loss, using data by Hansen *et al* 2014.¹ See the Map 1 and Map 2 below.

Map 1: Map for Environment web platform



Map2: Global Forest Watch based analysis using Hansen *et al* 2014 data



Olam Rubber Gabon – total concession areas

According to this map above, the gross concession area of the two concessions shown in Map 1 above is 23,015ha.

According to Olam's website:

1. *'Olam has partnered with the Government of the Republic of Gabon in a 60:40 Joint Venture to develop 12,000 hectares (ha) of rubber plantations in Bitam which will be planted by 2017'² - 60% of Olam Rubber Gabon SA is owned by Olam International Ltd and 40% owned by the Government of Gabon.'*³
2. *'Prior to commencing development, Olam Rubber completed the Environmental & Social Impact Assessment (ESIA) and Environmental & Social Management Plan (ESMP) as well as social due diligence for a **37,137 ha land lease**. LIDAR and soil surveys were completed in 2012 to determine sensitive landscapes and the suitability of an area for planting / development, **resulting in 12,000 ha plantable land**. The vast majority of unplanted land (25,137 ha or 68%) is preserved as traditional village use areas, buffer zones, traditional hunting areas, and conservation set-asides areas or because the land is unsuitable for planting (wetlands, rivers and steep slopes).'*⁴

Hence, given the two concession areas (see Map 1 above) only cover 23,015ha out of the planned leased area of 37,137 ha: a) there may be another concession that Olam has in the region; b) the boundaries of the two concession areas are larger than shown on the map; or c) Olam did not acquire the 37,137ha.

Timeline for land clearing

According to Olam's website, Olam started plantation development in 2013:

- **'From 2013 to October 2016, Olam Rubber Gabon has planted 8,985 hectares (ha), with a final target of 12,000 ha in 2017.'**⁵

As only '2,019 hectares of rubber [had] been planted in Bitam as at end-February 2014 as part of the Phase 1 development of 28,000 hectares,'⁶ hence the majority of the land clearing would have been done since March 2014 – well within the 5-year Policy for Association threshold.

Deforestation since 2012 within these two concessions

Using various desktop mapping platforms, we provide various maps showing tree cover loss between 2012 and 2016 with these two concessions. Based on landsat images (see Google images below for example):

1. Concession on the left:

According to the boundary for the concession on the left, this area is around the 7,855ha. This area had largely been previously developed into plantations, and therefore any tree cover loss, wouldn't necessarily be forest loss.

2. Concession on the right

According to the boundary the concession on the right, this area is around the 15,160ha. The area did have extensive forest cover in 2011 (including within an Intact Forest Landscape) and therefore most plantation development would lead to deforestation.

This concession overlaps with an estimated 8,370ha of an Intact Forest Landscape (IFL), which was 56,906 ha in 2013 – ie only 6,906 ha above the 50,000 ha threshold that determines the status of an IFL. The series of maps below show significant IFL loss in the 2013 layer (the dark green layer).

If the total IFL loss in the right-hand concession is any greater than 6,906 ha, the IFL will lose its entire IFL status. We would therefore argue that, if this was verified as being the case for Olam Rubber Gabon, that this would amount to a '*Significant damage of the attributes that constitute high conservation values in a way that they no longer exist or cannot be repaired.*' (ie a violation of the Policy for Association unacceptable activity – the 'destruction of high conservation values'). Hence, this matter needs to be fully investigated as part of the complaint.

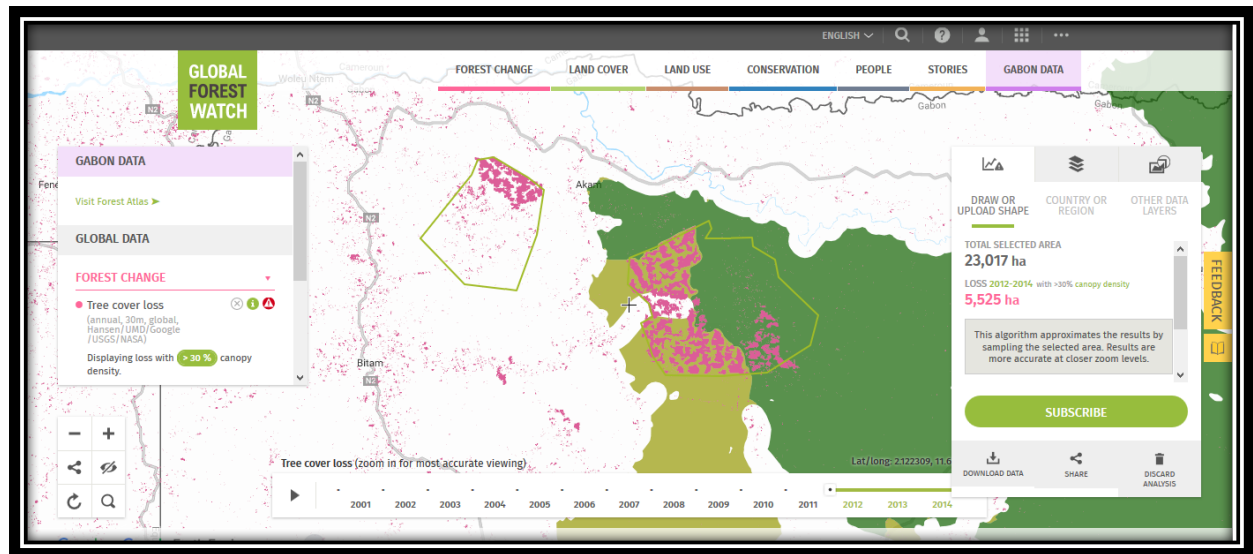
1. Tree cover losses, based on Hansen *et al* 2014 data

Using WRI's Global Forest Watch (GFW) website, we have run a simple analysis for '*tree cover loss with greater than 30% canopy density*' based on Hansen *et al* 2014 data. The online platform calculates a total '*tree cover loss with greater than 30% canopy **density***' loss of **5,525ha between 2012 and 2014** in these two concessions (see map below).

As stated above the concession on the left had already extensive plantation development (historical). From the available imagery, we were unable to determine whether the tree cover loss in this concession was forest loss or tree cover loss attributed to due to land clearing of old plantations.

However, for the concession on the right which was heavily forested in 2011, the total tree cover loss with greater than 30% canopy density would be **around 4,400 ha**. It is **highly likely that the majority of this loss would be forest loss**.

Map 3: Global Forest Watch based analysis using Hansen *et al* 2014 data



2. Land cover change using Terra-I alert data

Using the same GFW platform and Terra-I alerts for land cover change,⁷ the map below shows significant additional losses in the IFL 2013 layer up until 2016. See maps below.

Map 4: Global Forest Watch based analysis using Terra – I alerts

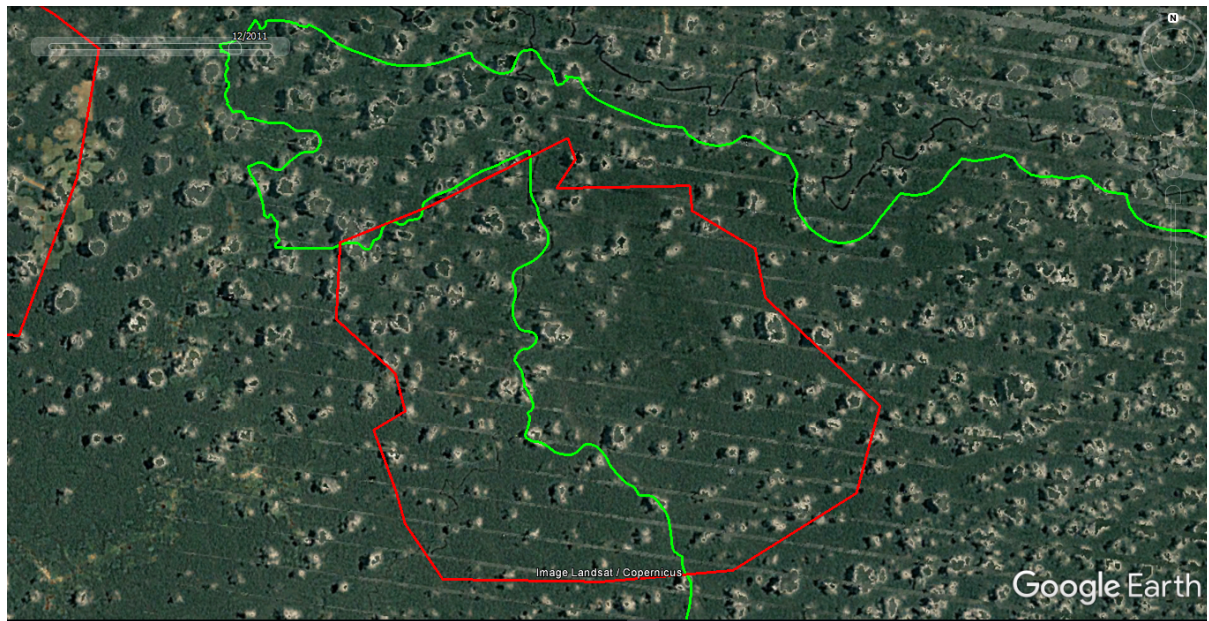


3. Google maps, showing Landsat images from 2012-16

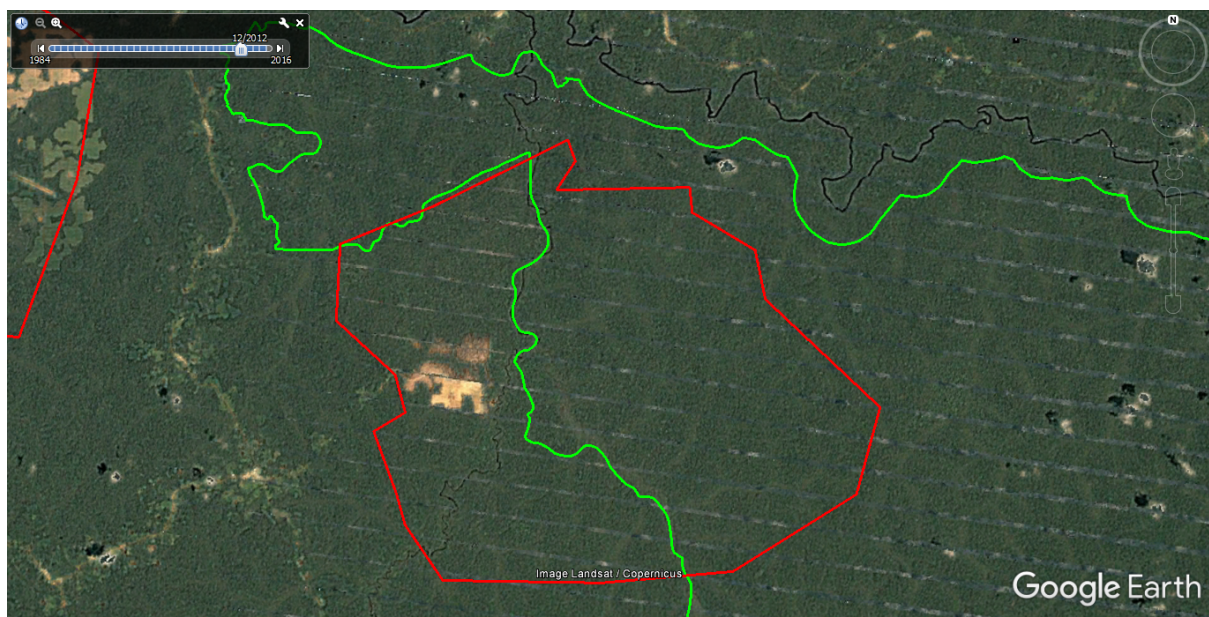
The maps below are Landsat images used in a time series on Google Earth, showing extensive development in the right hand concession overlapping with the IFL 2013 layer (the pale green line). These images support the data in the Hansen et al 2014 and Terra-I alert maps above.

Mighty was unable to conduct full Landsat analysis for this concession, due to resource constraints. We would be happy to provide the appropriate shapefiles to the FSC so it could conduct its own analysis.

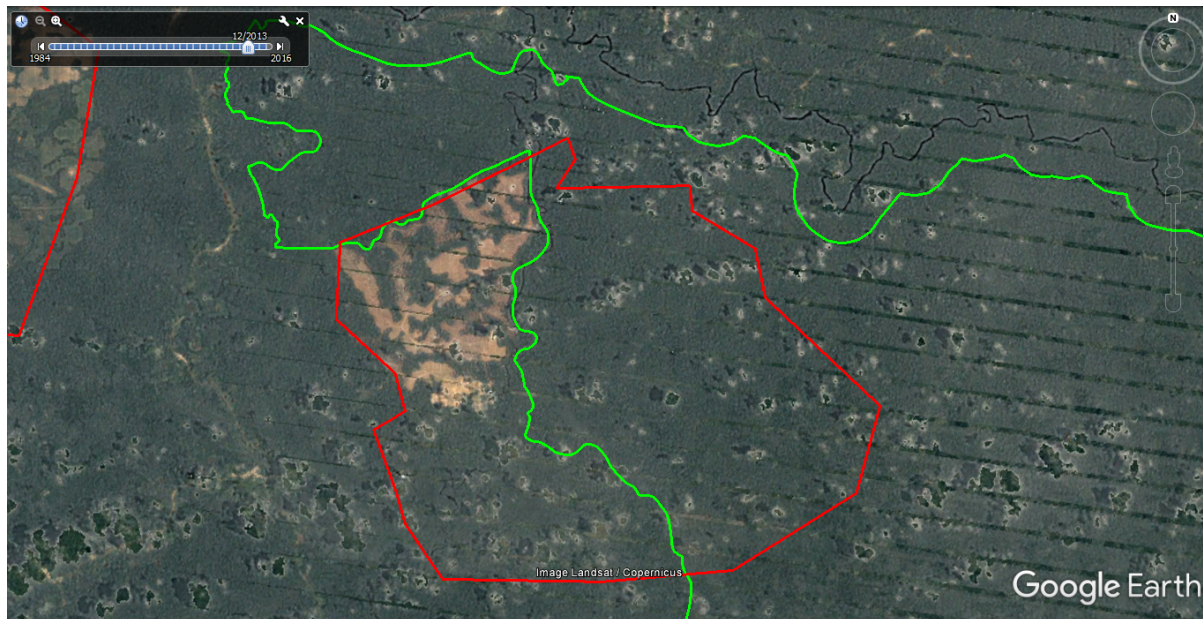
Map 5: Landsat maps hosted on Google Earth. Date - 12/2011



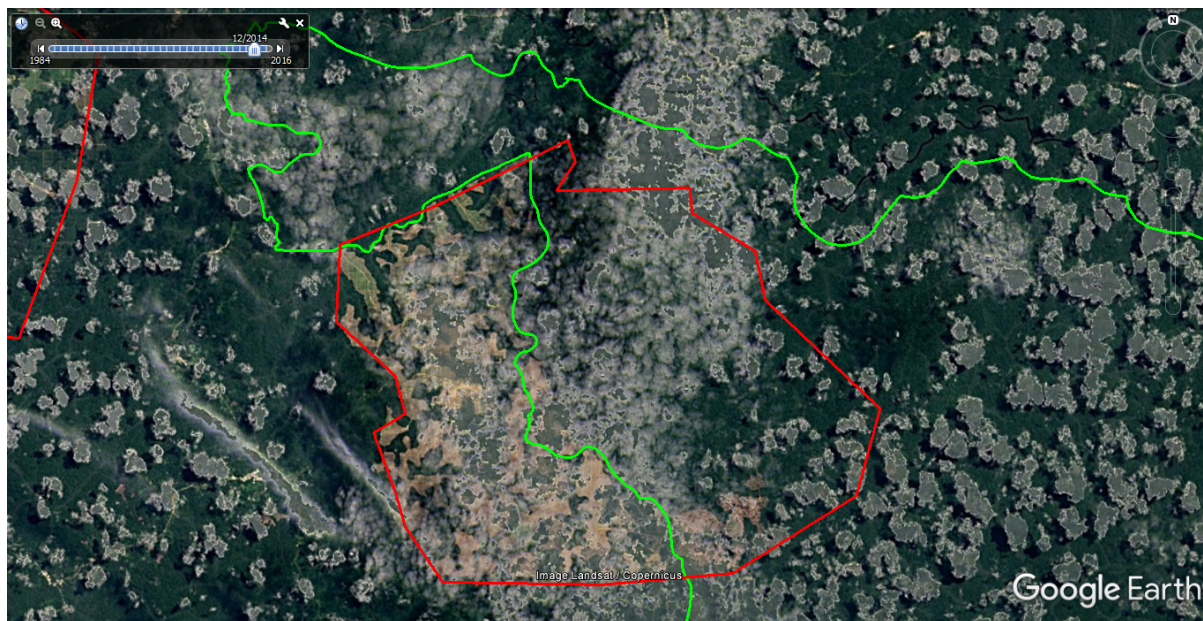
Map 6: Landsat maps hosted on Google Earth. Date - 12/2012



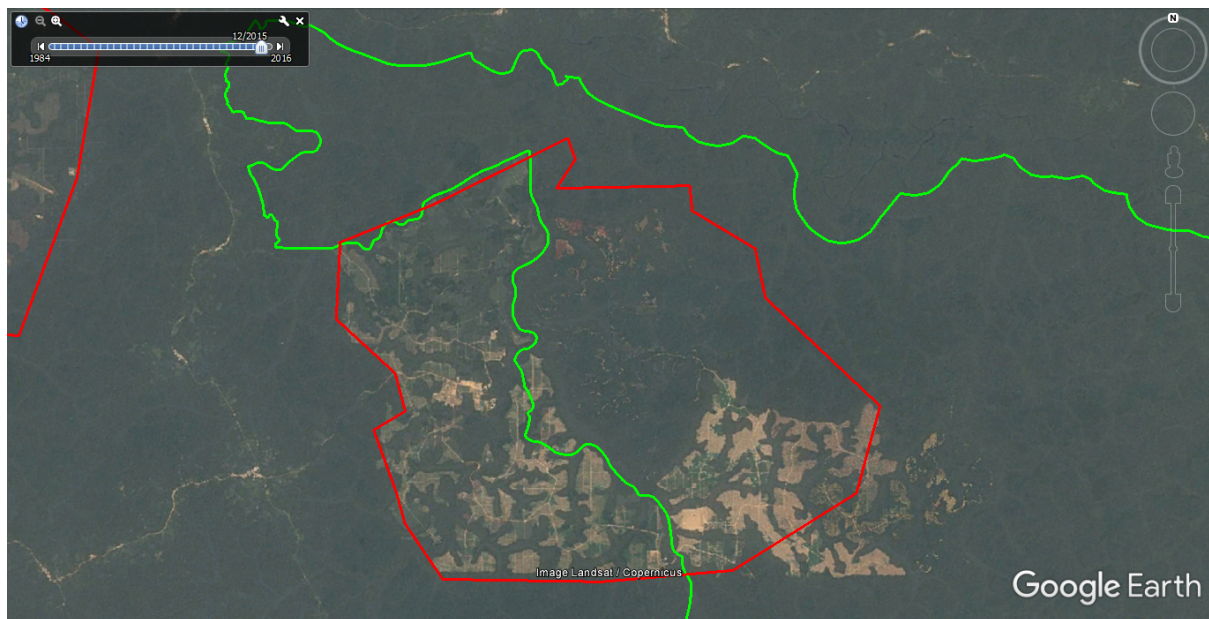
Map 7: Landsat maps hosted on Google Earth. Date - 12/2013



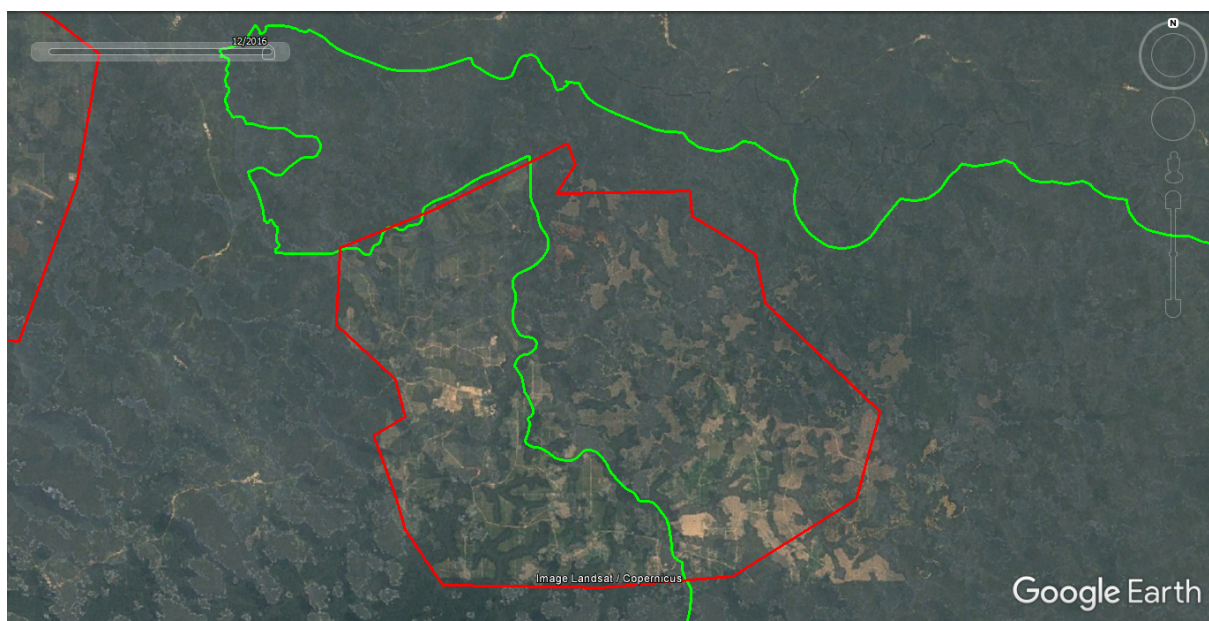
Map 8: Landsat maps hosted on Google Earth. Date - 12/2014



Map 9: Landsat maps hosted on Google Earth. Date - 12/2015



Map 10: Landsat maps hosted on Google Earth. Date - 12/2016



¹ Hansen, M. C., P. V. Potapov, R. Moore, M. Hancher, S. A. Turubanova, A. Tyukavina, D. Thau, S. V. Stehman, S. J. Goetz, T. R. Loveland, A. Kommareddy, A. Egorov, L. Chini, C. O. Justice, and J. R. G. Townshend. 2013. "High-Resolution Global Maps of 21st-Century Forest Cover Change." *Science* 342 (15 November): 850–53

² <http://olamgroup.com/products-services/industrial-raw-materials/rubber/>

³ <http://olamgroup.com/locations/west-central-africa/gabon/our-operations/>

⁴ <http://olamgroup.com/products-services/industrial-raw-materials/rubber/upstream-developments/>

⁵ <http://olamgroup.com/products-services/industrial-raw-materials/rubber/upstream-developments/>

⁶ <http://olamgroup.com/news/republic-gabon-increases-stake-olam-palm-rubber-joint-ventures-us56-8m-additional-equity-investment/#sthash.d8kfzaU1.dpuf>

⁷ <http://www.terra-i.org/terra-i/about.html>