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## ZAMBIA METEOROLOGICAL DEPARTMENT

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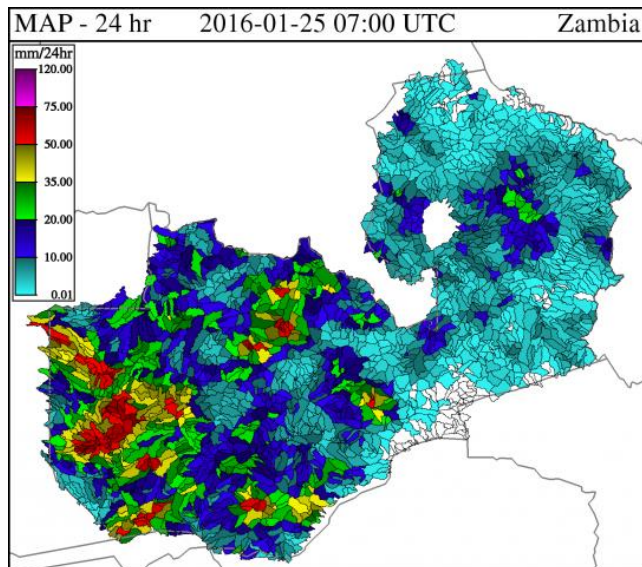
### FLASH FLOOD GUIDANCE MONITOR

Valid -6hrs

Time of issue: 12:00UTC 14:00hrs Local Time /Date:25.01.2016

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Figure 1: 24hrs Mean Areal Precipitation.



The 24 Mean Areal Precipitation Map obtained from Southern Africa Region Flash Flood Guidance System (SARFFG) indicates that more rainfall activities were experienced over much of the western half of Zambia. This is also confirmed by the rainfall collected from Meteorological stations at 0800hrs LT.

*Lusaka City 53, Kalomo 38, Solwezi, UNZA 30, Chongwe and Zambezi 27, Chinsali 25, Mwinilunga 21, Kabompo 16, Kafironda 17, CBU, Kalabo, Masaiti, Pemba and Magoye 14, KKIA 11, Mpulungu and Sesheke 10, Mt Makulu 7, Kasama 6, Livingstone, Sioma, Misamfu and Kawambwa 5, Mongu 4, Nangweshi and Kaoma 3, Samfya and Isoka 1, Petauke and Serenje less than 1*

## GENERAL SITUATION

The InterTropical Convergence Zone (ITCZ) is oscillating about the southern parts of Zambia.

**Luapula, Northern, Muchinga and Eastern Province:** Cloudy, windy with showers in few places

**The rest of Zambia:** Cloudy with showers and thunderstorms in places

### Satellite Imagery IR 10.8

The Satellite rainfall estimate obtained at 1045LT from European Meteorological Satellite shows mainly low to medium clouds covering most parts of Zambia except for the South-Eastern parts of Zambia. A cloud band stretching from North-western province to the South east coast of South Africa is expected to move eastwards and get organized into series of convective clouds causing an increase in showers and thunderstorm activities over North-western, Copperbelt, Luapula, Central Southern and Lusaka Provinces. (See figure2).

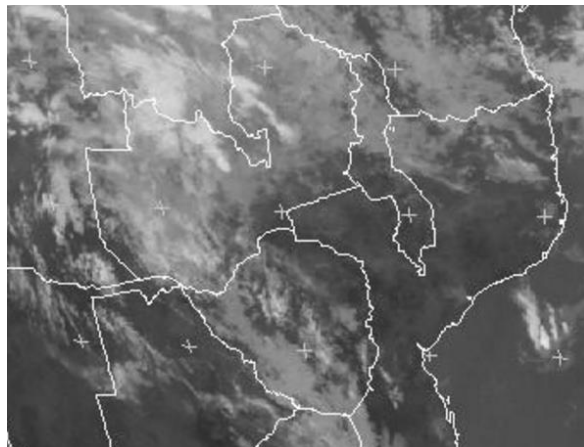


Figure 2 Eumesat IR 10.8

### Average Soil Moisture.

The Average Soil Moisture map obtained at 0800LT shows an increase in soil Moisture from the last 24hrs with northern parts of north-western and Copperbelt and the Kafue flats having average soil moisture of 95-100%. There has been also a general increase in the Soils Moisture over western, Southern, Central, Northern, Luapula and Muchinga Province. The average soil moisture is also expected to improve over Lusaka based on the weather forecast given. **(See figure 3)**

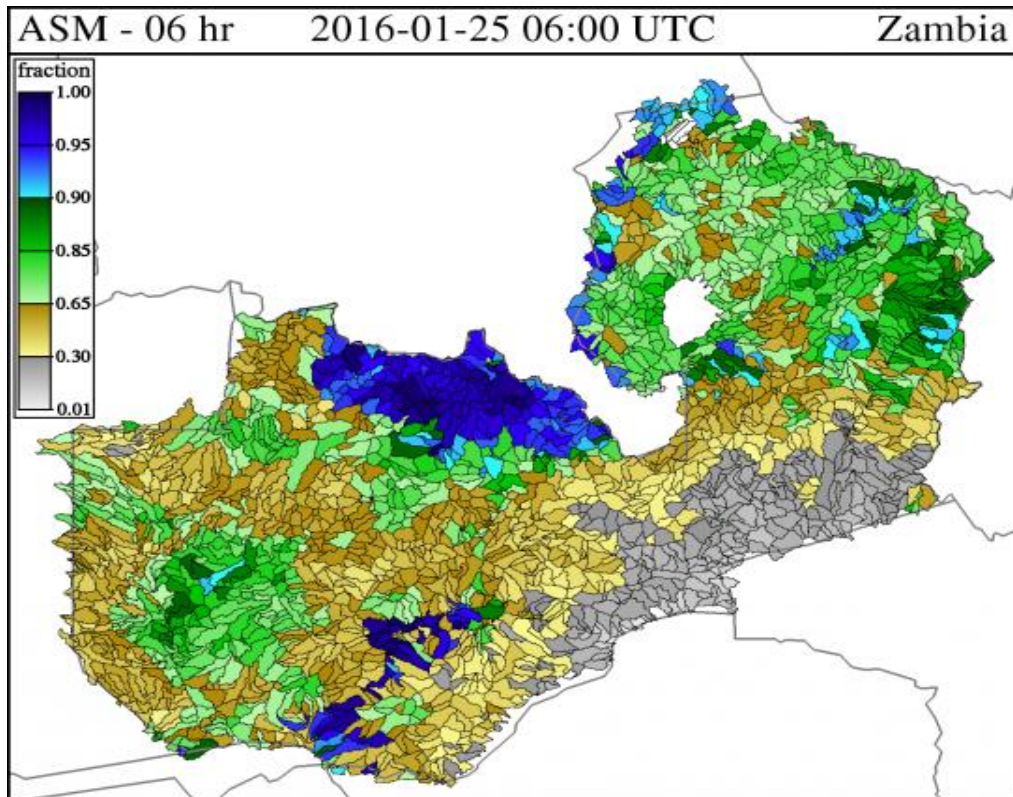


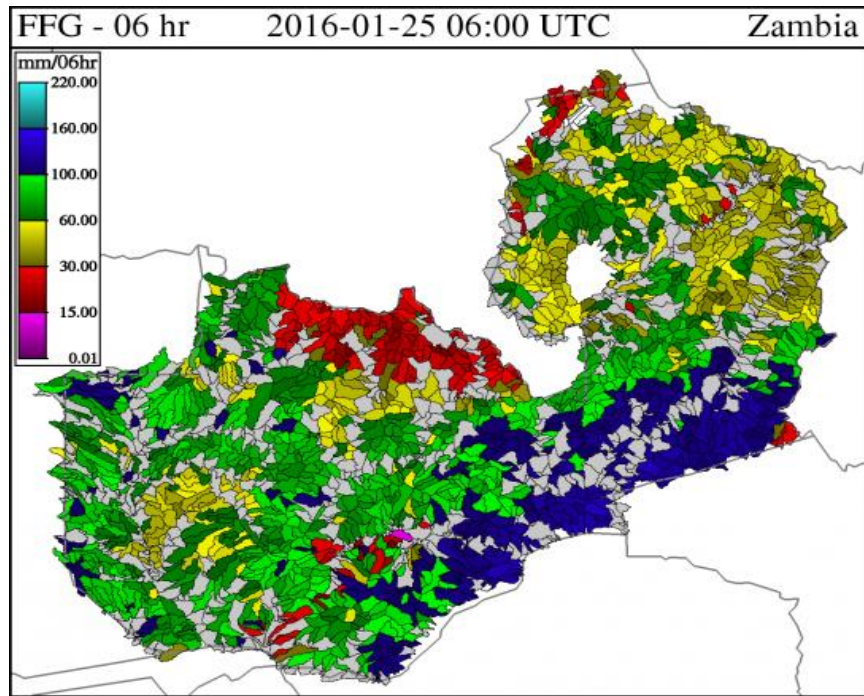
Figure 3: Average Soil Moisture

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### Flash flood Guidance

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The amount of rainfall required in the next 6hrs to reach the bank full (possible level of flash flood) shows less amount need over areas that are already saturated. These are northern parts of north-western and Copperbelt, Kafue flats and western districts of central province. However areas such as Lusaka Province can also reach the bankful in the next 6hrs and cause a flash flood due to impermeable rocks in some parts of the province.



**Figure 4:** Flash Flood guidance for 6hours

**Possible areas of Flash Flood**

Considering the weather forecast given, Average Soils Moisture and Flash Flood Guidance System the areas with possible flash floods are circled below and categories according to the percentage probability of Flash floods occurrence. (See Figure 4 & 5)

Figure 4. **Probability of Flash flood occurrence**



