

## INVENTAIRE DES DONNEES TABULAIRES ET SPATIALES DU CENTRE REGIONAL AGRHYMET

Le Centre Régional AGRHYMET est une source régionale d'informations pour la prise de décision dans les domaines de la sécurité alimentaire, de la lutte contre la désertification, de la gestion des ressources naturelles et du suivi de l'environnement. Ces informations concernent en général, la production agricole, le suivi phytosanitaire, l'élevage, le climat, l'hydrologie et les ressources naturelles (sols eaux, forêts ...)

### **1) Données Tabulaires**

#### **1.1) Données Climatologiques**

**Données protégées, leur diffusion est soumise à des protocoles d'accord avec les pays**

Paramètre PAYS	005	002	003	015	016	056	084	166
Burkina Faso	1902-2020	1907-2017	1907-2017	1960-2012	1960-2012	1950-1990	1950-2012	1950-1997
Cap-vert	1901-2018	1980-2018	1980-2018	1981-2016	1981-2016	1980-2001	1980-1998	1980-1993
Gambie	1950-2020	1950-2017	1950-2017	1943-2002		1950-1983	1950-2005	1950-1983
Guinée	1897-2015	1897-2015	1897-2015				1940-2003	
Guinée Bissau	1940-2020	1950-2013	1950-2013			1950-1989	1950-1989	1987-1989
Mali	1901-2020	1900-2016	1900-2016	1931-2013	1931-2013	1950-2010	1933-2013	1937-1997
Mauritanie	1905-2014	1912-2014	1912-2014	1933-2014	1934-2013	1950-1981	1939-1992	1950-1992
Niger	1905-2020	1950-2017	1950-2017	1979-1996	1979-1996	1950-1993	1950-1996	1950-1996
Tchad	1904-2020	1903-2011	1950-2010	1960-1999	1960-1999	1950-1999	1950-1999	1950-1983
Sénégal	1901-2013	1949-1989	1949-1989			1949-1989	1949-1990	1949-1989
Togo	1901-2020	1961-2011	1961-2016	1990-2006	1990-2006	1990-2006	1961-2005	
Bénin	1921-2016	1952-2015	1952-2013	1933-2013	1933-2013		1952-2012	1952-2012
Ghana	1921-2016	1952-2015	1952-2015	1960-2015	1960-2015		1960-2015	
Côte d'Ivoire	1921-2014	1952-2013	1952-2013	1989-2013	1989-2013		1989-2013	
Sierra Leone	1997-2015							
Libéria	1988-2019	2000-2019	2019	2019	2019		2019	

Code paramètre

- 005 Pluviométrie
- 002 Température maximale
- 003 Température minimale
- 015 Humidité relative, maximale
- 016 Humidité relative, minimum
- 056 Vitesse du vent, moyenne à 2 m
- 084 Insolation
- 166 Tension de vapeur

## **1.2) Données Hydrologiques**

**Données protégées, leur diffusion est soumise à des protocoles d'accord avec les pays**

Pays	Type de données collectées	Taille de séries données historiques
Bénin	debits	1948-2013
Burkina Faso	debits	1955-2020
Cap Vert	-	-
Côte d'Ivoire	debits	1953-2004
Gambie	debits	1953-2014
Ghana	cotes/debits	1951-2010
Guinée	cotes/debits	1923-2013
Guinée Bissau	cotes	1977-1995
Liberia	-	-
Mali	cotes/debits	1907-2012
Mauritanie	-	-
Niger	cotes/debits	1929-2018
Nigeria	cotes/debits	1960-2009
Sénégal	cotes/debits	1930-2009
Sierra Leone	-	-
Tchad	cotes/debits	1937-2010
Togo	debits	1951-1992
Cameroun	debits	1966-2000

### **1.3) Données Socio-économiques**

#### **Données à accès libre**

PAYS	Démographie RGP	Statistiques agricole	Santé animale	Immunisation	Effectif cheptel
Burkina Faso	1985	1984 – 2017	1992 – 2006	1990 – 2006	1989 – 2006
Cap-vert	1990	1987 – 2010	1998 – 1999, 2002	1994 – 2002	1995
Gambie	1993	1990 – 2017		1998	1994
Guinée Bissau	1991	1987 – 2006			1990 – 2000
Mali	1987	1984 – 2011	1990 – 1996 2000 - 2006	1991 – 1995 2007	1990 – 2000
Mauritanie	1988	1984 – 2007	1995 – 2006	1995 – 2006	1981 – 2000
Niger	1988	1985 – 2017	1990 – 2007	1999 – 2007	1990 – 2006
Sénégal	1988	1986 – 2012	1988 – 2005	1987 – 2005	1990 – 2004
Tchad	1993	1983 – 2017			1983 – 2000
Bénin		1998 - 2009			
Côte d'Ivoire		2000 - 2007			
Ghana		1992 - 2011			
Guinée		2008 - 2009			
Nigéria		1994 - 2017			
Togo		1994 - 2017			

#### **4) Données Phytosanitaires**

##### **Données à accès libre**

PAYS	Années
Niger	1986 - 2001
Cap-vert	1995-1998, 2001
Gambie	1999-2000
Tchad	1993, 1995, 1997
Burkina Faso	1993, 1994, 1996
Mali	1994-1995
Sénégal	1993-1994
Guinée Bissau	2001-2003

#### **5) Données simulées scénario Climatiques**

Ces données couvrent l'Afrique de l'ouest et les différents sites pilotes du projet changement climatique. Elles se rapportent à la pluviométrie et aux températures (minimum et maximum) ; elles sont publiques.

Données journalières	1961 - 2099
Données mensuelles	2020,2050,2080

## **2) Données SIG et Télédétection**

### **2.1) Données Satellitaires**

ASTER (2002-2004-2007)

SPOT (1998-2004-2005)

LANDSAT (1970-1980-2000)

accès libre

MODIS (2004 à 2008)

NOAA /AVHRR (1987 à ce jour)

METEOSAT (1990 à ce jour)

NDVI LAC décadaire de 1988 à ce jour

NDVI GAC décadaire de 1983 0 1987

MODELES NUMERIQUES DE TERRAIN

accès libre

SPOT VEGETATION (NDVI)

Données Radar (ENVISAT)

Produits VGT4 AFRICA : SWB, NDWP, PHENOMAX, PHENOOKS, DMP, ALBEDO, FCOVER

Données de vidéographie aérienne (1998)

Photos Corona (1960 – 1971)

### **2.2) Données vectorielles**

Unités administratives des pays

accès libre

Villages

accès libre

Cours d'eau

Point d'eau

Infrastructures routières

Voies ferrées

Aires de conservation (parcs, forêts classées, réserves, etc)

Végétation (Formations végétales)

Occupation du sol (1987-2000)

Intensité de l'utilisation agricole des terres (1987)

Sols (Types des sols)

Géologie (années 1960)

Hydrogéologie

Bassins versants

Topographie (Courbes de niveau, points cotés, etc)

Potentialités pastorales (1989)

### **2.3) Produits élaborés**

Pluies Estimées (1991 à ce jour)

accès libre

NDVI (MSG)

2007-2008

accès libre

Estimations Biomasse

1998-2013

accès libre

Zones à risques

1996-2008

accès libre

Estimation des rendements des cultures.

Types de sol et leur utilisation

Evolution du front de végétation  
Zones favorables au développement des criquets  
Feux de brousse  
Dates de semis des céréales  
Période de croissance des cultures

**2.4) Les données mergées (Nouvelles données élaborées, leur partage est à définir avec les pays)**

Ces données sont obtenues par la combinaison des données tabulaires (données terrain) et les données satellitales.

Pour les données pluie, le merging est disponible pour trois satellites: TAMSAT, CHIRPS, ARC2

PAYS	Pluie	Température Mini	Température Maxi
Burkina Faso	1983 à 2016	1983 à 2016	1983 à 2016
Gambie	1983 à 2016	1983 à 2016	1983 à 2016
Guinée Bissau	1983 à 2016	1983 à 2013	1983 à 2013
Mali	1983 à 2016	1983 à 2016	1983 à 2016
Mauritanie	1983 à 2014	1983 à 2014	1983 à 2014
Niger	1983 à 2016	1983 à 2016	1983 à 2016
Tchad	1983 à 2016	1983 à 2016	1983 à 2016
Sénégal	1983 à 2013		
Togo	1983 à 2016	1983 à 2016	1983 à 2016
Bénin	1983 à 2016	1983 à 2016	1983 à 2016
Côte d'Ivoire	1983 à 2014	1983 à 2013	1983 à 2013
Ghana	1983 à 2016	1983 à 2016	1983 à 2016
Guinée	1983 à 2016	1983 à 2016	1983 à 2016

## Produits satellitaires issus de la station MESA

<b>Vegetation</b>					
VGТ-NDVI	ndv	Ingest	Ingested NDVI	West Africa	since 1/1/2011
version: sv2- pv2.2 <sup>1</sup>	ndvi-linearx2	Derived	Filtered NDVI (linear filtering applied twice)	West Africa	since 1/1/2011
LTA: 1999- 2014	10davg-linearx2	Derived	Statistic: AVG of ndvi-linearx2	West Africa	36 dekads
	10dmin-linearx2	Derived	Statistic: MIN of ndvi-linearx2	West Africa	36 dekads
	10dmax-linearx2	Derived	Statistic: MAX of ndvi-linearx2	West Africa	36 dekads
	10dmed-linearx2	Derived	Statistic: MED of ndvi-linearx2	West Africa	36 dekads
	vci	Derived	Anomaly: VCI (ndv vs. linearx2 statistics)	West Africa	since 1/1/2011
	icn	Derived	Anomaly: ICN (ndv vs. linearx2 statistics)	West Africa	since 1/1/2011
	linearx2difflinearx2	Derived	Anomaly: Absolute Difference (ndvi-linearx2 -10davg-linearx2)	West Africa	since 1/1/2011
	vci_linearx2	Derived	Anomaly: VCI (linearx2 vs. linearx2 statistics)	West Africa	since 1/1/2011
	icn_linearx2	Derived	Anomaly: ICN (linearx2 vs. linearx2 statistics)	West Africa	since 1/1/2011
	monndvi	Derived	Indicator: monthly NDVI (from ndvi-linearx2)	West Africa	since 1/1/2011
	1monavg	Derived	Statistic: monthly multi-year average NDVI (from ndvi-linearx2)	West Africa	12 months
	1monmin	Derived	Statistic: monthly multi-year min NDVI (from ndvi-linearx2)	West Africa	12 months
	1monmax	Derived	Statistic: monthly multi-year max NDVI (from ndvi-linearx2)	West Africa	12 months
VGТ- FAPAR	fapar	Ingest	Ingested FAPAR	Africa	since 11/5/2015
VGТ- LAI	fapar	Ingest	Ingested LAI	Africa	since 11/5/2015
VGТ- FCOVER	fcover	Ingest	Ingested FCover	Africa	since 21/5/2014
VGТ-DMP	dmp	Ingest	Ingested DMP	Africa	since 1/6/2014

Inland Water						
WD-GEE	occur	Ingest	Inland water surface from LandSat – monthly occurrences	Africa <sup>2</sup>	since 1/1/2014	
version: V1.0	avg	Ingest	Long Term average occurrences			
LTA: 1985-2014						

Rainfall						
FEWSNET-RFE	10d	Ingest	Precipitation estimates over 10 days	Africa	since 1/1/2011	
version: 2.0	10davg	Derived	Statistic: multi-years average for each dekad	Africa	36 dekads	
LTA: 2001-2014	10dmin	Derived	Statistic: multi-years minimum for each dekad	Africa	36 dekads	
	10dmax	Derived	Statistic: multi-years maximum for each dekad	Africa	36 dekads	
	10ddiff	Derived	Anomaly: ABSOLUTE DIFFERENCE (10d – 10davg)	Africa	since 1/1/2011	
	10dratio	Derived	Anomaly: RELATIVE RATIO to LTA % (10d/10davg)	Africa	since 1/1/2011	
	10dperc	Derived	Anomaly: RELATIVE DIFFERENCE % ((10d – 10davg)/10davg)	Africa	since 1/1/2011	
	10dnp	Derived	Anomaly: Normalized Precipitation (10d-10dmin)/(10dmax10dmin)	Africa	since 1/1/2011	
	1moncum	Derived	Cumulated 10day RFE over each month	Africa	since 1/1/2011	
	1monavg	Derived	Statistic: multi-years average for each month	Africa	12 month	
	1monmin	Derived	Statistic: multi-years minimum for each month	Africa	12 month	
	1monmax	Derived	Statistic: multi-years maximum for each month	Africa	12 month	
	1mondif	Derived	Anomaly: ABSOLUTE DIFFERENCE (1moncum-1monavg)	Africa	since 1/1/2011	
	1monperc	Derived	Anomaly: RELATIVE DIFFERENCE (1moncum1monavg)/1monavg	Africa	since 1/1/2011	

<sup>2</sup> The product is computed globally, but distributed over Africa only, divided by region (dissemination start with ECOWAS region)

	1monnp	Derived	Anomaly: Normalized Precipitation (1moncum- 1monmin)/(1monmax- 1monmin)	Africa	since 1/1/2011
	3moncum	Derived	Cumulated 10day RFE over each 3 month	Africa	since 1/1/2011
	3monavg	Derived	Statistic: multi-years average for each 3 month	Africa	12 month
	3monmin	Derived	Statistic: multi-years minimum for each 3 month	Africa	12 month
	3monmax	Derived	Statistic: multi-years maximum for each 3 month	Africa	12 month
	3mondif	Derived	Anomaly: ABSOLUTE DIFFERENCE (3moncum-3monavg)	Africa	since 1/1/2011
	3monperc	Derived	Anomaly: RELATIVE DIFFERENCE (3moncum3monavg)/3monavg	Africa	since 1/1/2011
	6moncum	Derived	Cumulated 10day RFE over each 6 month	Africa	since 1/1/2011
	6monavg	Derived	Statistic: multi-years average for each 6 month	Africa	12 month
	6monmin	Derived	Statistic: multi-years minimum for each 6 month	Africa	12 month
	6monmax	Derived	Statistic: multi-years maximum for each 6 month	Africa	12 month
	6mondif	Derived	Anomaly: ABSOLUTE DIFFERENCE (6moncum-6monavg)	Africa	since 1/1/2011
	6monperc	Derived	Anomaly: RELATIVE DIFFERENCE (6moncum6monavg)/6monavg	Africa	since 1/1/2011
	1yearcum	Derived	Cumulated 10day RFE over each year	Africa	since 1/1/2011
	1yearavg	Derived	Statistic: multi-years average for each year	Africa	12 month
	1yearmin	Derived	Statistic: multi-years minimum for each year	Africa	12 month
	1yearmax	Derived	Statistic: multi-years maximum for each year	Africa	12 month
	1yeardif	Derived	Anomaly: ABSOLUTE DIFFERENCE (1yearcum-1yearavg)	Africa	since 1/1/2011
	1yearperc	Derived	Anomaly: RELATIVE DIFFERENCE (1yearcum1yearavg)/1yearavg	Africa	since 1/1/2011

TAMSAT-RFE	10d	Ingest	Precipitation estimates over 10 days	Africa	since 1/1/2011
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version: 2.0	10davg	Derived	Statistic: multi-years average for each dekad	Africa	36 dekads
LTA: 1984-2014	10dmin	Derived	Statistic: multi-years minimum for each dekad	Africa	36 dekads
	10dmax	Derived	Statistic: multi-years maximum for each dekad	Africa	36 dekads
	10ddiff	Derived	Anomaly: ABSOLUTE DIFFERENCE (10d – 10davg)	Africa	since 1/1/2011
	10dperc	Derived	Anomaly: RELATIVE DIFFERENCE % ((10d – 10davg)/10davg)	Africa	since 1/1/2011
	10dnp	Derived	Anomaly: Normalized Precipitation (10d-10dmin)/(10dmax10dmin)	Africa	since 1/1/2011
	1moncum	Derived	Cumulated 10day RFE over each month	Africa	since 1/1/2011
	1monavg	Derived	Statistic: multi-years average for each month	Africa	12 month
	1monmin	Derived	Statistic: multi-years minimum for each month	Africa	12 month
	1monmax	Derived	Statistic: multi-years maximum for each month	Africa	12 month
	1mondif	Derived	Anomaly: ABSOLUTE DIFFERENCE (1moncum-1monavg)	Africa	since 1/1/2011
	1monperc	Derived	Anomaly: RELATIVE DIFFERENCE (1moncum1monavg)/1monavg	Africa	since 1/1/2011
	1monnp	Derived	Anomaly: Normalized Precipitation (1moncum- 1monmin)/(1monmax-1monmin)	Africa	since 1/1/2011

CHIRPS-DEKAD	10d	Ingest	Precipitation estimates over 10 days	Africa	since 1/1/2011
version: 2.0	10davg	Derived	Statistic: multi-years average for each dekad	Africa	36 dekads
LTA: 1981-2014	10dmin	Derived	Statistic: multi-years minimum for each dekad	Africa	36 dekads
	10dmax	Derived	Statistic: multi-years maximum for each dekad	Africa	36 dekads
	10ddiff	Derived	Anomaly: ABSOLUTE DIFFERENCE (10d – 10davg)	Africa	since 1/1/2011
	10dperc	Derived	Anomaly: RELATIVE DIFFERENCE % ((10d – 10davg)/10davg)	Africa	since 1/1/2011
	10dnp	Derived	Anomaly: NP (10d- 10dmin)/(10dmax-10dmin)	Africa	since 1/1/2011

	1moncum	Derived	Cumulated 10day RFE over each month	Africa	since 1/1/2011
	1monavg	Derived	Statistic: multi-years average for each month	Africa	12 month
	1monmin	Derived	Statistic: multi-years minimum for each month	Africa	12 month
	1monmax	Derived	Statistic: multi-years maximum for each month	Africa	12 month
	1mondif	Derived	Anomaly: ABSOLUTE DIFFERENCE (1moncum-1monavg)	Africa	since 1/1/2011
	1monperc	Derived	Anomaly: RELATIVE DIFFERENCE (1moncum1monavg)/1monavg	Africa	since 1/1/2011
	1monnp	Derived	Anomaly: Normalized Precipitation (1moncum- 1monmin)/(1monmax-1monmin)	Africa	since 1/1/2011
	3moncum	Derived	Cumulated 10day RFE over each 3 month	Africa	since 1/1/2011
	3monavg	Derived	Statistic: multi-years average for each 3 month	Africa	12 month
	3monmin	Derived	Statistic: multi-years minimum for each 3 month	Africa	12 month
	3monmax	Derived	Statistic: multi-years maximum for each 3 month	Africa	12 month
	3mondif	Derived	Anomaly: ABSOLUTE DIFFERENCE (3moncum-3monavg)	Africa	since 1/1/2011
	3monperc	Derived	Anomaly: RELATIVE DIFFERENCE (3moncum3monavg)/3monavg	Africa	since 1/1/2011
	6moncum	Derived	Cumulated 10day RFE over each 6 month	Africa	since 1/1/2011
	6monavg	Derived	Statistic: multi-years average for each 6 month	Africa	12 month
	6monmin	Derived	Statistic: multi-years minimum for each 6 month	Africa	12 month
	6monmax	Derived	Statistic: multi-years maximum for each 6 month	Africa	12 month
	6mondif	Derived	Anomaly: ABSOLUTE DIFFERENCE (6moncum-6monavg)	Africa	since 1/1/2011
	6monperc	Derived	Anomaly: RELATIVE DIFFERENCE (6moncum-6monavg)/6monavg	Africa	since 1/1/2011
	1yearcum	Derived	Cumulated 10day RFE over each year	Africa	since 1/1/2011
	1yearavg	Derived	Statistic: multi-years average for each year	Africa	12 month

	1yearmin	Derived	Statistic: multi-years minimum for each year	Africa	12 month
	1yearmax	Derived	Statistic: multi-years maximum for each year	Africa	12 month
	1yeardif	Derived	Anomaly: ABSOLUTE DIFFERENCE (1yearcum-1yearavg)	Africa	since 1/1/2011
	1yearperc	Derived	Anomaly: RELATIVE DIFFERENCE (1yearcum1yearavg)/1yearavg	Africa	since 1/1/2011

ECMWF-RAIN	10d	Ingest	Precipitation estimates over 10 days	Africa	since 1/1/2008 <sup>4</sup>
version: OPE					
LTA: N.A.					

MSG-MPE	mpe <sup>5</sup>	Ingest	Precipitation estimates near-real time from MSG (15 min)	MSG-disk	no archive
version: undefined	1dcum	Derived	Cumulated precipitation estimate over 1 day	Africa	
version: undefined	10dcum	Derived	Cumulated precipitation estimate over 10 day	Africa	
LTA: N.A.					

ARC2-RFE	1d	Ingest	Precipitation estimates from NASA-CPC	Africa	since 1/1/1983
version: 2.0	10d	Derived	Cumulated precipitation estimate over 10 day	Africa	
LTA: N.A.	1mon	Derived	Cumulated precipitation estimate over 1 month	Africa	
	3mon	Derived	Cumulated precipitation estimate over 3 months	Africa	
	6mon	Derived	Cumulated precipitation estimate over 6 months	Africa	
	1year	Derived	Cumulated precipitation estimate over 1 year	Africa	

Table 4: Rainfall Datasets

Fire					
MODIS-FIRMS	1day	Ingest	Daily Active Fires at 1 km resolution	Africa	since 1/1/2015

version: v5.0 <sup>3</sup>	10dcount	Derived	Number of fires over 10 day period	Africa	
LTA: -	10dcountavg	Derived	Multi-years average number of 10dcount	Africa	
	10dcountmin	Derived	Multi-years minimum number of 10dcount	Africa	
	10dcountmax	Derived	Multi-years maximum number of 10dcount	Africa	
	10dcountdiff	Derived	Difference between 10dcount and 10dcountavg	Africa	
	10dcount10K	Derived	Number of fires over 10 day period over 10 Km grids	Africa	since 1/1/2015
	10dcount10Kavg	Derived	Multi-years average number of 10dcount over 10 Km grids	Africa	
	10dcount10Kmin	Derived	Multi-years minimum number of 10dcount over 10 Km grids	Africa	
	10dcount10Kmax	Derived	Multi-years maximum number of 10dcount over 10 Km grids	Africa	
	10dcount10Kdiff	Derived	Difference between 10dcount and 10dcountavg over 10 Km grids	Africa	
	10dcount10Kratio	Derived	Ratio between 10dcount and 10dcountavg over 10 Km grids	Africa	
MODIS- FIRMS	1day	Ingest	Daily Active Fires at 1 km resolution	Africa	since 1/1/2015
version: v6.0	10dcount	Derived	Number of fires over 10 day period	Africa	
LTA: -	10dcountavg	Derived	Multi-years average number of 10dcount	Africa	
	10dcountmin	Derived	Multi-years minimum number of 10dcount	Africa	
	10dcountmax	Derived	Multi-years maximum number of 10dcount	Africa	
	10dcountdiff	Derived	Difference between 10dcount and 10dcountavg	Africa	
	10dcount10K	Derived	Number of fires over 10 day period over 10 Km grids	Africa	since 1/1/2015
	10dcount10Kavg	Derived	Multi-years average number of 10dcount over 10 Km grids	Africa	
	10dcount10Kmin	Derived	Multi-years minimum number of 10dcount over 10 Km grids	Africa	

<sup>3</sup> Release 6.0 replaces the 5.0, which was discontinued in March 2017.

	10dcount10Kmax	Derived	Multi-years maximum number of 10dcount over 10 Km grids	Africa	
	10dcount10Kdiff	Derived	Difference between 10dcount and 10dcountavg over 10 Km grids	Africa	
	10dcount10Kratio	Derived	Ratio between 10dcount and 10dcountavg over 10 Km grids	Africa	

Table 5: Fire datasets

Miscellaneous					
LSASAF-ET	Et <sup>2</sup>	Ingest	Ingested ET (30 min)	MSG-disk	since 1/5/2015
version: undefined	10d30min <sup>2</sup>	Derived	Statistics (30min average over 10 days)	MSG-disk	
LTA: -	10dcum	Derived	Indicator: ET cumulated over 10 days	Africa	
	1moncum	Derived	Indicator: ET cumulated over 1 month	Africa	

LSASAF-LST	lst <sup>2</sup>	Ingest	Ingested LST (15 min)	MSG-disk	since 1/5/2015
version: undefined	10d15min <sup>2</sup>	Derived	Statistics (15min max over 10 days)	MSG-disk	
LTA: -	1dmax	Derived	Indicator: LST maximum over 1 day	Africa	
	10dmax	Derived	Indicator: LST maximum over 10 days	Africa	
	10dmin	Derived	Indicator: LST minimum over 10 days	Africa	-