



# Secas na região Norte

**Marcus Suassuna Santos**

*Sistemas de Alertas Hidrológicos*

*Serviço Geológico do Brasil - CPRM*



MINISTÉRIO DE  
MINAS E ENERGIA



# Acesso especial aos dados

## Nossos Produtos

SGB DESCOMPLICA - GEOCIÊNCIAS PARA TODOS

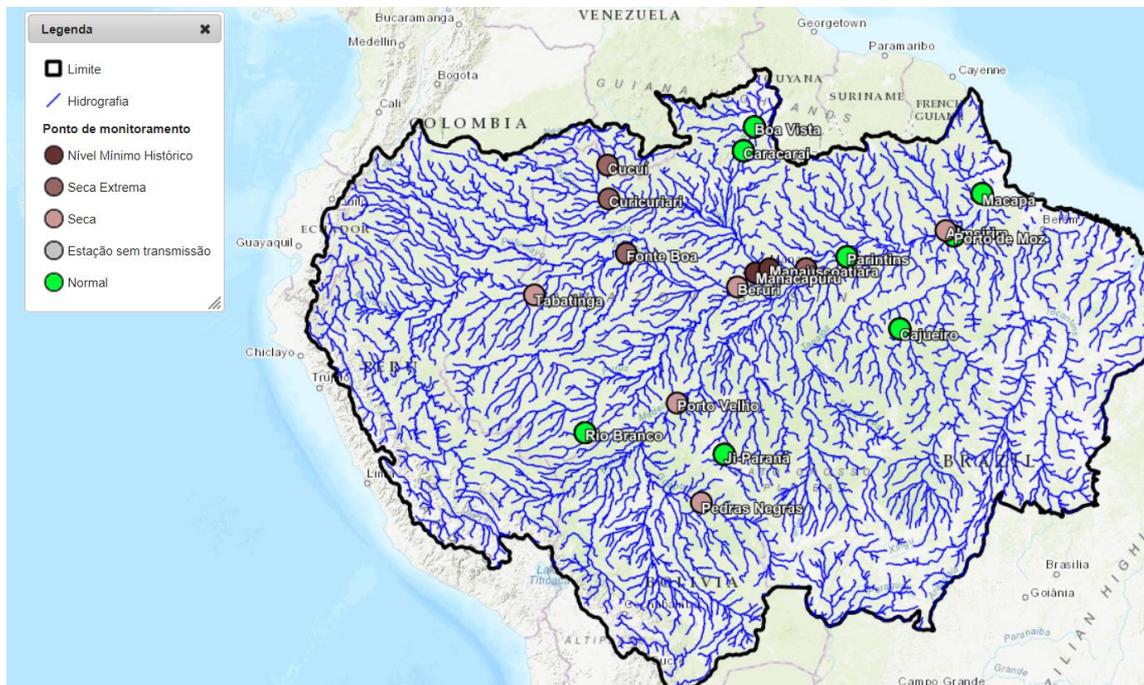


<https://www.sgb.gov.br/publique/Hidrologia/Eventos-Criticos/Seca-na-Regiao-Amazonica-8328.html>

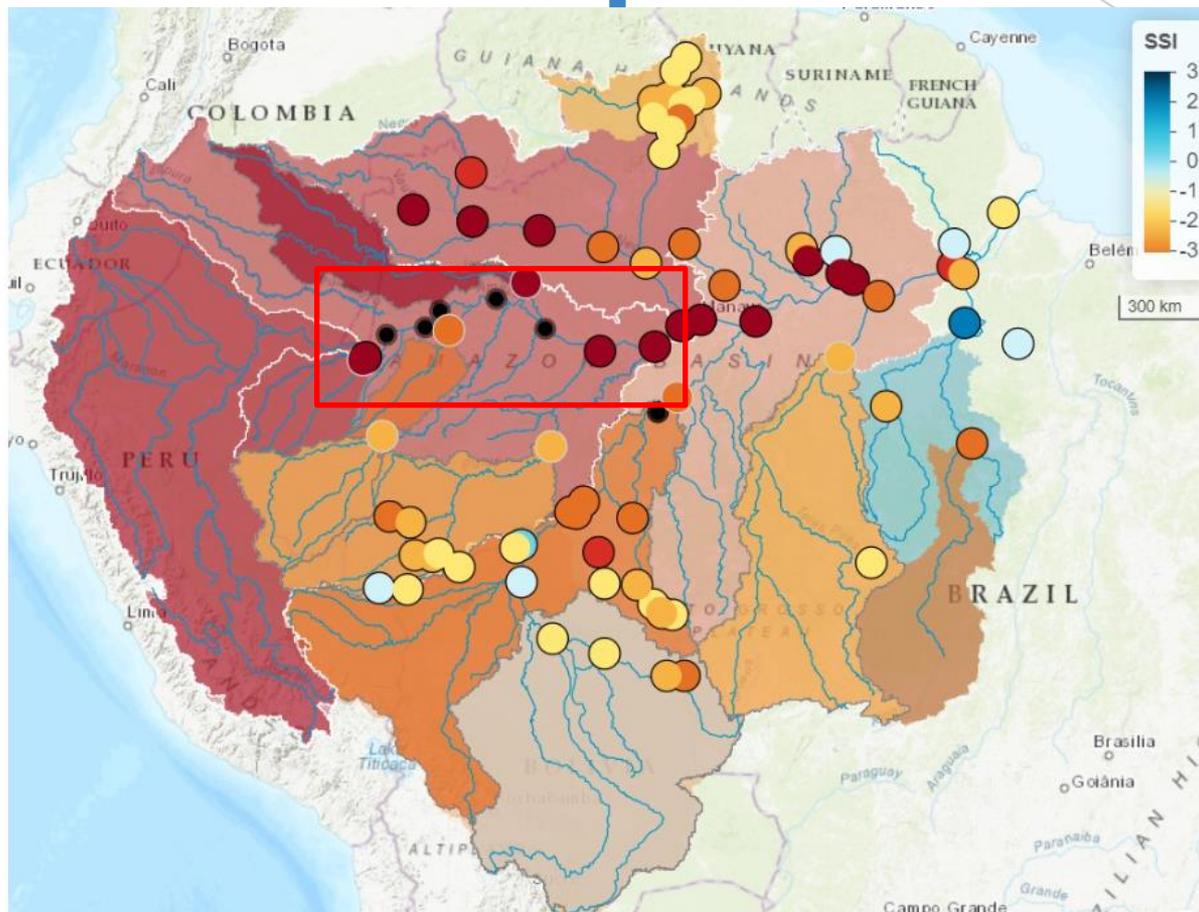
# Acesso aos dados



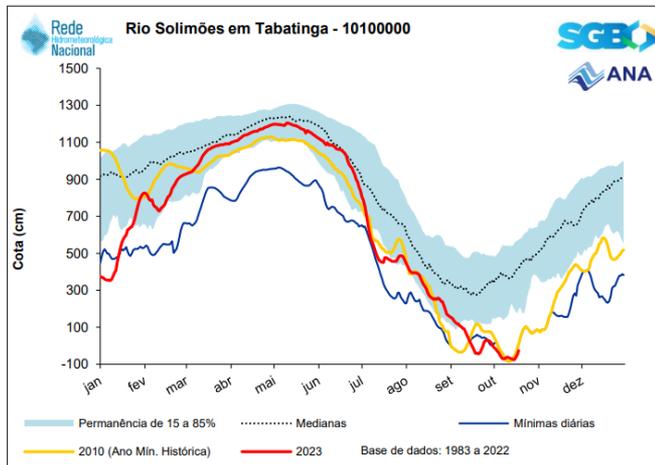
[Página Inicial](#) - [Bacias Monitoradas](#) - [Manchas de Inundação](#) - [Secas e Estiagens](#) - [Monitoramento Especial](#)



# Acesso aos dados – frequência dos boletins

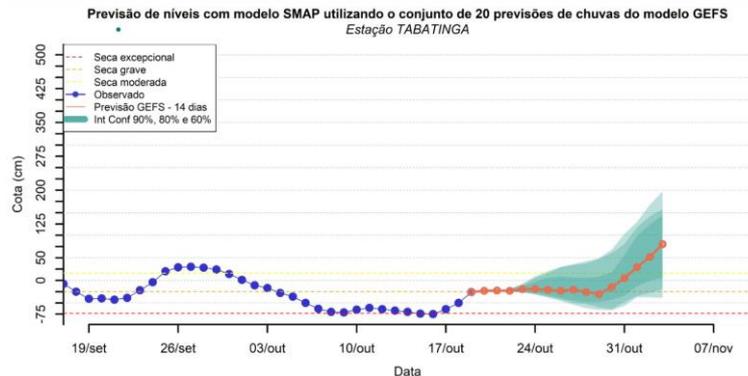


# Acesso aos dados – frequência dos boletins

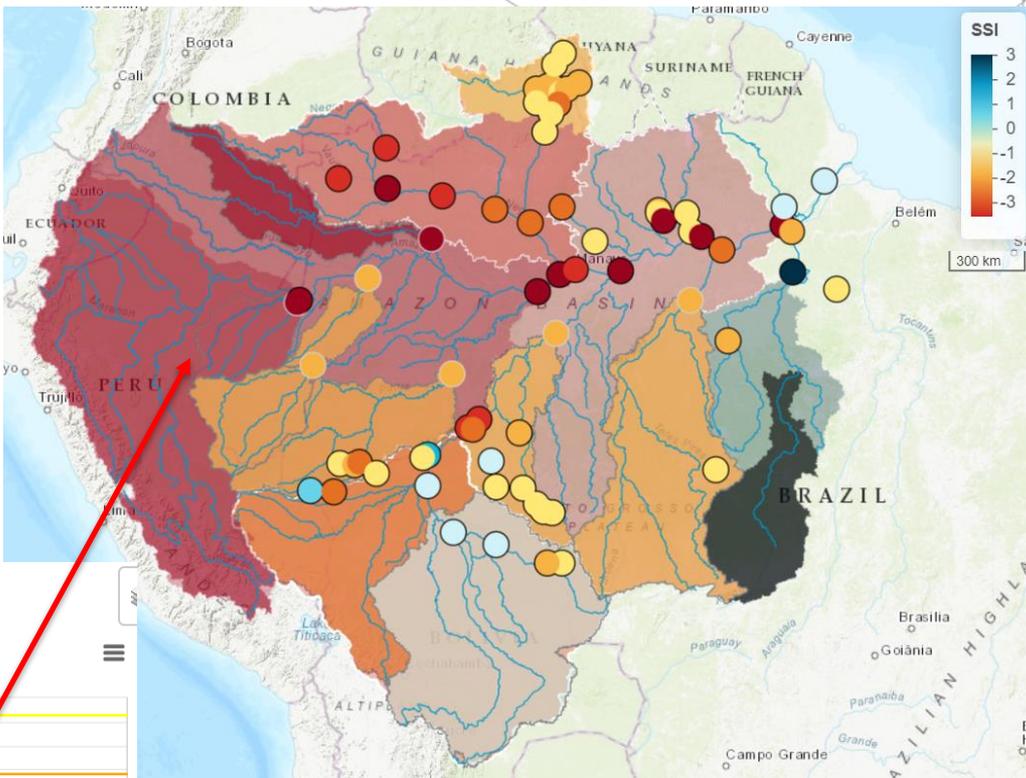
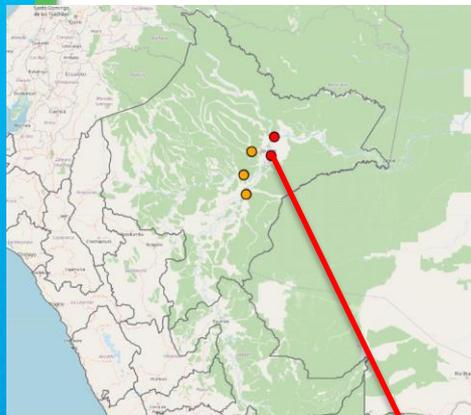


Tabatinga		
Cota atual: -26 cm		
Ordem	Ano	Cota (cm)
1	2010	-86
2	2023	-75
3	2005	2
4	2022	2
5	1998	13
6	1995	43
7	1988	60
8	2021	72
9	2012	84
10	2018	94
11	2007	97
12	2011	105
13	1999	113

Cota atual  
-5 cm



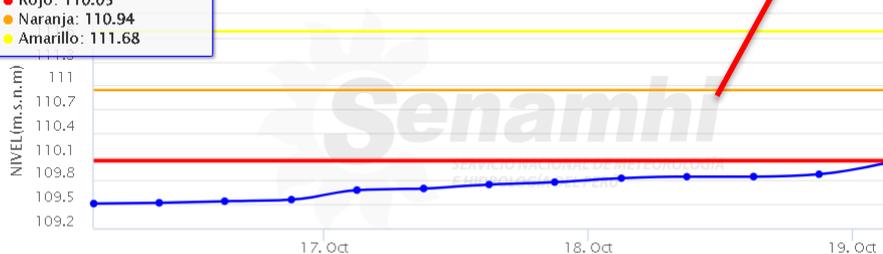
# Acesso aos dados -



● Nivel ● Caudal **Horario** Diario Fecha: 2023-10-19 06:00:00

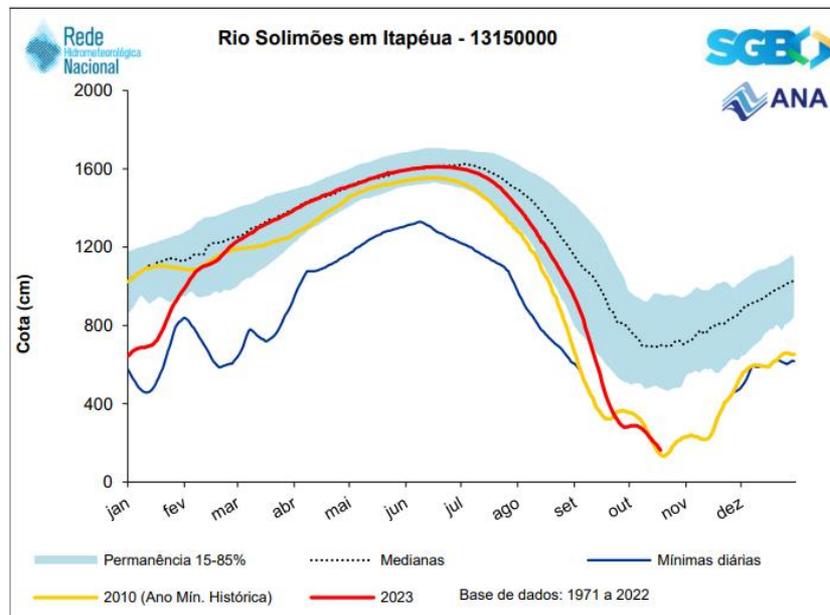
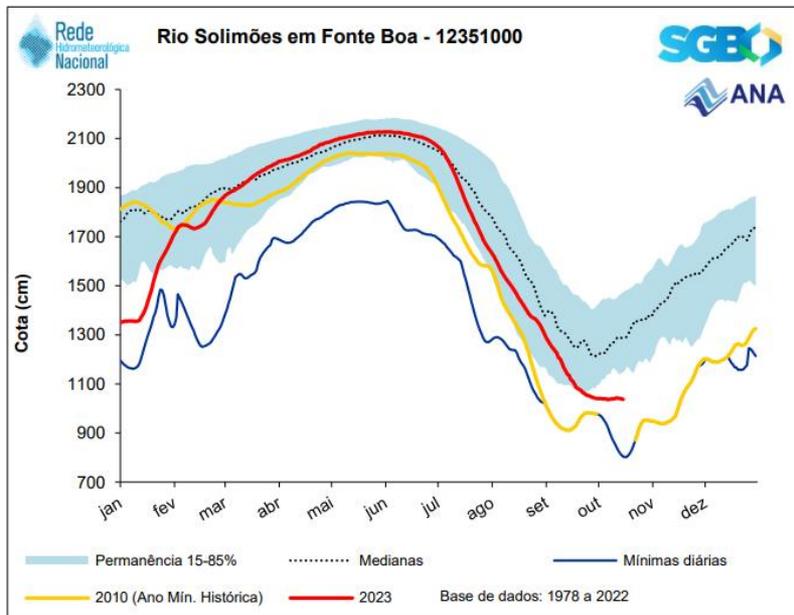
Jueves, 19 Oct 2023, 06:00  
● Datos Horarios: 110.02  
● Rojo: 110.05  
● Naranja: 110.94  
● Amarillo: 111.68

HIDROGRAMA DE NIVEL DEL RIO AMAZONAS  
ESTACION TAMSHIYACU

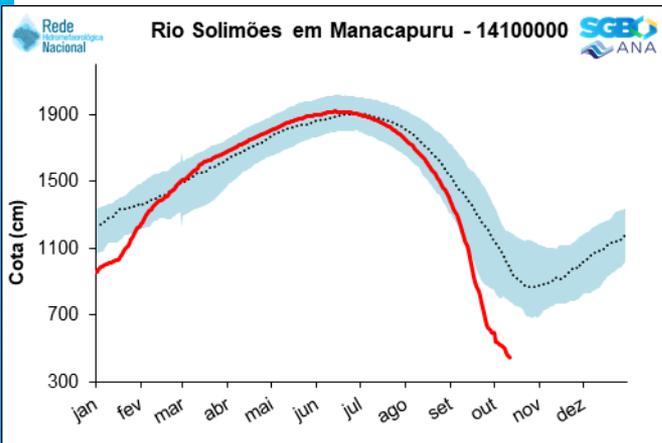


● Datos Horarios ● Rojo ● Naranja ● Amarillo

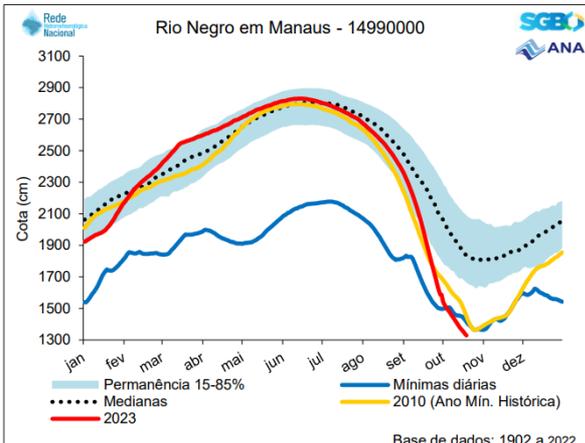
# Acesso aos dados – frequência dos boletins



# Acesso aos dados – frequência dos boletins



Manacapuru		
Cota atual: 361 cm		
Ordem	Ano	Cota (cm)
1	2023	361
2	2010	392
3	2009	460
4	1997	495
5	2005	508
6	1995	552
7	1998	557
8	2008	617
9	2022	652
10	1991	667
11	1990	670
12	2012	672
13	2015	691

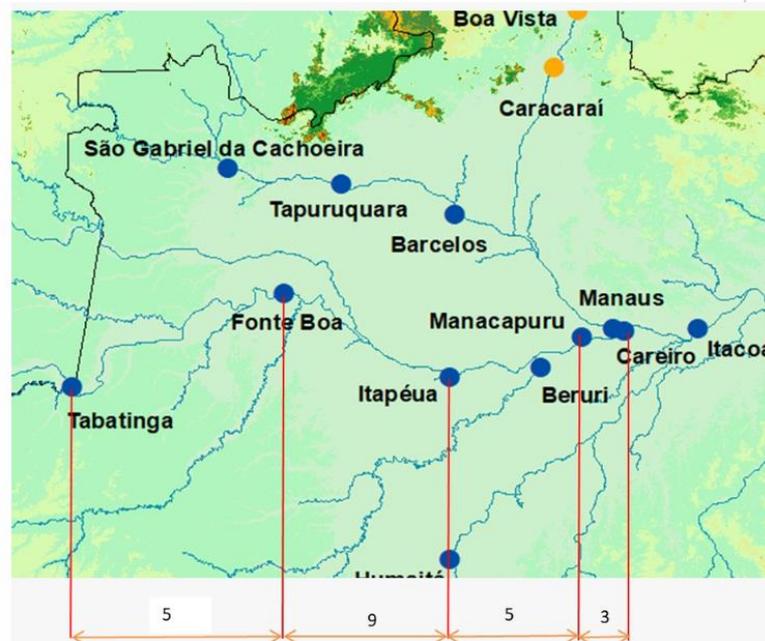
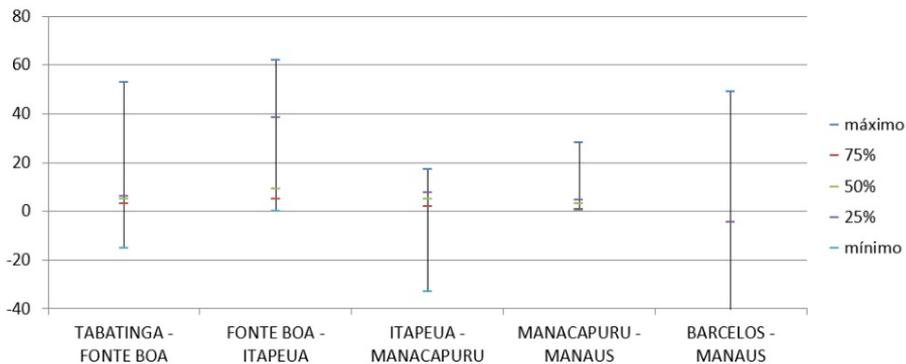


Maiores Vazantes em Manaus		
Cota atual: 1329 cm		
Ordem	Ano	Cota (cm)
1	2023	1329
2	2010	1363
3	1963	1364
4	1906	1420
5	1997	1434
6	1916	1442
7	1926	1454
8	1958	1474
9	2005	1475
10	1936	1497
11	1998	1503
12	1909	1504
13	1995	1506

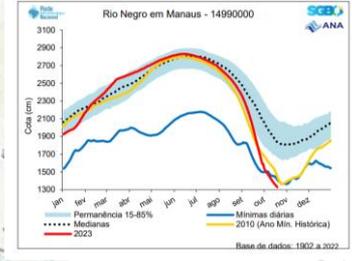
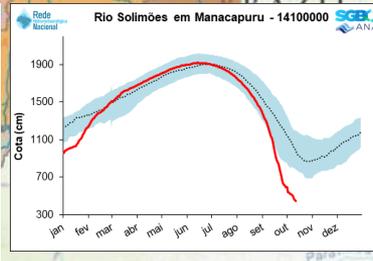
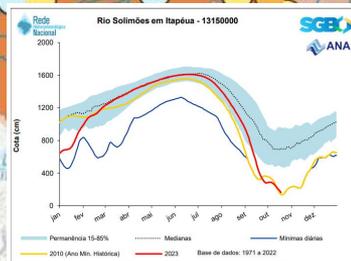
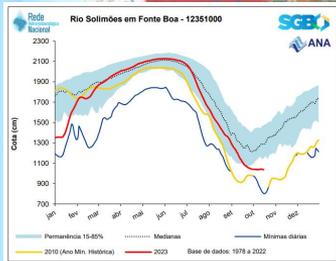
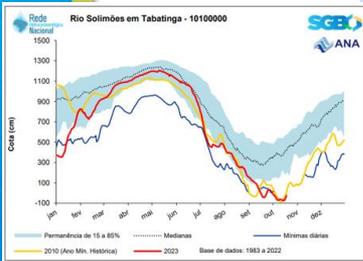
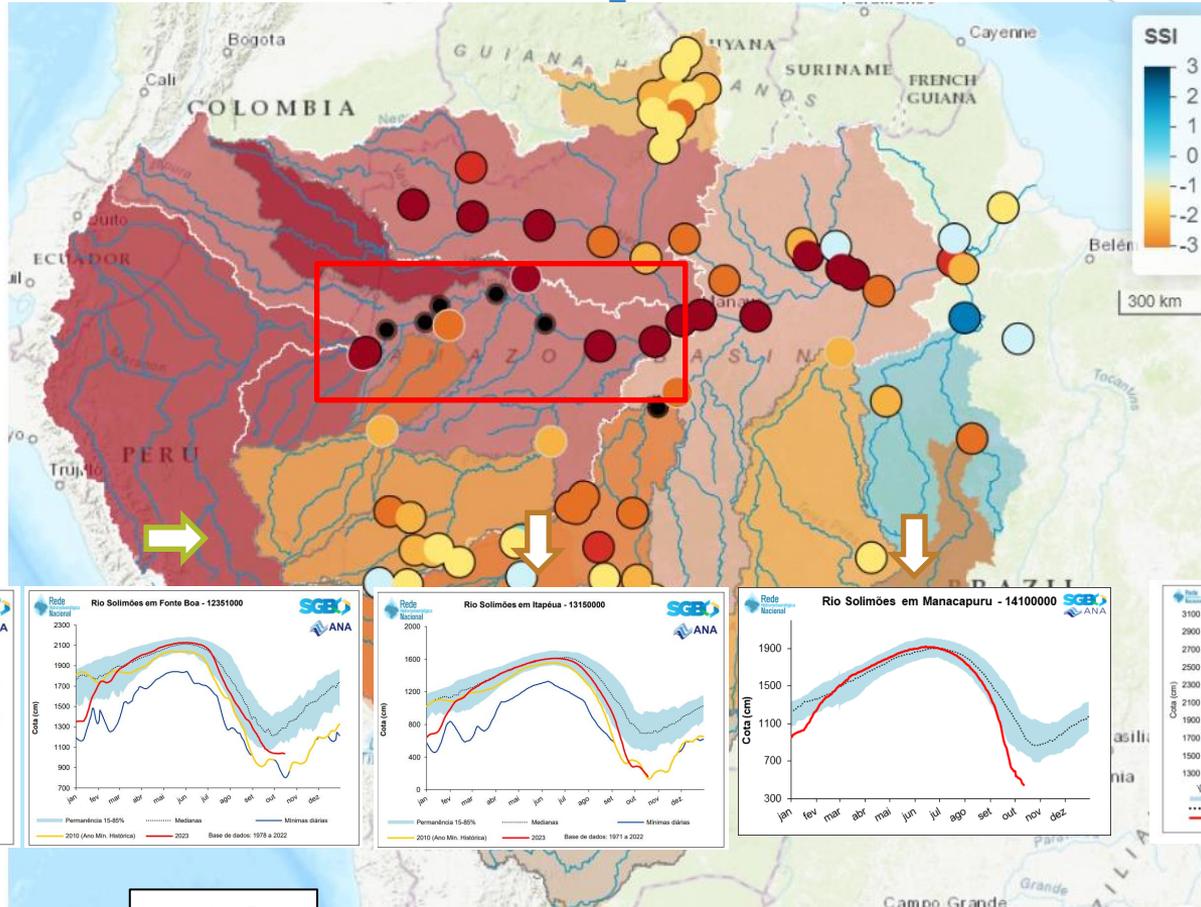
# Acesso aos dados – frequência dos boletins

DELTA DATA OCORRÊNCIA MÍNIMA

	TABATINGA - FONTE BOA	FONTE BOA - ITAPEUA	ITAPEUA - MANACAPURU	MANACAPURU - MANAUS	BARCELOS - MANAUS
máximo	53	62	17	28	49
75%	3	5	2	1	-279
50%	5	9	5	3	-256
25%	6	39	8	5	-5
mínimo	-15	0	-33	0	-331
média	7	20	6	4	-175
desvio padrão	12	20	5	6	145



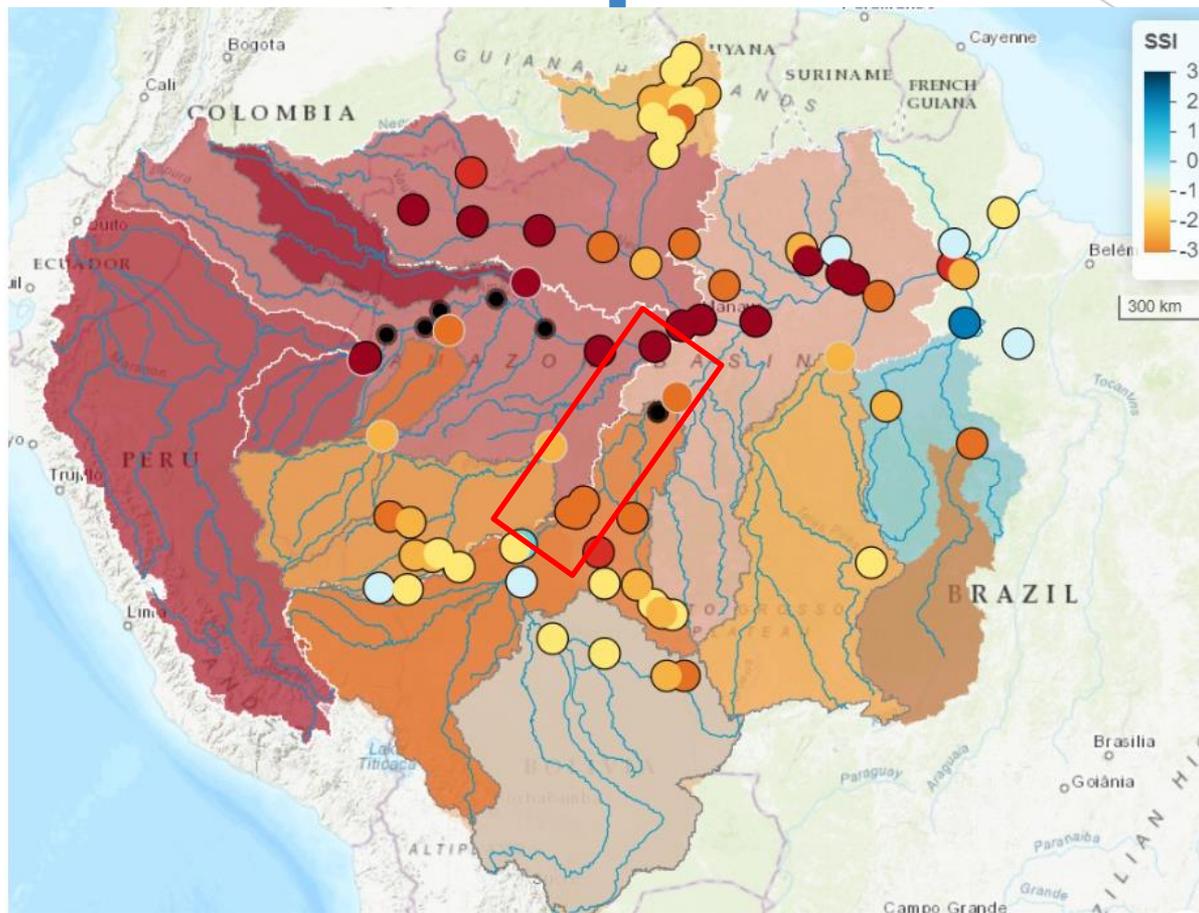
# Acesso aos dados – frequência dos boletins



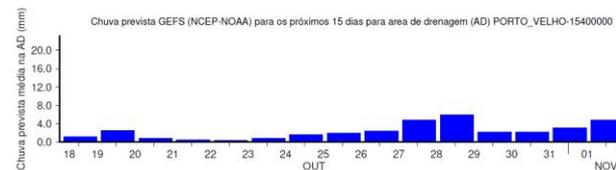
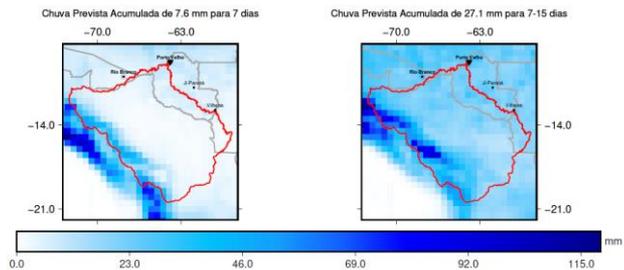
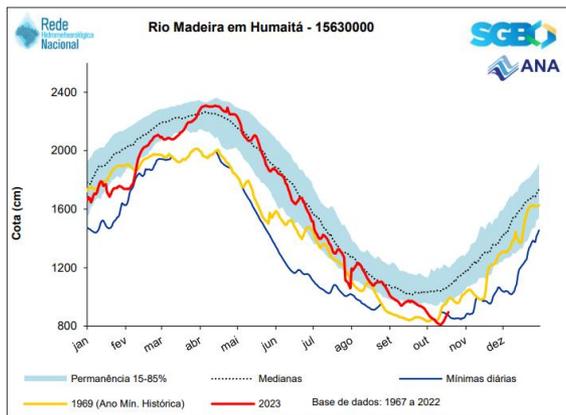
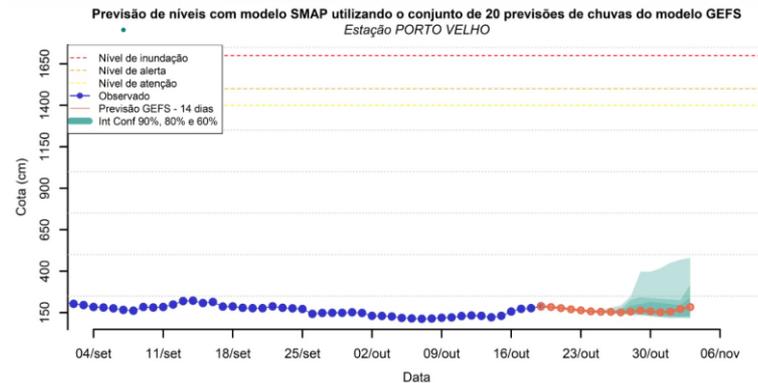
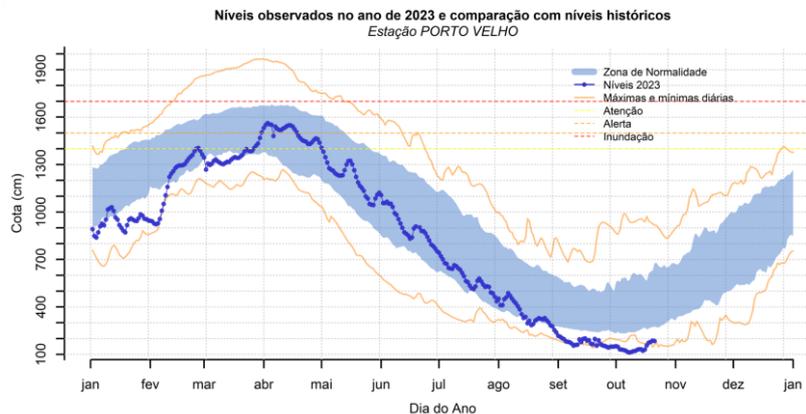
16/10

18/10?

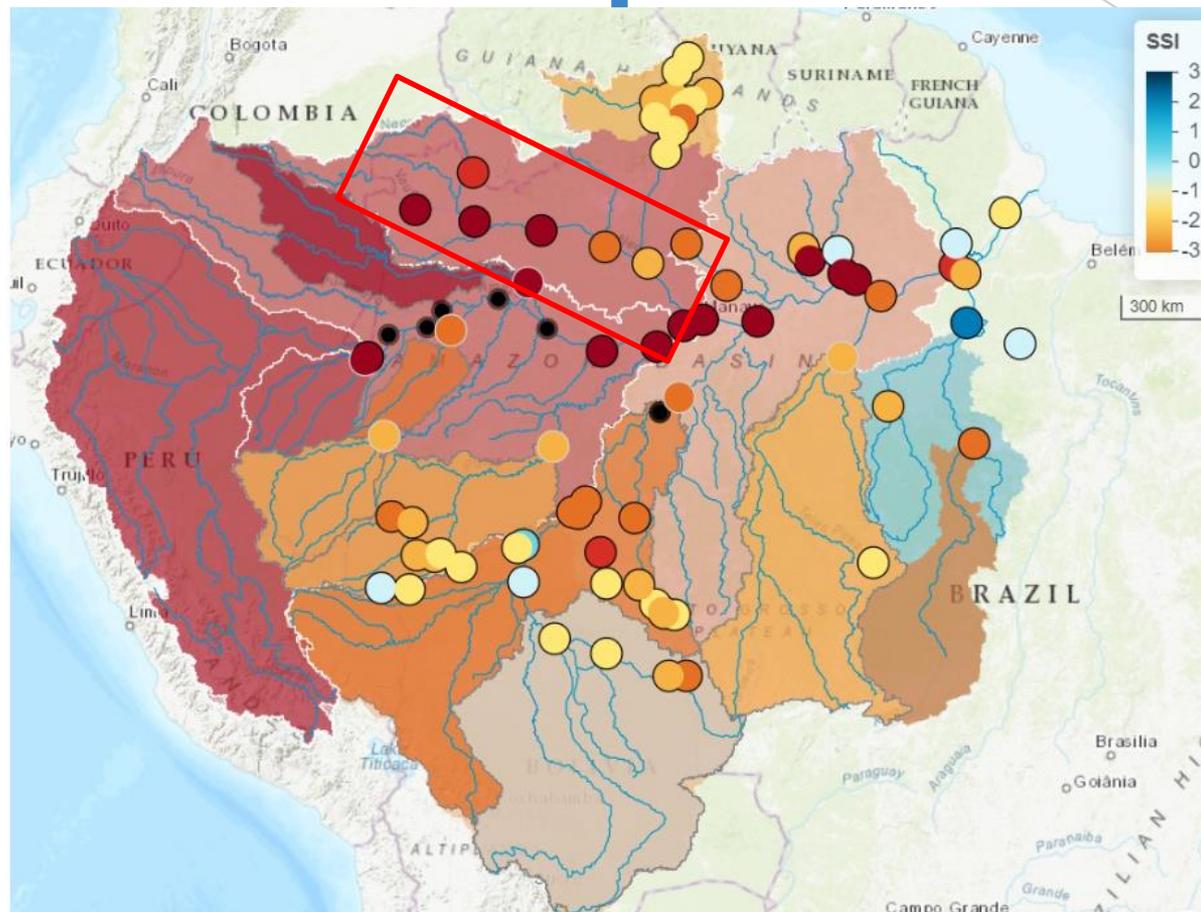
# Acesso aos dados – frequência dos boletins



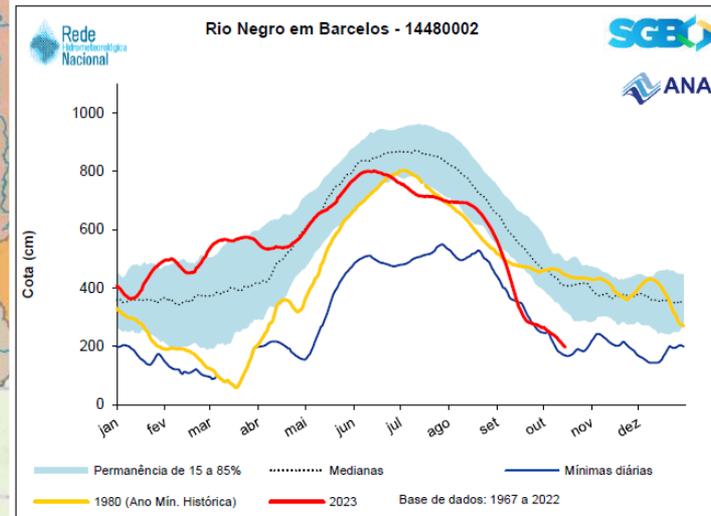
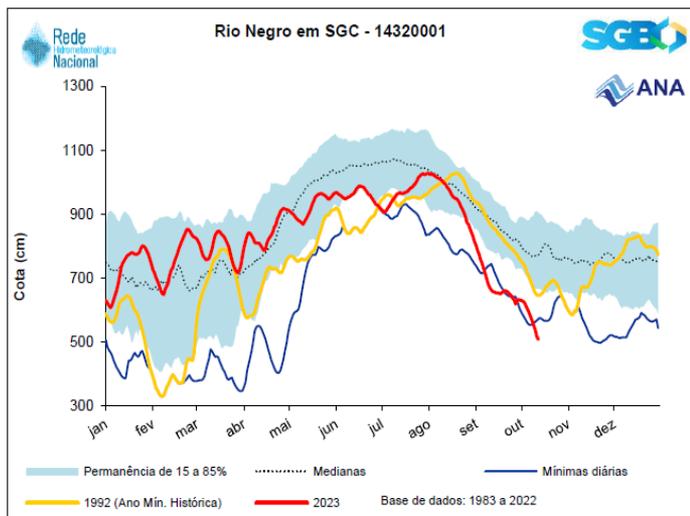
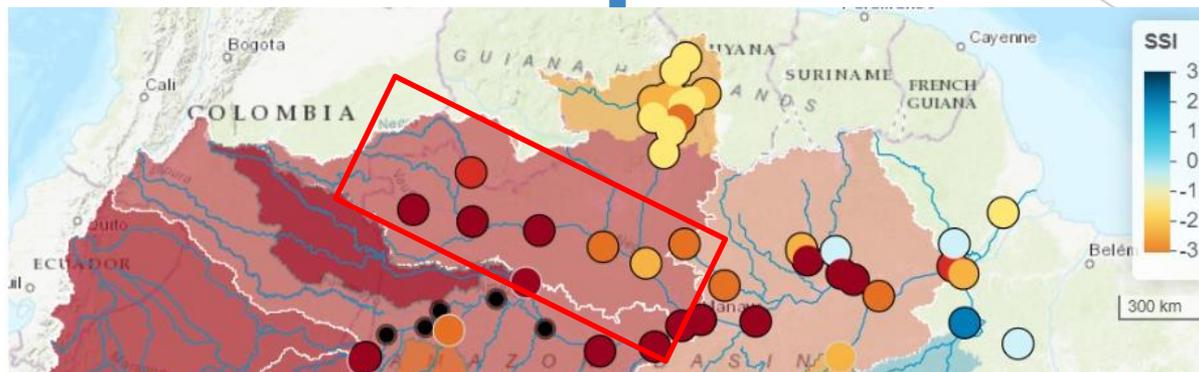
# Acesso aos dados – frequência dos boletins



# Acesso aos dados – frequência dos boletins



# Acesso aos dados – frequência dos boletins





**SERVIÇO GEOLÓGICO DO BRASIL**  
**HÁ 51 ANOS TRABALHANDO PARA O**  
**DESENVOLVIMENTO DO PAÍS**

 **SERVIÇO GEOLÓGICO DO BRASIL - CPRM**

**Marcus Suassuna Santos**  
*Pesquisador em Geociências*

Serviço Geológico do Brasil – CPRM

[www.sgb.gov.br](http://www.sgb.gov.br)

[marcus.santos@sgb.gov.br](mailto:marcus.santos@sgb.gov.br)

**SGBO**  
SERVIÇO GEOLÓGICO DO BRASIL - CPRM

MINISTÉRIO DE  
MINAS E ENERGIA

GOVERNO FEDERAL  
**BRASIL**  
UNIÃO E RECONSTRUÇÃO

**SAH**  
SISTEMA DE ALERTA HIDROLÓGICO  
Serviço Geológico do Brasil (SGBO/CPRM)

**SGBO**  
SERVIÇO GEOLÓGICO DO BRASIL - CPRM