

# Sea Surface Salinity Horizontal Gradient Data

Date type: NetCDF

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Earth & Space Research

## Aquarius

### **Monthly data with and w/o rain flag (RF)**

Data period: 09/2011-5/2015

*File Name: AQ\_V5.0\_MONTHLY\_RF.nc*

Variables:

- Latitude (180): -89.5:1:89.5
- Longitude (360): 20.5:1:379.5
- Time (45): serial date numbers starting from Jan-1-0000
- aq\_monthly\_sss: monthly sea surface salinity w/o rain flagged
- aq\_monthly\_sgrad: monthly salinity gradient w/o rain flagged
- aq\_monthly\_sgradx: monthly zonal salinity gradient w/o rain flagged
- aq\_monthly\_sgrady: monthly meridional salinity gradient w/o rain flagged
- aq\_monthly\_sss\_rf: monthly sea surface salinity with rain flagged
- aq\_monthly\_sgrad\_rf: monthly salinity gradient with rain flagged
- aq\_monthly\_sgradx\_rf: monthly zonal salinity gradient with rain flagged
- aq\_monthly\_sgrady\_rf: monthly meridional salinity gradient with rain flagged

## SMAP

**\*\* The resolution of SMAP is changed to 0.5 degree to get rid of some of the high frequency noise**

### **Monthly data w/o rain flag (RF)**

Data period: 04/2015-06/2020

*File Name: SMAP\_V4.0\_MONTHLY.nc*

Variables:

- Latitude (360): -89.8750:0.5:89.8750
- Longitude (720): 20.1250:0.5:379.8750
- Time (50): serial date numbers starting from Jan-1-0000
- smap\_monthly\_sss: monthly sea surface salinity w/o rain flagged
- smap\_monthly\_sgrad: monthly salinity gradient w/o rain flagged
- smap\_monthly\_sgradx: monthly zonal salinity gradient w/o rain flagged
- smap\_monthly\_sgrady: monthly meridional salinity gradient w/o rain flagged

## **Monthly data with rain flag (RF)**

Data period: 04/2015-05/2019

*File Name: SMAP\_V4.0\_MONTHLY\_RF.nc*

Variables:

- Latitude (360): -89.8750:0.5:89.8750
- Longitude (720): 20.1250:0.5:379.8750
- Time: serial date numbers starting from Jan-1-0000
- smap\_monthly\_sss\_rf: monthly sea surface salinity with rain flagged
- smap\_monthly\_sgrad\_rf: monthly salinity gradient with rain flagged
- smap\_monthly\_sgradx\_rf: monthly zonal salinity gradient with rain flagged
- smap\_monthly\_sgrady\_rf: monthly meridional salinity gradient with rain flagged

## **SMOS**

**\*\* The resolution of SMOS is changed to 50km to get rid of some of the high frequency noise**

### **Monthly data**

Data period: 01/2010-06/2020

*File Name: SMOS\_MIR\_OSUDP2\_MONTHLY.nc*

Variables:

- Latitude (292): -83.5171 ~ 81.9831
- Longitude (894): 20.1009 ~ 379.5821
- Time (117): serial date numbers starting from Jan-1-0000
- smos\_monthly\_sss: monthly sea surface salinity
- smos\_monthly\_sgrad: monthly salinity gradient
- smos\_monthly\_sgradx: monthly zonal salinity gradient
- smos\_monthly\_sgrady: monthly meridional salinity gradient