

# Sea State Bias corrections comparison : Peachi vs Scharroo 2013

Study variable	<b>PEACHI2D</b>
Reference variable	<b>GDR-D</b>
Missions	Altika ( <i>al</i> )
Period	[15636, 23806]

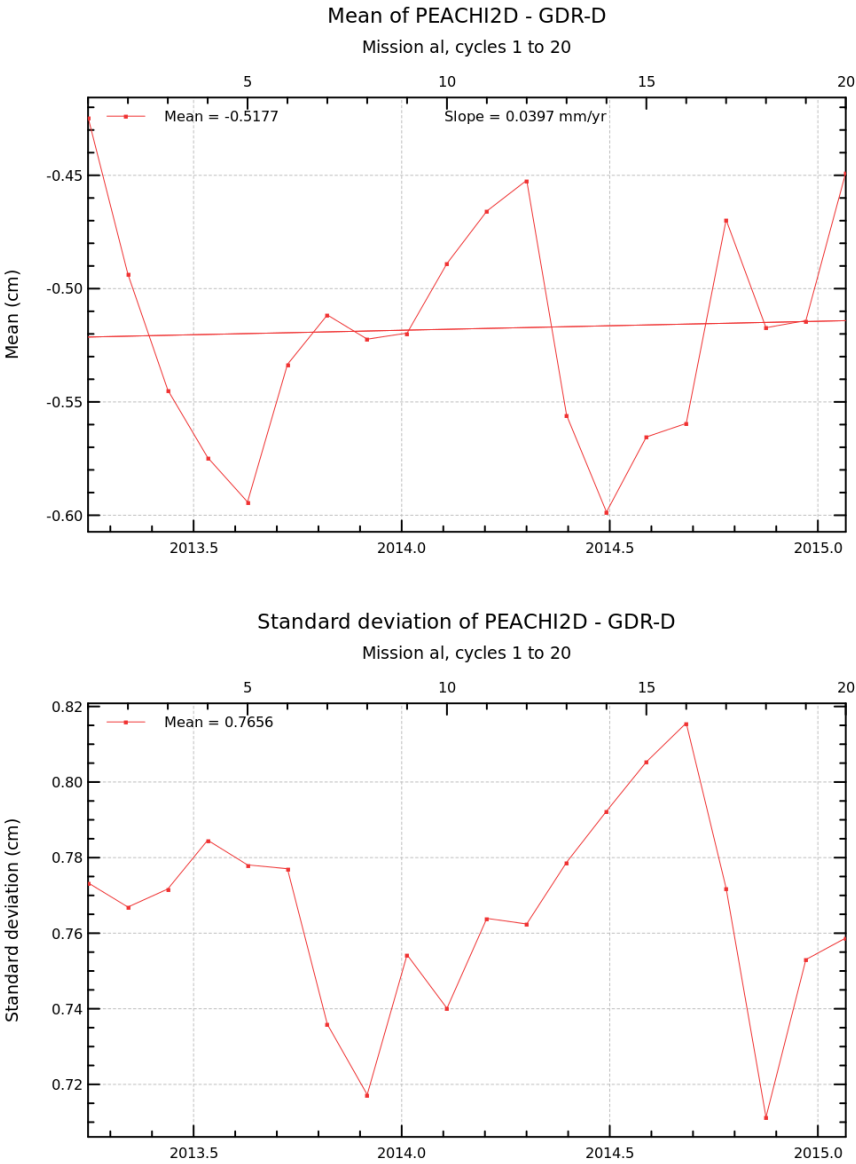
Creation date : 2015/11/06

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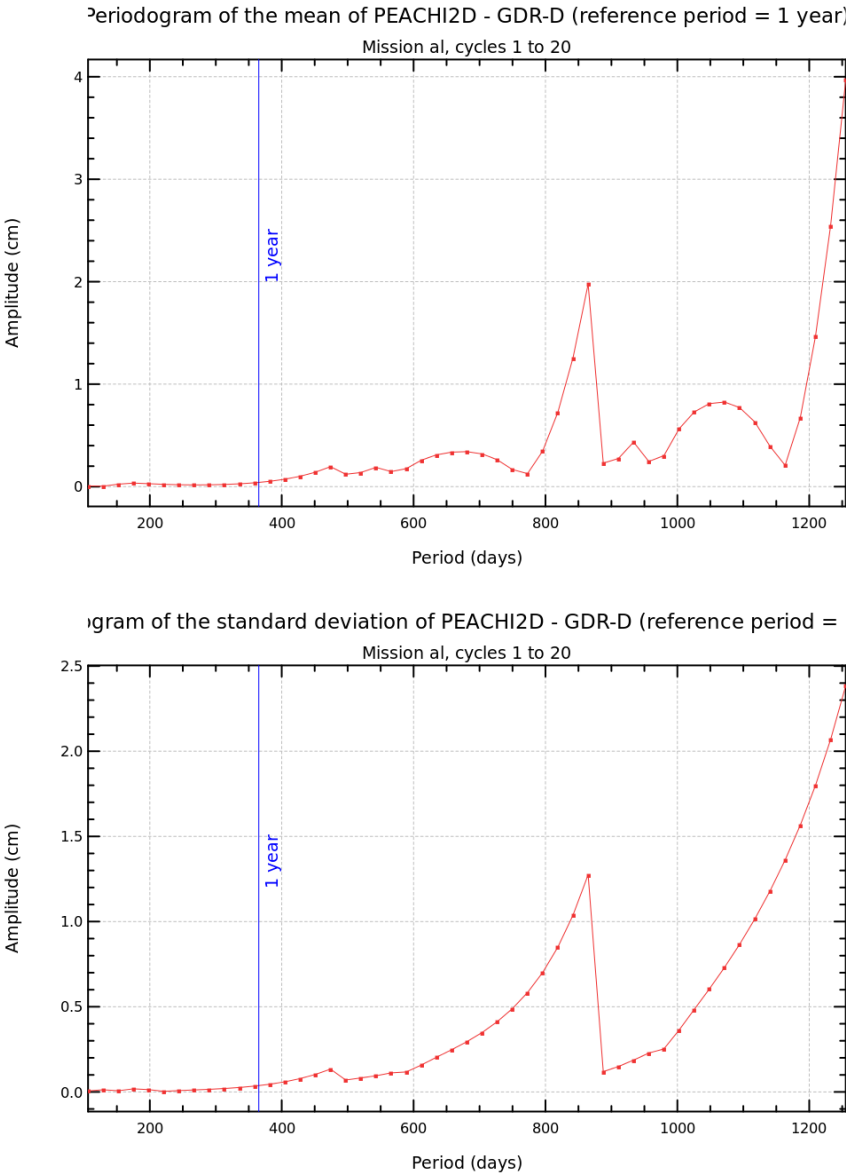
Diagnostic A002 (mission al)	
Name : Temporal evolution of differences between both altimetric components	
Input data : Along track altimetric components	
Description : The temporal evolution of global statistics (mean, variance, slope) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) . These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.	



Diagnostic A003 (mission al)	
Name : Map of differences between both altimetric components over all the period	
Input data : Along track altimetric components	
Description : The map of global statistics (mean, standard deviation) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated over a given period which is the longer as possible to have obtain reliable statically results. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.	
<div><div>Mean of PEACHI2D - GDR-D</div><div>Mission al, cycles 1 to 20</div><div>Mean (cm)</div><div>-1.5 -1.0 -0.5 0.0 0.5</div></div> <div><div>Standard deviation of PEACHI2D - GDR-D</div><div>Mission al, cycles 1 to 20</div><div>Standard Deviation (cm)</div><div>0.4 0.6 0.8 1.0</div></div>	



Diagnostic A004_a (mission al)	
Name : Periodogram derived from temporal evolution of altimetric component differences	
Input data : Along track altimetric components	
Description : The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.	



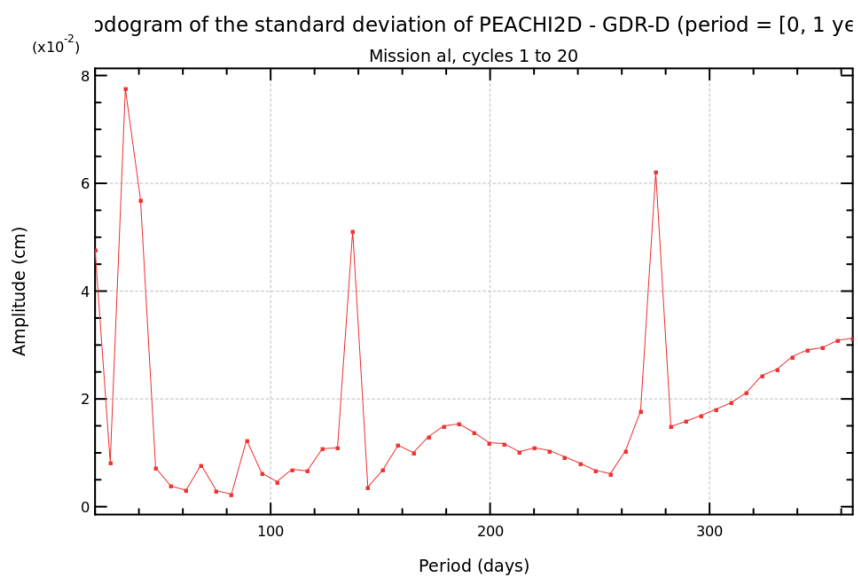
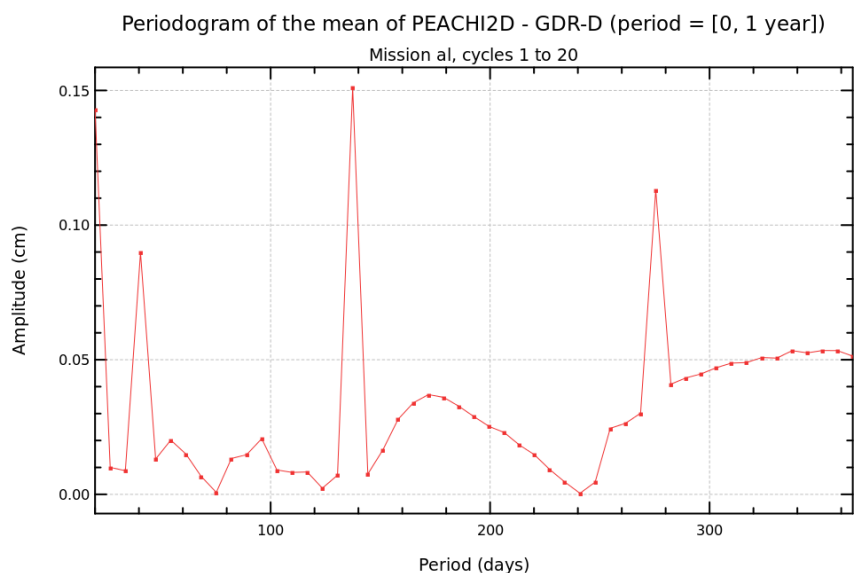
## Diagnostic A004\_b (mission al)

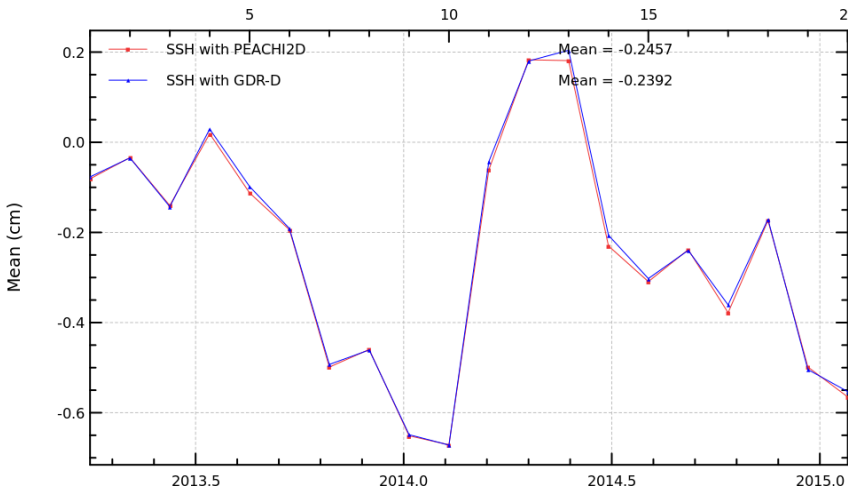
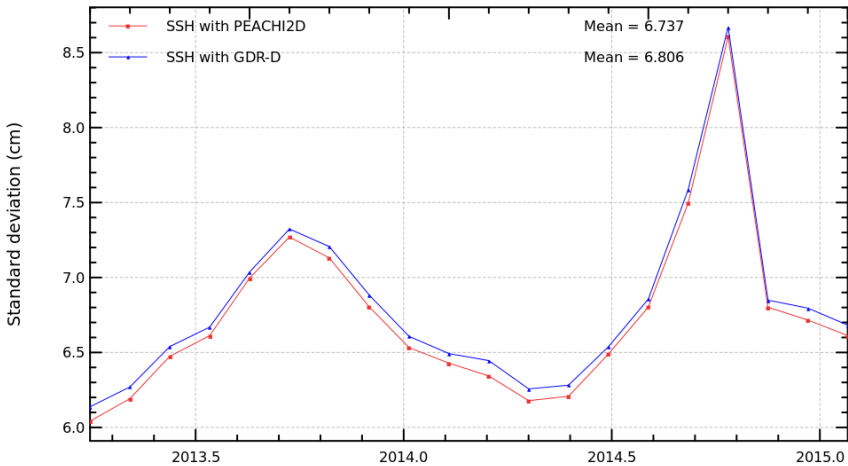
**Name :** Periodogram derived from temporal evolution of altimetric component differences

**Input data :** Along track altimetric components

**Description :** The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.

Diagnostic type : Mono-mission analyses



Diagnostic A101_a (mission al)																																																													
Name : Temporal evolution of SSH crossovers																																																													
Input data : Sea Surface Height (SSH) crossovers																																																													
<p><b>Description :</b> The temporal evolution of global statistics (mean, standard deviation) of SSH differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).</p>																																																													
<div><div><div>Mean of SSH crossovers</div><div>Mission al, cycles 1 to 20</div><table><caption>Estimated data for Mean of SSH crossovers</caption><tr><th>Year</th><th>SSH with PEACHI2D (cm)</th><th>SSH with GDR-D (cm)</th></tr><tr><td>2013.5</td><td>-0.10</td><td>-0.05</td></tr><tr><td>2013.7</td><td>-0.15</td><td>-0.10</td></tr><tr><td>2013.9</td><td>-0.20</td><td>-0.15</td></tr><tr><td>2014.1</td><td>-0.55</td><td>-0.50</td></tr><tr><td>2014.3</td><td>-0.05</td><td>-0.02</td></tr><tr><td>2014.5</td><td>-0.20</td><td>-0.18</td></tr><tr><td>2014.7</td><td>-0.35</td><td>-0.30</td></tr><tr><td>2014.9</td><td>-0.50</td><td>-0.45</td></tr><tr><td>2015.0</td><td>-0.55</td><td>-0.50</td></tr></table></div><div><div>Standard deviations of SSH crossovers</div><div>Mission al, cycles 1 to 20</div><table><caption>Estimated data for Standard deviations of SSH crossovers</caption><tr><th>Year</th><th>SSH with PEACHI2D (cm)</th><th>SSH with GDR-D (cm)</th></tr><tr><td>2013.5</td><td>6.1</td><td>6.2</td></tr><tr><td>2013.7</td><td>6.5</td><td>6.6</td></tr><tr><td>2013.9</td><td>7.3</td><td>7.2</td></tr><tr><td>2014.1</td><td>6.6</td><td>6.5</td></tr><tr><td>2014.3</td><td>6.2</td><td>6.3</td></tr><tr><td>2014.5</td><td>6.8</td><td>6.9</td></tr><tr><td>2014.7</td><td>7.5</td><td>7.6</td></tr><tr><td>2014.9</td><td>6.8</td><td>6.9</td></tr><tr><td>2015.0</td><td>6.6</td><td>6.7</td></tr></table></div></div>		Year	SSH with PEACHI2D (cm)	SSH with GDR-D (cm)	2013.5	-0.10	-0.05	2013.7	-0.15	-0.10	2013.9	-0.20	-0.15	2014.1	-0.55	-0.50	2014.3	-0.05	-0.02	2014.5	-0.20	-0.18	2014.7	-0.35	-0.30	2014.9	-0.50	-0.45	2015.0	-0.55	-0.50	Year	SSH with PEACHI2D (cm)	SSH with GDR-D (cm)	2013.5	6.1	6.2	2013.7	6.5	6.6	2013.9	7.3	7.2	2014.1	6.6	6.5	2014.3	6.2	6.3	2014.5	6.8	6.9	2014.7	7.5	7.6	2014.9	6.8	6.9	2015.0	6.6	6.7
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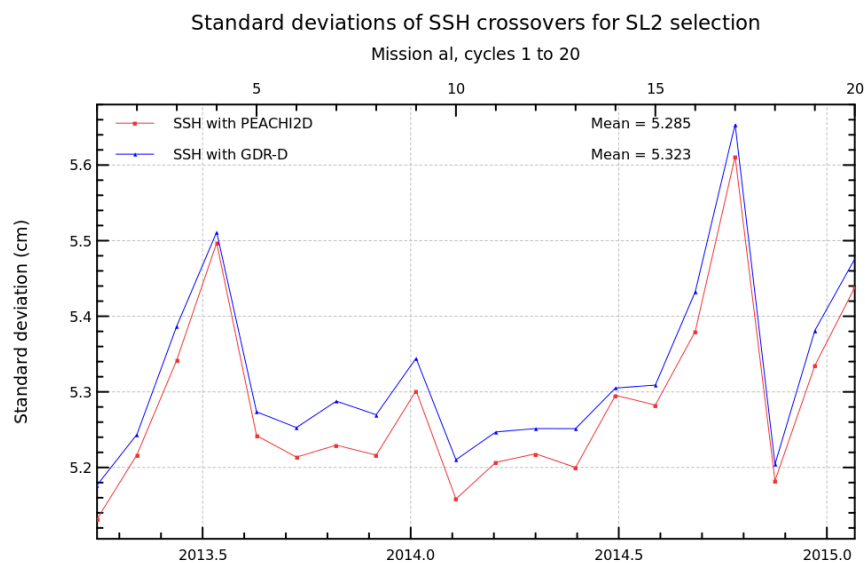
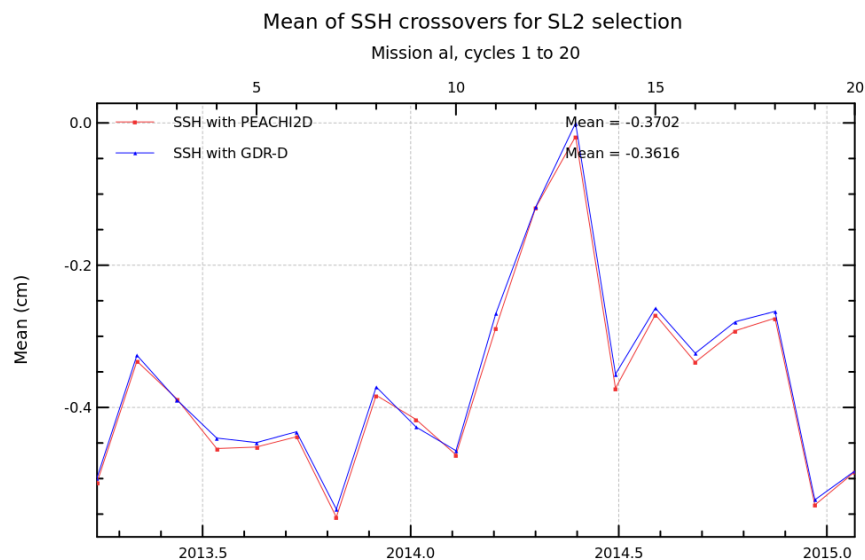
## Diagnostic A101\_b (mission al)

**Name :** Temporal evolution of SSH crossovers

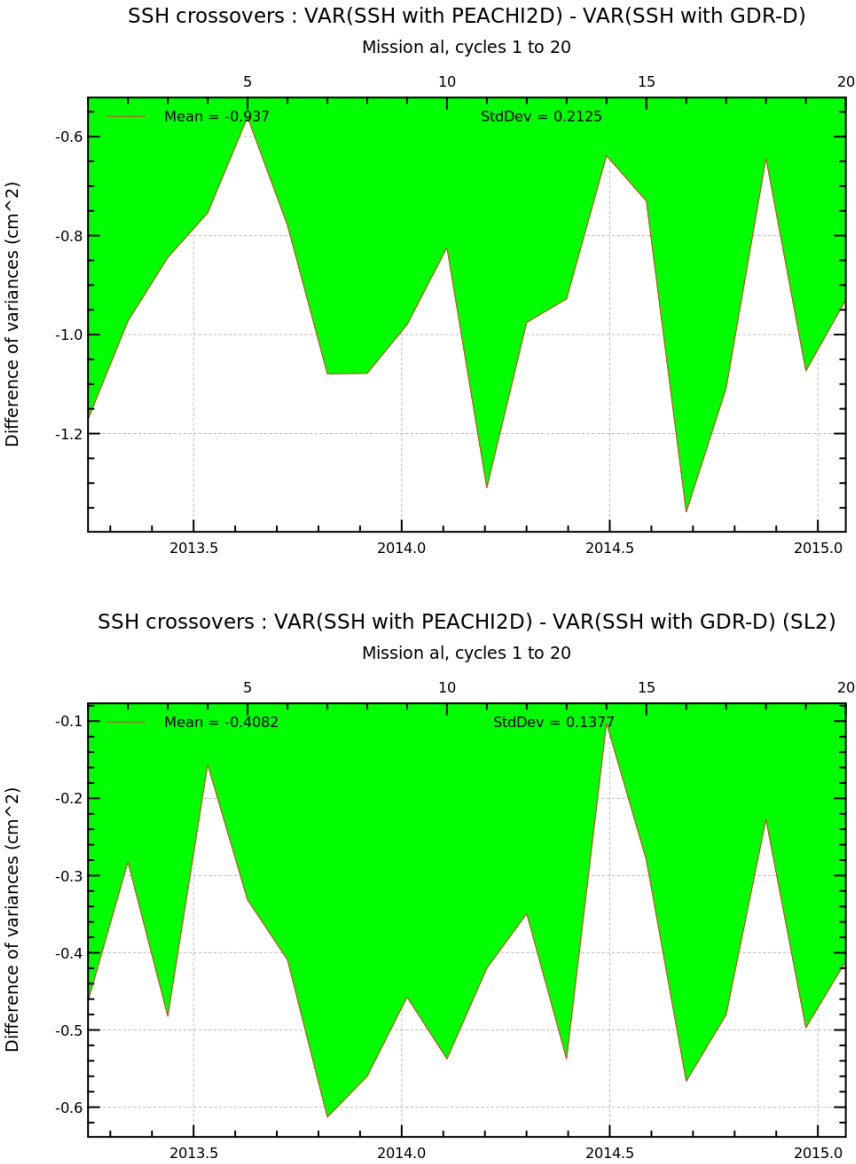
**Input data :** Sea Surface Height (SSH) crossovers

**Description :** The temporal evolution of global statistics (mean, standard deviation) of SSH differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

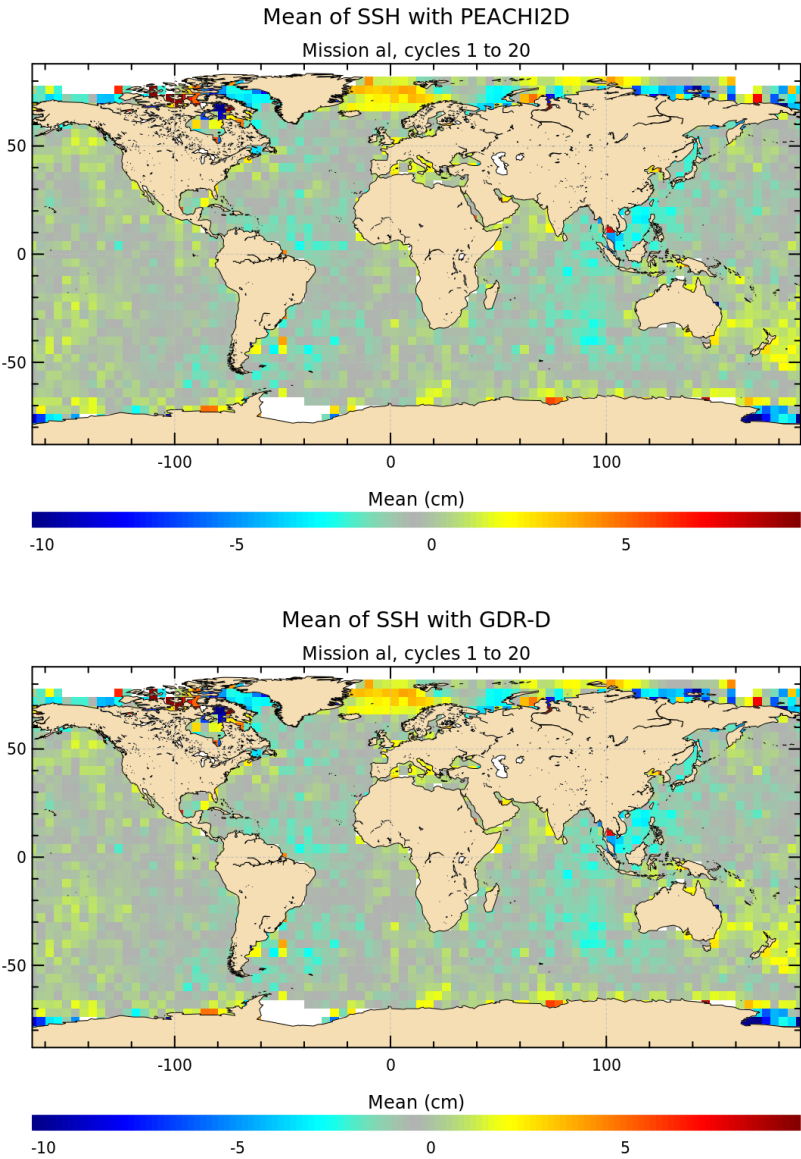
Diagnostic type : Mono-mission analyses

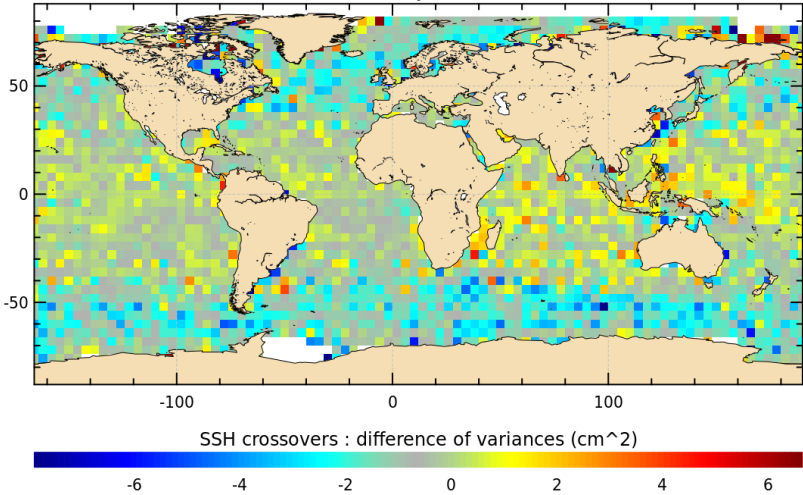
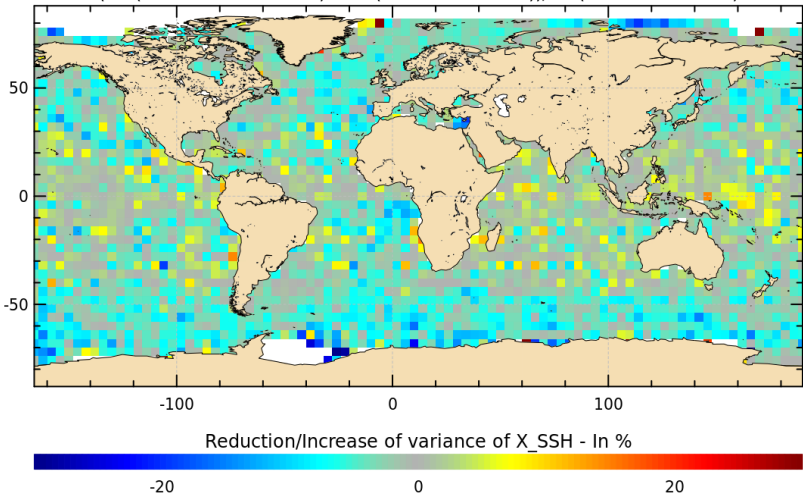


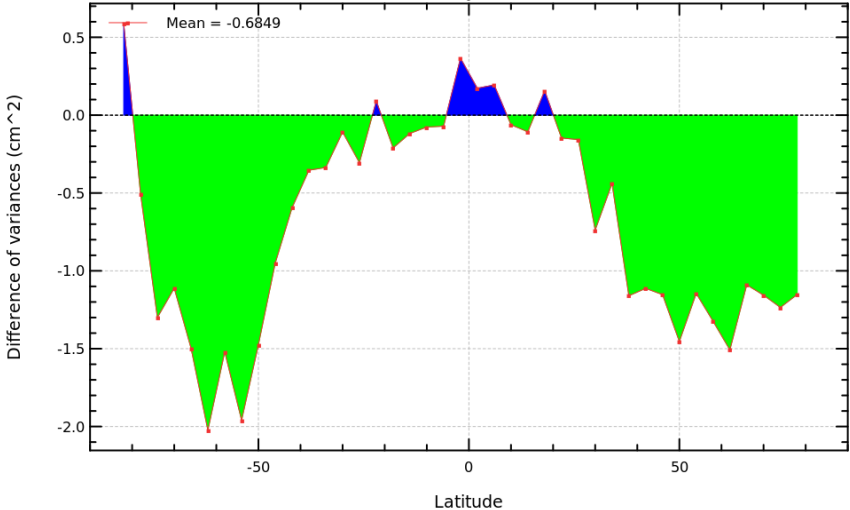
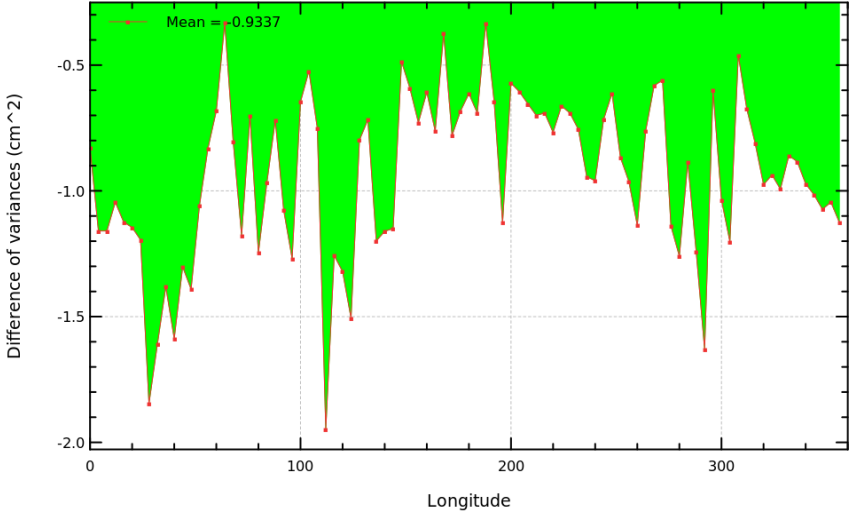
Diagnostic A102 (mission al)	
Name : Differences between temporal evolution of SSH crossovers	
Input data : Sea Surface Height (SSH) crossovers	
Description : The difference of temporal evolution between the global statistics (mean, standard deviation) of SSH differences are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).	



Diagnostic A103 (mission al)	
Name : Map of SSH crossovers	
Input data : Sea Surface Height (SSH) crossovers	
Description : The differences between maps of SSH crossovers differences (mean, variance) are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).	



Diagnostic type : Mono-mission analyses	Diagnostic A104 (mission al)	
	Name : Differences between maps of SSH crossovers	
	Input data : Sea Surface Height (SSH) crossovers	
	Description : The differences between maps of SSH crossovers (derived from diagnostic A103) are calculated from the SSH crossover differences (mean, standard deviation) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).	
	<div>VAR(SSh with PEACHI2D) - VAR(SSh with GDR-D)</div> <div>Mission al, cycles 1 to 20</div>  <div>SSH crossovers : difference of variances (cm^2)</div> <div>Percentage of X_SSh error reduction</div> <div><math display="block">\frac{\text{Var}(\text{SSH with PEACHI2D}) - \text{Var}(\text{SSH with GDR-D})}{\text{Var}(\text{SSH with GDR-D})}</math></div>  <div>Reduction/Increase of variance of X_SSh - ln %</div>	

Diagnostic type : Mono-mission analyses	Diagnostic A105 (mission al)	
	Name : Differences between SSH crossovers vs coastal distance	
	Input data : Sea Surface Height (SSH) crossovers	
	Description : The differences of SSH variances at crossovers are plotted in function of coastal distance, latitudes and longitudes.	
	<div><div><div>VAR(SSH with PEACHI2D) - VAR(SSH with GDR-D)</div><div>Mission al, cycles 1 to 20</div><div><div>Mean = -0.6849</div><p>This plot shows the difference of variances (cm^2) on the y-axis (ranging from -2.0 to 0.5) against Latitude on the x-axis (ranging from approximately -75 to 75). The data is represented by a red line with markers, and the area below the zero line is filled with green. The mean value is -0.6849. The plot shows significant negative values, particularly around -50 and 50 latitude.</p></div></div><div><div>VAR(SSH with PEACHI2D) - VAR(SSH with GDR-D)</div><div>Mission al, cycles 1 to 20</div><div><div>Mean = -0.9337</div><p>This plot shows the difference of variances (cm^2) on the y-axis (ranging from -2.0 to -0.5) against Longitude on the x-axis (ranging from 0 to 350). The data is represented by a red line with markers, and the area below the zero line is filled with green. The mean value is -0.9337. The plot shows significant negative values, particularly around 100 and 300 longitude.</p></div></div></div>	



Diagnostic type : Mono-mission analyses	Diagnostic A201_a (mission al)																								
	Name : Temporal evolution of Sea Level Anomaly (SLA)																								
	Input data : Along track SLA																								
	<p><b>Description :</b> The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.</p>																								
	<div>Global MSL</div> <div>Mission al, cycles 1 to 20</div> <table><caption>Estimated data points from the Global MSL graph</caption><tr><th>Mission Cycle</th><th>Year (approx.)</th><th>SLA with PEACHI2D (cm)</th><th>SLA with GDR-D (cm)</th></tr><tr><td>1</td><td>2013.5</td><td>-3.50</td><td>-4.00</td></tr><tr><td>5</td><td>2013.75</td><td>-3.40</td><td>-3.90</td></tr><tr><td>10</td><td>2014.0</td><td>-3.50</td><td>-4.00</td></tr><tr><td>15</td><td>2014.25</td><td>-3.60</td><td>-3.90</td></tr><tr><td>20</td><td>2014.5</td><td>-3.70</td><td>-4.00</td></tr></table>		Mission Cycle	Year (approx.)	SLA with PEACHI2D (cm)	SLA with GDR-D (cm)	1	2013.5	-3.50	-4.00	5	2013.75	-3.40	-3.90	10	2014.0	-3.50	-4.00	15	2014.25	-3.60	-3.90	20	2014.5	-3.70
Mission Cycle	Year (approx.)	SLA with PEACHI2D (cm)	SLA with GDR-D (cm)																						
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5	2013.75	-3.40	-3.90																						
10	2014.0	-3.50	-4.00																						
15	2014.25	-3.60	-3.90																						
20	2014.5	-3.70	-4.00																						

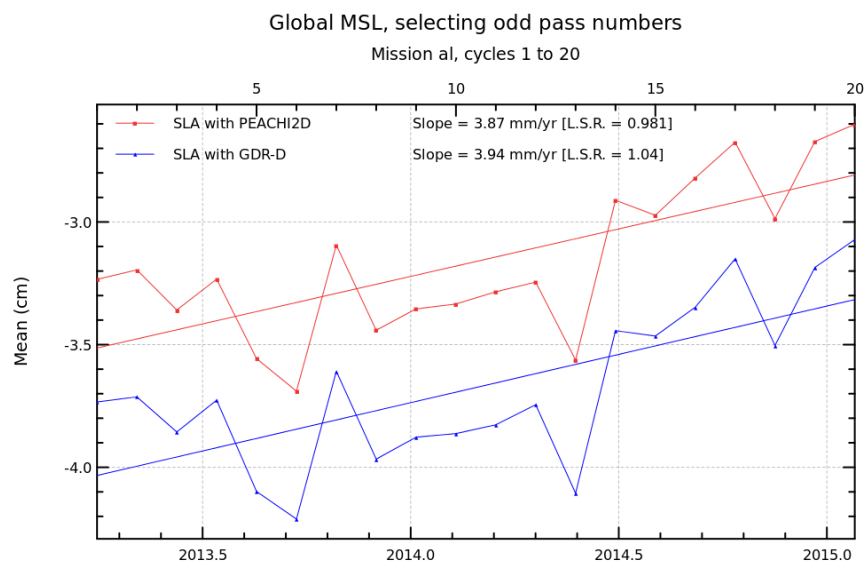
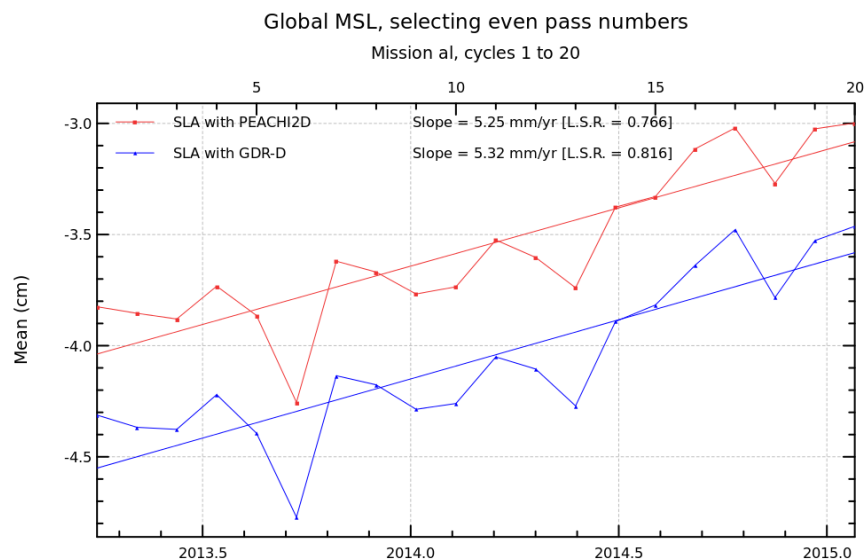
## Diagnostic A201\_b (mission al)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



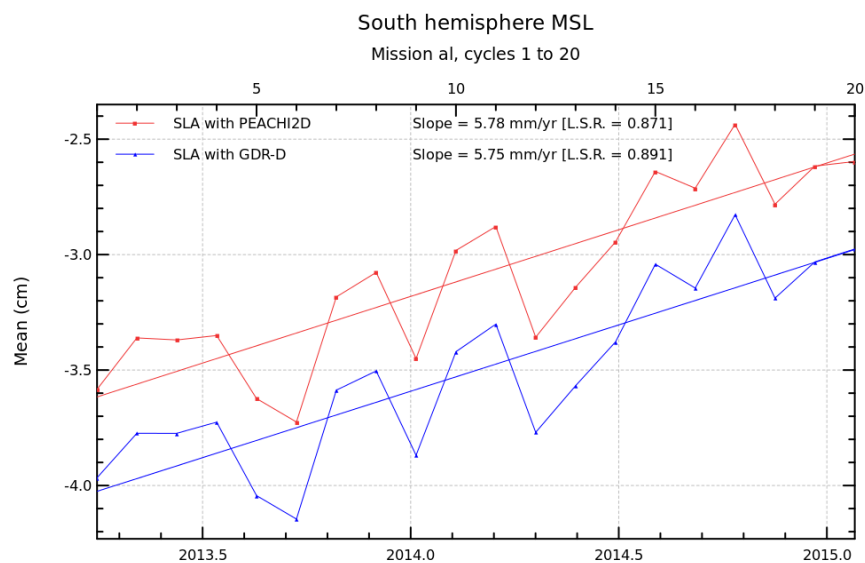
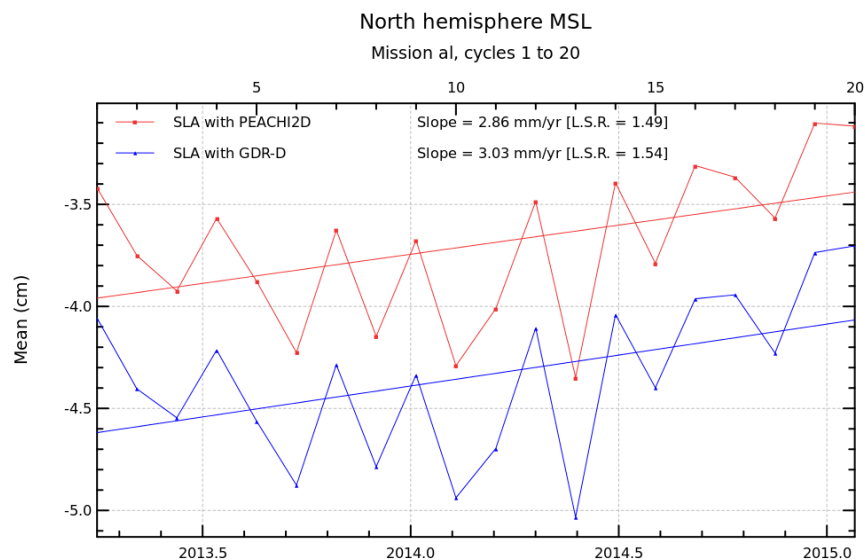
## Diagnostic A201\_c (mission al)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



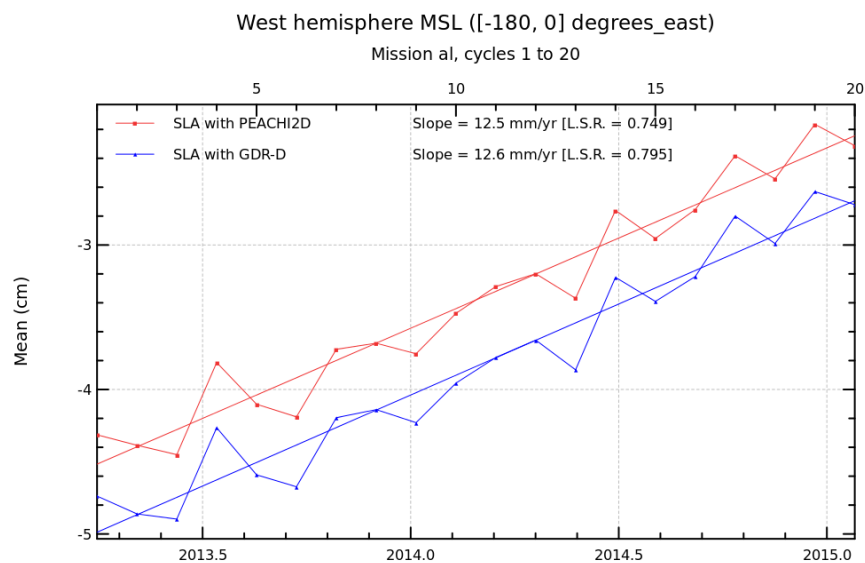
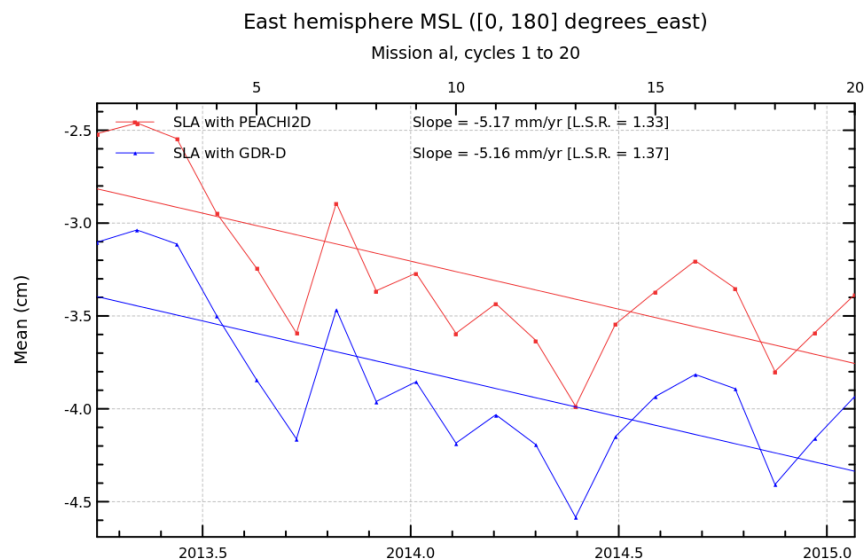
## Diagnostic A201\_d (mission al)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



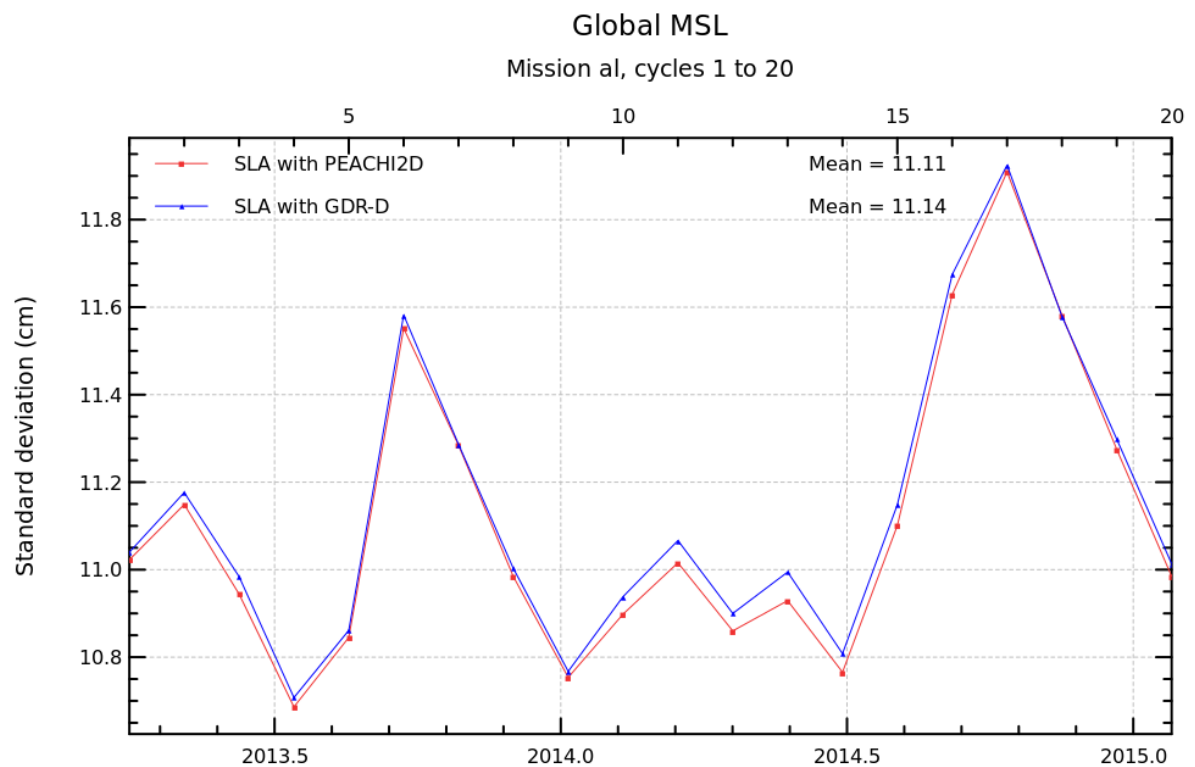
## Diagnostic A201\_e (mission al)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



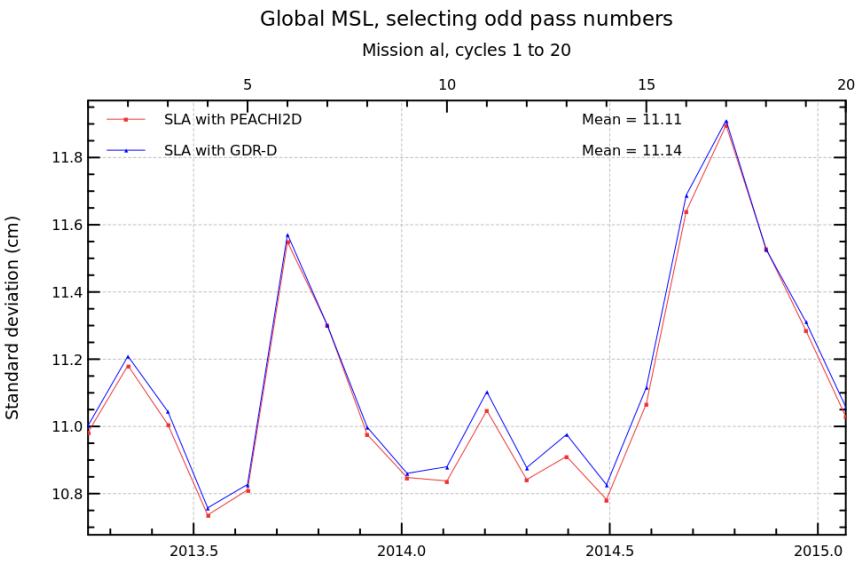
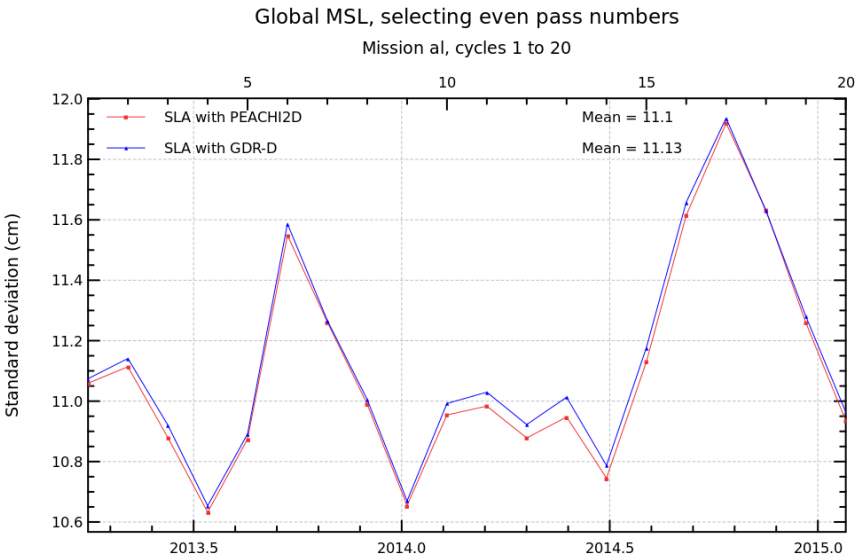
## Diagnostic A201\_f (mission al)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

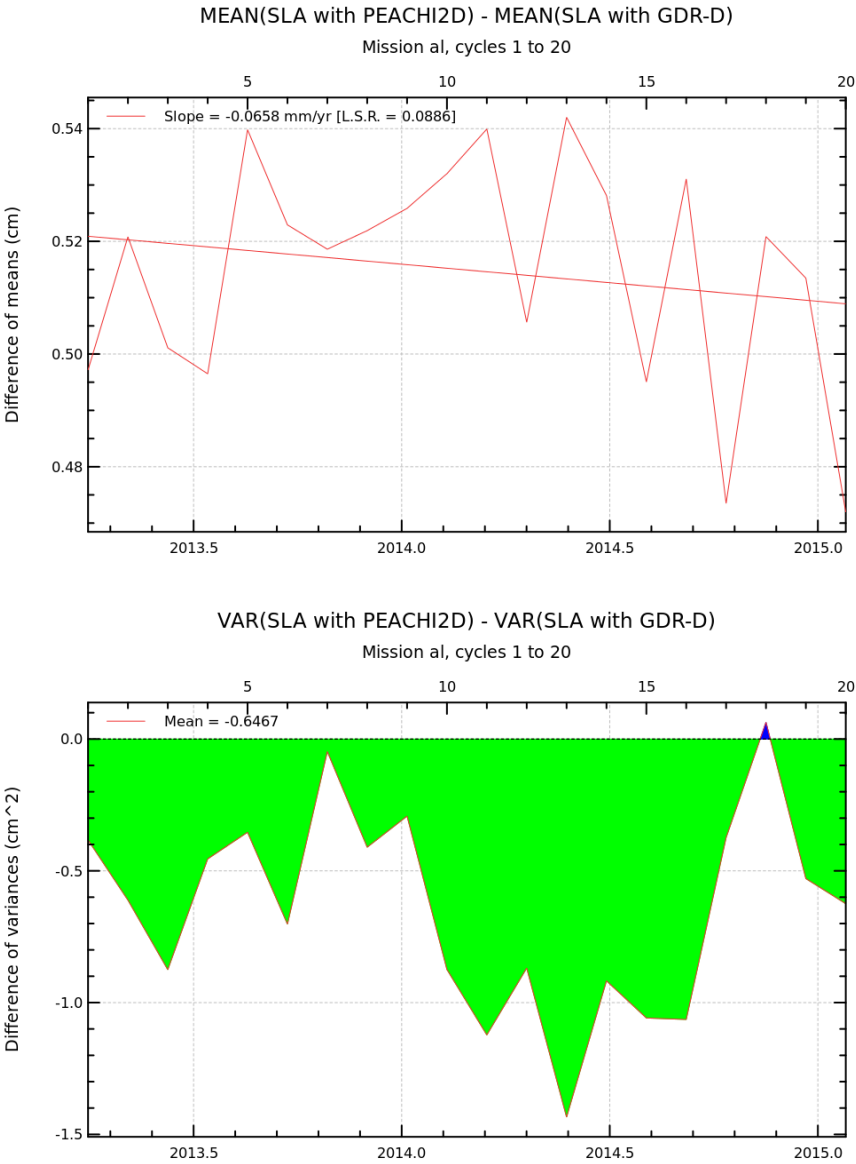
**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes, or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses



Diagnostic A202_a (mission al)
Name : Differences between temporal evolution of Sea Level Anomaly (SLA)
Input data : Along track SLA
Description : The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes or separating North and South hemispheres.



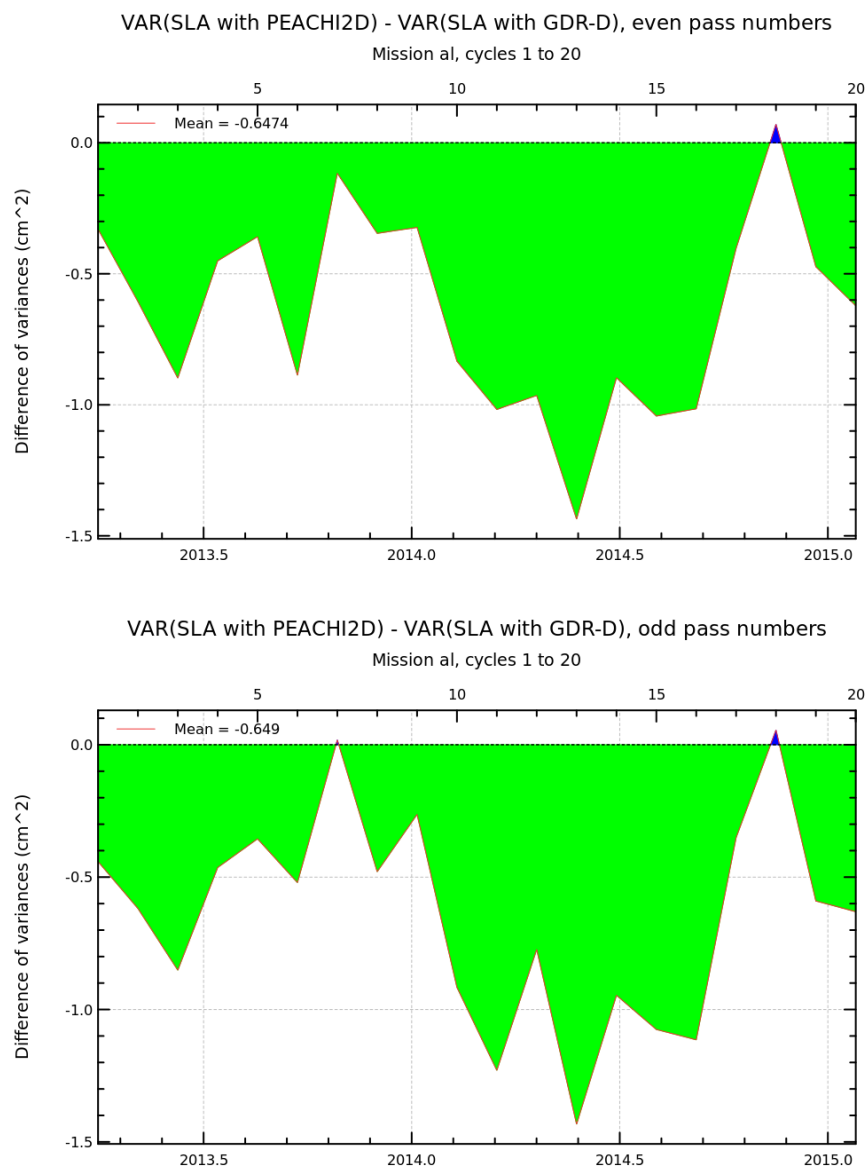
## Diagnostic A202\_b (mission al)

**Name :** Differences between temporal evolution of Sea Level Anomaly (SLA)

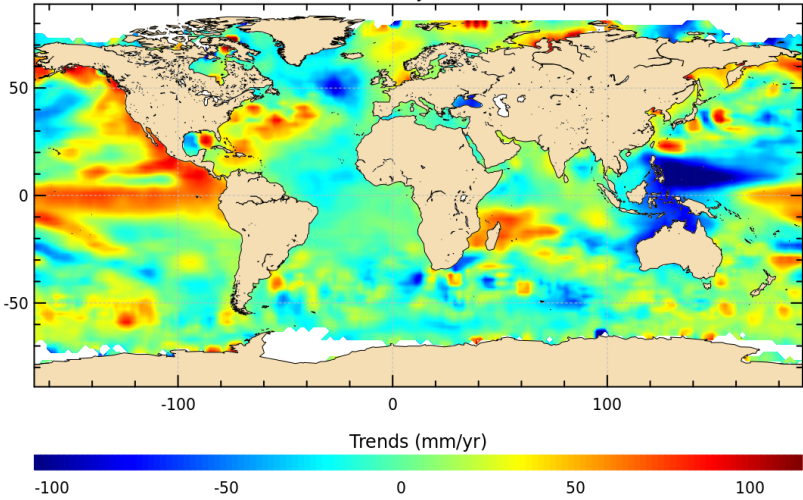
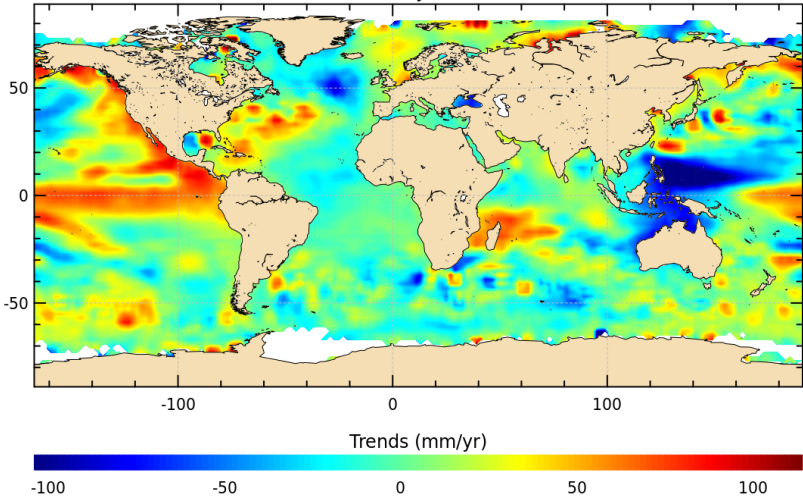
**Input data :** Along track SLA

**Description :** The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes or separating North and South hemispheres.

Diagnostic type : Mono-mission analyses





Diagnostic type : Mono-mission analyses	Diagnostic A203_a (mission al)	
	Name : Map of Sea Level Anomaly (SLA) over all the period	
	Input data : Along track SLA	
	Description : The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.	
	<div>SLA with PEACHI2D trends Mission al, cycles 1 to 20</div>  <div>SLA with GDR-D trends Mission al, cycles 1 to 20</div> 	

## Diagnostic A203\_b (mission al)

**Name :** Map of Sea Level Anomaly (SLA) over all the period

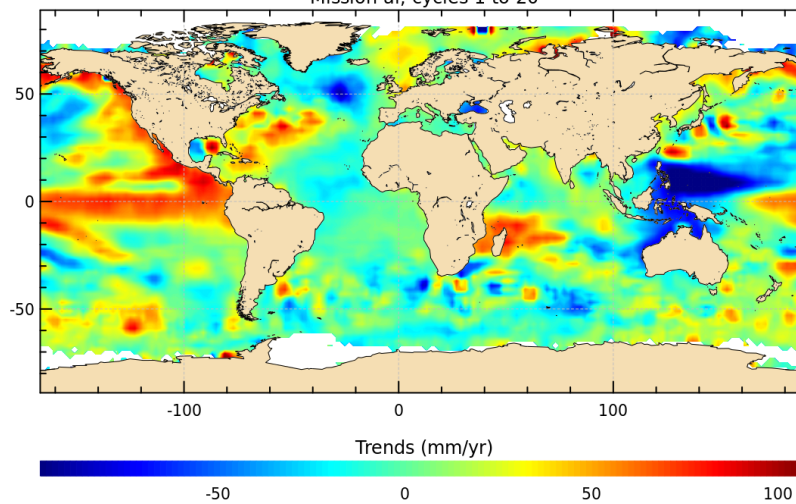
**Input data :** Along track SLA

**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Mono-mission analyses

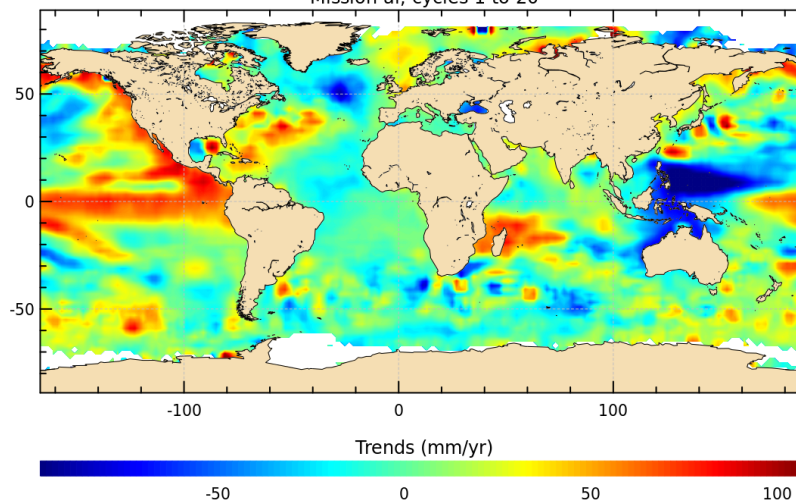
SLA with PEACHI2D trends : even pass numbers

Mission al, cycles 1 to 20



SLA with GDR-D trends : even pass numbers

Mission al, cycles 1 to 20



## Diagnostic A203\_c (mission al)

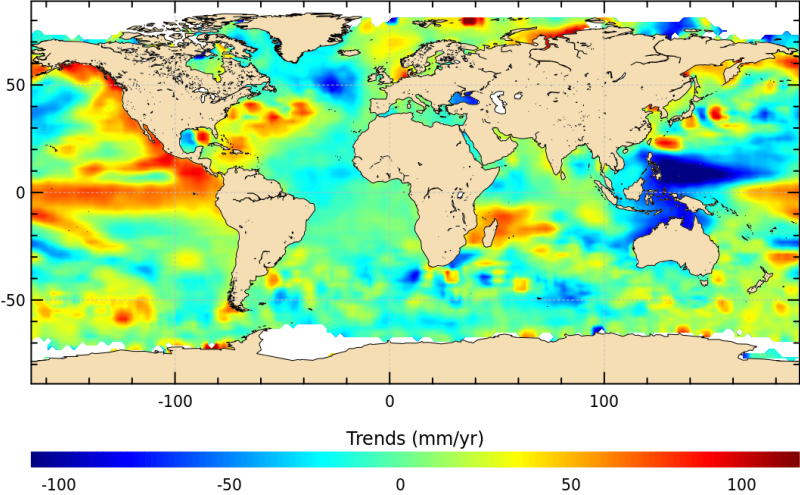
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

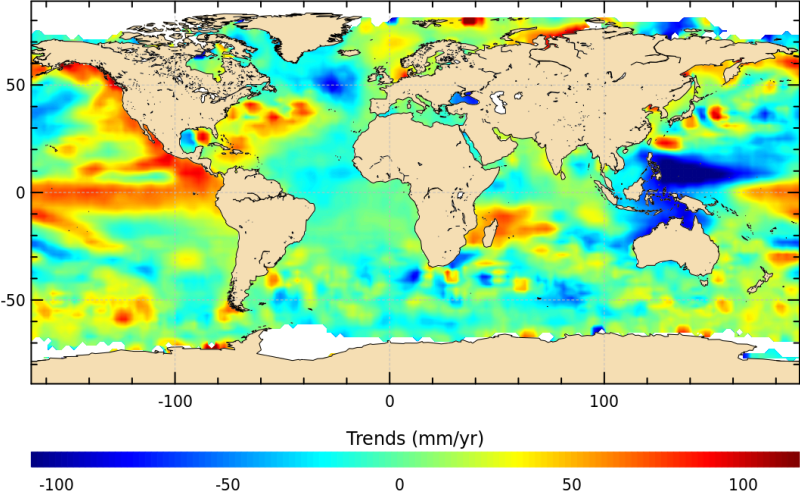
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

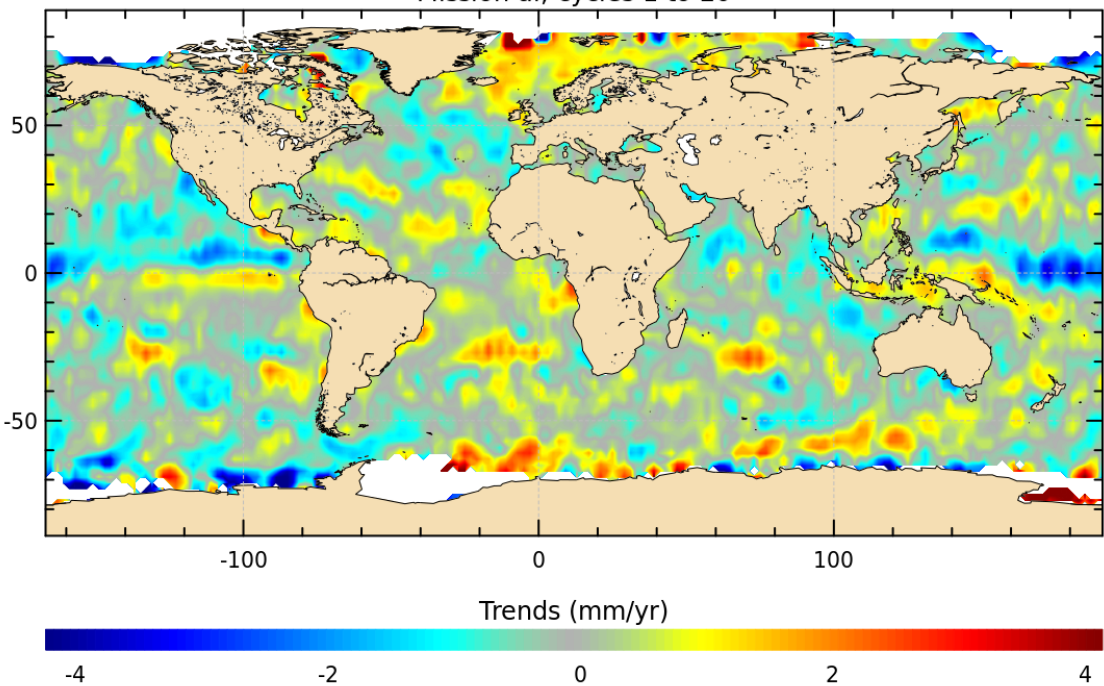
Diagnostic type : Mono-mission analyses

SLA with PEACHI2D trends : odd pass numbers  
Mission al, cycles 1 to 20



SLA with GDR-D trends : odd pass numbers  
Mission al, cycles 1 to 20



Diagnostic type : Mono-mission analyses	Diagnostic A204_a (mission al)	
	Name : Differences between maps of SLA trends	
	Input data : Along track SLA	
	Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).	
	<div>SLA with PEACHI2D trends - SLA with GDR-D trends</div> <div>Mission al, cycles 1 to 20</div> 	



## Diagnostic A204\_b (mission al)

**Name :** Differences between maps of SLA trends

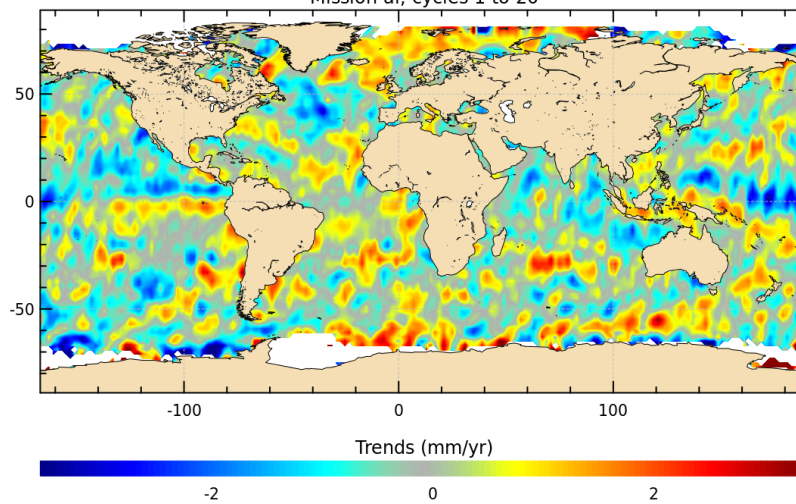
**Input data :** Along track SLA

**Description :** The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Mono-mission analyses

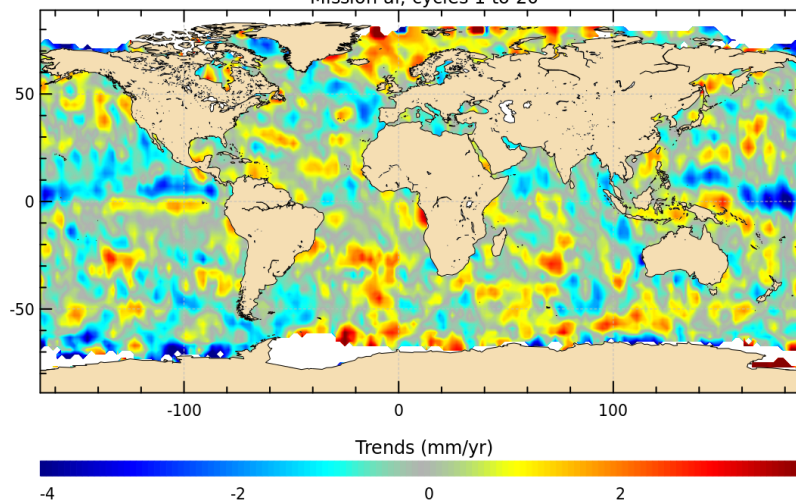
SLA with PEACHI2D trends - SLA with GDR-D trends : even pass number

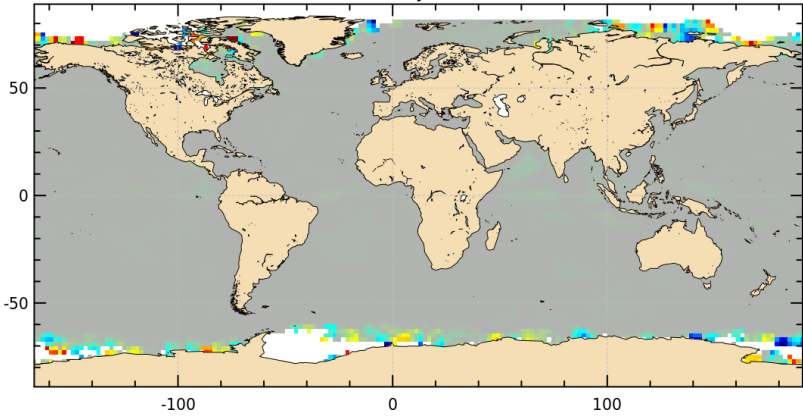
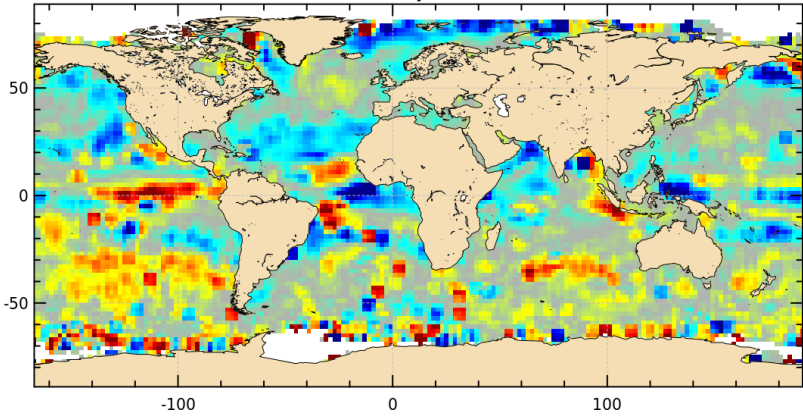
Mission al, cycles 1 to 20



SLA with PEACHI2D trends - SLA with GDR-D trends : odd pass numbers

Mission al, cycles 1 to 20



Diagnostic type : Mono-mission analyses	Diagnostic A205_a (mission al)	
	Name : Differences between maps of SLA amplitude and phase	
	Input data : Along track SLA	
	Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).	
	<div><div><div>SLA with PEACHI2D amplitude - SLA with GDR-D amplitude : annual signal</div><div>Mission al, cycles 1 to 20</div><div>Amplitude (cm)</div><div><div>-10</div><div>0</div><div>10</div></div></div><div><div>SLA with PEACHI2D phase - SLA with GDR-D phase : annual signal</div><div>Mission al, cycles 1 to 20</div><div>Phase (degree)</div><div><div>-5</div><div>0</div><div>5</div></div></div></div>	

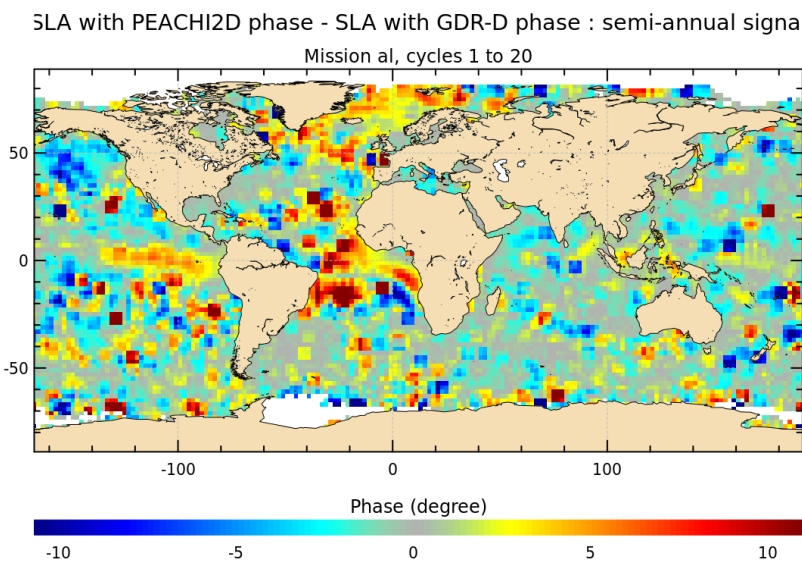
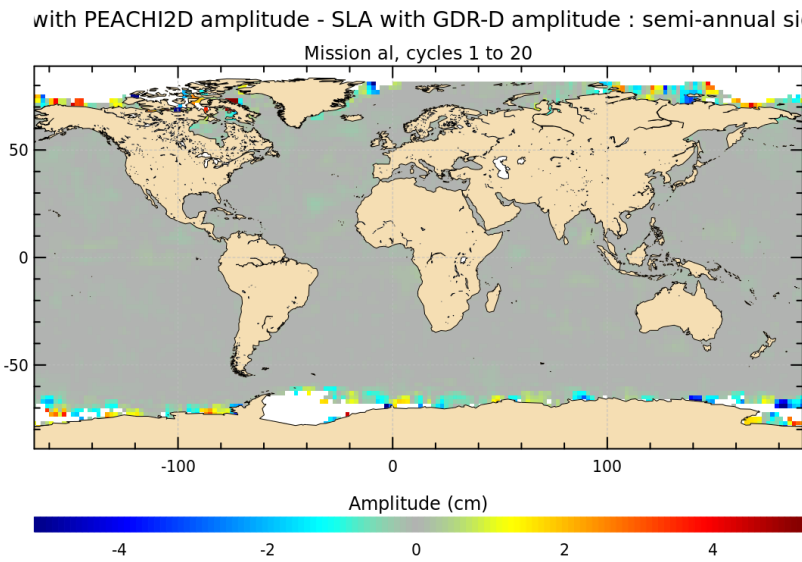
Diagnostic A205\_b (mission al)

Name : Differences between maps of SLA amplitude and phase

Input data : Along track SLA

Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Mono-mission analyses



Diagnostic A206_a (mission al)	
Name : Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)	
Input data : Along track SLA	
<p>Description : The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.</p>	
<div><div><div>Periodogram of SLA (reference period = 1 year)</div><div>Mission al, cycles 1 to 20</div><p>This plot shows the amplitude of SLA in centimeters versus the period in days for mission cycles 1 to 20. The y-axis ranges from 0 to 120 cm, and the x-axis ranges from 0 to 1200 days. Two data series are shown: 'SLA with PEACHI2D' (red line with dots) and 'SLA with GDR-D' (blue line with dots). A vertical green line at approximately 365 days is labeled '1 year'. Both series show a significant peak at the 1-year period, with the GDR-D series reaching a higher amplitude of nearly 60 cm compared to the PEACHI2D series at approximately 40 cm. There are also smaller peaks around 850 days and a rising trend after 1100 days.</p></div><div><div>Periodogram of SLA (period = [0, 1 year])</div><div>Mission al, cycles 1 to 20</div><p>This plot shows the amplitude of SLA in centimeters versus the period in days for mission cycles 1 to 20, focusing on the period from 0 to 1 year. The y-axis ranges from 0.0 to 1.2 cm, and the x-axis ranges from 0 to 350 days. Two data series are shown: 'SLA with PEACHI2D' (red line with dots) and 'SLA with GDR-D' (blue line with dots). Both series show a very sharp peak at the shortest period (around 20 days) with an amplitude of approximately 1.2 cm. Other notable peaks occur at approximately 130 days (amplitude ~0.5 cm) and 270 days (amplitude ~1.1 cm for GDR-D and ~1.0 cm for PEACHI2D). The amplitudes generally decrease as the period increases beyond 300 days.</p></div></div>	



## Diagnostic A206\_b (mission al)

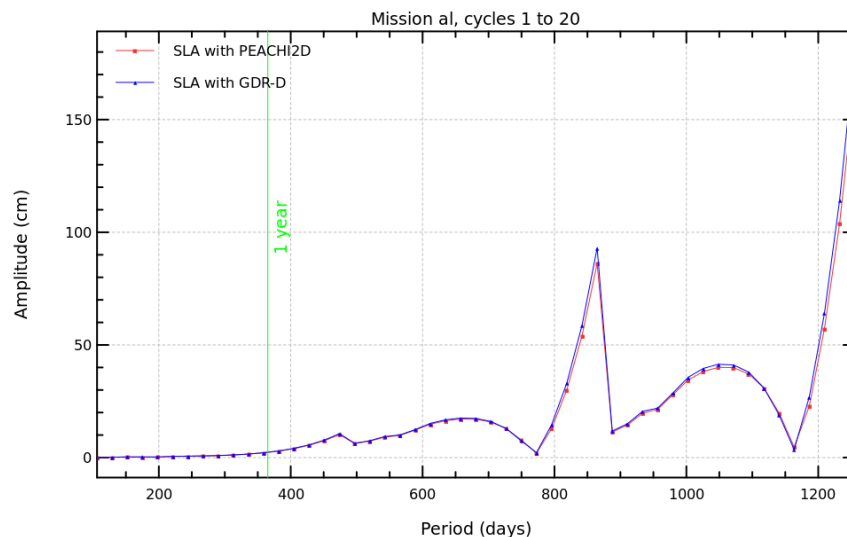
**Name :** Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

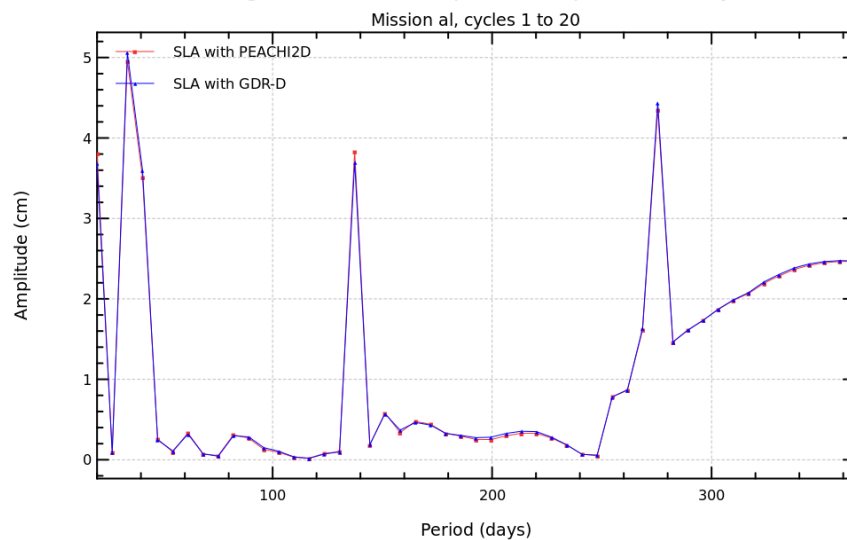
**Description :** The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Mono-mission analyses

Periodogram of north hemisphere SLA (reference period = 1 year)



Periodogram of north hemisphere SLA (period = [0, 1 year])



## Diagnostic A206\_c (mission al)

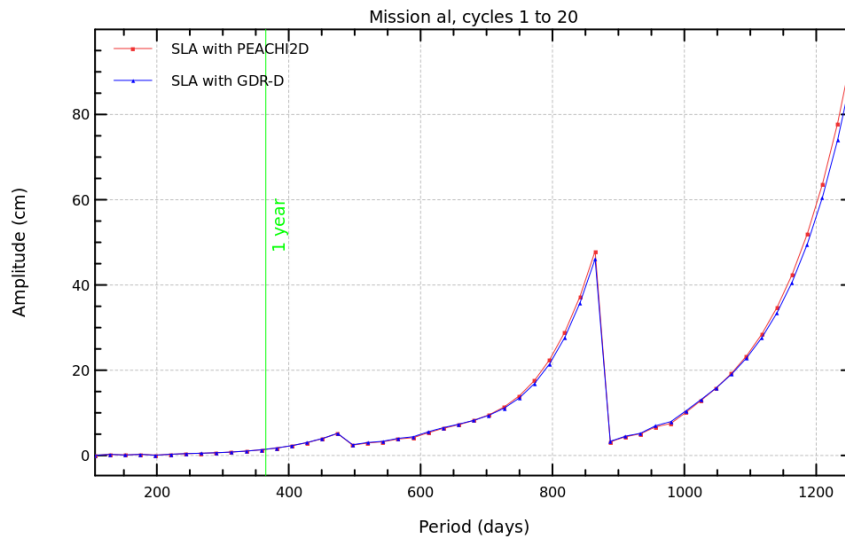
**Name :** Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

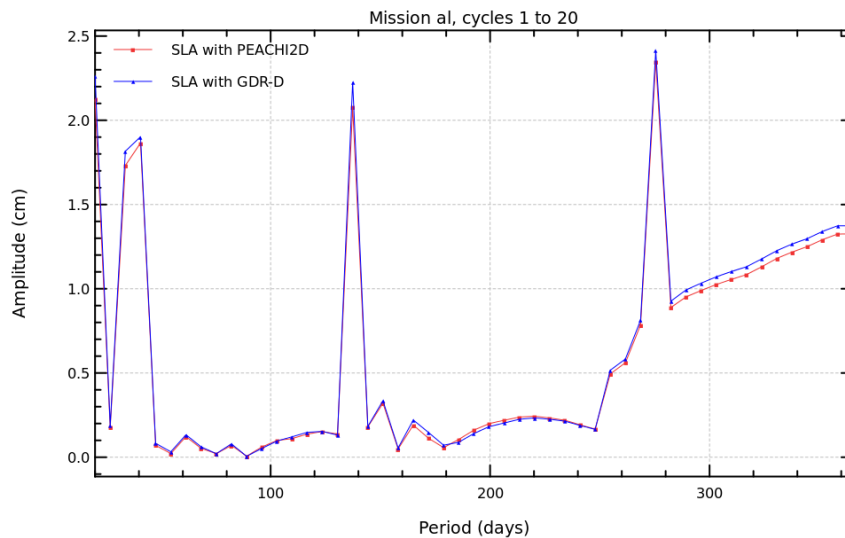
**Description :** The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Mono-mission analyses

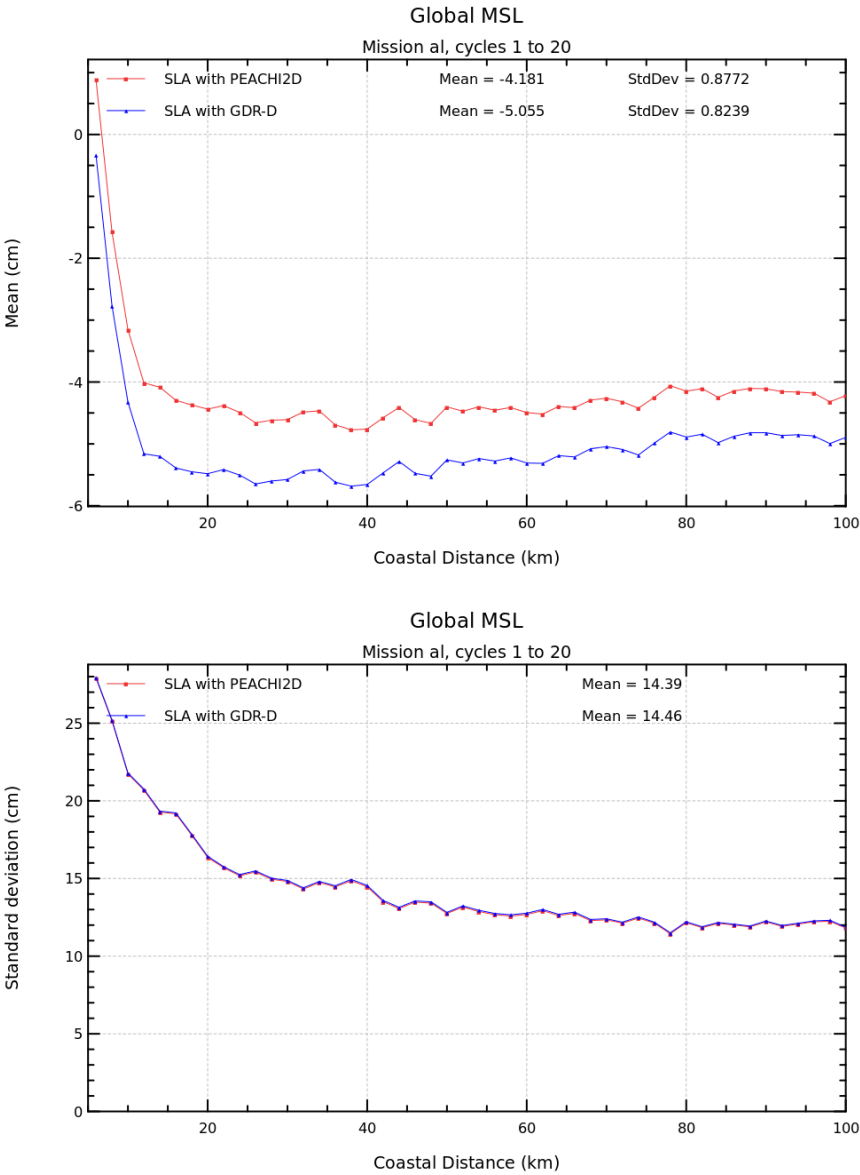
Periodogram of south hemisphere SLA (reference period = 1 year)



Periodogram of south hemisphere SLA (period = [0, 1 year])



Diagnostic A207 (mission al)	
Name : Sea Level Anomaly (SLA) versus coastal distance	
Input data : Along track SLA	
Description : Mean and standard deviation of SLA - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km.	



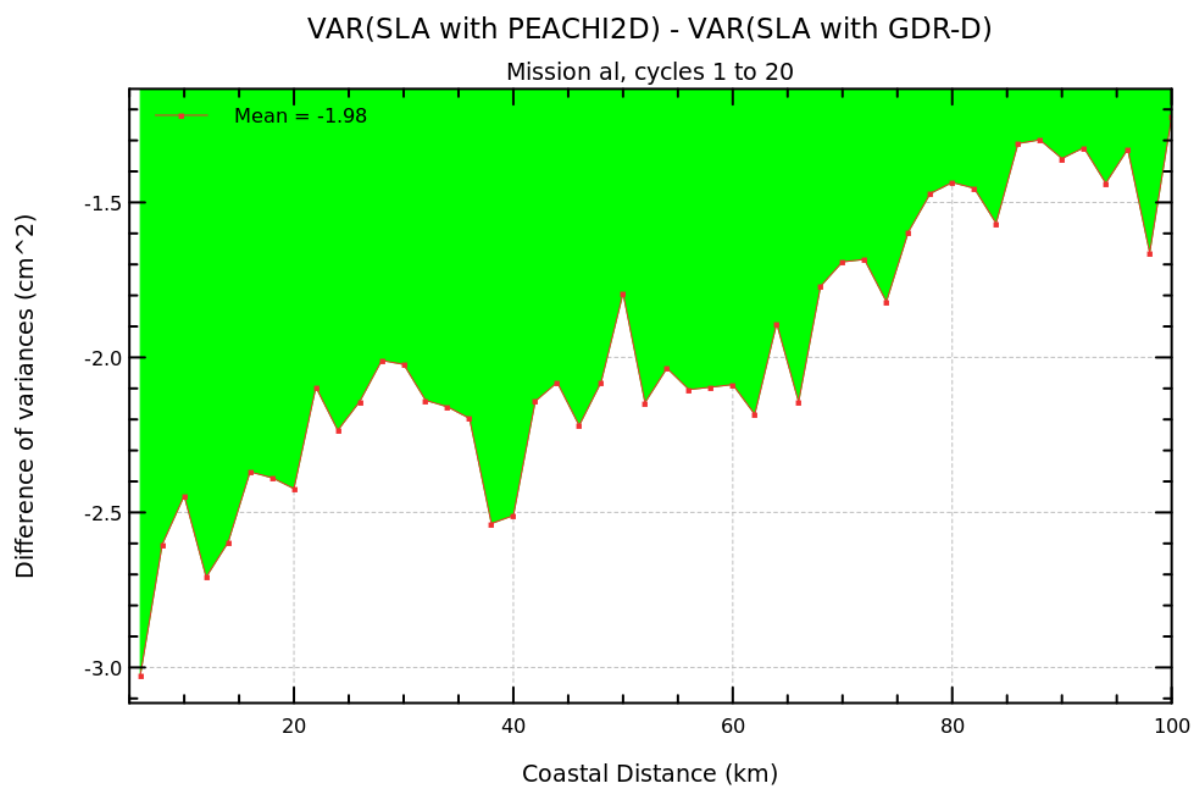
**Diagnostic A208 (mission al)**

**Name :** Sea Level Anomaly (SLA) differences versus coastal distance, latitude and longitude

**Input data :** Along track SLA

**Description :** The differences of SLA variances - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.

Diagnostic type : Mono-mission analyses



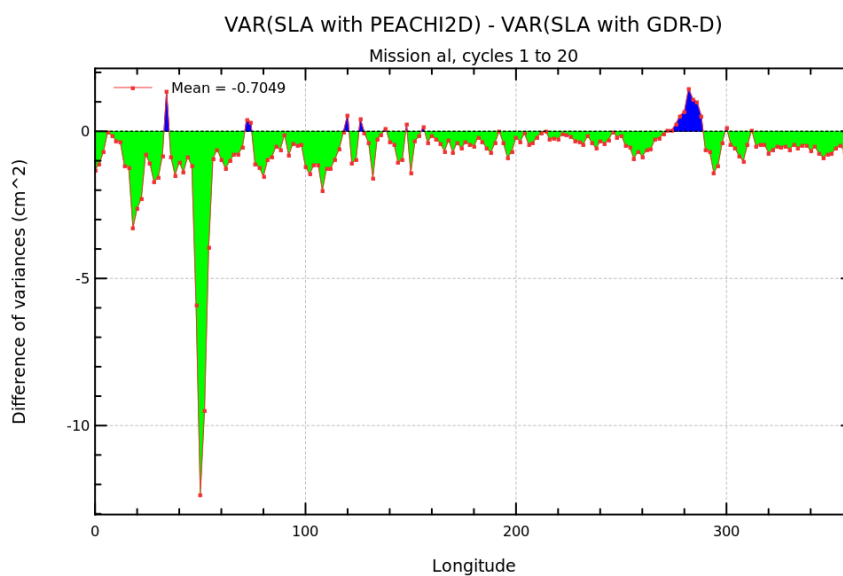
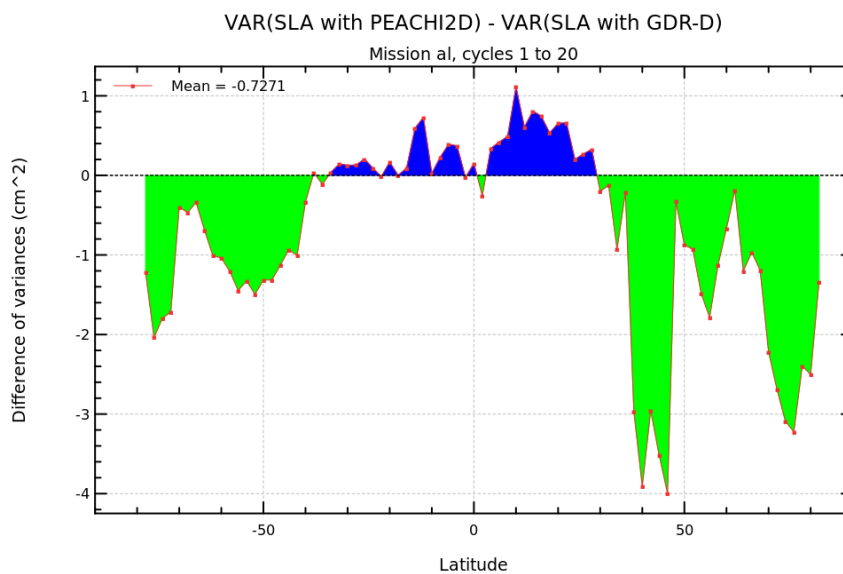
## Diagnostic A208 (mission al)

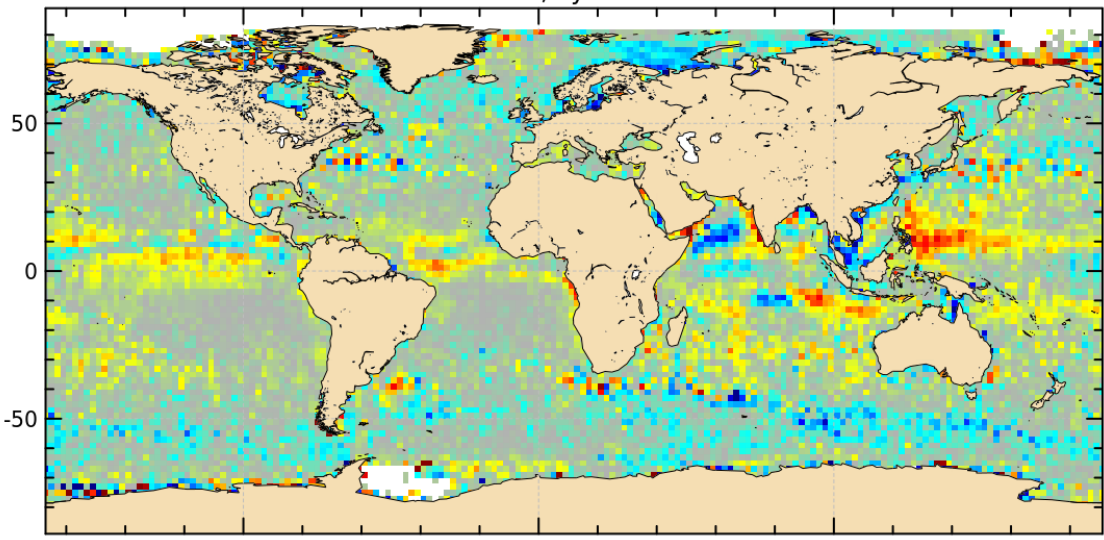
**Name :** Sea Level Anomaly (SLA) differences versus coastal distance, latitude and longitude

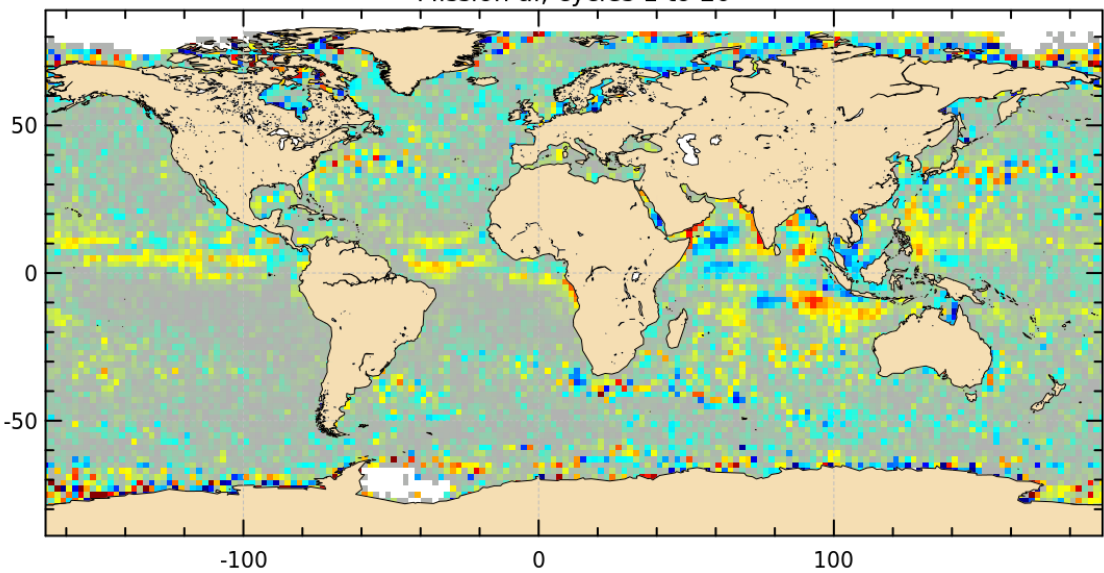
**Input data :** Along track SLA

**Description :** The differences of SLA variances - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km, in function of latitudes and in function of longitudes.

Diagnostic type : Mono-mission analyses



Diagnostic type : Mono-mission analyses	Diagnostic A209 (mission al)	
	Name : Differences between maps of SLA variance	
	Input data : Along track SLA	
	Description : The differences between maps of SLA are calculated from the SLA differences (mean, standard deviation) using successively both altimetric components in the SLA calculation.	
	<div>VAR(SLA with PEACHI2D) - VAR(SLA with GDR-D)</div> <div>Mission al, cycles 1 to 20</div>  <div>Difference of variances (cm<sup>2</sup>)</div> <div><div></div><div>-5</div><div>0</div><div>5</div></div>	

Diagnostic type : Mono-mission analyses	<b>Diagnostic A210_a (mission al)</b>
	<b>Name :</b> Differences between maps of SLA variance for different frequency bands
	<b>Input data :</b> Along track SLA
	<b>Description :</b> The differences between maps of SLA (variance) are calculated from the mean SLA maps using successively both altimetric components in the SLA calculation filtered to separate high-frequency ( $T < 1$ yr), mid-frequency ( $1 \text{ yr} < T < 3$ yrs) and low-frequency ( $T > 3$ yrs) signals.
	<div><p>VAR(SLA with PEACHI2D) - VAR(SLA with GDR-D) for FILTER HF</p><p>Mission al, cycles 1 to 20</p><p>Difference of variances HF (<math>\text{cm}^2</math>)</p><p>-4      -2      0      2      4</p></div>

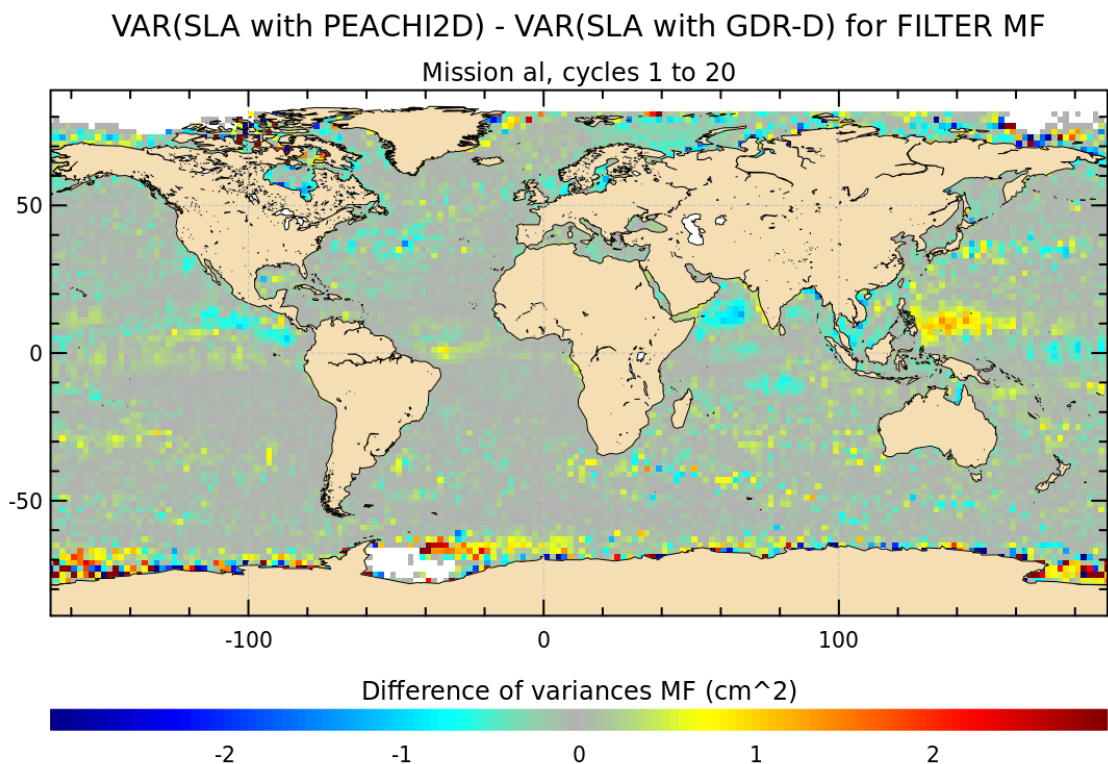
## Diagnostic A210\_b (mission al)

**Name :** Differences between maps of SLA variance for different frequency bands

**Input data :** Along track SLA

**Description :** The differences between maps of SLA (variance) are calculated from the mean SLA maps using successively both altimetric components in the SLA calculation filtered to separate high-frequency ( $T < 1$  yr), mid-frequency ( $1 \text{ yr} < T < 3$  yrs) and low-frequency ( $T > 3$  yrs) signals.

Diagnostic type : Mono-mission analyses





Diagnostic A210\_c (mission al)

**Name :** Differences between maps of SLA variance for different frequency bands

**Input data :** Along track SLA

**Description :** The differences between maps of SLA (variance) are calculated from the mean SLA maps using successively both altimetric components in the SLA calculation filtered to separate high-frequency ( $T < 1$  yr), mid-frequency ( $1 \text{ yr} < T < 3$  yrs) and low-frequency ( $T > 3$  yrs) signals.

Diagnostic type : Mono-mission analyses

