The difference between ascending and descending SSS. Monthly fields of SSS were constructed by bin-averaging raw Aquarius data (either ascending or descending) within $4^\circ \times 4^\circ$ bins centered on a global grid with the grid spacing of $2^\circ$. 
Ascending-Descending differences (V1.3.5)

June (153-159) 2012

June (160-166) 2012

June (167-173) 2012

June (174-180) 2012

July (181-187) 2012

July (188-194) 2012
The difference between ascending and descending SSS. Monthly fields of SSS were constructed by bin-averaging raw Aquarius data (either ascending or descending) within $4^\circ \times 4^\circ$ bins centered on a global grid with the grid spacing of $2^\circ$. 

Ascending-Descending differences (V1.3.5)
Next 2 Slides made for Thomas
The difference between ascending and descending SSS (toi_3). Monthly fields of SSS (toi_3) were constructed by bin-averaging the along-track data (either ascending or descending) within $4^\circ \times 4^\circ$ bins centered on a global grid with the grid spacing $2^\circ$. 
The difference between ascending and descending SSS (toi_3). Monthly fields of SSS (toi_3) were constructed by bin-averaging the along-track data (either ascending or descending) within 4° x 4° bins centered on a global grid with the grid spacing 2°.
Inter-beam biases (V1.3.5), September 2011

Ascending

Beam 2 – Beam 1

Beam 2 – Beam 3

Beam 1 – Beam 3

Descending

Beam 2 – Beam 1

Beam 2 – Beam 3

Beam 1 – Beam 3

S1>>S2<<S3

S1<<S2 ~ S3
Inter-beam biases (V1.3.5), April 2012

Ascending

Beam 2 – Beam 1

Beam 2 – Beam 3

Beam 1 – Beam 3

Descending

Beam 2 – Beam 1

Beam 2 – Beam 3

Beam 1 – Beam 3

S1 ~ S2 < S3

S1<<S2>>S3
Ascending-Descending differences (V1.3.5)

September 2011

Beam #1

Beam #2

Beam #3

April 2012

Beam #1

Beam #2

Beam #3
Next Slides were made to get down to the basic data: the along track time series. (Similar plots should be made for descending tracks as well as in different regions.)

Note the quasi-monthly variability in all beams especially near 20-25S and 30-60S in the next slide. Are these the wiggles?

The second slide shows beam differences in which the monthly signal seems more apparent. Does this mean that the galactic correction is not handling the lunar influence correctly?

Can we try to correct (empirically or via algorithm improvements) for this large effect in our next L2 version? I think we should! It seems to be the largest error in Aquarius SSS.
This slide of new data from the spurs region is intended to show that the Argo data should tell us what in situ SSS is (when a mixed layer is present) to about +/- 0.02 PSU or better.