

CRUISE REPORT 64PE334

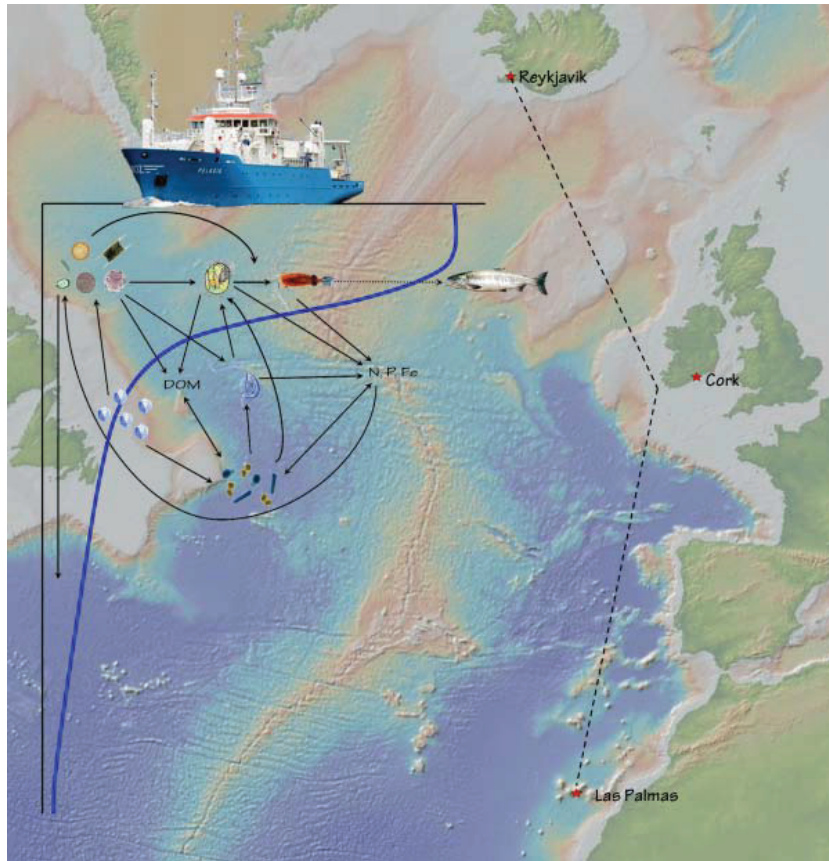
STRATIPHYT-II

6 April – 3 May 2011



Las Palmas - Reykjavik

2009 • ~~2010~~ 2011



Ship : RV Pelagia
Cruise Name : STRATIPHYT - Changes in vertical stratification and its impacts on phytoplankton communities
Cruise Number : 64PE334
Cruise Period : 6 April – 3 May 2011
Port of departure : Las Palmas, Gran Canaria
Port of return : Reykjavik, Island
Responsible Institute : Royal Netherlands Institute for Sea Research (NIOZ)
 Landsdiep 4, 1797 SZ 't Horntje, Texel, The Netherlands
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Acknowledgements

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Project Abstract

Global warming will change physical, chemical and biological processes in the oceans. Ocean-climate model predict that heating of the surface layer may yield a stronger vertical stratification, which starts earlier in spring and lasts longer in autumn. This results in suppressed upward mixing of nutrients from the deep ocean. Changes in stratification will have major effects on the production and species composition of phytoplankton (=unicellular algae). This will subsequently impact grazing, virally induced mortality and sedimentation rates, with cascading effects on ecosystem functioning and biogeochemical fluxes. Little is known, however, of the exact implications of global warming for these fundamental processes.

As part of the Dutch ZKO (Sea, Coast and Ocean) competitive funding program we will investigate how changes in vertical stratification affect phytoplankton communities along a north-south gradient in the Atlantic Ocean. Six institutes and 7 PIs are involved in the STRATIPHYT project. The project runs for 4 years (2009-2013).

Our study is based on oceanographic cruises from the Canaries to Iceland, advanced models of hydrodynamics and plankton growth, and detailed laboratory experiments with representative phytoplankton species. We have chosen for the Northeast Atlantic Ocean, because it is a key area in global ocean circulation, a large sink for atmospheric CO₂, and a major determinant of the climate in Western Europe. Furthermore, the Atlantic Ocean offers a gradient from weak seasonal stratification in the North to strong permanent stratification in the (sub)tropics. This gradient offers ideal opportunities for the comparative study of different stratification regimes. Our integrated approach of physical, chemical, and biological processes, by a new research team, will enable a better understanding of the implications of global warming for plankton growth in the North Atlantic Ocean.

Table 1. Project participants (project coordinator underlined).

<u>Name</u>	<u>Speciality</u>	<u>Institute</u>
Postdoc E. Jurado	Physical Oceanography	UU and VU
Postdoc W. vd Poll	Phytoplankton Ecology	RUG and NIOZ
PhD-student 3	Biological Oceanography	NIOZ
Postdoc M. Kehoe	Theoretical Ecology	UvA and CWI
<u>Dr. C. Brussaard</u>	Biological Oceanography	NIOZ
Dr. K.R. Timmermans	Phytoplankton Ecology	NIOZ
Prof. A.G.J. Buma	Phytoplankton Ecology	RUG
Prof. J. Huisman	Aquatic Microbiology	UvA
Dr. B. Sommeijer	Computational Science	CWI
Prof. H. Dijkstra	Physical Oceanography	UU/ IMAU
Dr. H. van der Woerd	Remote Sensing	VU / IVM

Project Introduction and Objectives

Observations as well as results from climate models indicate that stratification patterns in the ocean may change due to global warming (Sarmiento et al. 1998, Levitus et al. 2000, Toggweiler & Russell 2008). For example, warming of the surface layer may yield a stronger stratification, which enhances average light exposure for phytoplankton and can suppress the upward mixing of nutrients from the deeper nutrient-rich waters below. Global climate change is likely to have a particularly strong effect in the North Atlantic, which has been estimated to store 23% of the total oceanic uptake of anthropogenic CO₂ (Sabine et al. 2004). The North Atlantic Ocean is a key area in the global ocean circulation, and a major determinant of the climate in Western Europe. It has a clear north-south gradient, with permanent stratification in the subtropics and seasonal stratification in the temperate zone. The North Atlantic has already undergone a major warming, potentially affecting the strength of its meridional overturning circulation (MOC).

Changes in stratification patterns have major effects on phytoplankton growth (Behrenfeld et al. 2006, Huisman et al. 2006). Typically, prolonged stratification yields nutrient-poor surface waters with deep chlorophyll maxima (DCMs), whereas seasonal stratification induces a strong spring bloom. Fifty years of monitoring (the Continuous Plankton Recorder survey) suggests changes in phytoplankton and zooplankton abundance and composition in the Northeast Atlantic Ocean that agree with expectations based on global warming (Richardson & Schoeman 2004, Beaugrand et al. 2002). However, comprehensive and integrated studies are however, lacking and little is known on the exact nature of the consequences of global warming for the phytoplankton community in the Northeast Atlantic.

We will investigate how changes in vertical stratification affect phytoplankton communities along a north-south gradient by a combination of oceanographic cruises, high resolution ocean-biochemistry and mathematical modelling, and detailed laboratory experiments with representative phytoplankton species.

The North Atlantic Ocean offers the opportunity to investigate our overarching hypothesis that global warming will lead to enhanced stratification and reduced vertical transport in key areas, which in turn affects marine primary production and losses, plankton species composition and carbon storage in the ocean.

Phytoplankton fix large amounts of CO₂ and account for almost half of the total primary production on Earth. These photosynthetic microorganisms make up the base of the marine food web and provide more than 99% of the organic matter used by marine food webs. Phytoplankton production sets upper limits to both the overall activity of the pelagic food web and the quantity of organic carbon exported downwards. The nature and activity of the phytoplankton community are strongly influenced by physical and chemical factors that determine their light and nutrient availability. Phytoplankton losses by viral infection-induced death, grazing and sinking, however, restrain primary production and are thus equally important for ocean ecosystem productivity (Suttle 2007, Ruardij et al. 2005, Baudoux et al. 2006). These controlling processes influence the cycling of energy and biogeochemically relevant elements each very differently, directly affecting the production/respiration ratio of the ocean and the efficiency of the biological pump. As nicely formulated by Kirchman (1999), “how phytoplankton die largely determines how other marine organisms live”. Phytoplankton biomass that sinks from the euphotic zone has a strong impact on carbon sequestration in the oceans, whereas grazed algae are channelled to higher trophic levels. Viral lysis directly affects the standing stock of dissolved organic carbon which forces the food web towards a more regenerative pathway (Brussaard et al. 2005, Suttle 2007).

A stronger stratification is expected to suppress productivity in the (sub)tropics, where nutrients are typically limiting algal growth. At mid-latitudes, with seasonal stratification, the spring bloom may start earlier but phytoplankton may experience severe nutrient limitation already at the onset of summer. At high latitudes, decreased mixed layer depth and higher temperatures may stimulate phytoplankton growth. Modifications in vertical mixing and stratification will not only alter phytoplankton productivity, but also their species composition and most likely their nutritious value for higher trophic levels (Arrigo et al. 1999, Huisman et al. 2004, Diehl 2007). Model studies indicate, furthermore, that reduced vertical mixing may induce oscillations and chaos in the phytoplankton at the DCM, generated by differences in time scale between the sinking flux of phytoplankton and the upward flux of nutrients (Huisman et al. 2006). Anthropogenic global warming may thus destabilize the phytoplankton dynamics both in the upper mixed layer as well as DCM, with implications for oceanic productivity, species composition and carbon export.

Shifts in algal abundance and species composition will directly affect the degree of viral lysis and grazing. For instance, viral infection is dependent on encounter rate between host and virus and have a stringent host-specificity. Grazers can be selective in their choice of prey, depending on the nutritious quality and abundance of their prey species. Furthermore, changes in vertical stratification may directly and indirectly (e.g. shift towards smaller-sized phytoplankton in response to more severe nutrient limitation upon reduced vertical mixing) impinge on the sedimentation rate of algae from the euphotic zone.

Clearly, the interaction of physical, chemical and biological processes is extremely important in structuring plankton communities. Yet integrated, multidisciplinary programmes covering these aspects are scarce. At present such an approach is vital to enhance our understanding of potential shifts in phytoplankton distribution, ecosystem structure and function due to current global climate change.

The overall objectives of our research program are:

- 1) To establish the physical and chemical characteristics of the upper ocean (200 m) of the Northeast Atlantic Ocean, along the transect Iceland–Ireland–Canary Islands, with particular emphasis on the stratification patterns along this transect.
- 2) To model the effect of a changing atmospheric forcing on the upper ocean stratification and vertical transport along this transect.
- 3) To obtain remote sensing measurements and phytoplankton biomass data for the Northeast Atlantic Ocean to validate and improve net primary productivity estimates along this transect.
- 4) To determine the variability of the phytoplankton, grazer and algal virus community abundance and composition in the mixed layer and the DCM, as well as in the translocation experiments mimicking changes in nutrient supply and mixed layer depth.
- 5) To determine primary production, phytoplankton physiology and cellular composition in the surface ocean, DCM, and during the translocation experiments.
- 6) To investigate loss factors structuring the phytoplankton community in the surface ocean, DCM and translocation experiments, i.e. viral lysis and grazing of relevant groups and size classes of phytoplankton.
- 7) To study the ecophysiology, sinking rates, sensitivity for viral infection and grazing of representative phytoplankton species in laboratory culture under different light, nutrient and temperature conditions.
- 8) To model phytoplankton dynamics and species interactions in response to changes in seasonal stratification and vertical transport caused by climate change.

The STRATIPHYT cruise 2011

We studied for a month the vertical stratification and the biology of plankton (with a major focus on phytoplankton) in the Northeastern Atlantic Ocean, along a transect from Las Palmas (Gran Canaria) to Reykjavik (Iceland). This cruise was undertaken as part of larger integrated study with the main merit of assessing the physics, chemistry and biology of the upper water column (typically top 200 m) in order to understand the impact of vertical stratification of the water column for the unicellular algal community; its production, mortality and diversity. This is the second of two cruises, one in summer (2009) and the current one in spring (2011). The cruise track is shown in Figure 1, the station details in Table 2 and the participant and crew list in Table 3.

Different geographical locations and subsequently biological communities were studied in order to allow unique and optimal insight into the contribution of the different algal groups and to the functioning of the pelagic food web.

Fig. 1. Cruise track STRATIPHYT-II 2011.

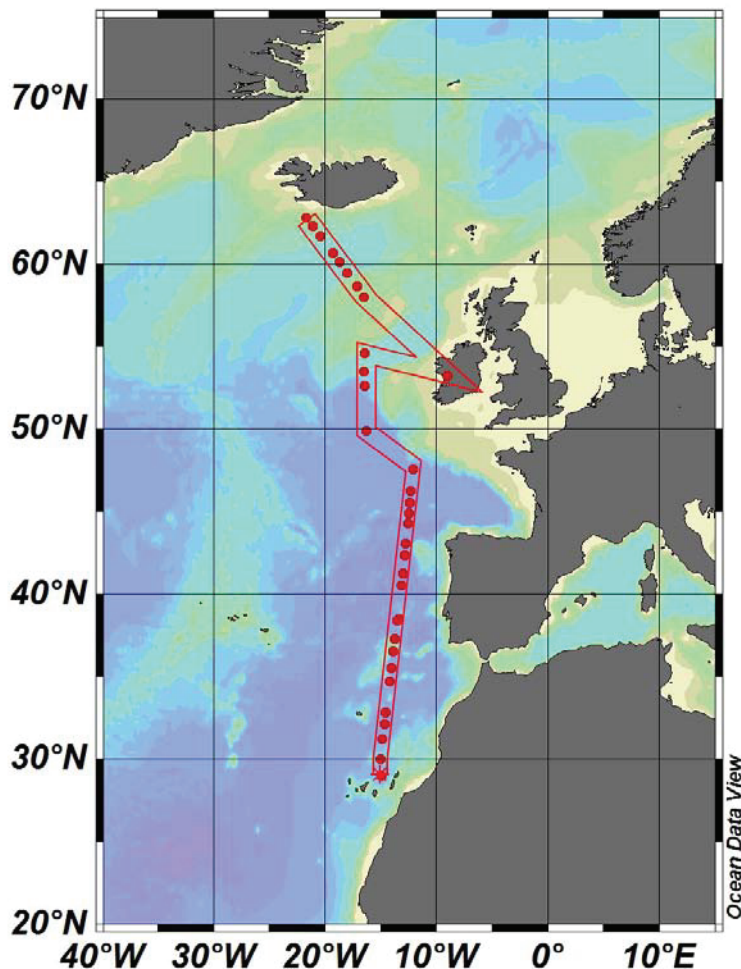


Table 2. Station details STRATIPHYT – 64PE334 cruise with R/V Pelagia.

Station	date	Latitude <i>degrees decimal</i>	Longitude <i>degrees decimal</i>
test	7-04-11	28.999.686	-15.000.194
0	8-04-11	28.999.982	-14.999.994
1	9-04-11	30.018.594	-15.070.508
2	10-04-11	31.220.091	-14.870.195
2B	11-04-11	32.138.433	-14.709.789
3	12-04-11	32.820.495	-14.590.394
no station 4			
5	13-04-11	34.719.725	-14.260.068
6	14-04-11	35.529.688	-14.110.193
7	15-04-11	36.529.698	-13.939.981
8	15-04-11	37.279.965	-13.800.038
9	16-04-11	38.420.489	-13.575.978
10	17-04-11	39.499.900	-13.390.100
11	18-04-11	40.529.594	-13.190.131
12	18-04-11	41.249.872	-13.049.851
13	19-04-11	42.340.079	-12.879.929
14	19-04-11	43.079.889	-1.277.936
15	20-04-11	44.279.789	-1.260.983
16	20-04-11	44.914.194	-12.517.894
17	21-04-11	45.529.783	-12.430.106
17B	21-04-11	46.268.504	-12.319.125
18	22-04-11	47.570.082	-12.110.403
no station 19			
20	23-04-11	49.915.062	-16.356.662
no station 21			
22	24-04-11	52.621.788	-16.497.225
22B	24-04-11	53.508.041	-16.520.077
23	25-04-11	54.633.279	-16.508.962
no station 24			
25	28-04-11	58.000.163	-16.520.083
26	28-04-11	58.650.223	-17.179.777
27	29-04-11	59.500.026	-18.069.873
28	29-04-11	60.119.958	-18.729.966
29	30-04-11	60.680.043	-19.340.095
30	1-05-11	61.710.326	-20.490.256
31	1-05-11	62.299.777	-21.159.864
32	2-05-11	62.800.035	-21.740.748

Table 3. R/V Pelagia Cruise STRATIPHYT-II Participants and Crew listing.

R/V Pelagia Cruise STRATIPHYT-II, spring 2011

PARTICIPANTS LIST	
Name	Institute/University, Country
Brussaard, C *	NIOZ, NL
Timmermans, K	NIOZ, NL
Asjes, S	NIOZ, NL
Boom, L	NIOZ, NL
Gonzalez, S	NIOZ, NL
Noort, v. G	NIOZ, NL
Van Ooijen, J	NIOZ, NL
Doggen, R	NIOZ, NL
Kooijman, K	NIOZ, NL
Mojica, K	NIOZ, NL
O'Connor, P	NIOZ, NL
Schuback, N	NIOZ, NL
Jurado, E	UU, NL
Doeschate, A	UU, NL
Schoffelen, N	UU, NL
Poll, v.d. W	RUG, NL
Rozema, P	RUG, NL
Kehoe, M	UvA, NL
Shelford, E	UBC, Canada
* = Chief Scientist	

CREW LIST	
Burkhard, C	Master
Puijman, B	Ch. Officer
Kikkert, K	Ch. Engineer
Verheyen, D	2 nd Officer
De Kleine, M	2 nd Engineer
Nieboer, A	Cook
Heide, vd R	AB
Maas, J	AB
Van Vosselen, W	AB
Vitoria, J	AB
Hiemstra, F	Steward

The physical vertical stratification was studied using a Scamp instrument (see for more detail furtheron in cruise report).

Water samples were taken using the 24 Teflon samplers (NIOZ design Pristine Bottles, 27 liters each), which were mounted on a ultra-clean (trace metal-free) system that consists of a full titanium sampler frame equipped with CTD (Seabird 9+) and auxiliary sensors. When aboard ship, the sampler frame was stored and sampled in its own 20 foot Clean Container. Deployment of the frame was from a non metallic hoisting cable, again to ensure contamination free sampling. Auxiliary sensors were: Oxygen (Seabird model 43), Fluorescence (Chelsea Aquatracka Mk III), Light transmission (Wet-Labs C-star), PAR (Satlantic) and OBS (Sea-Point turbidimeter). To compensate for variance in the sunlight, a deck reference PAR sensor (Satlantic) was installed, enabling ratiometric measurements.

Furthermore, a vertical net was used to collect the larger sized mesozooplankton (>300 μm mesh size).

Besides direct sampling of the upper water column and short termed (max 24 h) on-board incubation, on-deck incubations using 20 L bottles were conducted for up to one week. These so called ‘translocation experiments’ provide insight in the response of the algal community to more or less nutrient input in combination with enhanced or reduced light conditions. Additionally, optical measurements were obtained and the ship’s continuous Aquaflow system from a depth of 3 m (detecting temperature, salinity, optical back scatter, and fluorescence) was and will be used for validation, adaptation and testing new satellite products for Chlorophyll and primary production retrieval.

The results of this timely project will largely advance our comprehension of the importance of different stratification scenarios for phytoplankton population dynamics. The results are expected to provide new insights in our understanding of the functioning and structure of marine pelagic food webs and the impact of global change. The obtained data will, furthermore, be essential for the different models (to be) developed within the project.

The Atlantic Ocean showed indeed, according to expectation, permanent stratification with a deep mixed layer in the (sub)tropics and complete deep mixing in the Northeastern section of the transect (Fig. 2). The, furthermore, low concentrations of nutrients (Fig. 3), as found in the south, promoted only the very small-sized algae (majority typically <2 μm). Larger sized phytoplankton were observed during leg 2 (Cork-Reykjavik), resulting in enhanced total algal pigment (Chlorophyll a) fluorescence (Fig. 3).

In total 32 locations were sampled (stations), during which 103 CTD casts, 160 SCAMP profiles and 48 vertical net hauls have been performed. Only some of measurements could be analysed on board (e.g. macronutrients, direct counts of phytoplankton, physical and optical variables). Numerous samples were stored for later analysis at the home laboratories.

Detailed description of the different scientific activities can be found in the following section.

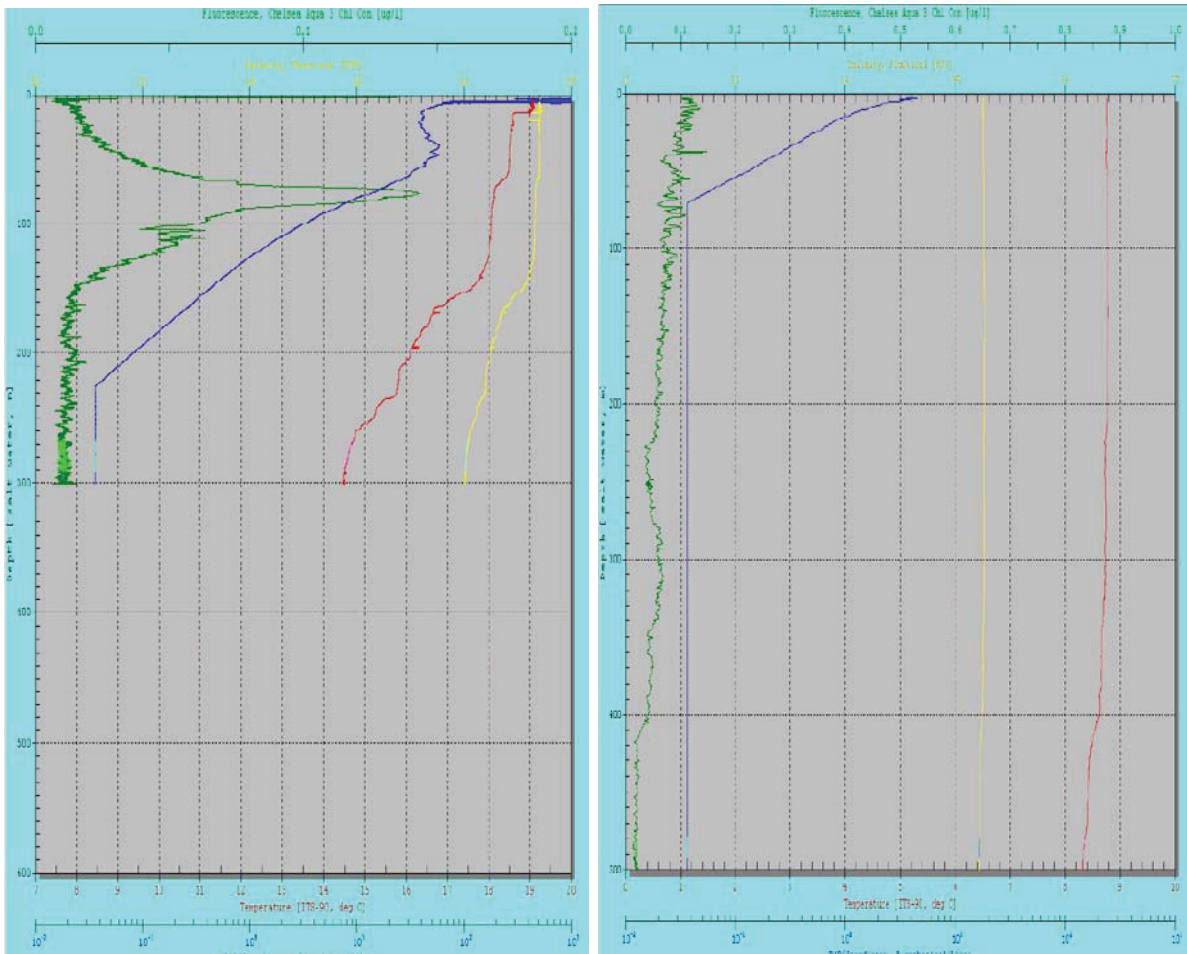


Figure 2. CTD profiles of temperature (red line), Chlorophyll a fluorescence (green line), light (blue line) and salinity (yellow line) for station in the southern and northeastern part of the cruise track.

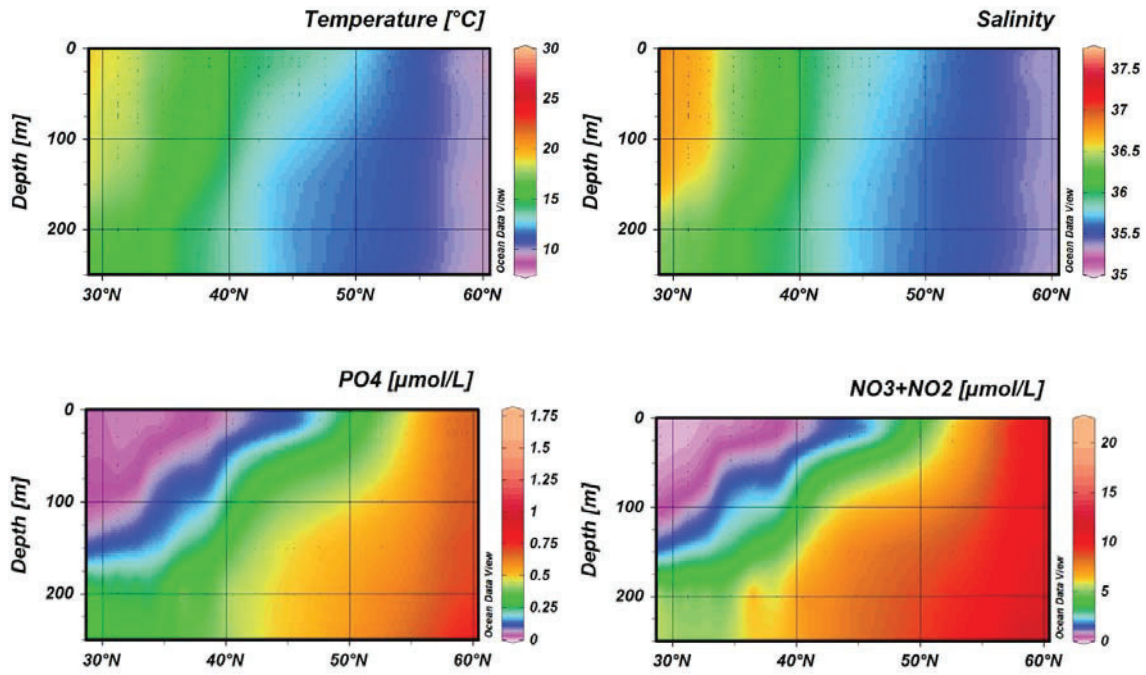


Figure 3. Transect plots from Las Palmas to Reykjavik, showing from top to bottom and from left to right: temperature, salinity, and inorganic phosphate and NO_x (nitrate and nitrite) concentrations.

Scientific activities (per variable):

Nutrient measurements

- Jan v Ooijen –

Summary: On this cruise samples were analyzed on inorganic phosphate, ammonium, nitrate and nitrite. Samples for the reactive silicate were filtered and stored at 4 degrees until analysis in the NIOZ home lab.

During the cruise about 5000 analysis (1250 samples) were analyzed using a Seal Analytical QuAAtro Autoanalyzer connected to an autosampler. The different nutrients were determined colorimetrically as described by Grashoff (1983).

Methodology: Samples were obtained from growth experiments and from an ultra clean CTD with 24 bottles of 27 Liter. Each sample from the CTD was taken in a polypropylene bottle and filtered through a 0.2 um pore-size Acrodisc filter. The samples were subsampled in 5 mL polyethylene vials. These vials were all stored dark at 4 °C until analysis within 18 hours. As a light source the QuAAtro uses a LED instead of a lamp to avoid the noise effect of the movements of the ship on the light source and therefore on the baseline.

Standards were prepared fresh every day by diluting the stock solutions of the different nutrients in nutrient depleted surface ocean water. This water is also used as baseline water. Each run of the system had a correlation coefficient for 9 calibrant points of at least 0.9999. The samples were measured from the lowest to the highest concentration in order to keep the carry over effects as small as possible.

In every run a mixed nutrient standard containing silicate, phosphate and nitrate in a constant and well known concentration, a so called cocktail, was measured as a triplicate. This cocktail was used as a guide to check the performance of the analysis.

Chemistry:

Ammonium reacts with phenol and sodiumhypochlorite at pH 10.5 to a indo-phenolblue complex. Citrate is used as a buffer and complexant for calcium and magnesium at this pH. The color is measured at 630 nm.

Phosphate reacts with ammoniummolybdate at pH 1.0, and potassiumantimonyl-tartrate was used as an inhibitor. The yellow phosphate-molybdenum complex was reduced by ascorbic acid and measured at 880 nm.

Nitrate plus nitrite (NO_x) was mixed with a buffer imidazol at pH 7.5 and reduced by a copperized cadmium column with a reductionpercentage of at least 98%, to nitrite. This was diazotated with sulphanylamide and naphthylethylenediamine to a pink colored complex and measured at 550nm.

After subtracting the nitrite value of the nitrite channel the nitrate value was achieved.

Nitrite was diazotated with sulphanylamide and naphthylethylenediamine to a pink colored complex and measured at 550 nm.

Table. Statistics of the analysis of this cruise. (A) within one run and (B) between runs.

(A) The standard deviation of samples measured in one run:

PO ₄ :	0.002 uM	0.19% of full scale value
NH ₄ :	0.009 uM	0.13% of full scale value
NO ₃ + NO ₂ :	0.020 uM	0.13% of full scale value
NO ₂ :	0.002 uM	0.19% of full scale value

(B) The standard deviation of samples measured between different runs:

PO4:	0.005 uM	0.24% of full scale value
NH4:	0.021 uM	0.19% of full scale value
NO3 +NO2:	0.043 uM	0.16% of full scale value
NO2:	0.003 uM	0.16% of full scale value

Vertical turbulence and POC

- *Elena Jurado and Anneke Doeschate* -

Microstructure measurements with SCAMP

Sampling procedure

During the cruise, high-resolution vertical profiles of temperature, pressure (depth), conductivity, fluorescence, and PAR (Photosynthetically Active Radiation) of the first 100 m of the water column have been measured with SCAMP, a free-fall microstructure profiler. Compared to the first STRATIPHYT cruise, we have used a new SCAMP device (SCAMP SN61), equipped with additional sensors for fluorescence and PAR. We have also brought the SCAMP device from the first cruise, SCAMP SN43, as a spare instrument. Bringing two SCAMPs was a benefit, due to the frequent technical problems encountered with the instrument.

We performed 2 to 14 SCAMP casts in each station, during the time period from 11h to 15h (see figure below). The total number of casts in this cruise is 214, about one fourth more than the first STRATIPHYT cruise. Few casts were performed when the SCAMP had a failure, adverse environmental conditions, or shortening of the sampling time for external reasons.

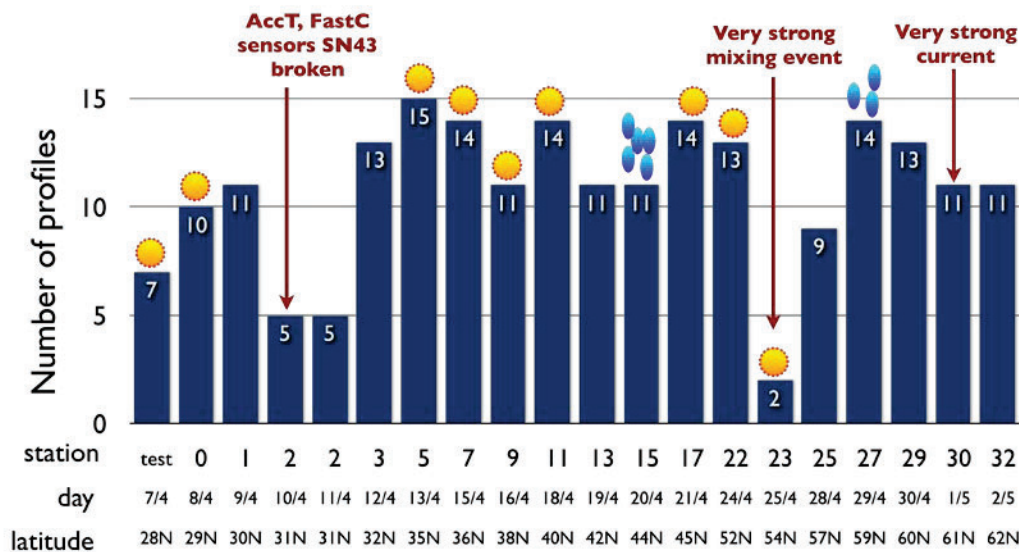


Figure legend. Number of SCAMP profiles per day during the STRATIPHYT-II cruise.

The maximum depth reached by the instrument was not always 100 m because the compromise between the need to obtain a large number of profiles and the tendency of the instrument to drift away from the ship due to its slow falling velocity. Furthermore, parts of the beginning and end of the profiles had to be trimmed, due to the influence of the waves, currents, or other phenomena that generated a large variability in the falling speed of SCAMP. This falling speed should be constant and equal 10 cm/s, so that the measures are more credible. 10 cm/s was hard to obtain, generally the SCAMP descended in the water between at around 15 cm/s.

As in the first STRATIPHYT cruise, the instrument was deployed with the fly-winch, property of NIOZ, with longer rope than the one provided with the SCAMP. It allowed to measure deeper depths, and permitted an easy recovery from the deck.

Obtained data

After each cast, the data was uploaded in a computer. After each scamp session, consisting in a group of casts from roughly 11h to 15h, the data was post-processed. The post-processing consists in a number of trimming, filtration, smoothing, and binning (1 m bins) procedures, plus the derivation of essential turbulent quantities. In this report we focus on the following turbulent quantities: the temperature eddy diffusivity (K_T), or vertical mixing coefficient of temperature, and the turbulent kinetic energy dissipation rate (ϵ). K_T proportionately reflects the effects produced by eddies from all other levels on the variation of the temperature at a certain depth level. ϵ represents the rate at which kinetic energy is lost by molecular viscosity and appears as thermal energy.

In the following picture (see figure below), are shown the typical variables measured with the SCAMP and averaged over the 15 profiles recorded at the station 5 the 13th April. Besides temperature (T), salinity (S), fluorescence (Fluor) and Photosynthetically Active Radiation (PAR), Figure 2 shows derived quantities such as density (ρ) and the buoyancy frequency (N). The latter is indicative of the stratification strength of the water column. As a general tendency, more stratification indicates less mixing.

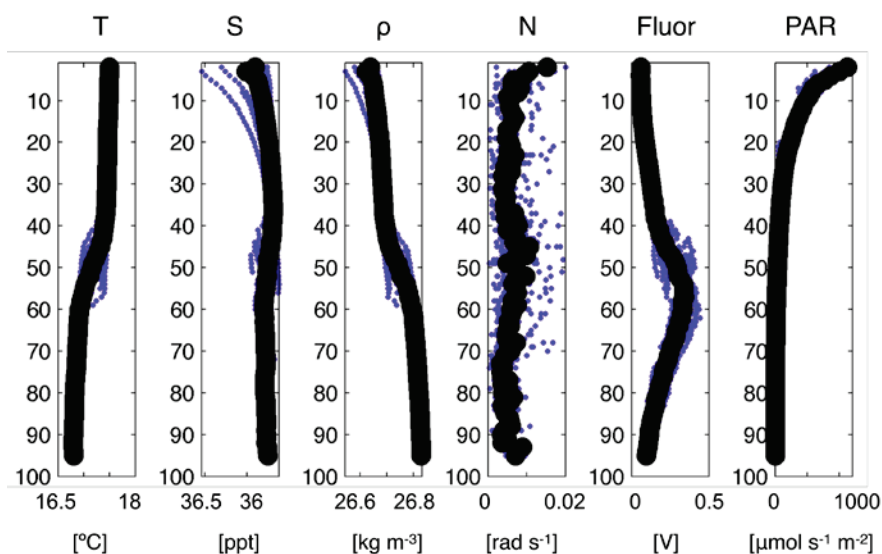


Figure legend. Depth-binned (blue dots) and station-averaged (larger black dots) temperature (T), salinity (S), buoyancy frequency (N), density (ρ), fluorescence (Fluor), and PAR recorded by SCAMP at the station 5 the 13th April.

In this figure, the surface mixed layer is indicated by the continuous part of the temperature and salinity profiles, and it extends up to 40 m depth. Just below the mixed layer, occurs the thermocline, where also the buoyancy frequency N has a maximum. In the mixed layer, the temperature eddy diffusivity K_T is also large (see figure below) indicating a strong mixing in this layer. The energy dissipation rate ϵ , more uniform than the K_T , is also somewhat larger in the mixed layer, and presents an increase towards the surface due to surface-waves' related turbulence. Both turbulent quantities present similar vertical trends agreeing with the results of the previous cruise STRATIPHYT-I. The magnitude of ϵ is larger than in the previous cruise, which took place in August. In the period of STRATIPHYT-II, the large convective events of the winter have a stronger print.

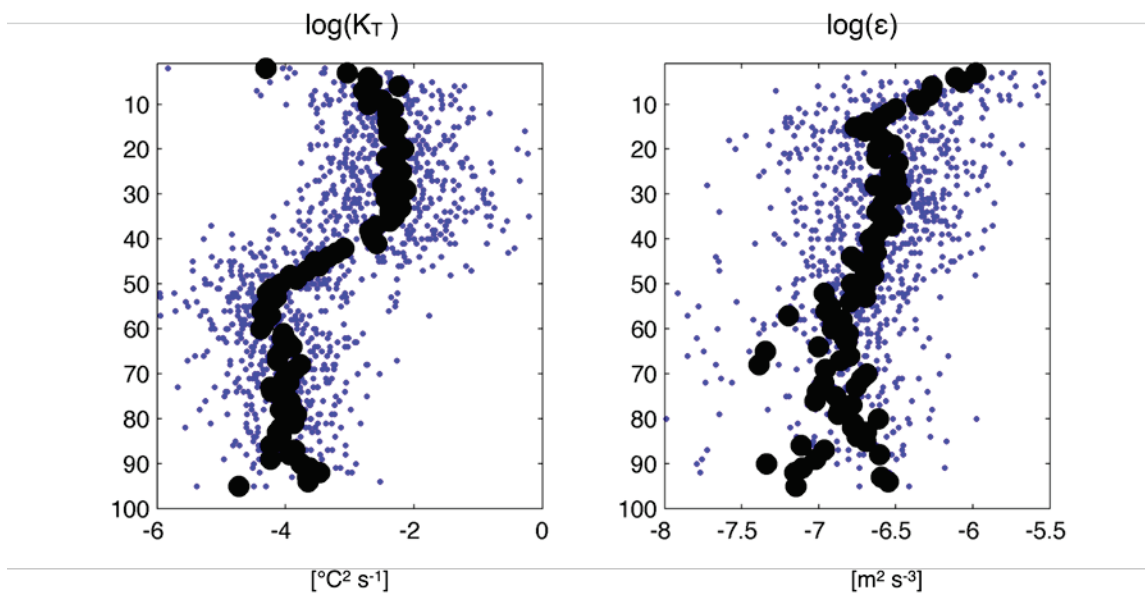
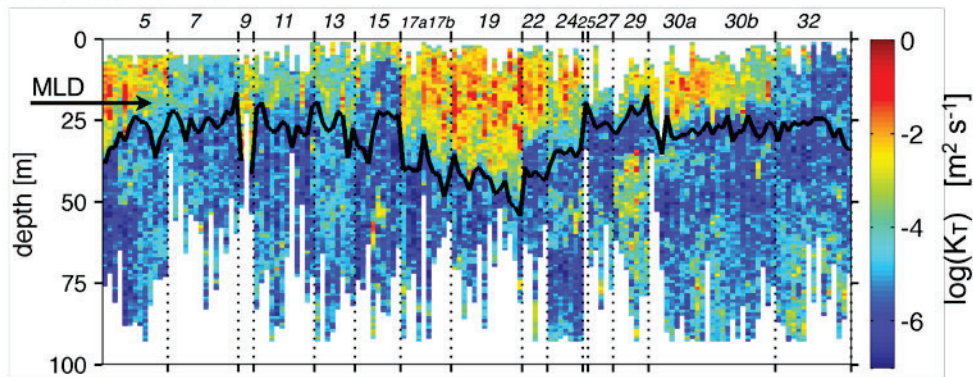


Figure legend. Depth-binned (blue crosses) and station-averaged (thick line) temperature eddy diffusivity (K_T), turbulent kinetic energy dissipation rate (ϵ) recorded by the SCAMP at the station 5 the 13th April.

Overview of the STRATIPHYT-II cruise and comparison to the values in STRATIPHYT-I cruise

From a first analysis, the results in this STRATIPHYT-II cruise indicate a major mixing than in the STRATIPHYT-I cruise (Figure 4) and also a lower stratification of the upper 100 m of the ocean. We do not perceive a uniform decrease of stratification below the mixed layer, as observed in the first cruise. Instead, the stations present more sparse mixing situations. Furthermore, STRATIPHYT-II presents two well-distinguished types of stations in terms of mixing. The first leg (stations from 0 to 17) present mixed layers of less than 100 m, the second leg (stations from 22 to 32) present mixed layers of more than 100 m (see figure below). It agrees with the transition from permanently stratified stations in the lower latitudes to seasonally stratified ones in the northern latitudes.

STRATIPHYT - I



STRATIPHYT - II

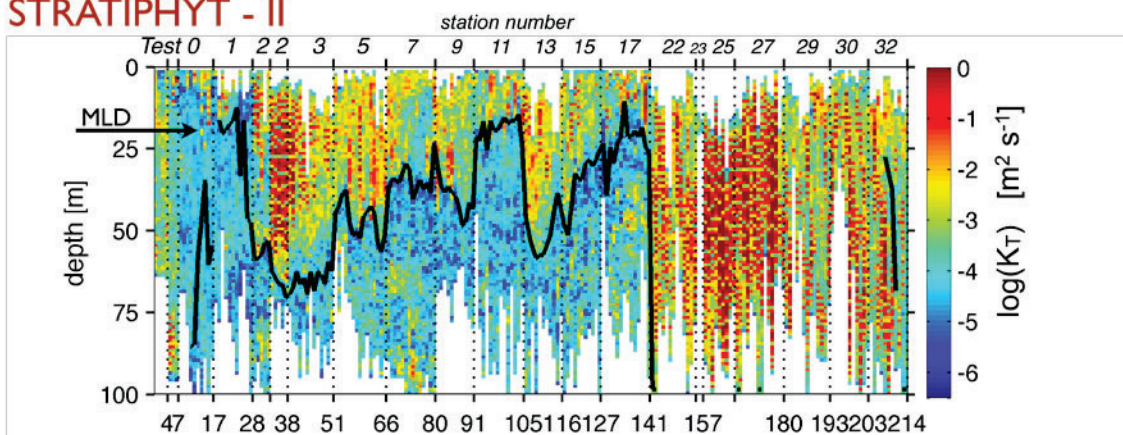


Figure legend. Depth-binned profiles of temperature eddy diffusivity (K_T) in the STRATIPHYT-I and STRATIPHYT-II cruise. Dotted vertical lines delimit the sampling stations, and the number of the station is shown at the top of the figure. The mixed layer depth (MLD), according to Levitus [2000] criteria, is also plotted. No MLD is plotted when it exceeds 100 m depth.

The second cruise offers us a unique opportunity to compare the fluorescence measurements with the turbulent quantities, both measured by SCAMP. The fluorescence measurements are a rough indicator of the chlorophyll *a* concentration, and thus of the phytoplankton concentration. A first look on the profiles of fluorescence points out to a relation with the turbulent mixing. The fluorescence tends to be higher in regions where the mixing is lower (see figure above and below). In certain stations, however, the fluorescence peaks in the mixed layer, in the region of more mixing. In addition, and in the first leg, the stratified region below the mixed layer acts like a barrier to the phytoplankton distribution, and may contribute to prevent the phytoplankton to spread upwards or downwards (see figure below). Further research, and the connection to the nutrients distribution, needs to be done in that direction.

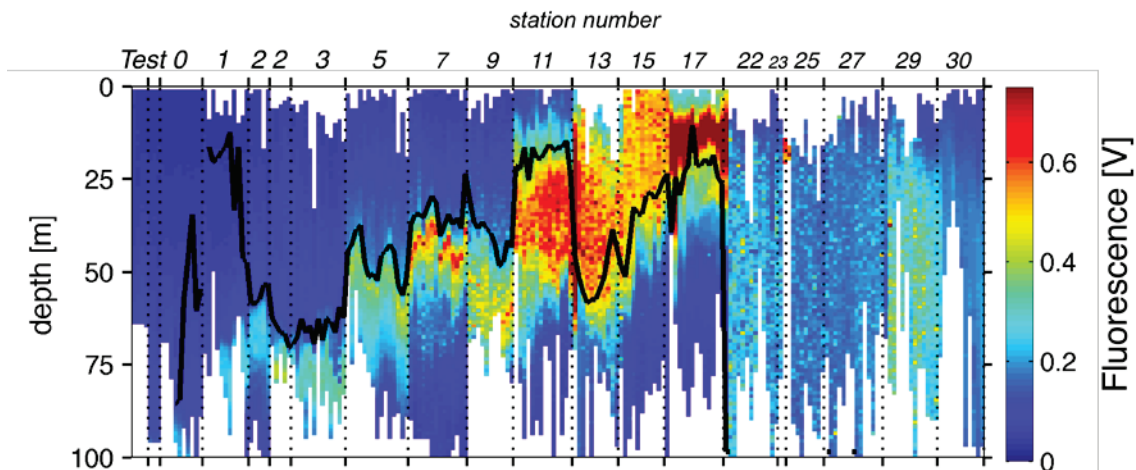


Figure legend. Depth-binned profiles of fluorescence. Relative units of in situ fluorescence. The highest fluorescence value of 2 V corresponds to a chlorophyll a concentration of $\sim 0.6 \mu\text{g/L}$ (station 17, 12 m depth, linear scale).

CTD measurements. At every station, two to five CTD casts were done. We analyzed them in order to calibrate the SCAMP and to have information of the physical properties of the water column below 100m. The CTD measures conductivity, temperature, depth, fluorescence, and PAR (Photosynthetically Active Radiation) down to 500 m and with a vertical resolution of 25 centimeters. Here we focus on the PAR and on the mixed layer depth, the latter derived from the temperature profiles.

Photosynthetically Active Radiation (PAR)

PAR (Photosynthetically Active Radiation) is a subset of the total solar irradiance; it comprises the radiation with wavelengths between 400 and 700 nm. From the PAR distribution in the water column, we have derived the mixing depth constant, $K_d [m^{-1}]$, which describes the rate of attenuation of visible light in the water column. It is obtained from the PAR profiles, by plotting the natural logarithm of the values against depth. The slope of the best-fit line is the K_d .

The figure below shows the K_d value for each CTD cast and for all the stations. Those will be used by STRATIPHYT-sub2.

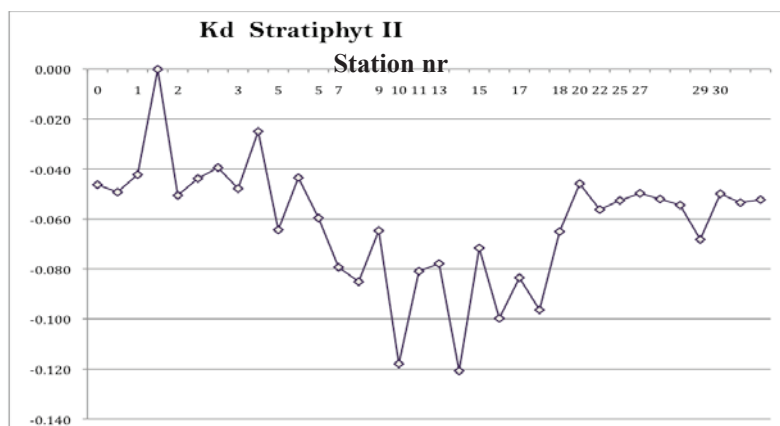


Figure legend. K_d values determined from the PAR data of the CTD casts. Each data point is a different cast.

Mixed layer depth (MLD)

Three criteria for the definition of the mixed layer depth (MLD) are explored:

(1) The traditionally used Levitus difference criterion (Levitus et al. 2000): $\Delta T = -0.5$ °C from surface temperature. (2) the Montegut difference criterion (Boyer Montegut et al. 2004): $\Delta T = -0.2$ °C from the temperature at 10 m depth. (3) the Lorbacher curvature criterion (Lorbacher et al. 2006): the first local extreme value of the curvature of the temperature profile.

From the temperature profile of each CTD cast, three MLD are calculated, according to the different criteria. Figure 7 presents the MLD for each CTD cast, upon an image showing the fluorescence. It clearly shows that the three criteria do not converge into a single MLD.

Additionally, the figure below indicates that there is a clear difference between the first and the second leg of the cruise. In the first leg, stations 0 to 17, mixed layer depths are found in the upper 100 m of the ocean. From station 18, the MLD is deeper than 100m.

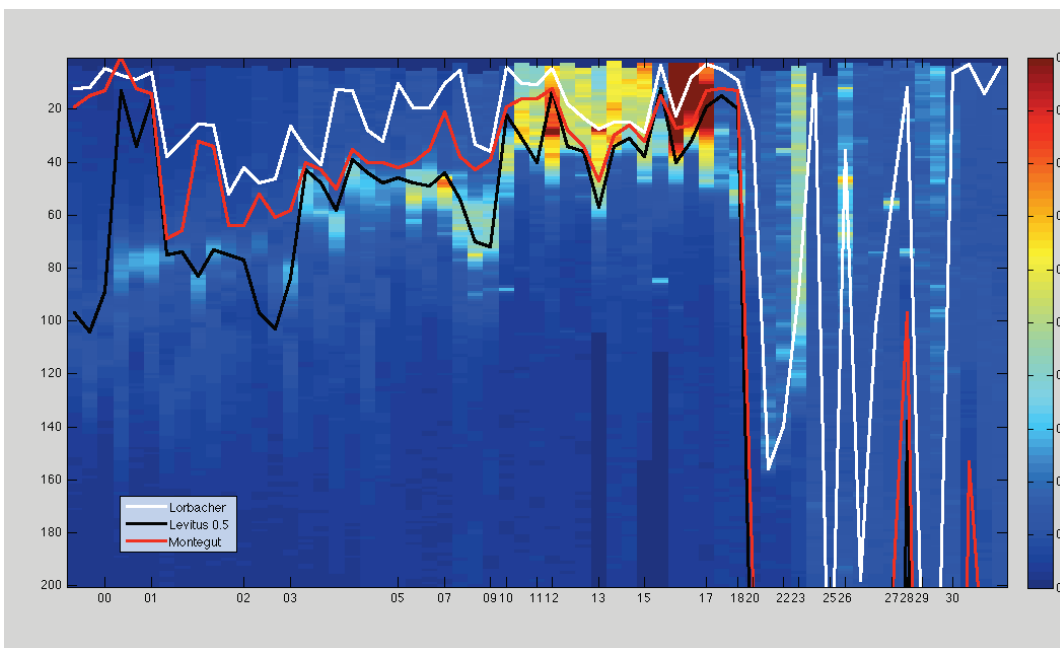


Figure legend. Fluorescence in the first 200 m as measured during the CTD casts. The MLD is additionally plotted, according to the Lorbacher (white), the Levitus (black) and the Montegut criteria (red)

* * **References.** Boyer Montegut, C. de, G.Madec, A.S.Fischer, A.Lazar, D.Iudicone (2004). Mixed layer depth over the global ocean: an examination of profile data and a profile-based climatology, *Journal of Geophysical Research*, vol. 109
Levitus, S., J. Antonov, T. Boyer, and C. Stephens (2000). Warming of the world ocean, *Science*, 287, 2225–2229.
Lorbacher K., D. Dommenget, P.P. Nijler, A. Kohl (2006). Ocean mixed layer depth: A subsurface proxy of ocean-atmosphere variability, *Journal of Geophysical Research*, vol. 111

Particulate Organic Carbon (POC), Particulate Organic Nitrogen (PON). One litre of water sample at 10 m depth has been taken from the 8h CTD cast. This water sample has been used to do determine both Particulate Organic Carbon and Nitrogen (POC/PON) by vacuum filtration through GF/F filters of 0.7 μm . These measures will be used to validate satellite measurements of ocean colour.

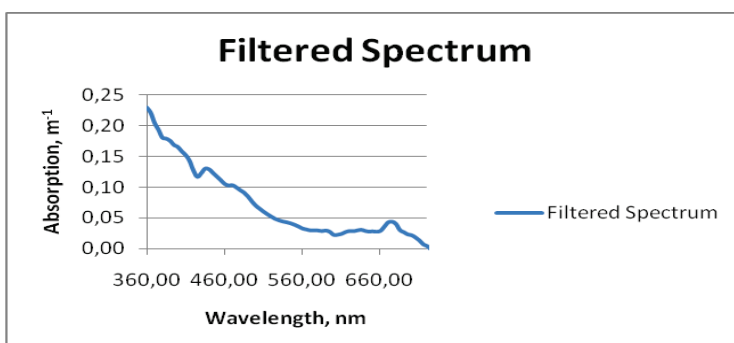
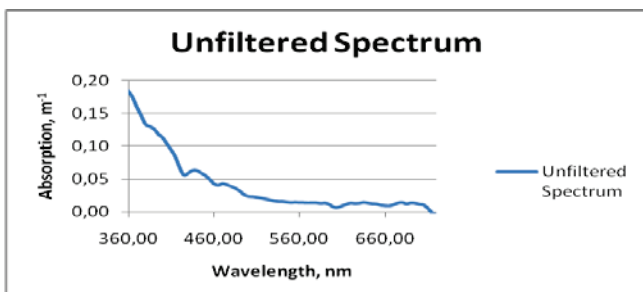
Optical measurements

- Michael Kehoe -

Spectrally resolved light absorption and light flux was measured. The objectives for measuring both light spectra and the wavelength specific absorption properties of sampled water were threefold. First, measurement of wavelength specific absorption in raw water compliments the identification of pigments by other methods such as HPLC. Second, due to the differences in wavelength absorption, quantification of the species specific absorption properties is necessary for the calibration of phytoplankton competition models. Finally, measurement of in situ light levels at different wavelengths compliments other analysis carried out on the cruise to better in form classification of the different water types encountered and to inform satellite based estimates of primary production.

Wavelength Specific Absorption. At every station water samples were measured for light absorption. These measurements were made with an a-sphere™ (Hobilabs) spectrophotometer. At all stations, the wavelength specific absorption of raw water sampled at 10 metres, plus at least one other depth, was carried out on all casts. At all stations, in some cases, the wavelength specific absorption of water filtered through 0.7 micron (GF/F) filters was also measured. In these instances the absorption signals measured in the filtered samples could be subtracted from the signal measured in the raw samples to yield an estimate of absorption by phytoplankton pigments (see figure below).

Light Spectra. At some stations the in situ wavelength specific light flux was measured. These measurements were made using a RAMSES™ wavelength radiometer (TriOS). This data can be used to compared with the absorption data collected with the a-sphere.



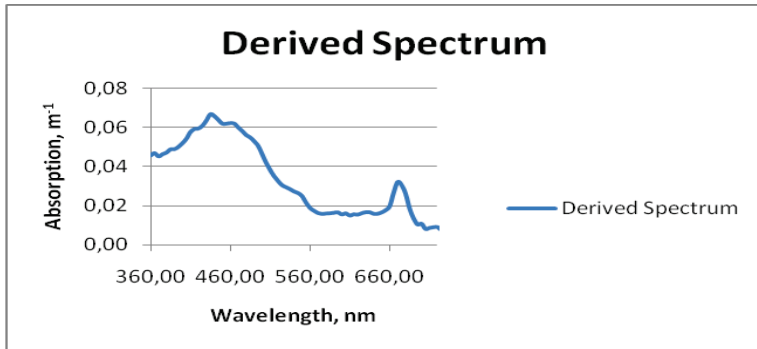


Figure legend. The filtered spectrum is subtracted from the unfiltered spectrum yielding the derived spectrum, which is an estimate of phytoplankton pigment absorption.

Flow cytometric abundances of phytoplankton, bacteria and viruses

- Richard Doggen, Nina Schuback, Kristina Mojica, Emma Shelford and Corina Brussaard -

For all stations, each CTD and each depth samples were taken for phytoplankton, bacteria and viruses. Furthermore, additional samples from various assays and experimental incubations were analyzed and/or sampled and fixed. Phytoplankton samples were measured fresh using flow cytometry onboard, whereas bacteria and viruses were fixed (glutaraldehyde EM-grade, 0.5% final concentration), flash frozen in liquid nitrogen and stored at -80 degrees Celsius until analysis in the NIOZ home lab upon arrival of RV Pelagia in The Netherlands (end of May 2011). The basic instrument applied for single-cell analysis of the phytoplankton community was a bench top flow cytometer, Beckton Dickinson FACSCalibur. The instrument is equipped with a 15mW Argon laser (488nm excitation), which has an emission in the green, orange and red light spectrum. In addition, forward and side light scatter are collected.

Fresh phytoplankton populations were discriminated by red chlorophyll autofluorescence. Algal community composition was characterized based on the cellular bio-optical properties of the algal cells, including pigment autofluorescence, forward- and side scatter. Serial size fractionation of 15 mL of the natural community using 10, 8, 5, 3, 2, 1 and 0.8 μm pore-size PC filters showed that most cells detectable using flow cytometry were in the southern stations typically $<1 \mu\text{m}$ in diameter. The more northern stations showed a larger contribution of the larger sized cells (5-20 μm diameter). However, the algal abundances were relatively low. It has to be noted that before this cruise started the climate in the northern part was mainly dominated by low-pressure areas, which enhanced mixing of the water column consequently mixed the algal community down to deeper depths.

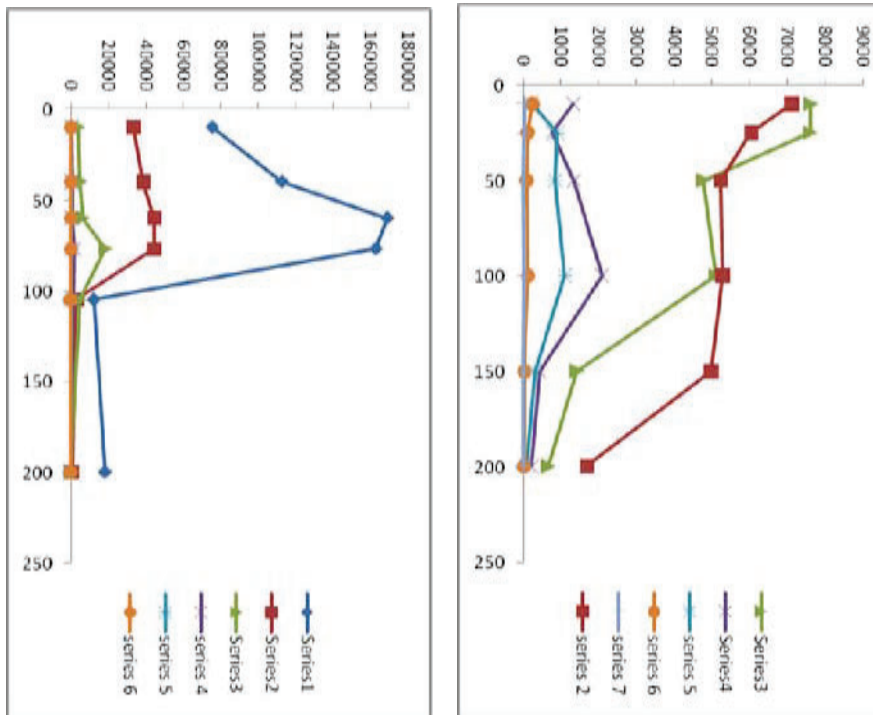


Figure legend. Depth profiles of algal abundance from station 2 and station 30, representing stations with the stratified southern stations and the well-mixed northern stations, respectively. Series 1 represents the prokaryotic *Prochlorococcus*, series 2 the prokaryotic *Synechococcus*, series 3 Picoeukaryotes group I, series 4, Picoeukaryotes group II, series 5 Nanoeukaryotes group III, series 6 Nanoeukaryotes group IV and series 7 Nanoeukaryotes group V. Station 2 (first plot) is dominated by prokaryotic *Prochlorococcus*, whereas at station 30 (second plot) the larger-sized eukaryotic algae can be found (series4-7).

Algal fluorescence, translocation experiments and Cd-isotope sampling

- Klaas Timmermans, Nina Schuback, Willem vd Poll, Patrick Rozema –

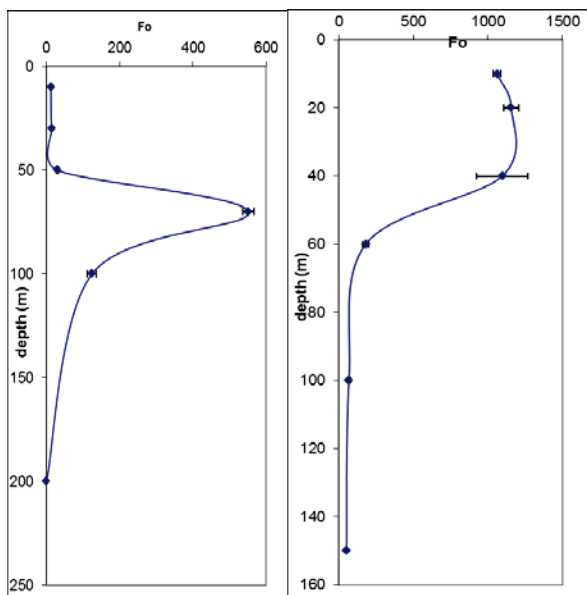
As part of subproject 2 of the Stratiphyt project, the following measurements, experiments and sampling were performed during the Stratiphyt-II cruise:

1) fluorescence measurements, 2) translocation experiments, 3) Cd isotope fractionation sampling.

Ad 1). Fluorescence measurements. Measurements were made of autofluorescence (F0), maximum fluorescence (Fm) and photosynthetic efficiency (Fv/Fm, with Fv the variable fluorescence) using a Walz (Walz, Germany) WATER-PAM. All stations and all casts were sampled for all depths. Measurements were made in duplicate in dark adapted (15 minutes minimum) samples.

Autofluorescence is an overall measure of phytoplankton biomass, including the whole population from large to small cells. The photosynthetic efficiency is an indicator of the physiological performance of the phytoplankton, with values of 0.6 to 0.7 typical for “healthy” phytoplankton.

A preliminary analysis of the measurements of the depth profiles show a clear distinction between stations with a Deep Chlorophyll Maximum (DCM) (stations in the southern part of the cruise) and stations without a DCM, where Chlorophyll was found in the surface layer (stations in the northern part of the cruise). Typical examples of both situations are depicted below.



Station 1 cast 2
 Figure legend: F_0 (autofluorescence in arbitrary units) versus depth (m).

Station 9 cast 1.

Figure legend: F_0 (autofluorescence in arbitrary units) versus depth (m).

The photosynthetic efficiency (F_v/F_m) showed limited variability with depth. In general, the photosynthetic efficiencies varied between 0.50 and 0.70, indicative of physiologically healthy cells. The results of the fluorescence measurements will be topic of further interpretation in the months to come. All results of the fluorescence measurements are in the database, and are available for the cruise participants.

Ad 2). Translocation experiments. In order to manipulate the phytoplankton growing conditions and to simulate enhanced or reduced mixing in the surface layers, so-called translocation experiments were performed during the cruise. In total 3 experiments (A, B, C) were done. During CTD casts water, from 500 m depth (nutrient-rich water, hereafter “deep water”) and water from the DCM (“surface water”) or chlorophyll maximum was collected. Upon recovery to Pelagia, water from the CTD bottles was used to fill the 20 L polycarbonate incubation bottles. Each bottle received 10 liters of unfiltered surface water. This water contained the phytoplankton inoculum for the experiment. Next, 4 bottles were amended with filtered deep water, simulating a nutrient pulse. Finally, 4 incubation bottles received 10 liters of filtered surface water. In the incubators on the aft-deck of Pelagia, 4 bottles were placed in the high light incubator (maximum 180 micromol photons $m^{-2} s^{-1}$), 4 bottles in the low light incubator (80 micromol photons $m^{-2} s^{-1}$). The reduction of light was achieved by applying mosquito maze and/or a floor mat.

Overview and coding of the different conditions in the translocation experiments:

- LL: Low Light, surface phytoplankton filtered surface water (duplo),
- HL: High Light, surface phytoplankton, filtered surface water (duplo),
- LL mix: Low light, surface phytoplankton filtered deep water (duplo),
- HL mix: High Light, surface phytoplankton, filtered deep water (duplo).

The incubators were connected to the ships seawater system, thereby maintaining surface seawater temperature during the incubations. Typically, an experiment lasted 5 days. The following measurements were done daily: flow cytometry (phytoplankton, bacteria and virus enumeration),

dissolved nutrients (NO_x, NO₂, PO₄, NH₄), fluorescence measurements (autofluorescence F₀, maximum fluorescence F_m and photosynthetic efficiency F_v/F_m, with F_v the variable fluorescence) . At the end of the incubations the following additional samples were collected: HPLC (Chl a concentration), DGGE (species composition), lugol (species composition), and viral DNA.

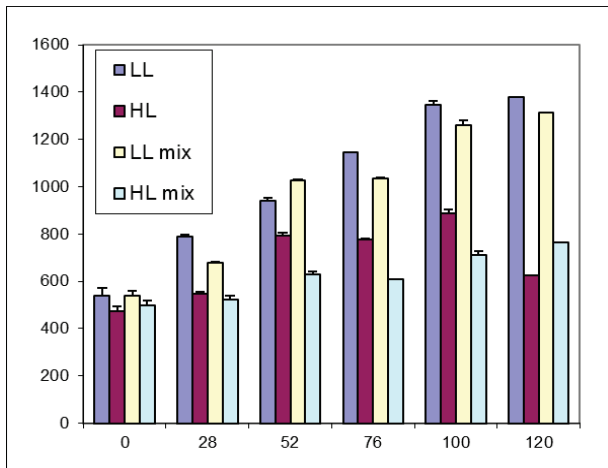


Figure legend: F₀ from translocation experiment C: autofluorescence F₀ (arbitrary units) versus time (hours)

Obviously, low light incubations performed best over time, with addition of nutrients having no additional effects on F₀. Other analyses need to be done in the home laboratory.

Ad 3) Cadmium isotope fractionation sampling. Water from 3 CTD casts was collected for determination of stable cadmium isotope fractionation. It is known that the stable cadmium isotopes are fractionated. It is unknown which processes cause this fractionation. In order to determine whether phytoplankton has a role in cadmium isotope fractionation (discrimination the lighter against the heavier isotopes), filtered seawater samples from different depths were collected. In this water the cadmium isotope fractionation will be measured and related to the presence and activity of phytoplankton.

Primary production phytoplankton

- Santiago Gonzalez and Willem vd Poll –

Phytoplankton productivity was determined at every main station by spiking samples with ¹⁴C Sodium bicarbonate. From two depths samples were incubated under a range of 20 light intensities (from 4 to 890 μmol photon) for 3 hours at in situ temperature. 20 transparent scintillation vials were filled with 5 ml seawater from the CTD-cast and to each vial 10 μCi Sodium bicarbonate was added. At 3 additional vials 250 μL 6N HCl was added and were left in the fumehood to let de ¹⁴C evaporate. The other 20 were placed in the incubator on fixed places with a known light value. After 3 h incubation photosynthesis in the light bottles was also stopped with HCl and left in the fumehood for 24 h. After this time for all vials the acid was neutralized with 250 μL 6N NaOH and

about 20 ml scintillation cocktail Ultima Gold was added. Samples were counted directly using a scintillation counter PerkinElmer TriCarb 2810.

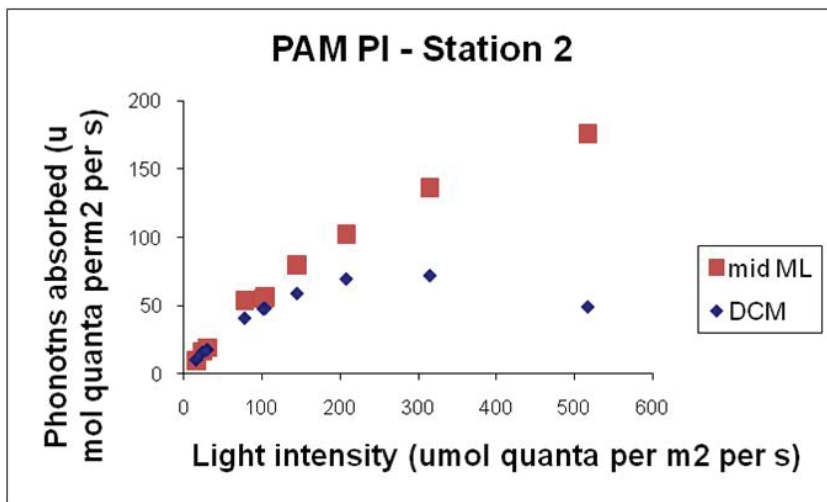


Figure legend. Photosynthesis vs irradiance responses determined using PAM fluorometry showing distinct differences in photosynthetic capacity between a sample from the mixed layer and a sample from the deep chlorophyll maximum of station 2.

Phytoplankton community structure, photo-acclimation and lipid composition

- Willem vd Poll and Patrick Rozema -

During the Stratiphyt 2 cruise samples were collected to gain insight in phytoplankton abundance and species composition. Furthermore, experiments were conducted onboard that provide insight in the phytoplankton photosynthesis and photoacclimation state.

Phytoplankton taxonomic composition and abundance. Phytoplankton taxonomic composition and abundance was determined by filtering 10 l water samples on GF/F for several depths at every station. Pigments on the frozen filters will be separated by HPLC and identified by retention time and diode array spectroscopy. Chlorophyll a (and divenyl chlorophyll a) will be used as an indicator for algal biomass because this pigment is present in all algae. The chlorophyll a concentration can be compared to the in situ determined chlorophyll a concentration from the fluorescence sensor on the CTD frame. Furthermore, specific marker pigments can be used to estimate the contribution of specific taxonomic groups to the total phytoplankton population. In addition, the abundance of photo protective pigments relative to chlorophyll a can provide information on the photoacclimation state of the phytoplankton sample (i.e. if phytoplankton is acclimated to low or high light). This ratio can also be used as an indicator for vertical mixing, because the abundance of these pigments change on a time scale of hours. In addition to pigment samples, also samples were fixed for microscopic examination. Furthermore, samples were obtained for DNA extraction, which after amplification can be separated onto a DGGE gel. This method can also reveal changes in phytoplankton composition.

Phytoplankton sensitivity to excess light. In the upper meters of the water column phytoplankton can experience excess light, which can inhibit photosynthesis and growth (photoinhibition). The magnitude of photoinhibition depends on phytoplankton species composition and photoacclimation state. Phytoplankton sensitivity to excess light was investigated at all main stations in samples from two depths. Samples were exposed to excess light under in situ temperature and recovery of photosynthesis was determined afterwards in low light using a pulse amplitude modulated fluorimeter (PAM).

Phytoplankton light absorption. Samples were obtained from two depths of all main stations to determine the chlorophyll specific phytoplankton absorption cross section. This parameter is needed for primary production estimates. Results from the filter pad method will be compared with in situ determined phytoplankton absorption.

Phytoplankton viral lysis and microzooplankton grazing rates

- Kristina Mojica and Paul O'Connor -

An adaption of the dilution assay by Landry & Hassett (1982), was applied to simultaneously estimate viral lysis and microzooplankton grazing. The method was applied to water collected from one depth at every main station of the Stratiphyt cruise. A series of dilutions were prepared to measure 24h loss rates in the pico- and nanophytoplankton. For each experiment, 40 liters of natural water obtained from the CTD cast was collected from either the mid DCM (deep chlorophyll maximum) depth, which ranged from 50-100 m (first leg of the cruise) or the mid ML depth (mixed layer), which typically ranged from 10-20 m. Ten liters of the collected water was filtered through AcroPak 200 SUPOR membrane filters with a pore size of 0.45 μm to produce grazers-free water. The principle is that the removal of grazers by dilution allows the algal cells to increase in standing stock over the measured 24 h period. The difference in algal concentration over the period; therefore, provides an estimate of algal growth rate. Plotting the growth rate against the dilution, the slope of the linear regression represents the loss rate due to microzooplankton grazing. Statistical analysis is used to test the significance of the slope. Ten liters of collected water was also filtered using Vivaflow 200 cartridges (Sartorius) with a 30 KDa cutoff to produce grazers and virus-free water, which provides the loss rate of grazing and viral lysis. From the difference between the two dilutions series the actual virally mediated algal mortality rate can be calculated. Using 1 L polycarbonate incubation bottles, natural water (sieved through 200 μm mesh-size) was diluted with the 0.45 μm and 30 KDa filtrate to 100, 70, 40 and 20% of the total volume (all dilutions in triplicate). Subsamples were taken at T=0 and T=24, the phytoplankton was measured fresh using the bench top flow cytometer, Becton Dickinson FacsCalibur and samples for bacterial and viral abundances were fixed using gluteraldehyde (0.5% final). All incubation bottles were closed (without air bubbles) and placed in an incubator at in situ temperature and irradiance.

Data processing and analysis of fixed samples will be done back at the homelab subsequent to the cruise.

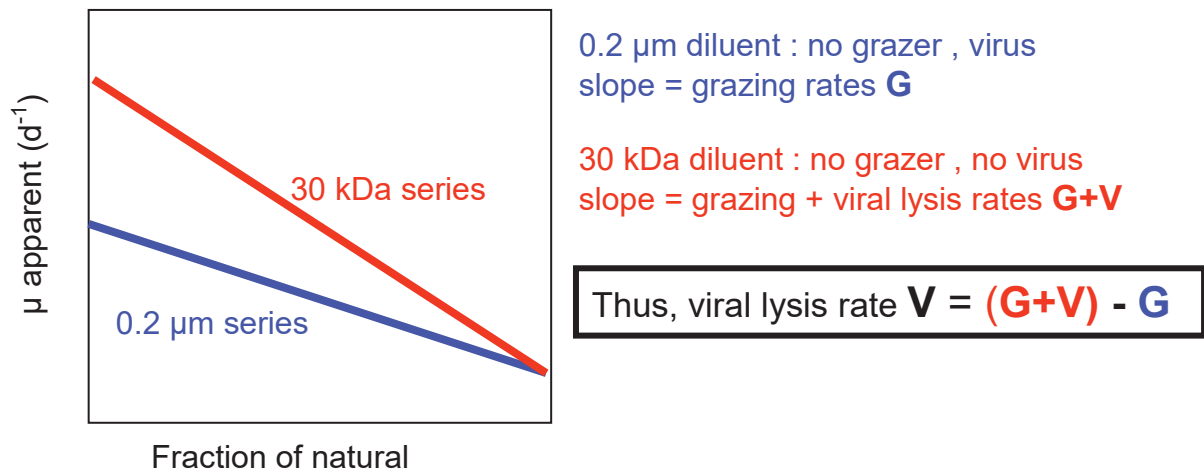


Figure legend: Dilution method principle.

Determination of lytic / lysogenic viral infection and grazing of prokaryotes

- Kristina Mojica and Niels Schoffelen -

Grazing of bacteria was investigated using by filtration experiments. Filtration grazing experiments were completed by comparing the abundance of bacteria in whole water incubations and water from which grazers had been removed by 0.8 μm filtration. In addition a further 0.2 μm filtered treatment was prepared to monitor adsorption of organisms to the incubation vessels walls. Samples were incubated under the temperature and approximate light conditions of the water depth at the collection station. Subsamples were taken at regular intervals for bacteria and viruses counts, these samples were flash frozen after gluteraldehyde (0.5%) fixation for 15-30 min at 4°C. Samples will be analysis by flow cytometry at the laboratory. Acquisition of the results will only be possible after the analysis of these samples. These experiments were completed at two to three depths at all the main stations.

Rates of lytic viral infection were determined according to the method of Winget et al. (2005). Briefly the bacterial fraction was concentrated and resuspended in virus-free water generated by tangential flow filtration. In this way further infection of the bacteria was prevented and the level of lytic infection in the existing population could be determined by monitoring the production of new viruses and loss of bacteria. Samples were fixed and frozen for bacterial and viral enumeration every 3 h for 24 h. Rates of lysogenic infection were determined by preparing addition replicates and adding the antibiotic Mitomycin C at a final concentration of 1 μg per ml to trigger the lytic production of any lysogenic phage incorporated into the bacterial population. These experiments were completed at two to three depths at all the main stations. Results from these experiments will become available after the analysis of bacterial and viral samples back in the NIOZ home lab.

Ammonium Regeneration by Viruses and Grazers of Bacteria

- Emma Shelford -

The objective of this experiment was to determine ammonium regeneration mediated by viruses and grazers of bacteria. When viruses infect bacteria, the bacteria break apart and release the contents of their cells to the environment. Other bacteria can use these released cellular contents for their own growth and respiration. Ammonium is often produced as a by-product of bacterial metabolism. Grazers of bacteria also excrete ammonium as a by-product of their own metabolism. Ammonium is an important source of nitrogen for phytoplankton, especially in stratified waters where nitrate is scarce and nutrient recycling provides the majority of nutrients for primary production. This cruise track allowed a comparison of ammonium regeneration mediated by viruses and grazers in waters of different stratification and mixing. It is expected that the relative importance of viruses and grazers in ammonium regeneration will change depending on the stratification of the water column. Water was obtained from selected stations (stations 0, 2, 3, 5, 7, 11, 15, 18, 22, 25, and 29) at the mid-mix layer depth (from 40 to 15 metres, depending on the stratification of the water at each station).

To determine ammonium regeneration by grazers of bacteria and by bacteria using viral lysis products, viruses were removed using a bacterial concentration method. Water was passed through 0.8 µm pore-size filters to remove grazers of bacteria, and then concentrated over a tangential flow filter system to remove particles less than 0.2 µm. The concentrated water was reconstituted with virus-free seawater. In this way, three treatments were produced: whole water to determine regeneration by grazers and viruses, 0.8 µm filtered water to determine regeneration mediated by viruses, and virus-reduced water to determine regeneration by bacteria alone. Ammonium labeled with the stable isotope of nitrogen (¹⁵N) was added to incubations at the end of the experiment to determine ammonium uptake rates. Incubations were stopped after 2 to 4 hours by filtration through 0.2 µm filters. These filters will be later analysed for nitrogen content and isotopic composition by mass spectrometry. Samples for microorganism counts, ammonium concentrations, and chlorophyll concentrations were taken, to be later analysed in the laboratory after the cruise.

Grazing experiments using fluorescently labelled prey

- Govert van Noort –

During Stratified cruise II from Canary Island to Iceland grazing rates on bacteria, cyanobacteria and algae by Heterotrophic nanoflagellates (HNF) and microzooplankton is investigated and measured by adding fluorescently labeled prey. We have used three types of prey FLA (Fluorescently Labeled Algae), FLB (Fluorescently Labeled Bacteria), FLC (Fluorescently Labeled cyano-bacteria).

At every head station fluorescently labeled bacteria, cyanobacteria and algae were added to a volume of 1 liter seawater sample at approximately 10% of the natural concentration. Grazing was determined by monitoring the concentration of labeled prey at the start of the experiment and after 24 hours. The analyses was done by preparation of filters. On the filters the fluorescence green prey will be counted by epifluorescence microscopy.

The protocol of Sherr and Sher was followed to prepare the fluorescence prey. The stain we use is DTAF. It is a good stain because after 24 hours in 0.2 filtered seawater in daylight you keep the same numbers as you start at time zero. They did not disintegrate..

The three different labeled prey FLA, FLB, FLC were added at every head station at 3 depth at three bottles per depth when a deep chlorophyll maximum is present. When no deep chlorophyll maximum was present at two depth. At time zero and at time 24h a 20ml sample was taken out of every bottle and filtered over a 0.2 um filter. The difference between the numbers on T24 and T0 gives the grazing rate of the different added prey species At the NIOZ all the slides will be counted.

Bacterial secondary production

- Santiago Gonzalez -

Heterotrophic bacterial secondary production was measured using Tritium-labeled Leucine, L-[3,4,5 -³H (N)- 142,2 Ci/mmol. Maximum three depth were samples (below DCM, DCM and Mixed layer) at each mean station from the CTD cast. Seawater was added into 4 sterile 15 ml tubes (Greiner Inc). To one of the four tubes 0.5 ml formaldehyde (37 %) was added in order to kill the bacteria (blank). Then 30 µL ³H-Leucine (50 µCi) was added in each vial. Incubation time was 30-60 and 90 minutes at *in situ* temperature. After the incubation time growing was stopped with formaldehyde and samples were filtered with 0.2 µm filters. After rinsing with 5% trichloroacetic acid (2 times 5 minutes) filters were placed in scintillation vials and 8 ml UltimaGold scintillation cocktail was added. Samples were measured after 24 hours using PerkinElmer Tricarb 2910 TR scintillation counter. At station 25, 27, 29 and 30 extra incubations were made adding 100 µCi Leucine.

Phytoplankton Sinking Rate Determination

-Kristina Mojica -

The sinking rates of phytoplankton were determined at several main stations over the course of the cruise. Sinking rates were permitted by the use of specially designed ship-board SETCOL devices, wherein a settling column is held in a 2-dimensional gimbal apparatus which eliminates the turbulence induced by the ship's roll. The column is gently filled with a homogeneous seawater sample and allowed to settle undisturbed for a set period of time under in-situ light and temperature conditions. A control consisting of a 1 L clear plastic Nalgene bottle was also filled and incubated under in-situ conditions for the duration of settlement. A 1 L sample was also filtered onto a GF/F filter for HPLC analysis (storage of filters at -80 degrees Celsius until analysis in the NIOZ home lab). A 2 ml sample was also analyzed for flow cytometric analysis of phytoplankton. After settling, the upper portion of the column is slowly sampled by opening a valve located on the side of the column. The middle fraction is then drained and the remaining bottom fraction sampled via a valve located on the bottom of the column. Two milliliter subsamples of both the bottom fraction and the control were taken for flow cytometric analysis of phytoplankton and the remaining volume was filtered onto a GF/F filter for HPLC analysis.

Mesozooplankton secondary production and biomass

- **Kirsten Kooijman** -

During this cruise the mesozooplankton were collected using a vertical net with a net opening of 0.354 m² and equipped with a 300 µm mesh size. The sampled depth layer was typically 100 meters. Usually 3 net catches were done at each station, two for taxonomy and one for the starvation experiment. The first two catches are collected in a 50 mL LDPE bottle, 5% formalin was added to fixate the samples. The third catch is used for the starvation experiment, where a zooplankton catch were split in several more or equal parts and added to bottles with GF/F (0.7µm nominal pore size) filtered seawater from HPLC filtrations by W vd Poll. The zooplankton from the bottles were collected at discrete time intervals and frozen at -80°C for later Chlorophyll a (phaeophytine) gut contents analysis at the lab. From the rate of gut contents loss with time and the initial gut content, the grazing (ingestion) rate can be calculated.

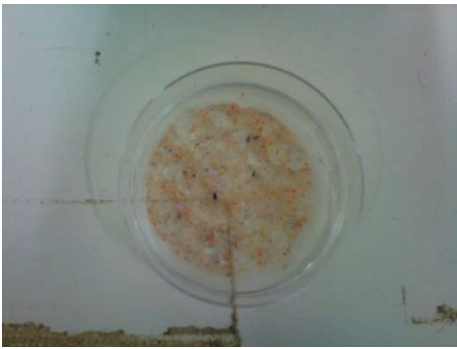


Figure legend: Copepods on filter in Petridish

APPENDIXES

Appendix 1. Logbook ship's scientific activities STRATIPHYT-II cruise 2011

Appendix 2. Onboard database STRATIPHYT-II cruise 2011

Appendix 3. Masterfile STRATIPHYT-II cruise 2011 – per participant

Appendix 4. Instruments configuration file STRATIPHYT-II cruise 2011

APPENDIX 1

Appendix 1. Logbook ship's scientific activities STRATIPHYT-II cruise 2011

	A	B	C	D	E	F	G	H	I	J
51	09/04/2011	12:17	N 30° 1.02336'	W 15° 6.22896'	OPE	SCAMP	SCAMP	3345CAMP23	1	12
52	09/04/2011	12:25	N 30° 0.97362'	W 15° 6.35928'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES4	1	13
53	09/04/2011	13:16	N 30° 1.26174'	W 15° 4.37448'	OPE	SCAMP	SCAMP	3345CAMP24	1	14
54	09/04/2011	13:33	N 30° 1.15218'	W 15° 4.55772'	OPE	SCAMP	SCAMP	3345CAMP25	1	15
55	09/04/2011	13:48	N 30° 1.02462'	W 15° 4.6764'	OPE	SCAMP	SCAMP	3345CAMP26	1	17
56	09/04/2011	14:08	N 30° 0.86664'	W 15° 4.94232'	OPE	SCAMP	SCAMP	3345CAMP27	1	18
57	09/04/2011	14:23	N 30° 0.70932'	W 15° 5.06628'	OPE	SCAMP	SCAMP	3345CAMP28	1	16
58	09/04/2011	14:56	N 30° 1.2075'	W 15° 4.20654'	OPE	Ultra Clean CTD	UCCTD	334UCCTD10	1	19
59	09/04/2011	16:31	N 30° 5.71818'	W 15° 3.68292'	OPE	Torpedo pump	TORPEDO	334TORPEDO1	1	19
60	09/04/2011	22:58	N 30° 40.0488'	W 14° 58.25688'	OPE	Torpedo pump	TORPEDO	334TORPEDO1	1	19
61										
62	10/04/2011	5:35	N 31° 13.2105'	W 14° 52.19556'	OPE	Ultra Clean CTD	UCCTD	334UCCTD11	2	1
63	10/04/2011	7:19	N 31° 13.20546'	W 14° 52.21117'	OPE	Ultra Clean CTD	UCCTD	334UCCTD12	2	2
64	10/04/2011	8:12	N 31° 13.1958'	W 14° 52.19544'	OPE	Vertical Net 300	WP200	334WP20010	2	3
65	10/04/2011	8:25	N 31° 13.21596'	W 14° 52.2066'	OPE	Vertical Net 300	WP200	334WP20011	2	4
66	10/04/2011	8:39	N 31° 13.21308'	W 14° 52.20498'	OPE	Vertical Net 300	WP200	334WP20012	2	5
67	10/04/2011	9:49	N 31° 13.19712'	W 14° 52.1823'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES5	2	6
68	10/04/2011	10:22	N 31° 13.22682'	W 14° 52.22814'	OPE	SCAMP	SCAMP	3345CAMP29	2	7
69	10/04/2011	10:37	N 31° 13.23648'	W 14° 52.14588'	OPE	SCAMP	SCAMP	3345CAMP30	2	8
70	10/04/2011	10:51	N 31° 13.27356'	W 14° 52.08582'	OPE	SCAMP	SCAMP	3345CAMP31	2	9
71	10/04/2011	11:23	N 31° 13.39476'	W 14° 52.13244'	OPE	SCAMP	SCAMP	3345CAMP32	2	10
72	10/04/2011	11:41	N 31° 13.2807'	W 14° 52.05954'	OPE	SCAMP	SCAMP	3345CAMP33	2	11
73	10/04/2011	12:02	N 31° 13.2807'	W 14° 52.05954'	OPE	SCAMP	SCAMP	3345CAMP34	2	12
74	10/04/2011	14:32	N 31° 13.12812'	W 14° 52.32048'	OPE	Ultra Clean CTD	UCCTD	334UCCTD13	2	13
75	10/04/2011	19:27	N 31° 13.18446'	W 14° 52.19268'	OPE	Ultra Clean CTD	UCCTD	334UCCTD14	2	14
76	10/04/2011	20:13	N 31° 13.19364'	W 14° 52.21146'	OPE	Vertical Net 300	WP200	334WP20013	2	15
77	10/04/2011	20:26	N 31° 13.2009'	W 14° 52.1973'	OPE	Vertical Net 300	WP200	334WP20014	2	16
78	10/04/2011	20:40	N 31° 13.19328'	W 14° 52.20852'	OPE	Vertical Net 300	WP200	334WP20015	2	17
79	11/04/2011	5:24	N 31° 13.15938'	W 14° 52.22424'	OPE	Ultra Clean CTD	UCCTD	334UCCTD15	2	18
80	11/04/2011	7:00	N 31° 13.20306'	W 14° 52.20612'	OPE	Ultra Clean CTD	UCCTD	334UCCTD16	2	19
81	11/04/2011	9:33	N 31° 22.80828'	W 14° 50.54688'	OPE	SCAMP	SCAMP	3345CAMP34	2	20
82	11/04/2011	9:51	N 31° 22.83342'	W 14° 50.33796'	OPE	SCAMP	SCAMP	3345CAMP35	2	21
83	11/04/2011	10:06	N 31° 22.8786'	W 14° 50.23326'	OPE	SCAMP	SCAMP	3345CAMP36	2	22
84	11/04/2011	10:23	N 31° 22.95192'	W 14° 50.13462'	OPE	SCAMP	SCAMP	3345CAMP37	2	23
85	11/04/2011	10:42	N 31° 23.02296'	W 14° 50.06172'	OPE	SCAMP	SCAMP	3345CAMP38	2	24
86										
87	11/04/2011	19:34	N 32° 8.30598'	W 14° 42.58734'	OPE	Ultra Clean CTD	UCCTD	334UCCTD17	2B	1
88	11/04/2011	20:26	N 32° 8.30412'	W 14° 42.6042'	OPE	Vertical Net 300	WP200	334WP20016	2B	2
89	11/04/2011	20:41	N 32° 8.30286'	W 14° 42.60804'	OPE	Vertical Net 300	SCAMP	3345CAMP39	2B	3
90	11/04/2011	20:56	N 32° 8.29308'	W 14° 42.6123'	OPE	Vertical Net 300	SCAMP	3345CAMP40	2B	4
91										
92	12/04/2011	5:26	N 32° 49.19412'	W 14° 35.3889'	OPE	Ultra Clean CTD	UCCTD	334UCCTD18	3	1
93	12/04/2011	7:03	N 32° 49.20234'	W 14° 35.38806'	OPE	Ultra Clean CTD	UCCTD	334UCCTD19	3	2
94	12/04/2011	7:58	N 32° 49.19772'	W 14° 35.4162'	OPE	Vertical Net 300	WP200	334WP20017	3	3
95	12/04/2011	8:13	N 32° 49.2105'	W 14° 35.4147'	OPE	Vertical Net 300	WP200	334WP20018	3	4
96	12/04/2011	8:26	N 32° 49.19958'	W 14° 35.42778'	OPE	Vertical Net 300	WP200	334WP20019	3	5
97	12/04/2011	9:24	N 32° 49.19196'	W 14° 35.3784'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES6	3	6
98	12/04/2011	10:13	N 32° 49.15674'	W 14° 35.3802'	OPE	SCAMP	SCAMP	3345CAMP41	3	7
99	12/04/2011	10:30	N 32° 49.17864'	W 14° 35.16168'	OPE	SCAMP	SCAMP	3345CAMP42	3	8
100	12/04/2011	10:50	N 32° 49.26762'	W 14° 34.93548'	OPE	SCAMP	SCAMP	3345CAMP43	3	9

	A	B	C	D	E	F	G	H	I	J
101	12/04/2011	11:07	N 32° 49.3833'	W 14° 34.84932'	OPE	SCAMP	SCAMP	3345CAMP44	3	10
102	12/04/2011	11:29	N 32° 49.35012'	W 14° 34.66134'	OPE	SCAMP	SCAMP	3345CAMP45	3	11
103	12/04/2011	11:46	N 32° 49.35702'	W 14° 34.58292'	OPE	SCAMP	SCAMP	3345CAMP46	3	12
104	12/04/2011	12:05	N 32° 49.35576'	W 14° 34.51962'	OPE	SCAMP	SCAMP	3345CAMP47	3	13
105	12/04/2011	12:21	N 32° 49.31376'	W 14° 34.44678'	OPE	SCAMP	SCAMP	3345CAMP48	3	14
106	12/04/2011	12:40	N 32° 49.32048'	W 14° 34.32522'	OPE	SCAMP	SCAMP	3345CAMP49	3	15
107	12/04/2011	13:08	N 32° 49.2705'	W 14° 34.19094'	OPE	SCAMP	SCAMP	3345CAMP51	3	16
108	12/04/2011	13:24	N 32° 49.3032'	W 14° 34.11912'	OPE	SCAMP	SCAMP	3345CAMP52	3	17
109	12/04/2011	13:40	N 32° 49.38108'	W 14° 34.017'	OPE	SCAMP	SCAMP	3345CAMP53	3	18
110	12/04/2011	13:57	N 32° 49.3992'	W 14° 33.8733'	OPE	SCAMP	SCAMP	3345CAMP54	3	19
111	12/04/2011	14:47	N 32° 49.2297'	W 14° 35.42364'	OPE	Ultra Clean CTD	UCCTD	334UCCTD20	3	19
112										
113	13/04/2011	5:25	N 34° 43.1835'	W 14° 15.60408'	OPE	Ultra Clean CTD	UCCTD	334UCCTD21	5	1
114	13/04/2011	7:11	N 34° 43.18566'	W 14° 15.59322'	OPE	Ultra Clean CTD	UCCTD	334UCCTD22	5	2
115	13/04/2011	7:58	N 34° 43.17846'	W 14° 15.606'	OPE	Vertical Net 300	WP200	334WP20020	5	3
116	13/04/2011	8:12	N 34° 43.2024'	W 14° 15.61026'	OPE	Vertical Net 300	WP200	334WP20021	5	4
117	13/04/2011	8:26	N 34° 43.18668'	W 14° 15.61908'	OPE	Vertical Net 300	WP200	334WP20022	5	5
118	13/04/2011	9:22	N 34° 43.18668'	W 14° 15.61908'	OPE	RAMSES underwater light sensors	not in casino	not in casino	5	6
119	13/04/2011	10:04	N 34° 43.22658'	W 14° 15.57714'	OPE	SCAMP	SCAMP	3345CAMP55	5	7
120	13/04/2011	10:22	N 34° 43.3116'	W 14° 15.44328'	OPE	SCAMP	SCAMP	3345CAMP56	5	8
121	13/04/2011	10:38	N 34° 43.3683'	W 14° 15.35106'	OPE	SCAMP	SCAMP	3345CAMP57	5	9
122	13/04/2011	10:51	N 34° 43.43196'	W 14° 15.2364'	OPE	SCAMP	SCAMP	3345CAMP58	5	10
123	13/04/2011	11:06	N 34° 43.53282'	W 14° 15.15006'	OPE	SCAMP	SCAMP	3345CAMP59	5	11
124	13/04/2011	11:21	N 34° 43.52646'	W 14° 15.08208'	OPE	SCAMP	SCAMP	3345CAMP60	5	12
125	13/04/2011	11:35	N 34° 43.51614'	W 14° 15.01404'	OPE	SCAMP	SCAMP	3345CAMP61	5	13
126	13/04/2011	11:50	N 34° 43.533'	W 14° 14.91696'	OPE	SCAMP	SCAMP	3345CAMP62	5	14
127	13/04/2011	12:11	N 34° 43.5417'	W 14° 14.88228'	OPE	SCAMP	SCAMP	3345CAMP63	5	15
128	13/04/2011	12:26	N 34° 43.51374'	W 14° 14.88846'	OPE	SCAMP	SCAMP	3345CAMP64	5	16
129	13/04/2011	12:42	N 34° 43.55136'	W 14° 14.8959'	OPE	SCAMP	SCAMP	3345CAMP65	5	17
130	13/04/2011	13:00	N 34° 43.55964'	W 14° 14.86548'	OPE	SCAMP	SCAMP	3345CAMP66	5	18
131	13/04/2011	13:15	N 34° 43.52262'	W 14° 14.89422'	OPE	SCAMP	SCAMP	3345CAMP67	5	19
132	13/04/2011	13:31	N 34° 43.49034'	W 14° 14.91978'	OPE	SCAMP	SCAMP	3345CAMP68	5	20
133	13/04/2011	13:51	N 34° 43.53456'	W 14° 14.86128'	OPE	SCAMP	SCAMP	3345CAMP69	5	21
134	13/04/2011	14:26	N 34° 43.24638'	W 14° 15.58086'	OPE	Ultra Clean CTD	UCCTD	334UCCTD23	5	22
135	13/04/2011	19:27	N 34° 43.21104'	W 14° 15.58938'	OPE	Ultra Clean CTD	UCCTD	334UCCTD24	5	23
136	13/04/2011	20:08	N 34° 43.20348'	W 14° 15.61008'	OPE	Vertical Net 300	WP200	334WP20023	5	24
137	13/04/2011	20:18	N 34° 43.18542'	W 14° 15.5991'	OPE	Vertical Net 300	WP200	334WP20024	5	25
138	13/04/2011	20:33	N 34° 43.19598'	W 14° 15.59754'	OPE	Vertical Net 300	WP200	334WP20025	5	26
139	14/04/2011	5:18	N 34° 43.18668'	W 14° 15.58356'	OPE	Ultra Clean CTD	UCCTD	334UCCTD25	5	27
140	14/04/2011	7:01	N 34° 43.1976'	W 14° 15.59808'	OPE	Ultra Clean CTD	UCCTD	334UCCTD26	5	28
141	14/04/2011	12:07	N 34° 43.24092'	W 14° 15.61458'	OPE	Ultra Clean CTD	UCCTD	334UCCTD27	5	29
142										
143	14/04/2011	19:26	N 35° 31.78128'	W 14° 6.61158'	OPE	Ultra Clean CTD	UCCTD	334UCCTD28	6	1
144	14/04/2011	20:15	N 35° 31.8045'	W 14° 6.62088'	OPE	Vertical Net 300	WP200	334WP20026	6	2
145	14/04/2011	20:30	N 35° 31.79514'	W 14° 6.61914'	OPE	Vertical Net 300	WP200	334WP20027	6	3
146	14/04/2011	20:44	N 35° 31.79952'	W 14° 6.60612'	OPE	Vertical Net 300	WP200	334WP20028	6	4
147										
148	15/04/2011	5:19	N 36° 31.78188'	W 13° 56.39886'	OPE	Ultra Clean CTD	UCCTD	334UCCTD29	7	1
149	15/04/2011	6:59	N 36° 31.79886'	W 13° 56.41488'	OPE	Ultra Clean CTD	UCCTD	334UCCTD30	7	2
150	15/04/2011	7:54	N 36° 31.79232'	W 13° 56.4126'	OPE	Vertical Net 300	WP200	334WP20029	7	3

	A	B	C	D	E	F	G	H	I	J
200	18/04/2011	5:20	N 40° 31.77564'	W 13° 11.40786'	OPE	Ultra Clean CTD	UCCTD	334UCCTD35	11	1
201	18/04/2011	6:56	N 40° 31.79178'	W 13° 11.4315'	OPE	Ultra Clean CTD	UCCTD	334UCCTD36	11	2
202	18/04/2011	7:42	N 40° 31.80546'	W 13° 11.40726'	OPE	Vertical Net 300	WP200	334WP20038	11	3
203	18/04/2011	7:55	N 40° 31.80887'	W 13° 11.391'	OPE	Vertical Net 300	WP200	334WP20039	11	4
204	18/04/2011	8:09	N 40° 31.81386'	W 13° 11.39508'	OPE	Vertical Net 300	WP200	334WP20040	11	5
205	18/04/2011	9:22:24	N 40° 31.82664'	W 13° 11.39034'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSE58	11	6
206	18/04/2011	10:07:00	N 40° 31.80786'	W 13° 11.39772'	OPE	SCAMP	SCAMP	334SCAMP94	11	7
207	18/04/2011	10:27:44	N 40° 31.71828'	W 13° 11.2257'	OPE	SCAMP	SCAMP	334SCAMP95	11	8
208	18/04/2011	10:43:01	N 40° 31.66962'	W 13° 11.1432'	OPE	SCAMP	SCAMP	334SCAMP96	11	9
209	18/04/2011	11:00:00	N 40° 31.63254'	W 13° 11.0064'	OPE	SCAMP	SCAMP	334SCAMP97	11	10
210	18/04/2011	11:16:49	N 40° 31.5711'	W 13° 10.89336'	OPE	SCAMP	SCAMP	334SCAMP98	11	11
211	18/04/2011	11:34:12	N 40° 31.53744'	W 13° 10.73592'	OPE	SCAMP	SCAMP	334SCAMP99	11	12
212	18/04/2011	11:49:49	N 40° 31.47786'	W 13° 10.65426'	OPE	SCAMP	SCAMP	334SCAMP100	11	13
213	18/04/2011	12:06:19	N 40° 31.4058'	W 13° 10.52082'	OPE	SCAMP	SCAMP	334SCAMP101	11	14
214	18/04/2011	12:21:34	N 40° 31.31226'	W 13° 10.3716'	OPE	SCAMP	SCAMP	334SCAMP102	11	15
215	18/04/2011	12:39:12	N 40° 31.18812'	W 13° 10.19388'	OPE	SCAMP	SCAMP	334SCAMP103	11	16
216	18/04/2011	13:02:52	N 40° 31.00512'	W 13° 9.95616'	OPE	SCAMP	SCAMP	334SCAMP104	11	17
217	18/04/2011	13:19:52	N 40° 30.83856'	W 13° 9.79254'	OPE	SCAMP	SCAMP	334SCAMP105	11	18
218	18/04/2011	13:33:41	N 40° 30.78042'	W 13° 9.77952'	OPE	SCAMP	SCAMP	334SCAMP106	11	19
219	18/04/2011	13:49:32	N 40° 30.65784'	W 13° 9.71538'	OPE	SCAMP	SCAMP	334SCAMP107	11	20
220	18/04/2011	14:27:05	N 40° 31.79664'	W 13° 11.41056'	OPE	Ultra Clean CTD	UCCTD	334UCCTD37	11	21
221										
222	18/04/2011	19:57:19	N 41° 14.99232'	W 13° 2.99106'	OPE	Ultra Clean CTD	UCCTD	334UCCTD38	12	1
223	18/04/2011	20:39:43	N 41° 15.00204'	W 13° 2.9991'	OPE	Vertical Net 300	WP200	334WP20041	12	2
224	18/04/2011	20:52:05	N 41° 15.0039'	W 13° 2.99922'	OPE	Vertical Net 300	WP200	334WP20042	12	3
225	18/04/2011	21:06:59	N 41° 14.9973'	W 13° 3.0297'	OPE	Vertical Net 300	WP200	334WP20043	12	4
226										
227	19/04/2011	5:36:47	N 42° 20.40474'	W 12° 52.79574'	OPE	Ultra Clean CTD	UCCTD	334UCCTD39	13	1
228	19/04/2011	7:02:33	N 42° 20.41308'	W 12° 52.78794'	OPE	Ultra Clean CTD	UCCTD	334UCCTD40	13	2
229	19/04/2011	7:46:16	N 42° 20.39274'	W 12° 52.80492'	OPE	Vertical Net 300	WP200	334WP20044	13	3
230	19/04/2011	7:59:59	N 42° 20.40624'	W 12° 52.79352'	OPE	Vertical Net 300	WP200	334WP20045	13	4
231	19/04/2011	8:16:33	N 42° 20.39436'	W 12° 52.81056'	OPE	Vertical Net 300	WP200	334WP20046	13	5
232	19/04/2011	9:27:41	N 42° 20.39982'	W 12° 52.79568'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSE59	13	6
233	19/04/2011	10:16:20	N 42° 20.39988'	W 12° 52.79988'	OPE	SCAMP	SCAMP	334SCAMP108	13	7
234	19/04/2011	10:33:51	N 42° 20.4492'	W 12° 52.96542'	OPE	SCAMP	SCAMP	334SCAMP109	13	8
235	19/04/2011	10:51:39	N 42° 20.60766'	W 12° 53.14896'	OPE	SCAMP	SCAMP	334SCAMP110	13	9
236	19/04/2011	11:06:58	N 42° 20.75922'	W 12° 53.32416'	OPE	SCAMP	SCAMP	334SCAMP111	13	10
237	19/04/2011	11:23:21	N 42° 20.8611'	W 12° 53.53266'	OPE	SCAMP	SCAMP	334SCAMP112	13	11
238	19/04/2011	11:36:40	N 42° 21.04644'	W 12° 53.78064'	OPE	SCAMP	SCAMP	334SCAMP113	13	12
239	19/04/2011	11:52:58	N 42° 21.31596'	W 12° 53.98188'	OPE	SCAMP	SCAMP	334SCAMP114	13	13
240	19/04/2011	12:08:45	N 42° 21.5793'	W 12° 54.13956'	OPE	SCAMP	SCAMP	334SCAMP115	13	14
241	19/04/2011	12:24:58	N 42° 21.84174'	W 12° 54.19692'	OPE	SCAMP	SCAMP	334SCAMP116	13	15
242	19/04/2011	12:39:08	N 42° 22.08696'	W 12° 54.23358'	OPE	SCAMP	SCAMP	334SCAMP117	13	16
243	19/04/2011	12:55:41	N 42° 22.41564'	W 12° 54.28344'	OPE	SCAMP	SCAMP	334SCAMP118	13	17
244	19/04/2011	13:25:10	N 42° 22.63986'	W 12° 54.11586'	OPE	Ultra Clean CTD	UCCTD	334UCCTD41	13	18
245										
246	19/04/2011	19:12:21	N 43° 4.7982'	W 12° 46.77408'	OPE	Ultra Clean CTD	UCCTD	334UCCTD42	14	1
247	19/04/2011	19:51:52	N 43° 4.7856'	W 12° 46.79862'	OPE	Vertical Net 300	WP200	334WP20047	14	2
248	19/04/2011	20:06:22	N 43° 4.76682'	W 12° 46.77882'	OPE	Vertical Net 300	WP200	334WP20048	14	3
249	19/04/2011	20:20:49	N 43° 4.78512'	W 12° 46.7997'	OPE	Vertical Net 300	WP200	334WP20049	14	4

	A	B	C	D	E	F	G	H	I	J
250										
251	20/04/2011	5:22:25	N 44° 16.78734'	W 12° 36.5898'	OPE	Ultra Clean CTD	UCCTD	334UCCTD43	15	1
252	20/04/2011	7:04:58	N 44° 16.79832'	W 12° 36.60066'	OPE	Ultra Clean CTD	UCCTD	334UCCTD44	15	2
253	20/04/2011	7:51:27	N 44° 16.79214'	W 12° 36.58686'	OPE	Vertical Net 300	WP200	334WP20051	15	3
254	20/04/2011	8:05:37	N 44° 16.81602'	W 12° 36.57216'	OPE	Vertical Net 300	WP200	334WP20052	15	4
255	20/04/2011	8:23:31	N 44° 16.79172'	W 12° 36.56016'	OPE	Vertical Net 300	WP200	334WP20053	15	5
256	20/04/2011	9:07:48	N 44° 17.0715'	W 12° 36.28944'	OPE	SCAMP	SCAMP	334SCAMP119	15	6
257	20/04/2011	9:23:38	N 44° 17.26194'	W 12° 36.23694'	OPE	SCAMP	SCAMP	334SCAMP120	15	7
258	20/04/2011	9:43:27	N 44° 17.54658'	W 12° 36.16548'	OPE	SCAMP	SCAMP	334SCAMP121	15	8
259	20/04/2011	9:53:32	N 44° 17.69862'	W 12° 36.09048'	OPE	SCAMP	SCAMP	334SCAMP122	15	9
260	20/04/2011	10:08:14	N 44° 17.95914'	W 12° 36.01842'	OPE	SCAMP	SCAMP	334SCAMP123	15	10
261	20/04/2011	10:22:07	N 44° 18.2124'	W 12° 35.92158'	OPE	SCAMP	SCAMP	334SCAMP124	15	11
262	20/04/2011	10:36:03	N 44° 18.48066'	W 12° 35.74344'	OPE	SCAMP	SCAMP	334SCAMP125	15	12
263	20/04/2011	10:50:40	N 44° 18.75546'	W 12° 35.4906'	OPE	SCAMP	SCAMP	334SCAMP126	15	13
264	20/04/2011	11:07:34	N 44° 19.02918'	W 12° 35.12268'	OPE	SCAMP	SCAMP	334SCAMP127	15	14
265	20/04/2011	11:25:14	N 44° 19.21308'	W 12° 34.6917'	OPE	SCAMP	SCAMP	334SCAMP128	15	15
266	20/04/2011	11:37:59	N 44° 19.4046'	W 12° 34.35402'	OPE	SCAMP	SCAMP	334SCAMP129	15	16
267	20/04/2011	12:05:43	N 44° 19.7862'	W 12° 33.95046'	OPE	Ultra Clean CTD	UCCTD	334UCCTD45	15	17
268										
269	20/04/2011	19:27:17	N 44° 54.85164'	W 12° 31.07364'	OPE	Ultra Clean CTD	UCCTD	334UCCTD46	16	1
270	20/04/2011	20:11:35	N 44° 54.80424'	W 12° 31.15878'	OPE	Vertical Net 300	WP200	334WP20054	16	2
271	20/04/2011	20:24:36	N 44° 54.78702'	W 12° 31.1673'	OPE	Vertical Net 300	WP200	334WP20055	16	3
272	20/04/2011	20:38:26	N 44° 54.8064'	W 12° 31.161'	OPE	Vertical Net 300	WP200	334WP20056	16	4
273										
274	21/04/2011	5:22:41	N 45° 31.794'	W 12° 25.8186'	OPE	Ultra Clean CTD	UCCTD	334UCCTD47	17	1
275	21/04/2011	6:56:07	N 45° 31.82088'	W 12° 25.78344'	OPE	Ultra Clean CTD	UCCTD	334UCCTD48	17	2
276	21/04/2011	7:42:46	N 45° 31.81074'	W 12° 25.79406'	OPE	Vertical Net 300	WP200	334WP20057	17	3
277	21/04/2011	7:56:15	N 45° 31.79352'	W 12° 25.8096'	OPE	Vertical Net 300	WP200	334WP20058	17	4
278	21/04/2011	8:10:26	N 45° 31.79676'	W 12° 25.79202'	OPE	Vertical Net 300	WP200	334WP20059	17	5
279	21/04/2011	9:30:24	N 45° 31.81266'	W 12° 25.8324'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES10	17	6
280	21/04/2011	10:05:31	N 45° 31.88202'	W 12° 26.08968'	OPE	SCAMP	SCAMP	334SCAMP130	17	7
281	21/04/2011	10:21:45	N 45° 32.01294'	W 12° 26.33964'	OPE	SCAMP	SCAMP	334SCAMP131	17	8
282	21/04/2011	10:50:12	N 45° 31.73274'	W 12° 26.16216'	OPE	SCAMP	SCAMP	334SCAMP132	17	9
283	21/04/2011	11:05:51	N 45° 31.5699'	W 12° 26.19198'	OPE	SCAMP	SCAMP	334SCAMP133	17	10
284	21/04/2011	11:22:17	N 45° 31.48302'	W 12° 26.27472'	OPE	SCAMP	SCAMP	334SCAMP134	17	11
285	21/04/2011	11:38:38	N 45° 31.43286'	W 12° 26.22775'	OPE	SCAMP	SCAMP	334SCAMP135	17	12
286	21/04/2011	11:54:03	N 45° 31.48428'	W 12° 26.1258'	OPE	SCAMP	SCAMP	334SCAMP136	17	13
287	21/04/2011	12:08:34	N 45° 31.35822'	W 12° 26.18388'	OPE	SCAMP	SCAMP	334SCAMP137	17	14
288	21/04/2011	12:26:24	N 45° 31.23672'	W 12° 26.32944'	OPE	SCAMP	SCAMP	334SCAMP138	17	15
289	21/04/2011	12:43:37	N 45° 31.11438'	W 12° 26.47572'	OPE	SCAMP	SCAMP	334SCAMP139	17	16
290	21/04/2011	12:59:38	N 45° 31.04076'	W 12° 26.58702'	OPE	SCAMP	SCAMP	334SCAMP140	17	17
291	21/04/2011	13:21:04	N 45° 30.83922'	W 12° 26.80428'	OPE	SCAMP	SCAMP	334SCAMP141	17	18
292	21/04/2011	13:36:20	N 45° 30.69936'	W 12° 26.97516'	OPE	SCAMP	SCAMP	334SCAMP142	17	19
293	21/04/2011	13:51:38	N 45° 30.66696'	W 12° 26.99484'	OPE	SCAMP	SCAMP	334SCAMP143	17	20
294	21/04/2011	14:35:37	N 45° 31.86972'	W 12° 25.83492'	OPE	Ultra Clean CTD	UCCTD	334UCCTD49	17	21
295										
296	21/04/2011	19:31:26	N 46° 16.11024'	W 12° 19.1475'	OPE	Ultra Clean CTD	UCCTD	334UCCTD50	17B	1
297	21/04/2011	20:07:39	N 46° 16.1586'	W 12° 19.11438'	OPE	Vertical Net 300	WP200	334WP20060	17B	2
298	21/04/2011	20:21:43	N 46° 16.1886'	W 12° 18.98934'	OPE	Vertical Net 300	WP200	334WP20061	17B	3
299	21/04/2011	20:35:43	N 46° 16.21326'	W 12° 18.84138'	OPE	Vertical Net 300	WP200	334WP20062	17B	4

	A	B	C	D	E	F	G	H	I	J
300										
301	22/04/2011	5:25:04	N 47° 34.20492'	W 12° 6.62418'	OPE	Ultra Clean CTD	UCCTD	334UCCTD51	18	1
302	22/04/2011	7:01:17	N 47° 34.21782'	W 12° 6.59652'	OPE	Ultra Clean CTD	UCCTD	334UCCTD52	18	2
303	22/04/2011	7:51:05	N 47° 34.20354'	W 12° 6.60474'	OPE	Vertical Net 300	WP200	334WP20063	18	3
304	22/04/2011	8:03:44	N 47° 34.20258'	W 12° 6.58248'	OPE	Vertical Net 300	WP200	334WP20064	18	4
305	22/04/2011	8:17:45	N 47° 34.20912'	W 12° 6.57636'	OPE	Vertical Net 300	WP200	334WP20065	18	5
306									no station 19	
307	23/04/2011	12:05:55	N 49° 54.90372'	W 16° 21.39972'	OPE	Ultra Clean CTD	UCCTD	334UCCTD53	20	1
308	23/04/2011	12:54:38	N 49° 54.87042'	W 16° 20.96154'	OPE	Vertical Net 300	WP200	334WP20066	20	2
309									no station 21	
310	24/04/2011	5:36:51	N 52° 37.30728'	W 16° 29.83355'	OPE	Ultra Clean CTD	UCCTD	334UCCTD54	22	1
311	24/04/2011	6:59:12	N 52° 37.32162'	W 16° 29.85324'	OPE	Ultra Clean CTD	UCCTD	334UCCTD55	22	2
312	24/04/2011	7:44:40	N 52° 37.31502'	W 16° 29.8674'	OPE	Vertical Net 300	WP200	334WP20067	22	3
313	24/04/2011	7:59:42	N 52° 37.30518'	W 16° 29.88786'	OPE	Vertical Net 300	WP200	334WP20068	22	4
314	24/04/2011	8:20:52	N 52° 37.30392'	W 16° 29.84856'	OPE	Vertical Net 300	WP200	334WP20069	22	5
315	24/04/2011	9:27:12	N 52° 37.27812'	W 16° 29.85444'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES11	22	6
316	24/04/2011	10:01:59	N 52° 37.18686'	W 16° 29.8773'	OPE	SCAMP	SCAMP	334SCAMP144	22	7
317	24/04/2011	10:20:17	N 52° 37.14582'	W 16° 30.07362'	OPE	SCAMP	SCAMP	334SCAMP145	22	8
318	24/04/2011	10:35:02	N 52° 37.11678'	W 16° 30.19866'	OPE	SCAMP	SCAMP	334SCAMP146	22	9
319	24/04/2011	11:28:13	N 52° 37.27314'	W 16° 31.99818'	OPE	SCAMP	SCAMP	334SCAMP147	22	10
320	24/04/2011	11:43:46	N 52° 37.18386'	W 16° 32.1309'	OPE	SCAMP	SCAMP	334SCAMP148	22	11
321	24/04/2011	11:59:10	N 52° 37.11534'	W 16° 32.19954'	OPE	SCAMP	SCAMP	334SCAMP149	22	12
322	24/04/2011	12:16:43	N 52° 37.03086'	W 16° 32.27628'	OPE	SCAMP	SCAMP	334SCAMP150	22	13
323	24/04/2011	12:32:40	N 52° 36.90276'	W 16° 32.31528'	OPE	SCAMP	SCAMP	334SCAMP151	22	14
324	24/04/2011	12:49:25	N 52° 36.86676'	W 16° 32.53254'	OPE	SCAMP	SCAMP	334SCAMP152	22	15
325	24/04/2011	13:16:01	N 52° 36.78312'	W 16° 32.56872'	OPE	SCAMP	SCAMP	334SCAMP153	22	16
326	24/04/2011	13:30:57	N 52° 36.77358'	W 16° 32.68392'	OPE	SCAMP	SCAMP	334SCAMP154	22	17
327	24/04/2011	13:47:56	N 52° 36.73218'	W 16° 32.83236'	OPE	SCAMP	SCAMP	334SCAMP155	22	18
328	24/04/2011	14:02:39	N 52° 36.71394'	W 16° 32.95932'	OPE	SCAMP	SCAMP	334SCAMP156	22	19
329										
330	24/04/2011	20:05:16	N 53° 30.48246'	W 16° 31.20462'	OPE	Ultra Clean CTD	UCCTD	334UCCTD56	22B	1
331	24/04/2011	20:53:16	N 53° 30.62196'	W 16° 31.17342'	OPE	Vertical Net 300	WP200	334WP20070	22B	2
332	24/04/2011	21:05:03	N 53° 30.69804'	W 16° 31.14906'	OPE	Vertical Net 300	WP200	334WP20071	22B	3
333	24/04/2011	21:17:51	N 53° 30.75708'	W 16° 31.17354'	OPE	Vertical Net 300	WP200	334WP20072	22B	4
334										
335	25/04/2011	5:37:44	N 54° 37.99674'	W 16° 30.53772'	OPE	Ultra Clean CTD	UCCTD	334UCCTD57	23	1
336	25/04/2011	7:02:22	N 54° 37.96746'	W 16° 30.57984'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES12	23	2
337	25/04/2011	7:27:01	N 54° 37.63266'	W 16° 30.54792'	OPE	SCAMP	SCAMP	334SCAMP157	23	3
338	25/04/2011	7:42:38	N 54° 37.52238'	W 16° 30.77514'	OPE	SCAMP	SCAMP	334SCAMP158	23	4
339										
340	28/04/2011	7:12:18	N 58° 0.00978'	W 16° 31.20498'	OPE	Ultra Clean CTD	UCCTD	334UCCTD58	25	1
341	28/04/2011	8:13:27	N 57° 59.98812'	W 16° 31.20252'	OPE	Vertical Net 300	WP200	334WP20073	25	2
342	28/04/2011	8:27:19	N 58° 0.02178'	W 16° 31.20792'	OPE	Vertical Net 300	WP200	334WP20074	25	3
343	28/04/2011	8:43:43	N 58° 0.006'	W 16° 31.19688'	OPE	Vertical Net 300	WP200	334WP20075	25	4
344	28/04/2011	9:05:26	N 58° 0.01374'	W 16° 31.20702'	OPE	Ultra Clean CTD	UCCTD	334UCCTD59	25	5
345	28/04/2011	10:11:19	N 58° 0.4242'	W 16° 30.89064'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES13	25	6
346	28/04/2011	10:31:52	N 58° 0.47826'	W 16° 30.54462'	OPE	SCAMP	SCAMP	334SCAMP159	25	7
347	28/04/2011	10:46:26	N 58° 0.36054'	W 16° 30.54936'	OPE	SCAMP	SCAMP	334SCAMP160	25	8
348	28/04/2011	11:04:27	N 58° 0.195'	W 16° 30.44196'	OPE	SCAMP	SCAMP	334SCAMP161	25	9
349	28/04/2011	11:21:30	N 58° 0.04764'	W 16° 30.36972'	OPE	SCAMP	SCAMP	334SCAMP162	25	10

	A	B	C	D	E	F	G	H	I	J
350	28/04/2011	11:35:58	N 57° 59.83926'	W 16° 30.2301'	OPE	SCAMP	SCAMP	334SCAMP163	25	11
351	28/04/2011	11:51:23	N 57° 59.68194'	W 16° 30.14424'	OPE	SCAMP	SCAMP	334SCAMP164	25	12
352	28/04/2011	12:07:16	N 57° 59.48958'	W 16° 30.07536'	OPE	SCAMP	SCAMP	334SCAMP165	25	13
353	28/04/2011	12:22:34	N 57° 59.30862'	W 16° 30.03144'	OPE	SCAMP	SCAMP	334SCAMP166	25	14
354	28/04/2011	12:34:41	N 57° 59.2623'	W 16° 29.96694'	OPE	SCAMP	SCAMP	334SCAMP167	25	15
355	28/04/2011	12:38:20	N 57° 59.25552'	W 16° 29.9349'	OPE	SCAMP	SCAMP	334SCAMP168	25	16
356										
357	28/04/2011	19:29:29	N 58° 39.01338'	W 17° 10.78662'	OPE	Ultra Clean CTD	UCCTD	334UCCTD60	26	1
358	28/04/2011	20:26:08	N 58° 39.00468'	W 17° 10.79748'	OPE	Vertical Net 300	WP200	334WP20076	26	2
359	28/04/2011	20:43:12	N 58° 38.99964'	W 17° 10.78518'	OPE	Vertical Net 300	WP200	334WP20077	26	3
360	28/04/2011	20:52:06	N 58° 38.99886'	W 17° 10.80888'	OPE	Vertical Net 300	WP200	334WP20078	26	4
361										
362	29/04/2011	5:21:06	N 59° 30.00156'	W 18° 4.19238'	OPE	Ultra Clean CTD	UCCTD	334UCCTD61	27	1
363	29/04/2011	7:00:50	N 59° 30.00996'	W 18° 4.17924'	OPE	Ultra Clean CTD	UCCTD	334UCCTD62	27	2
364	29/04/2011	7:45:42	N 59° 30.00432'	W 18° 4.17996'	OPE	Vertical Net 300	WP200	334WP20079	27	3
365	29/04/2011	7:58:31	N 59° 30.00486'	W 18° 4.20636'	OPE	Vertical Net 300	WP200	334WP20080	27	4
366	29/04/2011	8:11:29	N 59° 29.99916'	W 18° 4.20354'	OPE	Vertical Net 300	WP200	334WP20081	27	5
367	29/04/2011	9:24:54	N 59° 29.99442'	W 18° 4.20468'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES14	27	6
368	29/04/2011	9:56:46	N 59° 29.86164'	W 18° 3.92568'	OPE	SCAMP	SCAMP	334SCAMP169	27	7
369	29/04/2011	10:13:10	N 59° 29.8809'	W 18° 4.04712'	OPE	SCAMP	SCAMP	334SCAMP170	27	8
370	29/04/2011	10:29:22	N 59° 29.8836'	W 18° 4.25844'	OPE	SCAMP	SCAMP	334SCAMP171	27	9
371	29/04/2011	10:43:23	N 59° 29.92008'	W 18° 4.42218'	OPE	SCAMP	SCAMP	334SCAMP172	27	10
372	29/04/2011	11:01:57	N 59° 29.99082'	W 18° 4.72848'	OPE	SCAMP	SCAMP	334SCAMP173	27	11
373	29/04/2011	11:20:34	N 59° 30.06384'	W 18° 5.01342'	OPE	SCAMP	SCAMP	334SCAMP174	27	12
374	29/04/2011	11:38:15	N 59° 30.11778'	W 18° 5.22192'	OPE	SCAMP	SCAMP	334SCAMP175	27	13
375	29/04/2011	11:54:52	N 59° 30.1347'	W 18° 5.43612'	OPE	SCAMP	SCAMP	334SCAMP176	27	14
376	29/04/2011	12:12:21	N 59° 30.13932'	W 18° 5.79624'	OPE	SCAMP	SCAMP	334SCAMP177	27	15
377	29/04/2011	12:28:11	N 59° 30.162'	W 18° 6.22434'	OPE	SCAMP	SCAMP	334SCAMP178	27	16
378	29/04/2011	12:46:49	N 59° 30.13182'	W 18° 6.65592'	OPE	SCAMP	SCAMP	334SCAMP179	27	17
379	29/04/2011	13:03:55	N 59° 30.09174'	W 18° 6.97368'	OPE	SCAMP	SCAMP	334SCAMP180	27	18
380	29/04/2011	13:22:22	N 59° 30.05256'	W 18° 7.37946'	OPE	SCAMP	SCAMP	334SCAMP181	27	19
381	29/04/2011	13:38:27	N 59° 30.00384'	W 18° 7.80636'	OPE	SCAMP	SCAMP	334SCAMP182	27	20
382	29/04/2011	14:48:08	N 59° 30.02274'	W 18° 4.20606'	OPE	Ultra Clean CTD	UCCTD	334UCCTD63	27	21
383										
384	29/04/2011	20:02:48	N 60° 7.19748'	W 18° 43.79796'	OPE	Ultra Clean CTD	UCCTD	334UCCTD64	28	1
385	29/04/2011	21:31:22	N 60° 7.20732'	W 18° 43.80624'	OPE	Vertical Net 300	WP200	334WP20082	28	2
386	29/04/2011	21:45:59	N 60° 7.19622'	W 18° 43.8186'	OPE	Vertical Net 300	WP200	334WP20083	28	3
387	29/04/2011	22:00:08	N 60° 7.18986'	W 18° 43.78872'	OPE	Vertical Net 300	WP200	334WP20084	28	4
388										
389	30/04/2011	5:25:18	N 60° 40.80462'	W 19° 20.3904'	OPE	Ultra Clean CTD	UCCTD	334UCCTD65	29	1
390	30/04/2011	6:59:59	N 60° 40.81074'	W 19° 20.3988'	OPE	Ultra Clean CTD	UCCTD	334UCCTD66	29	2
391	30/04/2011	7:45:00	N 60° 40.85238'	W 19° 20.44674'	OPE	Vertical Net 300	WP200	334WP20085	29	3
392	30/04/2011	7:58:59	N 60° 40.9479'	W 19° 20.52084'	OPE	Vertical Net 300	WP200	334WP20086	29	4
393	30/04/2011	8:11:52	N 60° 41.01906'	W 19° 20.4987'	OPE	Vertical Net 300	WP200	334WP20087	29	5
394	30/04/2011	9:30:39	N 60° 40.818'	W 19° 20.43042'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES15	29	6
395	30/04/2011	9:59:00	N 60° 41.06544'	W 19° 20.31282'	OPE	SCAMP	SCAMP	334SCAMP183	29	7
396	30/04/2011	10:15:04	N 60° 40.986'	W 19° 20.08506'	OPE	SCAMP	SCAMP	334SCAMP184	29	8
397	30/04/2011	10:31:04	N 60° 40.91904'	W 19° 19.87068'	OPE	SCAMP	WP200	334WP20088	29	9
398	30/04/2011	10:46:26	N 60° 40.84242'	W 19° 19.6794'	OPE	SCAMP	SCAMP	334SCAMP185	29	10
399	30/04/2011	11:16:53	N 60° 41.52912'	W 19° 20.49816'	OPE	SCAMP	SCAMP	334SCAMP186	29	11

	A	B	C	D	E	F	G	H	I	J
400	30/04/2011	11:33:34	N 60° 41.4513'	W 19° 20.6409'	OPE	SCAMP	SCAMP	334SCAMP187	29	12
401	30/04/2011	11:53:24	N 60° 41.3524'	W 19° 20.54502'	OPE	SCAMP	SCAMP	334SCAMP188	29	13
402	30/04/2011	12:12:30	N 60° 41.30016'	W 19° 20.44194'	OPE	SCAMP	SCAMP	334SCAMP189	29	14
403	30/04/2011	12:35:03	N 60° 41.22414'	W 19° 20.37894'	OPE	SCAMP	SCAMP	334SCAMP190	29	15
404	30/04/2011	12:53:10	N 60° 41.08062'	W 19° 20.30716'	OPE	SCAMP	SCAMP	334SCAMP191	29	16
405	30/04/2011	13:11:32	N 60° 41.02638'	W 19° 20.2038'	OPE	SCAMP	SCAMP	334SCAMP192	29	17
406	30/04/2011	13:29:23	N 60° 40.95744'	W 19° 20.1115'	OPE	SCAMP	SCAMP	334SCAMP193	29	18
407	30/04/2011	13:48:15	N 60° 40.8663'	W 19° 20.0952'	OPE	SCAMP	SCAMP	334SCAMP194	29	19
408	30/04/2011	14:33:54	N 60° 40.82346'	W 19° 20.31168'	OPE	Ultra Clean CTD	UCCTD	334UCCTD67	29	20
409	30/04/2011	19:00:17	N 60° 40.7982'	W 19° 20.41068'	OPE	Ultra Clean CTD	UCCTD	334UCCTD68	29-21	21
410	30/04/2011	19:44:22	N 60° 40.80792'	W 19° 20.39862'	OPE	Vertical Net 300	WP200	334WP20089	29-22	22
411	30/04/2011	19:57:25	N 60° 40.81284'	W 19° 20.40132'	OPE	Vertical Net 300	WP200	334WP20090	29-23	23
412	30/04/2011	20:11:23	N 60° 40.81056'	W 19° 20.39844'	OPE	Vertical Net 300	WP200	334WP20091	29-24	24
413										
414	01/05/2011	6:57:32	N 61° 42.61956'	W 20° 29.41536'	OPE	Ultra Clean CTD	UCCTD	334UCCTD69	30	1
415	01/05/2011	7:51:12	N 61° 42.59718'	W 20° 29.39388'	OPE	Vertical Net 300	WP200	334WP20092	30	2
416	01/05/2011	8:07:55	N 61° 42.60888'	W 20° 29.40594'	OPE	Vertical Net 300	WP200	334WP20093	30	3
417	01/05/2011	8:19:40	N 61° 42.6081'	W 20° 29.38998'	OPE	Vertical Net 300	WP200	334WP20094	30	4
418	01/05/2011	8:58:10	N 61° 42.61158'	W 20° 29.40408'	OPE	Ultra Clean CTD	UCCTD	334UCCTD70	30	5
419	01/05/2011	9:59:11	N 61° 42.59292'	W 20° 29.38374'	OPE	SCAMP	SCAMP	334SCAMP195	30	6
420	01/05/2011	10:15:45	N 61° 42.58608'	W 20° 29.30904'	OPE	SCAMP	SCAMP	334SCAMP196	30	7
421	01/05/2011	10:33:19	N 61° 42.57066'	W 20° 29.2032'	OPE	SCAMP	SCAMP	334SCAMP197	30	8
422	01/05/2011	10:57:55	N 61° 42.51462'	W 20° 28.79466'	OPE	SCAMP	SCAMP	334SCAMP198	30	9
423	01/05/2011	11:19:24	N 61° 42.48756'	W 20° 28.4235'	OPE	SCAMP	SCAMP	334SCAMP199	30	10
424	01/05/2011	11:38:43	N 61° 42.4659'	W 20° 28.16982'	OPE	SCAMP	SCAMP	334SCAMP200	30	11
425	01/05/2011	11:59:54	N 61° 42.49032'	W 20° 27.93876'	OPE	SCAMP	SCAMP	334SCAMP201	30	12
426	01/05/2011	12:19:24	N 61° 42.48438'	W 20° 27.5409'	OPE	SCAMP	SCAMP	334SCAMP202	30	13
427	01/05/2011	12:40:47	N 61° 42.5406'	W 20° 27.24678'	OPE	SCAMP	SCAMP	334SCAMP203	30	14
428	01/05/2011	13:05:27	N 61° 42.65214'	W 20° 27.06258'	OPE	SCAMP	SCAMP	334SCAMP204	30	15
429	01/05/2011	13:26:46	N 61° 42.6711'	W 20° 26.7495'	OPE	SCAMP	SCAMP	334SCAMP205	30	16
430	01/05/2011	14:12:42	N 61° 42.6375'	W 20° 29.39148'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES16	30	17
431	01/05/2011	14:41:03	N 61° 42.62568'	W 20° 29.34414'	OPE	Ultra Clean CTD	UCCTD	334UCCTD71	30	18
432										
433	01/05/2011	19:52:14	N 62° 17.98662'	W 21° 9.59184'	OPE	Ultra Clean CTD	UCCTD	334UCCTD72	31	1
434	01/05/2011	20:40:54	N 62° 17.99772'	W 21° 9.59406'	OPE	Vertical Net 300	WP200	334WP20095	31	2
435	01/05/2011	20:54:03	N 62° 17.98188'	W 21° 9.59244'	OPE	Vertical Net 300	WP200	334WP20096	31	3
436	01/05/2011	21:08:13	N 62° 18.00006'	W 21° 9.59484'	OPE	Vertical Net 300	WP200	334WP20097	31	4
437										
438	02/05/2011	6:59:01	N 62° 48.0021'	W 21° 44.44488'	OPE	Ultra Clean CTD	UCCTD	334UCCTD73	32	1
439	02/05/2011	7:51:19	N 62° 48.00438'	W 21° 44.41776'	OPE	Vertical Net 300	WP200	334WP20098	32	2
440	02/05/2011	8:06:31	N 62° 47.99958'	W 21° 44.40282'	OPE	Vertical Net 300	WP200	334WP20099	32	3
441	02/05/2011	8:19:21	N 62° 47.994'	W 21° 44.39694'	OPE	Vertical Net 300	WP200	334WP20100	32	4
442	02/05/2011	9:06:59	N 62° 48.00258'	W 21° 44.4123'	OPE	RAMSES underwater light sensors	RAMSES	334RAMSES17	32	5
443	02/05/2011	9:43:09	N 62° 48.26454'	W 21° 44.32614'	OPE	SCAMP	SCAMP	334SCAMP206	32	6
444	02/05/2011	9:58:41	N 62° 48.16374'	W 21° 44.19594'	OPE	SCAMP	SCAMP	334SCAMP207	32	7
445	02/05/2011	10:14:52	N 62° 48.12348'	W 21° 44.07486'	OPE	SCAMP	SCAMP	334SCAMP208	32	8
446	02/05/2011	10:30:33	N 62° 48.0591'	W 21° 43.85238'	OPE	SCAMP	SCAMP	334SCAMP209	32	9
447	02/05/2011	10:47:42	N 62° 47.99952'	W 21° 43.49694'	OPE	SCAMP	SCAMP	334SCAMP210	32	10
448	02/05/2011	11:06:10	N 62° 47.93154'	W 21° 42.94944'	OPE	SCAMP	SCAMP	334SCAMP211	32	11
449	02/05/2011	11:28:28	N 62° 47.81796'	W 21° 42.41652'	OPE	SCAMP	SCAMP	334SCAMP212	32	12

appendix 1

	A	B	C	D	E	F	G	H	I	J
450	02/05/2011	11:50:01	N 62° 47' 61.462"	W 21° 41' 96946'	OPE	SCAMP	SCAMP	334SCAMP213	32	13
451	02/05/2011	12:25:54	N 62° 47' 38602'	W 21° 41' 56884'	OPE	SCAMP	SCAMP	334SCAMP214	32	14
452	02/05/2011	12:47:48	N 62° 47' 0361'	W 21° 41' 54616'	OPE	SCAMP	SCAMP	334SCAMP215	32	15
453	02/05/2011	13:06:04	N 62° 47' 2188'	W 21° 41' 57166'	OPE	SCAMP	SCAMP	334SCAMP216	32	16

APPENDIX 2

Appendix 2. Onboard database STRATIPHYT-II cruise 2011

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
	Brussard																					
1	Responsible scientist																					
2	Station #	Cast #	Latitude degrees decimal	Longitude degrees decimal	Notes	Bottle #	Month	Day	Year	Density	Depth (m)	Temperature (°C)	Salinity (µmol quanta m ⁻³)	PAR (µmol quanta m ⁻² s ⁻¹)	Surface PAR (µmol quanta m ⁻² s ⁻¹)	Fluorescence (µC-ug/L)	Oxygen (µmol/kg)	PO4 (µmol/L)	NH4 (µmol/L)	NO3+NO2 (µmol/L)	NOx (µmol/L)	
3																						
4																						
5																						
6																						
7	test	1	28.999.686	-15.000.194		1	Apr	7	2011		201	15.91	36.22	0.0	20	0.012	197.231	0.374	0.05	6.62	0.012	
8		2				2	Apr	7	2011		201	15.92	36.22	0.0	20	0.014	196.632	0.373	0.06	6.63	0.013	
9		3				3	Apr	7	2011		79	18.52	36.76	0.0	20	0.095	223.447	0.024	0.07	0.08	0.061	
10		4				4	Apr	7	2011		80	18.53	36.76	0.0	20	0.099	223.465	0.026	0.06	0.08	0.065	
11		5				5	Apr	7	2011		80	18.53	36.76	0.0	20	0.098	223.326	0.027	0.07	0.07	0.055	
12		6				6	Apr	7	2011		80	18.52	36.76	0.0	20	0.097	222.010	0.026	0.06	0.08	0.055	
13		7				7	Apr	7	2011		80	18.52	36.76	0.0	20	0.100	223.608	0.027	0.07	0.07	0.058	
14		8				8	Apr	7	2011		80	18.52	36.76	0.0	20	0.096	222.672	0.027	0.08	0.09	0.081	
15		9				9	Apr	7	2011		80	18.52	36.76	0.0	20	0.096	223.527	0.026	0.06	0.11	0.068	
16		10				10	Apr	7	2011		61	18.69	36.77	0.0	20	0.037	226.648	0.023	0.06	0.01	0.009	
17		11				11	Apr	7	2011		61	18.71	36.77	0.0	20	0.055	227.011	0.021	0.06	0.01	0.010	
18		12				12	Apr	7	2011		50	18.79	36.77	0.0	20	0.043	227.423	0.023	0.05	0.01	0.007	
19		13				13	Apr	7	2011		40	18.78	36.77	0.0	20	0.032	228.340	0.024	0.05	0.01	0.004	
20		14				14	Apr	7	2011		40	18.78	36.77	0.0	20	0.034	227.642	0.021	0.04	0.01	0.004	
21		15				15	Apr	7	2011		30	18.79	36.76	0.0	20	0.030	227.642	0.023	0.06	0.01	0.007	
22		16				16	Apr	7	2011		30	18.79	36.76	0.0	20	0.030	227.292	0.021	0.06	0.01	0.005	
23		17				17	Apr	7	2011		30	18.79	36.76	0.0	20	0.028	227.992	0.023	0.08	0.01	0.005	
24		18				18	Apr	7	2011		30	18.81	36.76	0.0	20	0.025	227.742	0.022	0.07	0.02	0.005	
25		19				19	Apr	7	2011		30	18.81	36.76	0.0	20	0.026	227.779	0.020	0.07	0.02	0.006	
26		20				20	Apr	7	2011		30	18.80	36.76	0.0	20	0.027	228.692	0.019	0.06	0.01	0.004	
27		21				21	Apr	7	2011		20	18.81	36.76	0.1	20	0.025	228.963	0.022	0.08	0.02	0.009	
28		22				22	Apr	7	2011		20	18.81	36.76	0.1	20	0.025	228.349	0.019	0.11	0.02	0.005	
29		23				23	Apr	7	2011		10	18.81	36.76	0.4	20	0.023	227.497	0.020	0.09	0.02	0.007	
30		24				24	Apr	7	2011		10	18.81	36.76	0.5	20	0.023	228.451	0.022	0.07	0.02	0.009	
31	test	5	28.999.686	-15.000.194		1	Apr	7	2011		200	16.04	36.25	0.1	1986	0.010	196.353	0.364	0.07	6.36	0.015	
32		2				2	Apr	7	2011		200	16.05	36.25	0.1	1981	0.013	195.471					
33		3				3	Apr	7	2011		82	18.62	36.77	8.2	1950	0.069	224.499	0.021	0.07	0.06	0.044	
34		4				4	Apr	7	2011		82	18.62	36.77	8.4	1983	0.071	222.291	0.023	0.07	0.08	0.047	
35		5				5	Apr	7	2011		82	18.62	36.77	8.5	2004	0.069	223.542	0.026	0.08	0.07	0.043	
36		6				6	Apr	7	2011		83	18.62	36.77	8.2	1986	0.068	224.467	0.029	0.08	0.08	0.050	
37		7				7	Apr	7	2011		82	18.62	36.77	8.4	1980	0.069	223.788					
38		8				8	Apr	7	2011		82	18.62	36.77	8.5	2017	0.065	223.264					
39		9				9	Apr	7	2011		83	18.62	36.77	8.3	2005	0.067	223.701					
40		10				10	Apr	7	2011		60	18.81	36.78	26.5	2000	0.043	227.859	0.028	0.07	0.00	0.009	
41		11				11	Apr	7	2011		61	18.81	36.78	25.4	2009	0.042	227.743					
42		12				12	Apr	7	2011		51	18.80	36.77	47.9	1987	0.038	226.932	0.034	0.07	0.01	0.010	
43		13				13	Apr	7	2011		41	18.81	36.78	68.1	2023	0.031	227.344	0.027	0.07	0.00	0.010	
44		14				14	Apr	7	2011		41	18.81	36.78	71.7	2064	0.030	227.387	0.025	0.06	0.01	0.010	
45		15				15	Apr	7	2011		40	18.82	36.78	76.6	2076	0.032	226.598	0.027	0.06	0.01	0.010	
46		16				16	Apr	7	2011		41	18.82	36.78	73.4	2065	0.034	227.501	0.025	0.06	0.01	0.008	
47		17				17	Apr	7	2011		41	18.82	36.78	72.2	1996	0.037	227.369					
48		18				18	Apr	7	2011		41	18.82	36.78	68.3	1982	0.035	227.617					
49		19				19	Apr	7	2011		30	18.81	36.77	138.9	2053	0.027	227.971	0.025	0.05	0.00	0.004	
50		20				20	Apr	7	2011		30	18.81	36.78	142.5	2052	0.027	227.116	0.024	0.05	0.00	0.005	
51		21				21	Apr	7	2011		20	18.82	36.77	220.5	1962	0.020	225.553	0.024	0.06	0.00	0.005	
52		22				22	Apr	7	2011		20	18.82	36.77	220.0	2004	0.019	228.769					
53		23				23	Apr	7	2011		10	18.82	36.77	497.0	2076	0.014	227.635	0.025	0.06	0.00	0.004	
54		24				24	Apr	7	2011		9	18.82	36.77	429.1	2085	0.017	226.420					
55																						
56																						
57	0	1	28.999.682	-14.999.994		1	Apr	8	2011	1027.6	199	16.10	36.25	0.0	20	0.012	197.599					
58		2				2	Apr	8	2011	1027.6	199	16.10	36.25	0.0	20	0.013	197.455	0.357	0.05	6.24	0.015	
59		3				3	Apr	8	2011	1027.2	151	17.63	36.54	0.0	20	0.018	206.459					
60		4				4	Apr	8	2011	1027.0	120	18.39	36.72	0.0	20	0.035	216.663	0.157	0.06	2.92	0.065	
61		5				5	Apr	8	2011	1027.0	110	18.58	36.76	0.0	20	0.041	217.529	0.067	0.06	1.07	0.259	
62		6				6	Apr	8	2011	1026.9	101	18.85	36.81	0.0	20	0.055	222.569	0.054	0.07	0.79	0.248	
63		7				7	Apr	8	2011	1026.8	90	18.94	36.82	0.0	20	0.049	223.073	0.027	0.07	0.10	0.064	
64		8				8	Apr	8	2011	1026.8	80	18.97	36.83	0.0	20	0.059	223.830	0.022	0.06	0.03	0.016	
64		9				9	Apr	8	2011	1026.8	81	18.97	36.83	0.0	20	0.060	226.555	0.023	0.07	0.02	0.008	

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
65					10	Apr	8	2011	1026.8	80	18.97	36.83	0.0	20	0.060	226.176				
66					11	Apr	8	2011	1026.8	81	18.97	36.83	0.0	20	0.080	226.390				
67					12	Apr	8	2011	1026.8	80	18.97	36.83	0.0	20	0.057	221.844				
68					13	Apr	8	2011	1026.7	70	19.02	36.83	0.0	20	0.042	224.561	0.022	0.07	0.01	0.008
69					14	Apr	8	2011	1026.7	61	19.03	36.84	0.0	20	0.035	223.787	0.024	0.06	0.02	0.011
70					15	Apr	8	2011	1026.6	49	19.04	36.84	0.0	20	0.028	225.469	0.022	0.07	0.02	0.013
71					16	Apr	8	2011	1026.6	40	19.05	36.84	0.0	20	0.024	226.133	0.022	0.07	0.03	0.008
72					17	Apr	8	2011	1026.6	40	19.05	36.84	0.0	20	0.025	225.484				
73					18	Apr	8	2011	1026.6	39	19.05	36.84	0.0	20	0.028	225.910				
74					19	Apr	8	2011	1026.6	40	19.05	36.84	0.0	20	0.027	224.996				
75					20	Apr	8	2011	1026.5	30	19.07	36.84	0.0	20	0.023	223.753	0.021	0.04	0.02	0.007
76					21	Apr	8	2011	1026.5	20	19.12	36.84	0.1	20	0.024	226.031	0.021	0.06	0.02	0.009
77					22	Apr	8	2011	1026.5	20	19.15	36.84	0.1	20	0.022	226.682				
78					23	Apr	8	2011	1026.4	10	19.28	36.84	0.5	20	0.020	223.375	0.019	0.06	0.02	0.008
79					24	Apr	8	2011	1026.4	11	19.28	36.84	0.5	20	0.020	223.108				
80	0	2	-14.999.924		1	Apr	8	2011	1027.6	200	16.19	36.26	0.0	516	0.011	196.968	0.341	0.05	6.13	0.020
81					2	Apr	8	2011	1027.6	200	16.19	36.26	0.0	525	0.010	198.865	0.339	0.05	6.11	0.019
82					3	Apr	8	2011	1027.0	120	18.67	36.78	0.3	589	0.059	220.810	0.031	0.06	0.34	0.150
83					4	Apr	8	2011	1027.0	120	18.67	36.78	0.3	558	0.058	220.291	0.035	0.04	0.35	0.153
84					5	Apr	8	2011	1027.0	120	18.67	36.78	0.3	515	0.061	219.052	0.032	0.07	0.36	0.162
85					6	Apr	8	2011	1027.0	120	18.68	36.78	0.3	489	0.059	220.592				
86					7	Apr	8	2011	1027.0	120	18.67	36.78	0.3	515	0.080	219.580				
87					8	Apr	8	2011	1027.0	121	18.67	36.78	0.3	606	0.057	219.857				
88					9	Apr	8	2011	1027.0	120	18.66	36.78	0.3	566	0.068	219.157				
89					10	Apr	8	2011	1027.0	121	18.66	36.77	0.3	617	0.060	218.958				
90					11	Apr	8	2011	1026.8	90	18.95	36.83	1.9	576	0.059	225.948	0.021	0.04	0.02	0.012
91					12	Apr	8	2011	1026.8	90	18.95	36.83	1.9	533	0.061	225.663				
92					13	Apr	8	2011	1026.8	90	18.95	36.83	2.0	546	0.063	223.677				
93					14	Apr	8	2011	1026.8	90	18.96	36.83	2.0	599	0.061	223.796				
94					15	Apr	8	2011	1026.7	60	19.03	36.83	8.8	576	0.028	226.103	0.019	0.04	0.00	0.005
95					16	Apr	8	2011	1026.7	60	19.03	36.83	8.7	611	0.030	225.896				
96					17	Apr	8	2011	1026.6	40	19.05	36.84	2.3	583	0.024	226.690	0.022	0.05	0.00	0.006
97					18	Apr	8	2011	1026.6	41	19.05	36.84	23.5	604	0.024	225.828	0.021	0.04	0.01	0.007
98					19	Apr	8	2011	1026.6	41	19.05	36.84	23.5	674	0.022	224.916	0.021	0.04	0.00	0.005
99					20	Apr	8	2011	1026.6	41	19.05	36.84	23.8	681	0.024	226.613	0.023	0.05	0.00	0.005
100					21	Apr	8	2011	1026.6	40	19.05	36.84	24.6	583	0.026	226.134				
101					22	Apr	8	2011	1026.6	40	19.05	36.84	24.4	545	0.024	226.033				
102					23	Apr	8	2011	1026.4	10	19.24	36.84	138.5	609	0.016	222.710	0.021	0.04	0.01	0.006
103					24	Apr	8	2011	1026.4	10	19.25	36.84	139.1	589	0.020	225.132				
104	0	6	-14.999.869	translocation #	1	Apr	8	2011	1029.3	502	12.27	35.69	0.0	1215	0.010	180.597				
105					2	Apr	8	2011	1029.3	502	12.27	35.69	0.0	1252	0.010	180.726				
106					3	Apr	8	2011	1029.3	503	12.26	35.69	0.0	1247	0.009	180.762				
107					4	Apr	8	2011	1029.3	502	12.26	35.69	0.0	1245	0.010	180.666				
108					5	Apr	8	2011	1029.3	502	12.27	35.69	0.0	1223	0.009	180.428				
109					6	Apr	8	2011	1029.3	502	12.26	35.69	0.0	1207	0.008	180.462				
110					7	Apr	8	2011	1029.3	502	12.26	35.69	0.0	1222	0.010	180.387				
111					8	Apr	8	2011	1029.3	502	12.27	35.69	0.0	1255	0.010	181.127				
112					9	Apr	8	2011	1029.3	503	12.26	35.69	0.0	1252	0.011	180.467				
113					10	Apr	8	2011	1029.3	503	12.26	35.69	0.0	1228	0.008	181.319				
114					11	Apr	8	2011	1029.3	502	12.27	35.69	0.0	1213	0.008	180.509				
115					12	Apr	8	2011	1029.3	502	12.27	35.69	0.0	1236	0.010	179.850				
116					13	Apr	8	2011	1026.9	95	18.74	36.79	4.2	1331	0.067	220.069				
117					14	Apr	8	2011	1026.9	94	18.75	36.79	4.5	1274	0.070	218.929				
118					15	Apr	8	2011	1026.9	95	18.76	36.80	4.4	1342	0.071	219.616				
119					16	Apr	8	2011	1026.9	94	18.75	36.79	4.5	1235	0.071	218.067				
120					17	Apr	8	2011	1026.9	94	18.74	36.79	4.5	1233	0.071	219.249				
121					18	Apr	8	2011	1026.9	95	18.75	36.79	4.4	1344	0.072	221.666				
122					19	Apr	8	2011	1026.9	94	18.75	36.79	4.5	1281	0.072	218.628				
123					20	Apr	8	2011	1026.9	94	18.74	36.79	4.4	1278	0.074	219.412				
124					21	Apr	8	2011	1026.9	95	18.73	36.79	4.2	1350	0.072	220.225				
125					22	Apr	8	2011	1026.9	95	18.73	36.79	4.3	1400	0.068	219.582				
126					23	Apr	8	2011	1026.9	95	18.73	36.79	4.2	1426	0.068	219.912				
127					24	Apr	8	2011	1026.9	95	18.73	36.79	4.3	1397	0.070	220.852				
128	0	18	-14.999.703		1	Apr	8	2011	1027.0	120	18.59	36.76	1.7	1512	0.084	218.360	0.027	0.07	0.57	0.135
129					2	Apr	8	2011	1027.0	120	18.60	36.76	1.7	1519	0.082	219.783				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
195						19	Apr	9	2011	1026.6	30	18.55	36.71	0.0	20	0.022	228.526	0.021	0.07	0.03	0.012
196						20	Apr	9	2011	1026.6	29	18.55	36.71	0.0	20	0.024	228.100				
197						21	Apr	9	2011	1026.4	10	19.07	36.73	0.5	20	0.023	228.480	0.021	0.06	0.02	0.010
198						22	Apr	9	2011	1026.4	10	19.10	36.73	0.5	20	0.024	228.110				
199						23	Apr	9	2011	1026.4	11	19.10	36.73	0.4	20	0.023	227.689				
200						24	Apr	9	2011	1026.4	11	19.10	36.73	0.4	20	0.024	225.887				
201	1	2	30.020.153	-15.070.018		1	Apr	9	2011	1027.6	201	16.02	36.24	0.0	362	0.010	198.759	0.362	0.04	6.37	0.017
202						2	Apr	9	2011	1027.6	200	16.01	36.24	0.0	364	0.012	199.007	0.359	0.05	6.36	0.021
203						3	Apr	9	2011	1027.6	201	16.01	36.24	0.0	377	0.011	198.543				
204						4	Apr	9	2011	1027.6	200	16.01	36.24	0.0	391	0.011	197.392				
205						5	Apr	9	2011	1027.6	200	16.13	36.68	0.5	392	0.052	220.216	0.049	0.05	0.79	0.455
206						6	Apr	9	2011	1027.0	100	18.13	36.68	0.4	375	0.056	220.297	0.049	0.05	0.79	0.451
207						7	Apr	9	2011	1026.8	74	18.22	36.69	2.8	437	0.146	226.224	0.028	0.04	0.11	0.088
208						8	Apr	9	2011	1026.8	74	18.22	36.69	2.8	437	0.147	224.802	0.028	0.05	0.11	0.088
209						9	Apr	9	2011	1026.8	74	18.22	36.69	2.8	442	0.150	223.703	0.028	0.05	0.11	0.088
210						10	Apr	9	2011	1026.8	75	18.22	36.69	2.6	467	0.146	224.913	0.029	0.05	0.11	0.085
211						11	Apr	9	2011	1026.8	74	18.22	36.69	2.6	454	0.145	224.367	0.032	0.06	0.11	0.087
212						12	Apr	9	2011	1026.8	73	18.22	36.69	3.0	466	0.145	224.125				
213						13	Apr	9	2011	1026.8	74	18.22	36.69	2.8	509	0.148	225.551				
214						14	Apr	9	2011	1026.7	48	18.51	36.71	11.9	589	0.030	227.523	0.037	0.07	0.01	0.006
215						15	Apr	9	2011	1026.6	31	18.55	36.71	12.4	558	0.029	228.156	0.029	0.07	0.02	0.008
216						16	Apr	9	2011	1026.6	31	18.55	36.71	17.0	482	0.023	227.894	0.031	0.08	0.02	0.009
217						17	Apr	9	2011	1026.6	31	18.55	36.71	14.0	204	0.021	228.726	0.025	0.05	0.02	0.008
218						18	Apr	9	2011	1026.6	31	18.55	36.71	12.8	187	0.026	230.365	0.026	0.05	0.02	0.007
219						19	Apr	9	2011	1026.6	30	18.55	36.71	13.9	187	0.024	229.216	0.027	0.07	0.02	0.012
220						20	Apr	9	2011	1026.6	30	18.55	36.71	14.7	194	0.025	228.866	0.023	0.03	0.02	0.008
221						21	Apr	9	2011	1026.6	30	18.55	36.71	15.0	200	0.025	229.493	0.022	0.05	0.01	0.007
222						22	Apr	9	2011	1026.6	30	18.56	36.71	33.9	565	0.024	229.758				
223						23	Apr	9	2011	1026.4	10	18.99	36.73	110.4	580	0.026	227.761	0.021	0.06	0.02	0.009
224						24	Apr	9	2011	1026.4	11	18.99	36.73	134.0	668	0.024	228.227	0.020	0.05	0.01	0.005
225	1	16	30.020.125	-15.070.109		1	Apr	9	2011	1026.8	72	18.15	36.67	15.8	1570	0.143	228.373	0.016	0.04	0.12	0.078
226						2	Apr	9	2011	1026.8	72	18.16	36.67	16.4	1575	0.141	228.080	0.015	0.03	0.12	0.078
227						3	Apr	9	2011	1026.8	72	18.16	36.67	15.8	1550	0.143	225.154	0.014	0.04	0.11	0.074
228						4	Apr	9	2011	1026.8	72	18.16	36.67	16.4	1550	0.141	227.641				
229						5	Apr	9	2011	1026.8	73	18.15	36.67	15.8	1545	0.146	226.708				
230						6	Apr	9	2011	1026.8	72	18.15	36.67	15.8	1508	0.146	226.909				
231						7	Apr	9	2011	1026.8	72	18.16	36.67	16.0	1564	0.138	226.914				
232						8	Apr	9	2011	1026.8	72	18.17	36.67	16.1	1543	0.134	226.453				
233						9	Apr	9	2011	1026.8	72	18.17	36.67	16.0	1530	0.132	226.418				
234						10	Apr	9	2011	1026.8	72	18.16	36.67	15.5	1544	0.134	227.166				
235						11	Apr	9	2011	1026.8	72	18.17	36.67	15.8	1543	0.132	224.904				
236						12	Apr	9	2011	1026.8	71	18.17	36.67	16.3	1543	0.134	226.150				
237						13	Apr	9	2011	1026.6	30	18.52	36.70	56.0	1525	0.021	229.442				
238						14	Apr	9	2011	1026.6	30	18.51	36.70	51.6	1548	0.022	228.437	0.014	0.03	0.03	0.010
239						15	Apr	9	2011	1026.5	30	18.66	36.70	46.9	1560	0.020	226.918				
240						16	Apr	9	2011	1026.6	30	18.60	36.70	43.4	1533	0.023	227.293				
241						17	Apr	9	2011	1026.6	31	18.55	36.70	42.3	1492	0.021	227.775				
242						18	Apr	9	2011	1026.6	31	18.56	36.70	40.4	1500	0.022	229.499				
243						19	Apr	9	2011	1026.6	31	18.58	36.70	41.3	1525	0.022	228.887				
244						20	Apr	9	2011	1026.6	30	18.58	36.70	40.7	1531	0.021	227.576				
245						21	Apr	9	2011	1026.6	30	18.57	36.70	40.8	1494	0.021	228.316				
246						22	Apr	9	2011	1026.6	30	18.55	36.70	43.4	1513	0.022	229.305				
247						23	Apr	9	2011	1026.6	31	18.54	36.70	39.7	1533	0.022	229.051				
248						24	Apr	9	2011	1026.6	31	18.53	36.70	40.6	1559	0.022	228.360				
249																					
250	2	1	31.220.175	-14.869.926		1	Apr	10	2011	1027.6	201	16.16	36.27	0.0	20	0.014	201.903	0.301	0.05	5.49	0.020
251						2	Apr	10	2011	1027.6	201	16.19	36.27	0.0	20	0.016	200.425				
252						3	Apr	10	2011	1027.6	200	16.19	36.27	0.0	20	0.014	200.028				
253						4	Apr	10	2011	1027.1	128	17.65	36.58	0.0	20	0.052	219.570	0.071	0.04	1.48	0.333
254						5	Apr	10	2011	1027.1	128	17.65	36.58	0.0	20	0.050	218.843				
255						6	Apr	10	2011	1026.8	75	18.57	36.75	0.0	20	0.087	225.925	0.019	0.06	0.02	0.009
256						7	Apr	10	2011	1026.8	75	18.57	36.75	0.0	20	0.085	225.315	0.015	0.05	0.02	0.012
257						8	Apr	10	2011	1026.8	75	18.57	36.75	0.0	20	0.083	226.519				
258						9	Apr	10	2011	1026.8	75	18.57	36.75	0.0	20	0.086	226.414				
259						10	Apr	10	2011	1026.8	75	18.57	36.75	0.0	20	0.088	225.829				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
260						11	Apr 10	2011	1026.8	75	18.56	36.75	0.090	20	0.090	224.006					
261						12	Apr 10	2011	1026.8	75	18.56	36.75	0.089	20	0.089	225.707					
262						13	Apr 10	2011	1026.8	75	18.55	36.75	0.092	20	0.092	228.993					
263						14	Apr 10	2011	1026.7	61	18.67	36.75	0.046	20	0.046	228.067	0.021	0.06	0.04	0.008	
264						15	Apr 10	2011	1026.7	61	18.67	36.76	0.049	20	0.049	227.866					
265						16	Apr 10	2011	1026.5	30	18.84	36.75	0.024	20	0.024	227.377	0.017	0.07	0.03	0.012	
266						17	Apr 10	2011	1026.5	31	18.84	36.75	0.025	20	0.025	228.222	0.014	0.07	0.03	0.010	
267						18	Apr 10	2011	1026.5	31	18.83	36.75	0.025	20	0.025	228.303					
268						19	Apr 10	2011	1026.5	30	18.84	36.75	0.025	20	0.025	227.346					
269						20	Apr 10	2011	1026.5	30	18.84	36.75	0.025	20	0.025	226.831					
270						21	Apr 10	2011	1026.5	31	18.85	36.75	0.026	20	0.026	227.496					
271						22	Apr 10	2011	1026.5	31	18.85	36.75	0.024	20	0.024	226.743					
272						23	Apr 10	2011	1026.4	10	18.85	36.75	0.020	20	0.020	229.150	0.014	0.07	0.03	0.010	
273						24	Apr 10	2011	1026.4	10	18.85	36.75	0.023	20	0.023	228.690					
274	2	2	31.220.091	-14.870.195		1	Apr 10	2011	1027.6	199	16.22	36.28	0.015	157	0.015	200.101	0.307	0.05	5.51	0.023	
275						2	Apr 10	2011	1027.6	199	16.21	36.28	0.014	160	0.014	201.362	0.307	0.05	5.49	0.025	
276						3	Apr 10	2011	1027.6	199	16.22	36.28	0.013	161	0.013	201.832	0.303	0.06	5.46	0.026	
277						4	Apr 10	2011	1027.1	117	17.73	36.60	0.049	122	0.049	218.797	0.079	0.06	1.52	0.318	
278						5	Apr 10	2011	1027.1	117	17.73	36.60	0.051	120	0.051	218.540					
279						6	Apr 10	2011	1026.8	72	18.34	36.71	0.09	107	0.09	223.959	0.022	0.05	0.29	0.111	
280						7	Apr 10	2011	1026.8	72	18.32	36.71	0.108	109	0.108	225.245	0.023	0.06	0.26	0.097	
281						8	Apr 10	2011	1026.8	73	18.30	36.70	0.106	110	0.106	224.517					
282						9	Apr 10	2011	1026.8	72	18.30	36.70	0.107	110	0.107	224.963					
283						10	Apr 10	2011	1026.8	72	18.30	36.70	0.103	112	0.103	223.618					
284						11	Apr 10	2011	1026.8	72	18.28	36.70	0.101	113	0.101	224.864					
285						12	Apr 10	2011	1026.8	72	18.27	36.70	0.098	114	0.098	224.595					
286						13	Apr 10	2011	1026.8	72	18.27	36.70	0.098	114	0.098	223.332	0.019	0.05	0.27	0.106	
287						14	Apr 10	2011	1026.7	60	18.68	36.77	0.061	129	0.061	227.039	0.013	0.05	0.02	0.010	
288						15	Apr 10	2011	1026.7	60	18.68	36.77	0.063	130	0.063	225.970	0.010	0.05	0.02	0.011	
289						16	Apr 10	2011	1026.5	26	18.82	36.75	0.053	184	0.053	225.003	0.013	0.05	0.02	0.011	
290						17	Apr 10	2011	1026.5	26	18.82	36.75	0.027	205	0.027	227.071	0.014	0.07	0.02	0.013	
291						18	Apr 10	2011	1026.5	26	18.83	36.75	0.023	229	0.023	227.511					
292						19	Apr 10	2011	1026.5	25	18.82	36.75	0.026	360	0.026	227.370					
293						20	Apr 10	2011	1026.5	26	18.82	36.75	0.024	438	0.024	226.815					
294						21	Apr 10	2011	1026.5	26	18.82	36.75	0.026	379	0.026	227.734					
295						22	Apr 10	2011	1026.5	26	18.82	36.75	0.025	608	0.025	226.395	0.010	0.05	0.02	0.011	
296						23	Apr 10	2011	1026.5	10	18.82	36.75	0.027	191	0.027	226.908	0.012	0.05	0.02	0.011	
297						24	Apr 10	2011	1026.5	10	18.82	36.75	0.026	191	0.026	228.387	0.015	0.05	0.01	0.010	
298	2	13	31.218.802	-14.872.008		1	Apr 10	2011	1027.6	203	16.05	36.24	0.012	1443	0.012	199.269	0.334	0.04	6.13	0.021	
299						2	Apr 10	2011	1027.6	202	16.05	36.24	0.012	1222	0.012	199.077					
300						3	Apr 10	2011	1027.0	107	17.62	36.58	0.052	1893	0.052	219.933	0.075	0.05	1.49	0.326	
301						4	Apr 10	2011	1027.0	107	17.62	36.58	0.054	1714	0.054	220.242					
302						5	Apr 10	2011	1026.8	77	18.51	36.73	0.081	1312	0.081	226.397	0.010	0.05	0.02	0.013	
303						6	Apr 10	2011	1026.8	77	18.51	36.73	0.080	1292	0.080	224.625					
304						7	Apr 10	2011	1026.8	77	18.51	36.73	0.082	1151	0.082	225.717					
305						8	Apr 10	2011	1026.8	77	18.51	36.73	0.080	949	0.080	225.916					
306						9	Apr 10	2011	1026.8	78	18.51	36.73	0.080	1123	0.080	225.515					
307						10	Apr 10	2011	1026.8	78	18.50	36.73	0.083	1055	0.083	227.090					
308						11	Apr 10	2011	1026.8	77	18.51	36.73	0.084	1017	0.084	224.699					
309						12	Apr 10	2011	1026.8	77	18.51	36.73	0.079	976	0.079	224.747					
310						13	Apr 10	2011	1026.7	59	18.63	36.74	0.043	1219	0.043	225.412	0.009	0.05	0.01	0.007	
311						14	Apr 10	2011	1026.7	59	18.63	36.74	0.043	1311	0.043	228.304	0.006	0.04	0.01	0.007	
312						15	Apr 10	2011	1026.6	40	18.83	36.75	0.028	1290	0.028	227.037					
313						16	Apr 10	2011	1026.6	40	18.83	36.75	0.028	1915	0.028	228.109					
314						17	Apr 10	2011	1026.6	40	18.81	36.75	0.032	1385	0.032	227.470					
315						18	Apr 10	2011	1026.6	39	18.81	36.75	0.026	1816	0.026	228.657					
316						19	Apr 10	2011	1026.6	40	18.81	36.75	0.028	1828	0.028	228.161					
317						20	Apr 10	2011	1026.6	39	18.81	36.75	0.028	1794	0.028	228.419					
318						21	Apr 10	2011	1026.6	40	18.80	36.75	0.029	1769	0.029	228.557					
319						22	Apr 10	2011	1026.6	40	18.79	36.75	0.026	1828	0.026	228.633					
320						23	Apr 10	2011	1026.4	10	18.92	36.75	0.016	1950	0.016	227.750	0.003	0.04	0.01	0.007	
321						24	Apr 10	2011	1026.4	10	18.92	36.75	0.015	1545	0.015	226.864					
322	2	14	31.219.741	-14.869.878		1	Apr 10	2011	1027.6	202	16.29	36.29	0.015	20	0.015	202.796	0.281	0.05	4.82	0.016	
323						2	Apr 10	2011	1027.6	201	16.29	36.29	0.016	20	0.016	202.788					
324						3	Apr 10	2011	1027.0	110	17.73	36.60	0.055	20	0.055	216.843					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
325						4	Apr 10	2011	1027.1	110	17.68	36.59	0.0	20	0.052	218,041	0.069	0.05			
326						5	Apr 10	2011	1027.0	109	17.68	36.59	0.0	20	0.055	218,643				1.30	0.329
327						6	Apr 10	2011	1027.1	109	17.68	36.59	0.0	20	0.053	219,143					
328						7	Apr 10	2011	1026.8	74	18.18	36.68	0.0	20	0.096	222,534	0.021	0.09	0.36	0.164	
329						8	Apr 10	2011	1026.8	74	18.18	36.68	0.0	20	0.102	222,436					
330						9	Apr 10	2011	1026.8	74	18.18	36.68	0.0	20	0.097	222,618					
331						10	Apr 10	2011	1026.8	74	18.18	36.68	0.0	20	0.103	223,625					
332						11	Apr 10	2011	1026.8	74	18.18	36.68	0.0	20	0.106	223,284					
333						12	Apr 10	2011	1026.8	74	18.18	36.68	0.0	20	0.106	223,891					
334						13	Apr 10	2011	1026.7	61	18.55	36.74	0.0	20	0.053	225,877	0.006	0.07	0.01	0.006	
335						14	Apr 10	2011	1026.7	61	18.53	36.73	0.0	20	0.055	224,621					
336						15	Apr 10	2011	1026.6	39	18.66	36.74	0.0	20	0.064	226,829					
337						16	Apr 10	2011	1026.6	39	18.66	36.74	0.0	20	0.039	227,107	0.009	0.07	0.01	0.006	
338						17	Apr 10	2011	1026.6	40	18.65	36.74	0.0	20	0.039	228,851					
339						18	Apr 10	2011	1026.6	40	18.65	36.74	0.0	20	0.036	227,808					
340						19	Apr 10	2011	1026.6	40	18.66	36.74	0.0	20	0.040	228,556					
341						20	Apr 10	2011	1026.6	40	18.68	36.74	0.0	20	0.038	228,736					
342						21	Apr 10	2011	1026.6	40	18.67	36.74	0.0	20	0.039	229,211					
343						22	Apr 10	2011	1026.4	10	18.89	36.75	0.5	20	0.029	228,537	0.009	0.07	0.01	0.006	
344						23	Apr 10	2011	1026.4	10	18.89	36.75	0.5	20	0.029	229,455					
345						24	Apr 10	2011	1026.4	10	18.89	36.75	0.5	20	0.028	226,824					
346	2	18	31.219.323	-14.870.404		1	Apr 11	2011	1027.6	199	16.13	36.26	0.0	20	0.013	200,621	0.319	0.07	5.63	0.022	
347						2	Apr 11	2011	1027.6	200	16.13	36.26	0.0	20	0.012	201,110					
348						3	Apr 11	2011	1027.6	199	16.13	36.26	0.0	20	0.014	198,944					
349						4	Apr 11	2011	1027.1	110	17.49	36.56	0.0	20	0.040	221,829	0.065	0.06	1.16	0.455	
350						5	Apr 11	2011	1027.1	110	17.49	36.56	0.0	20	0.047	221,513					
351						6	Apr 11	2011	1027.1	110	17.49	36.56	0.0	20	0.044	220,908					
352						7	Apr 11	2011	1026.8	71	18.37	36.71	0.0	20	0.103	222,472	0.018	0.06	0.20	0.088	
353						8	Apr 11	2011	1026.8	72	18.37	36.71	0.0	20	0.105	223,415					
354						9	Apr 11	2011	1026.8	72	18.37	36.71	0.0	20	0.106	223,577					
355						10	Apr 11	2011	1026.8	72	18.36	36.71	0.0	20	0.106	225,862					
356						11	Apr 11	2011	1026.8	72	18.36	36.71	0.0	20	0.100	224,583					
357						12	Apr 11	2011	1026.8	71	18.35	36.71	0.0	20	0.106	222,743					
358						13	Apr 11	2011	1026.8	71	18.35	36.71	0.0	20	0.110	224,902					
359						14	Apr 11	2011	1026.7	50	18.69	36.74	0.0	20	0.040	225,853	0.009	0.06	0.01	0.005	
360						15	Apr 11	2011	1026.6	30	18.74	36.75	0.0	20	0.030	227,036	0.008	0.08	0.01	0.003	
361						16	Apr 11	2011	1026.6	30	18.74	36.75	0.0	20	0.030	226,823					
362						17	Apr 11	2011	1026.6	31	18.74	36.75	0.0	20	0.029	227,394					
363						18	Apr 11	2011	1026.6	30	18.74	36.75	0.0	20	0.029	227,505					
364						19	Apr 11	2011	1026.6	31	18.74	36.75	0.0	20	0.031	228,283					
365						20	Apr 11	2011	1026.6	30	18.74	36.75	0.0	20	0.031	226,731					
366						21	Apr 11	2011	1026.6	31	18.74	36.75	0.0	20	0.030	228,602					
367						22	Apr 11	2011	1026.5	11	18.73	36.75	0.5	20	0.028	229,291	0.011	0.05	0.01	0.004	
368						23	Apr 11	2011	1026.5	10	18.73	36.75	0.5	20	0.029	227,003					
369						24	Apr 11	2011	1026.5	10	18.73	36.75	0.5	20	0.028	226,565					
370	2	19	31.220.051	-14.870.102		1	Apr 11	2011	1027.6	198	16.16	36.27	0.0	86	0.014	198,470	0.316	0.05	5.57	0.020	
371						2	Apr 11	2011	1027.6	199	16.15	36.26	0.0	86	0.014	200,616					
372						3	Apr 11	2011	1027.6	199	16.15	36.26	0.0	86	0.015	200,213					
373						4	Apr 11	2011	1027.1	120	17.33	36.52	0.1	119	0.030	213,706	0.070	0.05	1.31	0.462	
374						5	Apr 11	2011	1027.1	121	17.33	36.52	0.1	121	0.032	220,530					
375						6	Apr 11	2011	1026.8	64	18.46	36.72	2.1	146	0.069	223,493	0.008	0.06	0.06	0.038	
376						7	Apr 11	2011	1026.8	64	18.46	36.72	2.2	149	0.067	224,120	0.009	0.06	0.08	0.041	
377						8	Apr 11	2011	1026.8	65	18.46	36.72	2.2	153	0.066	226,519					
378						9	Apr 11	2011	1026.8	65	18.46	36.72	2.2	156	0.066	226,029					
379						10	Apr 11	2011	1026.8	65	18.46	36.72	2.3	159	0.067	226,486					
380						11	Apr 11	2011	1026.8	64	18.47	36.72	2.4	162	0.061	224,749					
381						12	Apr 11	2011	1026.8	63	18.48	36.73	2.5	165	0.060	227,211					
382						13	Apr 11	2011	1026.7	63	18.49	36.73	2.6	168	0.058	224,486					
383						14	Apr 11	2011	1026.7	51	18.63	36.74	4.7	169	0.046	227,871	0.013	0.06	0.00	0.007	
384						15	Apr 11	2011	1026.6	30	18.73	36.74	9.8	161	0.031	228,891	0.011	0.06	0.01	0.007	
385						16	Apr 11	2011	1026.6	30	18.73	36.74	9.9	160	0.031	227,187	0.010	0.05	0.01	0.007	
386						17	Apr 11	2011	1026.6	30	18.73	36.74	9.5	159	0.030	227,622					
387						18	Apr 11	2011	1026.6	30	18.73	36.74	9.6	156	0.029	227,963					
388						19	Apr 11	2011	1026.6	30	18.73	36.74	9.4	154	0.030	228,467					
389						20	Apr 11	2011	1026.6	30	18.73	36.74	9.6	153	0.031	225,824					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
390						21	Apr	11	2011	1026.6	31	18.73	36.74	9.4	152	0.031	229,294				
391						22	Apr	11	2011	1026.6	30	18.73	36.74	9.8	148	0.034	226,142				
392						23	Apr	11	2011	1026.5	10	18.73	36.74	24.3	141	0.029	229,120	0.010	0.05	0.04	0.007
393						24	Apr	11	2011	1026.5	10	18.73	36.74	26.6	141	0.030	228,722				
394																					
395	2B	1	32,138.433	-14,709.789		1	Apr	11	2011	1027.6	200	16.20	36.26	0.0	20	0.017	199,747	0.337	0.04	6.08	0.031
396						2	Apr	11	2011	1027.6	201	16.21	36.26	0.0	20	0.015	198,795				
397						3	Apr	11	2011	1027.1	110	17.75	36.62	0.0	20	0.038	217,367	0.069	0.04	1.29	0.426
398						4	Apr	11	2011	1027.1	110	17.75	36.61	0.0	20	0.039	220,058				
399						5	Apr	11	2011	1026.9	75	18.09	36.67	0.0	20	0.128	222,318	0.024	0.05	0.41	0.214
400						6	Apr	11	2011	1026.9	75	18.09	36.67	0.0	20	0.135	222,956				
401						7	Apr	11	2011	1026.9	75	18.08	36.67	0.0	20	0.132	224,066				
402						8	Apr	11	2011	1026.9	76	18.08	36.67	0.0	20	0.129	224,716				
403						9	Apr	11	2011	1026.9	75	18.08	36.67	0.0	20	0.131	222,929				
404						10	Apr	11	2011	1026.9	76	18.08	36.67	0.0	20	0.133	224,544				
405						11	Apr	11	2011	1026.9	75	18.09	36.67	0.0	20	0.125	224,902				
406						12	Apr	11	2011	1026.7	50	18.47	36.70	0.0	20	0.051	228,416	0.010	0.05	0.01	0.012
407						13	Apr	11	2011	1026.7	50	18.47	36.70	0.0	20	0.054	230,571	0.006	0.04	0.01	0.013
408						14	Apr	11	2011	1026.6	23	18.46	36.70	0.0	20	0.050	229,611				
409						15	Apr	11	2011	1026.6	23	18.46	36.70	0.0	20	0.042	228,324				
410						16	Apr	11	2011	1026.6	24	18.46	36.70	0.0	20	0.046	229,202				
411						17	Apr	11	2011	1026.6	23	18.46	36.70	0.0	20	0.045	230,288				
412						18	Apr	11	2011	1026.6	23	18.46	36.70	0.0	20	0.046	229,492				
413						19	Apr	11	2011	1026.6	23	18.46	36.70	0.0	20	0.047	229,257				
414						20	Apr	11	2011	1026.5	11	18.46	36.70	0.3	20	0.050	229,520				
415						21	Apr	11	2011	1026.5	11	18.46	36.70	0.4	20	0.048	226,816	0.015	0.05	0.03	0.010
416						22	Apr	11	2011	1026.5	11	18.45	36.70	0.4	20	0.047	229,306				
417						23	Apr	11	2011	1026.5	11	18.45	36.70	0.4	20	0.047	230,740				
418						24	Apr	11	2011	1026.5	10	18.45	36.70	0.4	20	0.046	229,093				
419																					
420	3	1	32,819.902	-14,589.815		1	Apr	12	2011	1027.5	200	16.40	36.30	0.0	20	0.015	200,401	0.305	0.08	5.65	0.030
421						2	Apr	12	2011	1027.5	200	16.39	36.29	0.0	20	0.013	199,602				
422						3	Apr	12	2011	1027.5	199	16.40	36.30	0.0	20	0.014	199,897				
423						4	Apr	12	2011	1027.1	110	17.74	36.60	0.0	20	0.025	215,657	0.087	0.09	1.63	0.241
424						5	Apr	12	2011	1027.1	110	17.74	36.61	0.0	20	0.026	218,323				
425						6	Apr	12	2011	1026.8	72	18.07	36.66	0.0	20	0.101	217,633	0.022	0.10	0.05	0.025
426						7	Apr	12	2011	1026.8	73	18.07	36.66	0.0	20	0.110	227,829				
427						8	Apr	12	2011	1026.8	73	18.06	36.66	0.0	20	0.110	227,829				
428						9	Apr	12	2011	1026.8	73	18.06	36.66	0.0	20	0.098	229,290				
429						10	Apr	12	2011	1026.8	72	18.07	36.66	0.0	20	0.097	227,109				
430						11	Apr	12	2011	1026.8	72	18.07	36.66	0.0	20	0.093	228,979				
431						12	Apr	12	2011	1026.8	73	18.08	36.66	0.0	20	0.090	228,200				
432						13	Apr	12	2011	1026.8	73	18.07	36.66	0.0	20	0.091	228,105				
433						14	Apr	12	2011	1026.7	50	18.34	36.69	0.0	20	0.041	231,218	0.015	0.07	0.03	0.015
434						15	Apr	12	2011	1026.7	50	18.33	36.69	0.0	20	0.044	229,919				
435						16	Apr	12	2011	1026.6	23	18.35	36.69	0.0	20	0.037	230,202	0.013	0.07	0.03	0.015
436						17	Apr	12	2011	1026.6	23	18.35	36.69	0.0	20	0.036	230,049	0.013	0.07	0.04	0.017
437						18	Apr	12	2011	1026.6	24	18.35	36.69	0.0	20	0.037	230,429				
438						19	Apr	12	2011	1026.6	24	18.35	36.69	0.0	20	0.038	230,768				
439						20	Apr	12	2011	1026.6	24	18.35	36.69	0.0	20	0.037	229,800				
440						21	Apr	12	2011	1026.6	25	18.35	36.69	0.0	20	0.037	230,334				
441						22	Apr	12	2011	1026.6	24	18.34	36.69	0.0	20	0.035	229,123				
442						23	Apr	12	2011	1026.5	10	18.35	36.69	0.5	20	0.035	230,927	0.012	0.06	0.03	0.016
443						24	Apr	12	2011	1026.5	10	18.35	36.69	0.5	20	0.038	229,465				
444	3	2	32,820.039	-14,589.801		1	Apr	12	2011	1027.6	201	16.14	36.25	0.0	174	0.012	198,088	0.339	0.05	6.20	0.027
445						2	Apr	12	2011	1027.6	201	16.14	36.25	0.0	184	0.013	197,881				
446						3	Apr	12	2011	1027.6	201	16.13	36.25	0.0	146	0.014	200,059	0.333	0.07	6.14	0.030
447						4	Apr	12	2011	1027.0	108	17.80	36.63	0.2	139	0.033	219,928	0.053	0.08	1.05	0.532
448						5	Apr	12	2011	1027.0	108	17.80	36.63	0.2	144	0.036	221,460				
449						6	Apr	12	2011	1026.9	77	18.04	36.66	1.1	160	0.096	224,284	0.018	0.07	0.34	0.171
450						7	Apr	12	2011	1026.9	77	18.03	36.66	1.0	155	0.093	225,619				
451						8	Apr	12	2011	1026.9	76	18.04	36.66	1.0	152	0.094	226,219				
452						9	Apr	12	2011	1026.9	77	18.04	36.66	0.9	149	0.085	226,747				
453						10	Apr	12	2011	1026.9	77	18.03	36.66	0.9	149	0.083	226,640				
454						11	Apr	12	2011	1026.9	77	18.02	36.66	0.9	150	0.095	226,025	0.013	0.08	0.31	0.153

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
455						12	Apr	12	2011	1026.9	77	18.04	36.66	1.0	151	0.095	224.737				
456						13	Apr	12	2011	1026.9	78	18.04	36.66	1.0	160	0.094	226.161				
457						14	Apr	12	2011	1026.8	58	18.18	36.67	2.9	161	0.063	228.976	0.008	0.06	0.02	0.013
458						15	Apr	12	2011	1026.8	59	18.19	36.67	2.9	169	0.061	229.379	0.006	0.07	0.04	0.015
459						16	Apr	12	2011	1026.6	23	18.37	36.70	17.6	194	0.037	228.012				
460						17	Apr	12	2011	1026.6	24	18.37	36.70	18.3	202	0.037	229.236				
461						18	Apr	12	2011	1026.6	24	18.37	36.70	18.9	213	0.038	229.529				
462						19	Apr	12	2011	1026.6	24	18.37	36.70	28.7	300	0.038	229.296				
463						20	Apr	12	2011	1026.6	24	18.37	36.70	30.2	308	0.038	228.734	0.006	0.06	0.05	0.014
464						21	Apr	12	2011	1026.6	24	18.37	36.70	32.3	352	0.038	228.479				
465						22	Apr	12	2011	1026.6	24	18.37	36.70	31.0	349	0.035	229.774	0.009	0.07	0.03	0.013
466						23	Apr	12	2011	1026.5	11	18.37	36.70	58.3	283	0.035	231.103				
467						24	Apr	12	2011	1026.5	11	18.37	36.70	55.5	263	0.036	229.952				
468	3	19	32.820.495	-14.590.394		1	Apr	12	2011	1027.6	200	16.31	36.28	0.1	1646	0.016	197.603	0.318	0.08	5.77	0.030
469						2	Apr	12	2011	1027.6	200	16.30	36.28	0.1	1668	0.016	198.289				
470						3	Apr	12	2011	1027.2	141	17.89	36.60	0.5	1897	0.032	219.155	0.071	0.08	1.26	0.458
471						4	Apr	12	2011	1027.2	140	17.89	36.60	0.5	1498	0.030	218.537				
472						5	Apr	12	2011	1026.9	82	18.07	36.67	5.0	1030	0.146	223.599	0.023	0.09	0.42	0.264
473						6	Apr	12	2011	1026.9	82	18.04	36.67	5.7	1056	0.144	225.011				
474						7	Apr	12	2011	1026.9	82	18.04	36.67	6.4	1292	0.145	224.229				
475						8	Apr	12	2011	1026.9	82	18.03	36.67	8.3	1696	0.149	224.413				
476						9	Apr	12	2011	1026.9	82	18.03	36.67	9.7	1780	0.147	224.962				
477						10	Apr	12	2011	1026.9	82	18.04	36.67	4.7	955	0.144	224.300				
478						11	Apr	12	2011	1026.9	83	18.01	36.66	3.6	783	0.140	224.284				
479						12	Apr	12	2011	1026.9	81	18.03	36.66	3.8	771	0.145	224.672				
480						13	Apr	12	2011	1026.6	39	18.43	36.71	42.4	1559	0.044	229.314	0.011	0.07	0.06	0.015
481						14	Apr	12	2011	1026.6	40	18.43	36.71	43.8	1510	0.039	231.012				
482						15	Apr	12	2011	1026.6	26	18.49	36.71	77.1	1548	0.036	230.245	0.010	0.07	0.05	0.017
483						16	Apr	12	2011	1026.6	25	18.49	36.71	84.5	1603	0.032	230.241				
484						17	Apr	12	2011	1026.6	25	18.49	36.71	78.8	1209	0.033	228.516				
485						18	Apr	12	2011	1026.6	25	18.48	36.71	65.1	928	0.032	228.765				
486						19	Apr	12	2011	1026.6	25	18.44	36.71	75.4	1190	0.033	230.533				
487						20	Apr	12	2011	1026.6	25	18.45	36.71	74.7	934	0.034	229.553				
488						21	Apr	12	2011	1026.6	25	18.45	36.71	72.5	959	0.036	229.604				
489						22	Apr	12	2011	1026.6	26	18.44	36.71	69.2	993	0.037	230.400				
490						23	Apr	12	2011	1026.5	10	18.49	36.71	311.3	1057	0.026	228.115	0.010	0.07	0.05	0.016
491						24	Apr	12	2011	1026.5	10	18.49	36.71	234.1	1101	0.031	228.455				
492																					
493	no station 4																				
494																					
495	5	1	34.719.725	-14.260.068		1	Apr	13	2011	1027.6	200	15.60	36.17	0.0	20	0.012	207.893	0.305	0.06	5.62	0.038
496						2	Apr	13	2011	1027.6	200	15.60	36.17	0.0	20	0.013	207.760				
497						3	Apr	13	2011	1027.6	200	15.60	36.17	0.0	20	0.014	205.779				
498						4	Apr	13	2011	1027.3	131	16.51	36.37	0.0	20	0.027	223.886	0.116	0.06	2.45	0.356
499						5	Apr	13	2011	1027.3	131	16.51	36.37	0.0	20	0.027	223.673				
500						6	Apr	13	2011	1027.0	80	16.88	36.44	0.0	20	0.048	222.791	0.096	0.07	2.23	0.286
501						7	Apr	13	2011	1027.0	79	16.88	36.44	0.0	20	0.046	222.962				
502						8	Apr	13	2011	1026.8	48	16.93	36.43	0.0	20	0.165	231.690	0.031	0.10	1.02	0.264
503						9	Apr	13	2011	1026.8	48	16.93	36.42	0.0	20	0.188	233.808				
504						10	Apr	13	2011	1026.8	48	16.93	36.42	0.0	20	0.187	234.438				
505						11	Apr	13	2011	1026.8	48	16.93	36.42	0.0	20	0.167	233.459				
506						12	Apr	13	2011	1026.8	47	16.93	36.42	0.0	20	0.172	232.904				
507						13	Apr	13	2011	1026.8	48	16.93	36.42	0.0	20	0.172	233.437				
508						14	Apr	13	2011	1026.8	47	16.93	36.43	0.0	20	0.166	232.159				
509						15	Apr	13	2011	1026.6	20	17.43	36.47	0.0	20	0.043	237.157	0.010	0.06	0.01	0.007
510						16	Apr	13	2011	1026.6	21	17.43	36.47	0.0	20	0.042	237.647				
511						17	Apr	13	2011	1026.6	21	17.43	36.47	0.0	20	0.043	236.560				
512						18	Apr	13	2011	1026.6	20	17.43	36.47	0.0	20	0.045	235.153				
513						19	Apr	13	2011	1026.6	21	17.43	36.47	0.0	20	0.045	234.335				
514						20	Apr	13	2011	1026.6	20	17.43	36.47	0.0	20	0.046	236.567				
515						21	Apr	13	2011	1026.6	21	17.43	36.47	0.0	20	0.050	237.498				
516						22	Apr	13	2011	1026.6	10	17.43	36.47	0.1	20	0.041	234.420	0.008	0.06	0.02	0.007
517						23	Apr	13	2011	1026.6	10	17.43	36.47	0.2	20	0.047	235.304				
518						24	Apr	13	2011	1026.6	10	17.43	36.47	0.2	20	0.049	235.408				
519	5	2	34.719.761	-14.259.887		1	Apr	13	2011	1027.7	199	15.11	36.07	0.0	252	0.012	200.822	0.420	0.05	7.58	0.017

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
520						2	Apr 13	2011	1027.7	200	15.11	36.07	0.0	238	0.10	200.183	0.416	0.07	7.51	0.019	
521						3	Apr 13	2011	1027.7	200	15.10	36.07	0.0	247	0.013	201.067					
522						4	Apr 13	2011	1027.7	200	15.10	36.07	0.0	289	0.014	201.557					
523						5	Apr 13	2011	1027.3	131	16.43	36.34	0.1	282	0.023	224.285	0.118	0.05	2.41	0.400	
524						6	Apr 13	2011	1027.3	131	16.43	36.34	0.1	278	0.023	223.687					
525						7	Apr 13	2011	1027.1	90	16.82	36.43	0.3	332	0.060	222.402	0.098	0.04	2.14	0.350	
526						8	Apr 13	2011	1027.1	89	16.83	36.43	0.3	327	0.062	222.375					
527						9	Apr 13	2011	1026.9	47	16.89	36.44	3.9	366	0.107	228.470	0.060	0.08	1.37	0.364	
528						10	Apr 13	2011	1026.9	47	16.89	36.44	4.0	389	0.089	227.004	0.061	0.09	1.37	0.367	
529						11	Apr 13	2011	1026.9	47	16.89	36.44	3.9	387	0.104	229.018					
530						12	Apr 13	2011	1026.8	46	16.89	36.44	4.1	374	0.100	229.024					
531						13	Apr 13	2011	1026.8	47	16.89	36.44	3.9	398	0.108	229.284					
532						14	Apr 13	2011	1026.8	46	16.89	36.44	3.9	372	0.103	228.202					
533						15	Apr 13	2011	1026.8	46	16.89	36.44	4.0	400	0.110	227.495	0.008	0.06	0.02	0.008	
534						16	Apr 13	2011	1026.6	19	17.42	36.47	32.2	377	0.052	236.630	0.005	0.05	0.02	0.006	
535						17	Apr 13	2011	1026.6	19	17.42	36.47	29.6	390	0.051	237.490					
536						18	Apr 13	2011	1026.6	20	17.42	36.47	30.4	399	0.054	235.716					
537						19	Apr 13	2011	1026.6	20	17.42	36.47	30.3	393	0.051	237.069					
538						20	Apr 13	2011	1026.6	19	17.42	36.47	33.7	415	0.048	235.571					
539						21	Apr 13	2011	1026.6	19	17.42	36.47	32.5	379	0.049	235.185					
540						22	Apr 13	2011	1026.6	20	17.42	36.47	30.1	392	0.050	236.592	0.005	0.06	0.01	0.005	
541						23	Apr 13	2011	1026.6	10	17.42	36.47	67.0	432	0.055	237.322					
542						24	Apr 13	2011	1026.6	10	17.42	36.47	79.3	445	0.054	234.854					
543	5	22	34,720,773	-14,259,681		1	Apr 13	2011	1027.4	150	16.38	36.33	0.3	1517	0.025	223.065	0.127	0.03	2.54	0.396	
544						2	Apr 13	2011	1027.3	149	16.39	36.34	0.3	1520	0.024	222.738					
545						3	Apr 13	2011	1027.1	99	16.77	36.42	1.6	1512	0.042	221.174	0.102	0.05	2.25	0.272	
546						4	Apr 13	2011	1027.1	99	16.77	36.42	1.6	1492	0.043	221.798					
547						5	Apr 13	2011	1026.9	61	16.85	36.40	10.7	1486	0.206	234.873	0.023	0.12	0.61	0.078	
548						6	Apr 13	2011	1026.9	62	16.84	36.40	11.2	1481	0.205	234.228					
549						7	Apr 13	2011	1026.9	61	16.84	36.40	11.6	1476	0.198	235.613					
550						8	Apr 13	2011	1026.9	61	16.85	36.40	12.1	1485	0.192	234.154					
551						9	Apr 13	2011	1026.9	61	16.86	36.40	11.3	1486	0.214	238.176					
552						10	Apr 13	2011	1026.9	61	16.88	36.40	11.5	1485	0.238	236.773					
553						11	Apr 13	2011	1026.9	60	16.89	36.40	12.0	1492	0.221	237.859					
554						12	Apr 13	2011	1026.9	62	16.89	36.40	10.7	1487	0.228	238.225					
555						13	Apr 13	2011	1026.7	40	17.43	36.47	28.3	1470	0.056	236.371	0.010	0.04	0.01	0.001	
556						14	Apr 13	2011	1026.7	40	17.43	36.47	26.9	1467	0.059	237.930					
557						15	Apr 13	2011	1026.6	25	17.51	36.47	37.2	1460	0.060	237.387	0.005	0.07	0.01	0.001	
558						16	Apr 13	2011	1026.6	26	17.44	36.47	38.2	1414	0.060	237.831					
559						17	Apr 13	2011	1026.6	25	17.45	36.47	41.9	1455	0.060	238.244					
560						18	Apr 13	2011	1026.6	26	17.44	36.47	39.3	1467	0.044	237.945					
561						19	Apr 13	2011	1026.6	25	17.45	36.47	44.6	1457	0.046	237.294					
562						20	Apr 13	2011	1026.6	26	17.45	36.47	34.8	1431	0.050	235.594					
563						21	Apr 13	2011	1026.6	26	17.45	36.47	34.9	1444	0.044	236.435					
564						22	Apr 13	2011	1026.6	25	17.49	36.47	36.9	1419	0.049	236.269					
565						23	Apr 13	2011	1026.5	10	17.59	36.47	86.1	1445	0.046	236.671	0.002	0.04	0.01	0.003	
566						24	Apr 13	2011	1026.5	9	17.60	36.47	103.8	1454	0.044	234.153					
567	5	23	34,720,184	-14,259,823		1	Apr 13	2011	1027.3	132	16.32	36.32	0.0	21	0.025	223.317	0.138	0.03	2.56	0.383	
568						2	Apr 13	2011	1027.3	130	16.32	36.32	0.0	21	0.030	222.621					
569						3	Apr 13	2011	1027.3	130	16.32	36.32	0.0	21	0.025	223.292					
570						4	Apr 13	2011	1027.3	130	16.32	36.32	0.0	21	0.029	223.341					
571						5	Apr 13	2011	1027.1	100	16.70	36.41	0.0	20	0.037	219.833	0.119	0.05	2.40	0.210	
572						6	Apr 13	2011	1027.1	100	16.70	36.41	0.0	20	0.036	222.278					
573						7	Apr 13	2011	1027.1	99	16.70	36.41	0.0	20	0.036	221.540					
574						8	Apr 13	2011	1027.1	100	16.70	36.41	0.0	20	0.035	222.106					
575						9	Apr 13	2011	1027.0	70	16.79	36.41	0.0	20	0.089	226.729	0.081	0.15	1.64	0.356	
576						10	Apr 13	2011	1027.0	70	16.79	36.41	0.0	20	0.070	226.590					
577						11	Apr 13	2011	1027.0	71	16.79	36.41	0.0	20	0.070	228.820					
578						12	Apr 13	2011	1027.0	71	16.79	36.41	0.0	20	0.070	227.866					
579						13	Apr 13	2011	1026.8	42	17.03	36.42	0.0	20	0.188	236.877	0.017	0.08	0.41	0.079	
580						14	Apr 13	2011	1026.8	42	17.00	36.42	0.0	20	0.176	238.014					
581						15	Apr 13	2011	1026.8	43	16.97	36.42	0.0	20	0.183	237.419					
582						16	Apr 13	2011	1026.8	43	16.95	36.42	0.0	20	0.201	235.633					
583						17	Apr 13	2011	1026.8	43	16.94	36.42	0.0	20	0.201	238.366					
584						18	Apr 13	2011	1026.8	43	16.95	36.42	0.0	20	0.216	235.688					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
585						19	Apr	13	2011	1026.6	20	17.45	36.47	0.1	20	0.053	236.087	0.012	0.07		
586						20	Apr	13	2011	1026.6	20	17.45	36.47	0.1	20	0.053	235.619				
587						21	Apr	13	2011	1026.6	20	17.45	36.47	0.1	20	0.048	237.953				
588						22	Apr	13	2011	1026.6	21	17.45	36.47	0.1	20	0.048	238.830				
589						23	Apr	13	2011	1026.6	21	17.45	36.47	0.1	20	0.050	238.502				
590						24	Apr	13	2011	1026.6	20	17.45	36.47	0.1	20	0.044	236.907				
591	5	27	34.719.778	-14.259.726		1	Apr	14	2011	1027.6	199	15.84	36.24	0.0	20	0.019	221.000	0.180	0.06	3.10	0.316
592						2	Apr	14	2011	1027.6	199	15.84	36.24	0.0	20	0.019	222.583				
593						3	Apr	14	2011	1027.6	199	15.84	36.24	0.0	20	0.019	221.966				
594						4	Apr	14	2011	1027.2	111	16.60	36.38	0.0	20	0.048	223.504	0.132	0.09	2.46	0.491
595						5	Apr	14	2011	1027.2	111	16.60	36.38	0.0	20	0.049	222.797				
596						6	Apr	14	2011	1027.0	79	16.73	36.40	0.0	20	0.054	228.028	0.092	0.22	1.74	0.349
597						7	Apr	14	2011	1027.0	79	16.73	36.40	0.0	20	0.056	229.336				
598						8	Apr	14	2011	1026.8	49	16.85	36.41	0.0	20	0.145	235.024	0.049	0.16	0.97	0.156
599						9	Apr	14	2011	1026.8	49	16.85	36.41	0.0	20	0.151	233.978				
600						10	Apr	14	2011	1026.8	48	16.85	36.41	0.0	20	0.149	235.024				
601						11	Apr	14	2011	1026.8	48	16.85	36.41	0.0	20	0.152	235.219				
602						12	Apr	14	2011	1026.8	48	16.85	36.41	0.0	20	0.146	233.946				
603						13	Apr	14	2011	1026.8	48	16.84	36.41	0.0	20	0.145	234.584				
604						14	Apr	14	2011	1026.8	47	16.84	36.41	0.0	20	0.160	232.987				
605						15	Apr	14	2011	1026.8	48	16.84	36.41	0.0	20	0.149	234.397				
606						16	Apr	14	2011	1026.6	20	17.43	36.46	0.1	20	0.056	235.859	0.015	0.10	0.04	0.009
607						17	Apr	14	2011	1026.6	21	17.43	36.46	0.1	20	0.053	237.474				
608						18	Apr	14	2011	1026.6	20	17.43	36.46	0.1	20	0.050	236.950				
609						19	Apr	14	2011	1026.6	20	17.43	36.46	0.1	20	0.053	233.794				
610						20	Apr	14	2011	1026.6	21	17.43	36.46	0.1	20	0.049	237.331				
611						21	Apr	14	2011	1026.6	21	17.43	36.46	0.1	20	0.058	237.480				
612						22	Apr	14	2011	1026.6	20	17.43	36.46	0.1	20	0.045	236.528				
613						23	Apr	14	2011	1026.6	10	17.43	36.46	0.5	20	0.055	235.614	0.007	0.08	0.02	0.008
614						24	Apr	14	2011	1026.6	10	17.43	36.46	0.5	20	0.047	235.480				
615	5	28	34.720.008	-14.260.018		1	Apr	14	2011	1027.6	199	15.82	36.23	0.0	119	0.018	220.157	0.199	0.08	3.47	0.262
616						2	Apr	14	2011	1027.6	200	15.82	36.23	0.0	116	0.018	220.939	0.197	0.06	3.47	0.261
617						3	Apr	14	2011	1027.6	200	15.82	36.23	0.0	114	0.019	220.219				
618						4	Apr	14	2011	1027.3	141	16.25	36.30	0.0	159	0.028	223.940	0.136	0.06	2.54	0.326
619						5	Apr	14	2011	1027.3	141	16.25	36.30	0.0	154	0.028	223.032				
620						6	Apr	14	2011	1027.1	89	16.73	36.41	0.3	211	0.052	223.192	0.103	0.07	2.10	0.483
621						7	Apr	14	2011	1027.1	90	16.73	36.41	0.3	211	0.050	225.678				
622						8	Apr	14	2011	1026.8	48	16.88	36.41	3.6	237	0.125	233.177	0.037	0.16	0.89	0.129
623						9	Apr	14	2011	1026.8	47	16.88	36.41	3.4	237	0.124	235.744	0.038	0.15	0.88	0.128
624						10	Apr	14	2011	1026.8	47	16.88	36.41	3.4	230	0.136	234.742				
625						11	Apr	14	2011	1026.8	47	16.88	36.41	3.6	233	0.124	233.479				
626						12	Apr	14	2011	1026.8	47	16.88	36.40	3.6	236	0.126	233.101				
627						13	Apr	14	2011	1026.8	48	16.89	36.41	3.4	239	0.122	234.434				
628						14	Apr	14	2011	1026.8	48	16.89	36.41	3.4	239	0.126	234.505				
629						15	Apr	14	2011	1026.6	20	17.40	36.46	17.8	199	0.045	235.405	0.009	0.08	0.03	0.007
630						16	Apr	14	2011	1026.6	20	17.41	36.46	19.7	210	0.050	235.489				
631						17	Apr	14	2011	1026.6	20	17.41	36.46	21.3	216	0.044	237.121				
632						18	Apr	14	2011	1026.6	19	17.41	36.46	24.1	227	0.043	235.238				
633						19	Apr	14	2011	1026.6	20	17.42	36.46	23.3	241	0.044	236.036	0.008	0.06	0.02	0.004
634						20	Apr	14	2011	1026.6	20	17.42	36.46	23.1	235	0.050	236.826				
635						21	Apr	14	2011	1026.6	20	17.39	36.45	18.4	212	0.049	238.243				
636						22	Apr	14	2011	1026.6	10	17.41	36.46	35.5	180	0.064	233.677	0.008	0.05	0.02	0.005
637						23	Apr	14	2011	1026.6	10	17.41	36.46	40.3	191	0.046	237.483				
638						24	Apr	14	2011	1026.6	10	17.41	36.46	40.8	200	0.046	235.056				
639	5	29	34.720.682	-14.260.243		1	Apr	14	2011	1029.3	501	12.00	35.64	0.0	1787	0.012	194.388				
640						2	Apr	14	2011	1029.3	501	12.01	35.64	0.0	1821	0.010	194.081				
641						3	Apr	14	2011	1029.3	501	12.00	35.64	0.0	1784	0.013	194.563				
642						4	Apr	14	2011	1029.3	502	12.00	35.64	0.0	1797	0.012	195.072				
643						5	Apr	14	2011	1026.8	47	16.83	36.40	44.1	1789	0.118	227.817				
644						6	Apr	14	2011	1026.8	47	16.82	36.40	43.7	1775	0.131	227.961				
645						7	Apr	14	2011	1026.8	48	16.82	36.41	42.4	1755	0.131	229.349				
646						8	Apr	14	2011	1026.8	47	16.82	36.41	44.6	1767	0.128	229.020				
647						9	Apr	14	2011	1026.8	47	16.81	36.41	44.4	1781	0.123	227.556				
648						10	Apr	14	2011	1026.8	47	16.82	36.41	45.8	1799	0.127	227.208				
649						11	Apr	14	2011	1026.8	47	16.82	36.41	46.6	1824	0.131	228.372				

for Klas Timmermans
- Translocation exps.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
650						12	Apr	14	2011	1026.8	47	16.81	36.41	48.4	1849	0.128	228.061				
651						13	Apr	14	2011	1026.8	47	16.82	36.41	50.7	1971	0.125	228.344				
652						14	Apr	14	2011	1026.9	47	16.83	36.41	46.7	2058	0.153	228.993				
653						15	Apr	14	2011	1026.9	47	16.83	36.41	31.6	1346	0.139	228.874				
654						16	Apr	14	2011	1026.9	47	16.82	36.41	38.6	1594	0.129	228.895				
655						17	Apr	14	2011	1026.9	47	16.82	36.41	39.1	1478	0.133	227.610				
656						18	Apr	14	2011	1026.9	47	16.82	36.41	34.2	1385	0.119	227.831				
657						19	Apr	14	2011	1026.9	47	16.82	36.41	37.4	1556	0.121	226.749				
658						20	Apr	14	2011	1026.9	47	16.82	36.41	49.8	1557	0.138	226.919				
659						21	Apr	14	2011	1026.9	47	16.82	36.41	45.8	1740	0.123	228.469				
660						22	Apr	14	2011	1026.9	47	16.81	36.41	43.8	1876	0.120	227.841				
661						23	Apr	14	2011	1026.9	47	16.81	36.41	46.5	1847	0.120	227.197				
662						24	Apr	14	2011	1026.6	20	17.44	36.46	283.1	1802	0.049	236.896				
663																					
664	6	1	36.529.688	-14,110.193		1	Apr	14	2011	1027.9	201	13.73	35.92	0.0	20	0.016	208.335	0.508	0.07	8.62	0.019
665						2	Apr	14	2011	1027.9	203	13.73	35.92	0.0	20	0.014	208.929				
666						3	Apr	14	2011	1027.9	202	13.73	35.92	0.0	20	0.019	208.217				
667						4	Apr	14	2011	1027.3	94	15.09	36.16	0.0	20	0.034	224.421	0.22	0.06	3.74	0.206
668						5	Apr	14	2011	1027.3	94	15.09	36.16	0.0	20	0.034	223.324				
669						6	Apr	14	2011	1027.3	94	15.09	36.16	0.0	20	0.034	224.124				
670						7	Apr	14	2011	1027.2	75	15.45	36.24	0.0	20	0.196	229.932	0.156	0.06	2.78	0.563
671						8	Apr	14	2011	1027.2	75	15.45	36.23	0.0	20	0.196	230.415				
672						9	Apr	14	2011	1027.2	75	15.44	36.23	0.0	20	0.078	228.685				
673						10	Apr	14	2011	1027.0	54	15.77	36.26	0.0	20	0.346	245.131				
674						11	Apr	14	2011	1027.0	54	15.77	36.26	0.0	20	0.408	247.260				
675						12	Apr	14	2011	1027.0	54	15.77	36.26	0.0	20	0.412	247.162				
676						13	Apr	14	2011	1027.0	53	15.77	36.26	0.0	20	0.360	247.135				
677						14	Apr	14	2011	1027.0	53	15.76	36.26	0.0	20	0.346	246.198				
678						15	Apr	14	2011	1027.0	54	15.75	36.26	0.0	20	0.388	247.027				
679						16	Apr	14	2011	1026.7	25	16.91	36.34	0.0	20	0.062	239.395	0.017	0.04	0.01	0.005
680						17	Apr	14	2011	1026.7	25	16.91	36.34	0.0	20	0.062	242.209				
681						18	Apr	14	2011	1026.7	25	16.93	36.34	0.0	20	0.060	240.580				
682						19	Apr	14	2011	1026.7	25	16.94	36.34	0.0	20	0.059	241.491				
683						20	Apr	14	2011	1026.7	25	16.93	36.34	0.0	20	0.062	239.801				
684						21	Apr	14	2011	1026.7	25	16.91	36.34	0.0	20	0.065	239.651				
685						22	Apr	14	2011	1026.6	10	17.02	36.35	0.4	20	0.041	237.663	0.019	0.05	0.01	0.006
686						23	Apr	14	2011	1026.6	11	17.03	36.35	0.4	20	0.056	238.353				
687						24	Apr	14	2011	1026.6	10	17.03	36.35	0.4	20	0.057	239.269				
688																					
689	7	1	36.529.698	-13,939.981		1	Apr	15	2011	1027.8	201	14.09	35.99	0.0	20	0.017	208.463	0.464	0.07	7.81	0.022
690						2	Apr	15	2011	1027.8	201	14.09	35.99	0.0	20	0.016	208.918				
691						3	Apr	15	2011	1027.8	201	14.08	35.99	0.0	20	0.015	207.211				
692						4	Apr	15	2011	1027.8	201	14.08	35.99	0.0	20	0.017	206.138				
693						5	Apr	15	2011	1027.2	81	15.32	36.23	0.0	20	0.052	227.864	0.168	0.09	2.99	0.166
694						6	Apr	15	2011	1027.2	80	15.32	36.23	0.0	20	0.054	228.436				
695						7	Apr	15	2011	1027.2	81	15.33	36.23	0.0	20	0.054	228.656				
696						8	Apr	15	2011	1027.0	53	16.07	36.28	0.0	20	0.291	242.182	0.028	0.11	0.33	0.108
697						9	Apr	15	2011	1027.0	53	16.07	36.28	0.0	20	0.253	240.492				
698						10	Apr	15	2011	1027.0	53	16.07	36.28	0.0	20	0.277	240.460				
699						11	Apr	15	2011	1027.0	52	16.07	36.28	0.0	20	0.278	240.448				
700						12	Apr	15	2011	1027.0	53	16.07	36.28	0.0	20	0.272	242.010				
701						13	Apr	15	2011	1027.0	52	16.08	36.28	0.0	20	0.272	241.040				
702						14	Apr	15	2011	1027.0	53	16.08	36.28	0.0	20	0.285	241.987				
703						15	Apr	15	2011	1026.7	25	16.68	36.32	0.1	20	0.069	240.943	0.019	0.08	0.02	0.005
704						16	Apr	15	2011	1026.7	25	16.68	36.32	0.1	20	0.061	243.374				
705						17	Apr	15	2011	1026.7	25	16.68	36.32	0.1	20	0.057	242.266				
706						18	Apr	15	2011	1026.7	25	16.68	36.32	0.1	20	0.060	242.575				
707						19	Apr	15	2011	1026.7	25	16.67	36.32	0.1	20	0.061	242.722				
708						20	Apr	15	2011	1026.7	25	16.68	36.32	0.1	21	0.066	242.888				
709						21	Apr	15	2011	1026.7	25	16.67	36.32	0.1	21	0.059	241.671				
710						22	Apr	15	2011	1026.6	11	16.72	36.32	0.8	21	0.060	241.915	0.019	0.08	0.02	0.005
711						23	Apr	15	2011	1026.6	11	16.72	36.32	0.7	21	0.060	240.728				
712						24	Apr	15	2011	1026.6	11	16.71	36.32	0.8	21	0.060	242.001				
713	7	2	36.529.981	-13,940.248		1	Apr	15	2011	1027.8	198	13.75	35.93	0.0	248	0.015	207.425	0.523	0.10	8.70	0.019
714						2	Apr	15	2011	1027.8	198	13.75	35.93	0.0	223	0.016	207.359	0.52	0.06	8.66	0.021

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
715						3	Apr 15	2011	1027.8	198	13.75	35.93	0.0	211	0.012	207.527					
716						4	Apr 15	2011	1027.8	198	13.75	35.93	0.0	210	0.015	207.399					
717						5	Apr 15	2011	1027.3	100	15.27	36.22	0.1	235	0.045	230.324	0.181	0.06	2.94	0.336	
718						6	Apr 15	2011	1027.3	101	15.27	36.22	0.1	237	0.040	229.948					
719						7	Apr 15	2011	1027.1	63	15.51	36.23	0.7	252	0.059	231.698	0.148	0.05	2.33	0.375	
720						8	Apr 15	2011	1027.1	63	15.49	36.23	0.7	226	0.073	231.153					
721						9	Apr 15	2011	1027.0	47	15.81	36.26	3.2	473	0.209	237.346	0.069	0.04	0.98	0.259	
722						10	Apr 15	2011	1027.0	47	15.81	36.26	3.3	431	0.206	238.368					
723						11	Apr 15	2011	1027.0	48	15.82	36.26	3.3	490	0.221	238.860					
724						12	Apr 15	2011	1027.0	47	15.82	36.26	3.2	400	0.250	239.700	0.064	0.08	0.86	0.232	
725						13	Apr 15	2011	1027.0	47	15.81	36.26	2.8	396	0.250	239.313					
726						14	Apr 15	2011	1027.0	47	15.81	36.26	2.4	294	0.220	239.744					
727						15	Apr 15	2011	1027.0	47	15.81	36.26	2.4	309	0.219	241.186					
728						16	Apr 15	2011	1026.7	25	16.61	36.32	27.7	499	0.066	241.217					
729						17	Apr 15	2011	1026.7	25	16.61	36.32	27.4	493	0.067	241.800					
730						18	Apr 15	2011	1026.7	25	16.60	36.32	28.2	477	0.062	242.957					
731						19	Apr 15	2011	1026.7	25	16.59	36.32	28.0	524	0.066	242.924	0.026	0.05	0.01	0.011	
732						20	Apr 15	2011	1026.7	25	16.60	36.32	28.1	538	0.066	242.801					
733						21	Apr 15	2011	1026.7	26	16.58	36.32	27.7	570	0.060	243.468					
734						22	Apr 15	2011	1026.7	26	16.58	36.32	29.6	562	0.070	243.085					
735						23	Apr 15	2011	1026.7	10	16.65	36.31	106.5	494	0.064	242.544	0.02	0.04	0.01	0.011	
736						24	Apr 15	2011	1026.7	10	16.65	36.31	106.5	492	0.062	240.869					
737	7	20	36.529.697	-13.940.295		1	Apr 15	2011	1027.2	80	15.18	36.20	2.8	1589	0.042	228.662	0.212	0.06	3.50	0.121	
738						2	Apr 15	2011	1027.2	80	15.18	36.20	2.8	1533	0.039	227.309					
739						3	Apr 15	2011	1027.0	47	15.83	36.26	24.9	1522	0.439	242.912	0.051	0.09	0.72	0.156	
740						4	Apr 15	2011	1027.0	47	15.80	36.26	21.5	1506	0.441	243.886	0.049	0.10	0.67	0.143	
741						5	Apr 15	2011	1027.0	47	15.81	36.26	21.3	1518	0.444	243.380					
742						6	Apr 15	2011	1027.0	47	15.76	36.25	21.3	1543	0.512	244.037					
743						7	Apr 15	2011	1027.0	47	15.75	36.25	22.2	1531	0.430	242.526					
744						8	Apr 15	2011	1027.0	47	15.77	36.25	21.9	1515	0.413	242.424					
745						9	Apr 15	2011	1027.0	48	15.72	36.25	20.5	1502	0.408	243.367					
746						10	Apr 15	2011	1027.0	48	15.70	36.25	21.1	1519	0.385	242.236					
747						11	Apr 15	2011	1026.8	34	16.60	36.30	49.8	1442	0.062	243.344	0.022	0.07	0.02	0.006	
748						12	Apr 15	2011	1026.7	34	16.67	36.31	45.1	1591	0.067	242.381					
749						13	Apr 15	2011	1026.7	20	16.72	36.32	214.0	1602	0.051	241.194	0.023	0.06	0.01	0.006	
750						14	Apr 15	2011	1026.7	21	16.72	36.32	149.2	1161	0.055	242.573					
751						15	Apr 15	2011	1026.7	21	16.72	36.32	188.8	1616	0.059	242.980					
752						16	Apr 15	2011	1026.7	20	16.72	36.32	173.1	1564	0.053	241.050					
753						17	Apr 15	2011	1026.7	20	16.73	36.32	179.6	1565	0.055	241.376					
754						18	Apr 15	2011	1026.7	21	16.73	36.32	167.7	1592	0.054	242.035					
755						19	Apr 15	2011	1026.7	21	16.73	36.32	171.1	1542	0.054	243.121					
756						20	Apr 15	2011	1026.7	21	16.73	36.32	195.4	1563	0.057	243.571					
757						21	Apr 15	2011	1026.6	11	16.83	36.32	412.6	1474	0.042	242.069	0.023	0.08	0.01	0.005	
758						22	Apr 15	2011	1026.6	11	16.83	36.32	398.0	1509	0.036	241.807					
759						23	Apr 15	2011	1026.6	11	16.83	36.32	381.4	1510	0.044	242.903					
760						24	Apr 15	2011	1026.6	11	16.88	36.32	403.2	1514	0.040	242.096					
761																					
762	8	1	37.279.965	-13.800.038		1	Apr 15	2011	1027.8	201	14.40	36.06	0.0	20	0.014	223.542	0.325	0.06	5.33	0.030	
763						2	Apr 15	2011	1027.8	201	14.38	36.06	0.0	20	0.019	224.242					
764						3	Apr 15	2011	1027.8	201	14.33	36.05	0.0	20	0.014	223.815					
765						4	Apr 15	2011	1027.8	201	14.33	36.05	0.0	20	0.015	223.637					
766						5	Apr 15	2011	1027.4	120	15.00	36.14	0.0	20	0.024	224.033	0.253	0.06	4.13	0.107	
767						6	Apr 15	2011	1027.4	120	15.00	36.14	0.0	20	0.022	224.015					
768						7	Apr 15	2011	1027.2	80	15.42	36.22	0.0	20	0.059	226.141	0.179	0.08	3.00	0.316	
769						8	Apr 15	2011	1027.2	80	15.43	36.22	0.0	20	0.063	228.813					
770						9	Apr 15	2011	1027.0	48	15.77	36.27	0.0	20	0.139	234.766	0.095	0.21	1.53	0.390	
771						10	Apr 15	2011	1027.0	48	15.78	36.27	0.0	20	0.154	232.934					
772						11	Apr 15	2011	1027.0	49	15.77	36.27	0.0	20	0.131	233.568					
773						12	Apr 15	2011	1027.0	48	15.78	36.27	0.0	20	0.159	233.448					
774						13	Apr 15	2011	1027.0	48	15.78	36.27	0.0	20	0.140	234.553					
775						14	Apr 15	2011	1027.0	48	15.84	36.27	0.0	20	0.149	235.083					
776						15	Apr 15	2011	1026.7	20	16.47	36.31	0.1	20	0.073	241.413	0.024	0.07	0.01	0.009	
777						16	Apr 15	2011	1026.7	20	16.48	36.31	0.1	20	0.069	242.615					
778						17	Apr 15	2011	1026.7	21	16.48	36.31	0.1	20	0.072	242.310					
779						18	Apr 15	2011	1026.7	20	16.48	36.31	0.1	20	0.065	241.971					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
780						19	Apr	15	2011	1026.7	20	16.48	36.31	0.1	20	0.064	241.839				
781						20	Apr	15	2011	1026.7	20	16.48	36.31	0.1	20	0.051	242.178				
782						21	Apr	15	2011	1026.7	10	16.63	36.31	0.4	20	0.065	241.805	0.013	0.07	0.01	0.011
783						22	Apr	15	2011	1026.7	10	16.63	36.31	0.4	20	0.072	241.180				
784						23	Apr	15	2011	1026.7	10	16.63	36.31	0.4	20	0.068	240.622				
785						24	Apr	15	2011	1026.7	10	16.63	36.31	0.4	20	0.066	238.481				
786																					
787	9	1	38.420.489	-13.575.978		1	Apr	16	2011	1027.8	201	14.45	36.07	0.0	20	0.019	226.203	0.295	0.08	4.95	0.071
788						2	Apr	16	2011	1027.8	201	14.45	36.07	0.0	20	0.022	224.336				
789						3	Apr	16	2011	1027.2	101	15.63	36.25	0.0	20	0.050	225.179	0.144	0.09	2.56	0.293
790						4	Apr	16	2011	1027.2	101	15.63	36.25	0.0	20	0.051	227.872				
791						5	Apr	16	2011	1027.0	67	15.90	36.26	0.0	20	0.188	239.274	0.045	0.24	0.52	0.145
792						6	Apr	16	2011	1027.0	67	15.91	36.26	0.0	20	0.197	237.377				
793						7	Apr	16	2011	1027.0	67	15.90	36.26	0.0	20	0.183	239.057				
794						8	Apr	16	2011	1027.0	66	15.90	36.26	0.0	20	0.175	238.989	0.050	0.25	0.55	0.150
795						9	Apr	16	2011	1027.0	67	15.89	36.26	0.0	20	0.173	238.659				
796						10	Apr	16	2011	1027.0	66	15.89	36.26	0.0	20	0.177	238.855				
797						11	Apr	16	2011	1027.0	66	15.90	36.26	0.0	20	0.165	237.122				
798						12	Apr	16	2011	1027.0	66	15.89	36.26	0.0	20	0.184	238.235				
799						13	Apr	16	2011	1026.9	41	16.14	36.27	0.0	20	0.091	245.731	0.022	0.07	0.03	0.013
800						14	Apr	16	2011	1026.9	41	16.14	36.27	0.0	20	0.114	244.722				
801						15	Apr	16	2011	1026.7	18	16.37	36.29	0.2	20	0.089	242.546	0.016	0.08	0.03	0.013
802						16	Apr	16	2011	1026.7	17	16.37	36.29	0.2	20	0.078	240.221				
803						17	Apr	16	2011	1026.7	17	16.37	36.29	0.2	20	0.071	240.768				
804						18	Apr	16	2011	1026.7	18	16.37	36.29	0.2	20	0.073	242.073				
805						19	Apr	16	2011	1026.7	18	16.37	36.29	0.2	20	0.066	241.458				
806						20	Apr	16	2011	1026.7	18	16.37	36.29	0.2	20	0.069	242.832				
807						21	Apr	16	2011	1026.7	17	16.37	36.29	0.2	20	0.080	241.163				
808						22	Apr	16	2011	1026.7	18	16.37	36.29	0.2	20	0.089	243.716				
809						23	Apr	16	2011	1026.7	11	16.37	36.29	0.6	21	0.076	242.657	0.016	0.07	0.04	0.012
810						24	Apr	16	2011	1026.7	11	16.37	36.29	0.6	21	0.072	243.576				
811	9	2	38.420.489	-13.575.978		1	Apr	16	2011	1027.8	200	14.33	36.07	0.0	174	0.014	232.919	0.254	0.07	4.20	0.028
812						2	Apr	16	2011	1027.8	200	14.33	36.07	0.0	176	0.012	231.685	0.250	0.07	4.20	0.023
813						3	Apr	16	2011	1027.8	200	14.33	36.07	0.0	178	0.014	231.916				
814						4	Apr	16	2011	1027.8	200	14.35	36.07	0.0	185	0.013	231.601				
815						5	Apr	16	2011	1027.1	80	15.86	36.26	0.3	197	0.128	239.048	0.052	0.34	0.57	0.163
816						6	Apr	16	2011	1027.1	80	15.86	36.26	0.3	184	0.120	238.277				
817						7	Apr	16	2011	1027.0	63	16.01	36.26	1.0	196	0.166	242.508	0.018	0.14	0.08	0.037
818						8	Apr	16	2011	1027.0	63	16.01	36.26	1.1	198	0.182	242.354	0.018	0.16	0.08	0.039
819						9	Apr	16	2011	1027.0	64	16.00	36.26	1.0	194	0.179	242.699				
820						10	Apr	16	2011	1027.0	63	16.02	36.26	1.2	222	0.193	239.366				
821						11	Apr	16	2011	1027.0	64	16.01	36.26	1.3	248	0.184	243.159				
822						12	Apr	16	2011	1027.0	63	16.01	36.26	1.3	253	0.169	242.802				
823						13	Apr	16	2011	1027.0	64	16.00	36.26	1.1	215	0.196	242.802				
824						14	Apr	16	2011	1026.9	49	16.36	36.29	4.7	412	0.064	242.560	0.012	0.07	0.01	0.011
825						15	Apr	16	2011	1026.9	49	16.36	36.29	4.1	256	0.063	241.456				
826						16	Apr	16	2011	1026.7	19	16.36	36.29	36.3	386	0.061	241.863	0.009	0.06	0.01	0.011
827						17	Apr	16	2011	1026.7	19	16.36	36.29	28.5	283	0.059	239.329	0.009	0.06	0.02	0.011
828						18	Apr	16	2011	1026.7	19	16.36	36.29	37.4	381	0.087	240.748				
829						19	Apr	16	2011	1026.7	20	16.36	36.29	30.9	393	0.064	242.967				
830						20	Apr	16	2011	1026.7	20	16.36	36.29	30.8	352	0.070	242.288				
831						21	Apr	16	2011	1026.7	20	16.36	36.29	22.0	226	0.077	242.762				
832						22	Apr	16	2011	1026.7	19	16.36	36.29	22.8	202	0.069	240.216				
833						23	Apr	16	2011	1026.7	10	16.36	36.29	39.9	199	0.063	243.042	0.010	0.07	0.01	0.010
834						24	Apr	16	2011	1026.7	10	16.36	36.29	39.8	208	0.060	243.396				
835	9	18	38.420.489	-13.575.978		1	Apr	16	2011	1027.3	119	15.43	36.22	0.3	1198	0.035	225.566	0.171	0.07	2.76	0.194
836						2	Apr	16	2011	1027.3	119	15.43	36.22	0.3	938	0.029	227.986				
837						3	Apr	16	2011	1027.3	119	15.43	36.22	0.2	865	0.033	225.823				
838						4	Apr	16	2011	1027.3	119	15.43	36.22	0.2	840	0.028	227.795				
839						5	Apr	16	2011	1027.1	76	15.72	36.26	2.0	1029	0.087	233.065	0.118	0.25	1.66	0.435
840						6	Apr	16	2011	1027.1	76	15.72	36.26	2.4	1290	0.088	231.881				
841						7	Apr	16	2011	1027.0	61	15.87	36.26	6.7	1589	0.181	237.705	0.045	0.28	0.51	0.138
842						8	Apr	16	2011	1027.0	61	15.86	36.26	6.3	1183	0.167	237.161	0.045	0.30	0.52	0.140
843						9	Apr	16	2011	1027.0	61	15.86	36.26	5.9	1134	0.175	236.791				
844						10	Apr	16	2011	1027.0	61	15.86	36.26	5.5	1136	0.185	235.473				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
845						11	Apr	16	2011	1027.0	61	15.86	36.26	5.8	1327	0.222	237.889				
846						12	Apr	16	2011	1027.0	61	15.84	36.26	5.2	1149	0.169	237.934				
847						13	Apr	16	2011	1026.9	44	16.12	36.27	28.8	1818	0.164	243.336	0.013	0.09	0.02	0.014
848						14	Apr	16	2011	1026.9	45	16.11	36.27	20.8	1298	0.167	242.784				
849						15	Apr	16	2011	1026.9	45	16.11	36.27	28.8	1985	0.157	244.151				
850						16	Apr	16	2011	1026.7	20	16.40	36.30	106.6	1279	0.064	243.672	0.011	0.07	0.01	0.006
851						17	Apr	16	2011	1026.7	20	16.40	36.30	101.4	1208	0.065	243.790				
852						18	Apr	16	2011	1026.7	20	16.40	36.30	93.2	1085	0.063	242.374				
853						19	Apr	16	2011	1026.7	20	16.40	36.30	131.2	1559	0.066	242.294				
854						20	Apr	16	2011	1026.7	20	16.42	36.30	134.2	1509	0.065	242.813				
855						21	Apr	16	2011	1026.7	20	16.42	36.30	150.0	1822	0.062	241.685				
856						22	Apr	16	2011	1026.7	10	16.47	36.30	196.1	961	0.052	243.477	0.011	0.06	0.02	0.005
857						23	Apr	16	2011	1026.7	10	16.46	36.30	202.1	1024	0.049	242.471				
858						24	Apr	16	2011	1026.7	10	16.46	36.30	177.8	993	0.051	243.517				
859																					
860	10	2	394.999	-13.3901		1	Apr	17	2011	1027.9	200	13.12	35.85	0.0	1543	0.016	215.444	0.523	0.06	8.69	0.016
861						2	Apr	17	2011	1027.9	200	13.12	35.85	0.0	1566	0.014	216.541				
862						3	Apr	17	2011	1027.9	201	13.11	35.85	0.0	1607	0.016	216.704				
863						4	Apr	17	2011	1027.3	71	14.25	36.06	1.0	1568	0.030	231.235	0.283	0.07	4.60	0.066
864						5	Apr	17	2011	1027.3	71	14.25	36.06	1.0	1562	0.033	231.099				
865						6	Apr	17	2011	1027.3	71	14.27	36.06	1.0	1567	0.034	231.577				
866						7	Apr	17	2011	1027.0	38	15.10	36.08	22.8	1657	0.277	248.650	0.052	0.34	0.37	0.065
867						8	Apr	17	2011	1026.9	37	15.12	36.08	25.7	1571	0.270	246.777	0.049	0.35	0.36	0.060
868						9	Apr	17	2011	1027.0	38	15.10	36.08	22.6	1593	0.260	250.720				
869						10	Apr	17	2011	1026.9	38	15.17	36.09	23.8	1617	0.270	249.995				
870						11	Apr	17	2011	1026.9	37	15.14	36.08	22.9	1603	0.287	249.683				
871						12	Apr	17	2011	1026.9	38	15.10	36.08	20.7	1598	0.269	250.001				
872						13	Apr	17	2011	1026.8	31	15.76	36.18	48.9	1667	0.247	248.132	0.022	0.07	0.02	0.009
873						14	Apr	17	2011	1026.8	30	15.76	36.18	53.3	1591	0.243	246.470				
874						15	Apr	17	2011	1026.8	31	15.76	36.18	50.2	1643	0.262	247.134				
875						16	Apr	17	2011	1026.8	20	15.97	36.21	159.4	1631	0.064	247.030	0.023	0.07	0.02	0.008
876						17	Apr	17	2011	1026.8	21	16.00	36.22	151.0	1681	0.067	245.571				
877						18	Apr	17	2011	1026.8	21	15.98	36.21	146.8	1680	0.067	245.151				
878						19	Apr	17	2011	1026.8	21	16.00	36.22	165.6	1627	0.063	246.746				
879						20	Apr	17	2011	1026.8	21	15.99	36.22	164.7	1635	0.061	247.350				
880						21	Apr	17	2011	1026.8	20	15.89	36.22	170.8	1616	0.062	244.454				
881						22	Apr	17	2011	1026.7	10	16.49	36.28	447.0	1604	0.054	242.776	0.021	0.06	0.02	0.009
882						23	Apr	17	2011	1026.7	11	16.49	36.28	385.7	1661	0.054	243.094				
883						24	Apr	17	2011	1026.6	11	16.57	36.28	387.9	1701	0.054	241.894				
884																					
885	11	1	40.529.594	-13.190.131		1	Apr	18	2011	1027.9	202	13.26	35.88	0.0	20	0.018	222.643	0.467	0.07	7.57	0.021
886						2	Apr	18	2011	1027.9	203	13.25	35.88	0.0	20	0.017	222.566				
887						3	Apr	18	2011	1027.9	202	13.25	35.88	0.0	20	0.018	221.596				
888						4	Apr	18	2011	1027.2	51	14.25	36.03	0.0	20	0.043	233.117	0.265	0.10	4.25	0.099
889						5	Apr	18	2011	1027.2	51	14.26	36.03	0.0	20	0.049	231.524				
890						6	Apr	18	2011	1027.2	51	14.27	36.03	0.0	20	0.044	232.843				
891						7	Apr	18	2011	1027.2	51	14.28	36.04	0.0	20	0.054	232.518				
892						8	Apr	18	2011	1026.9	25	14.94	36.06	0.0	20	0.277	252.271	0.046	0.22	0.44	0.054
893						9	Apr	18	2011	1026.9	25	14.94	36.06	0.0	20	0.299	252.414	0.047	0.22	0.45	0.063
894						10	Apr	18	2011	1026.9	24	14.94	36.05	0.0	20	0.317	251.557				
895						11	Apr	18	2011	1026.9	25	14.93	36.06	0.0	20	0.299	252.106				
896						12	Apr	18	2011	1026.9	25	14.98	36.06	0.0	20	0.280	253.355				
897						13	Apr	18	2011	1026.9	25	14.99	36.06	0.0	20	0.313	251.596				
898						14	Apr	18	2011	1026.9	24	15.09	36.06	0.0	20	0.226	253.917				
899						15	Apr	18	2011	1026.9	15	14.96	36.06	0.2	20	0.290	254.922	0.042	0.12	0.25	0.038
900						16	Apr	18	2011	1026.9	15	14.96	36.06	0.2	20	0.338	253.156	0.040	0.12	0.25	0.038
901						17	Apr	18	2011	1026.9	15	14.96	36.06	0.2	20	0.303	254.496				
902						18	Apr	18	2011	1026.9	15	14.96	36.06	0.2	20	0.273	254.630				
903						19	Apr	18	2011	1026.9	15	14.97	36.06	0.2	20	0.315	254.893				
904						20	Apr	18	2011	1026.9	16	14.98	36.06	0.1	20	0.252	255.112				
905						21	Apr	18	2011	1026.9	15	14.99	36.06	0.2	20	0.258	254.335				
906						22	Apr	18	2011	1026.8	10	15.17	36.06	0.5	21	0.196	253.109	0.036	0.12	0.25	0.040
907						23	Apr	18	2011	1026.8	10	15.17	36.06	0.5	21	0.190	253.544				
908						24	Apr	18	2011	1026.8	11	15.17	36.06	0.5	21	0.210	254.064				
909	11	2	40.529.863	-13.190.525		1	Apr	18	2011	1027.9	201	13.20	35.87	0.0	204	0.024	220.550	0.494	0.05	8.05	0.017

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
910						2	Apr 18	2011	1027.9	200	13.21	35.87	0.0	206	0.20	218,382	0.492	0.05	8.04	0.017	
911						3	Apr 18	2011	1027.9	200	13.21	35.87	0.0	214	0.22	219,021					
912						4	Apr 18	2011	1027.9	200	13.21	35.87	0.0	206	0.20	219,802					
913						5	Apr 18	2011	1027.3	80	13.98	35.98	0.1	228	0.040	235,570	0.289	0.06	4.53	0.308	
914						6	Apr 18	2011	1027.3	80	13.99	35.98	0.1	224	0.040	236,959					
915						7	Apr 18	2011	1027.0	40	14.81	36.08	0.8	246	0.127	244,984	0.111	0.43	1.36	0.201	
916						8	Apr 18	2011	1027.0	40	14.82	36.08	0.9	252	0.168	242,666					
917						9	Apr 18	2011	1026.9	24	14.95	36.06	4.6	267	0.269	251,300	0.039	0.12	0.24	0.032	
918						10	Apr 18	2011	1026.9	25	14.95	36.06	4.3	257	0.258	253,431	0.041	0.12	0.24	0.032	
919						11	Apr 18	2011	1026.9	24	14.95	36.06	4.8	260	0.274	252,260					
920						12	Apr 18	2011	1026.9	25	14.95	36.06	5.0	268	0.250	252,874					
921						13	Apr 18	2011	1026.9	24	14.95	36.06	5.3	269	0.270	250,838					
922						14	Apr 18	2011	1026.9	24	14.96	36.06	5.3	273	0.240	253,407					
923						15	Apr 18	2011	1026.8	15	15.08	36.06	5.5	285	0.264	251,297					
924						16	Apr 18	2011	1026.8	15	15.08	36.06	12.3	274	0.233	253,203	0.034	0.07	0.16	0.028	
925						17	Apr 18	2011	1026.8	15	15.09	36.06	11.4	269	0.260	255,215	0.036	0.07	0.16	0.030	
926						18	Apr 18	2011	1026.8	15	15.08	36.06	11.8	292	0.226	253,788					
927						19	Apr 18	2011	1026.8	15	15.06	36.06	11.7	298	0.236	254,264					
928						20	Apr 18	2011	1026.8	15	15.06	36.06	11.6	307	0.240	255,092					
929						21	Apr 18	2011	1026.8	14	15.07	36.06	11.5	292	0.258	252,207					
930						22	Apr 18	2011	1026.8	15	15.05	36.06	10.1	275	0.227	254,193					
931						23	Apr 18	2011	1026.8	10	15.09	36.06	18.4	299	0.231	253,724	0.037	0.07	0.16	0.029	
932						24	Apr 18	2011	1026.8	10	15.08	36.06	18.7	304	0.239	254,941					
933	11	21	40,529,944	-13,190,176		1	Apr 18	2011	1027.4	100	13.93	35.98	0.2	1129	0.022	230,987	0.311	0.04	4.98	0.063	
934						2	Apr 18	2011	1027.4	100	13.93	35.98	0.2	1400	0.030	233,891					
935						3	Apr 18	2011	1027.2	60	14.27	36.03	1.4	1322	0.051	234,967	0.251	0.17	3.87	0.265	
936						4	Apr 18	2011	1026.9	25	14.98	36.07	15.3	1281	0.366	252,457	0.035	0.11	0.21	0.038	
937						5	Apr 18	2011	1026.9	25	14.98	36.07	15.0	1273	0.364	250,599	0.037	0.10	0.19	0.037	
938						6	Apr 18	2011	1026.9	25	14.97	36.07	14.9	1303	0.338	253,644					
939						7	Apr 18	2011	1026.9	25	14.97	36.07	15.3	1284	0.336	253,284					
940						8	Apr 18	2011	1026.9	15	15.02	36.07	28.4	823	0.296	255,332	0.032	0.08	0.15	0.031	
941						9	Apr 18	2011	1026.9	15	15.03	36.06	25.8	622	0.285	254,503	0.031	0.08	0.14	0.031	
942						10	Apr 18	2011	1026.8	15	15.05	36.06	23.5	700	0.261	256,491					
943						11	Apr 18	2011	1026.9	15	15.01	36.07	23.2	685	0.303	255,828					
944						12	Apr 18	2011	1026.8	10	15.08	36.06	55.1	937	0.249	257,040	0.028	0.06	0.07	0.025	
945						13	Apr 18	2011	1026.8	10	15.09	36.06	54.3	1030	0.238	255,434					
946						14	Apr 18	2011	1026.8	10	15.07	36.06	51.1	1100	0.226	255,559					
947						15	Apr 18	2011	1026.8	10	15.07	36.06	52.3	993	0.261	253,348					
948						16	Apr 18	2011	1026.8	10	15.07	36.06	52.3	911	0.239	257,126					
949						17	Apr 18	2011	1026.8	10	15.08	36.06	53.4	963	0.257	255,697					
950						18	Apr 18	2011	1026.8	10	15.11	36.06	51.5	945	0.232	256,837					
951						19	Apr 18	2011	1026.8	10	15.12	36.06	52.9	919	0.216	258,756					
952						20	Apr 18	2011	1026.8	10	15.12	36.06	54.2	991	0.241	256,757					
953						21	Apr 18	2011	1026.8	10	15.14	36.06	56.9	986	0.235	254,462					
954						22	Apr 18	2011	1026.8	10	15.13	36.06	51.5	1000	0.207	256,285					
955						23	Apr 18	2011	1026.8	10	15.14	36.06	55.9	1079	0.218	255,285					
956						24	Apr 18	2011	1026.8	10	15.16	36.06	54.4	926	0.195	255,563					
957																					
958	12	1	41,249,872	-13,049,851		1	Apr 18	2011	1027.9	200	13.17	35.85	0.0	20	0.018	223,194	0.484	0.08	8.05	0.027	
959						2	Apr 18	2011	1027.9	200	13.17	35.85	0.0	20	0.017	221,219					
960						3	Apr 18	2011	1027.4	101	14.12	36.01	0.0	20	0.029	230,602	0.283	0.07	4.65	0.045	
961						4	Apr 18	2011	1027.4	101	14.12	36.01	0.0	20	0.024	232,508					
962						5	Apr 18	2011	1027.2	61	14.22	36.02	0.0	20	0.040	234,795	0.261	0.06	4.31	0.126	
963						6	Apr 18	2011	1027.2	60	14.22	36.02	0.0	20	0.045	233,896					
964						7	Apr 18	2011	1027.0	39	14.72	36.05	0.0	20	0.397	248,480	0.079	0.26	1.31	0.111	
965						8	Apr 18	2011	1027.0	39	14.72	36.05	0.0	20	0.404	247,828					
966						9	Apr 18	2011	1026.9	21	14.91	36.05	0.0	20	0.419	258,674	0.034	0.11	0.40	0.046	
967						10	Apr 18	2011	1026.9	21	14.92	36.05	0.0	20	0.498	257,862					
968						11	Apr 18	2011	1026.9	20	14.92	36.05	0.0	20	0.440	257,073					
969						12	Apr 18	2011	1026.9	20	14.92	36.05	0.0	20	0.440	258,450					
970						13	Apr 18	2011	1026.9	20	14.92	36.05	0.0	20	0.475	258,164					
971						14	Apr 18	2011	1026.9	20	14.92	36.05	0.0	20	0.472	255,339					
972						15	Apr 18	2011	1026.9	20	14.92	36.05	0.0	20	0.448	257,335					
973						16	Apr 18	2011	1026.9	15	14.98	36.05	0.1	20	0.463	260,766	0.032	0.08	0.31	0.042	
974						17	Apr 18	2011	1026.9	15	14.97	36.05	0.1	20	0.409	259,994					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
975						18	Apr	18	2011	1026.9	15	14.98	35.05	0.1	20	0.663	260.517				
976						19	Apr	18	2011	1026.9	15	14.98	36.05	0.1	20	0.528	260.751				
977						20	Apr	18	2011	1026.9	15	14.98	36.05	0.1	20	0.511	260.377				
978						21	Apr	18	2011	1026.9	15	14.98	36.05	0.1	20	0.463	258.174				
979						22	Apr	18	2011	1026.9	15	14.97	36.05	0.1	20	0.462	259.399				
980						23	Apr	18	2011	1026.7	10	15.40	36.05	0.3	20	0.386	257.995	0.032	0.07	0.31	0.039
981						24	Apr	18	2011	1026.7	10	15.40	36.05	0.2	20	0.381	259.139				
982																					
983	13	1	42.340.079	-12.879.929		1	Apr	19	2011	1028.0	199	12.76	35.82	0.0	20	0.016	234.661	0.446	0.06	7.24	0.025
984						2	Apr	19	2011	1027.8	151	12.88	35.84	0.0	20	0.017	239.808	0.407	0.07	6.61	0.026
985						3	Apr	19	2011	1027.8	151	12.88	35.84	0.0	20	0.018	237.783				
986						4	Apr	19	2011	1027.5	101	12.97	35.86	0.0	21	0.021	237.787	0.407	0.07	6.62	0.032
987						5	Apr	19	2011	1027.5	101	12.97	35.86	0.0	21	0.020	236.398				
988						6	Apr	19	2011	1027.2	40	13.35	35.89	0.0	21	0.061	239.088	0.357	0.11	5.66	0.534
989						7	Apr	19	2011	1027.2	40	13.36	35.89	0.0	21	0.066	238.863				
990						8	Apr	19	2011	1026.9	21	14.37	35.90	0.1	22	0.284	256.947	0.062	0.26	0.76	0.078
991						9	Apr	19	2011	1026.9	20	14.40	35.90	0.1	22	0.276	256.280				
992						10	Apr	19	2011	1026.9	21	14.40	35.90	0.1	22	0.271	258.433				
993						11	Apr	19	2011	1026.9	20	14.40	35.90	0.1	22	0.249	258.046				
994						12	Apr	19	2011	1026.9	21	14.39	35.90	0.1	22	0.252	259.521				
995						13	Apr	19	2011	1026.9	21	14.40	35.90	0.1	22	0.288	259.487				
996						14	Apr	19	2011	1026.9	20	14.40	35.90	0.1	22	0.309	258.705				
997						15	Apr	19	2011	1026.8	11	14.42	35.90	0.7	23	0.255	258.144	0.059	0.26	0.76	0.077
998						16	Apr	19	2011	1026.8	11	14.42	35.90	0.6	23	0.302	258.667				
999						17	Apr	19	2011	1026.8	11	14.42	35.90	0.7	23	0.292	257.719				
1000						18	Apr	19	2011	1026.8	11	14.42	35.90	0.6	23	0.300	259.094				
1001						19	Apr	19	2011	1026.8	11	14.43	35.90	0.6	23	0.267	257.404				
1002						20	Apr	19	2011	1026.8	11	14.43	35.90	0.7	23	0.263	258.436				
1003						21	Apr	19	2011	1026.8	11	14.43	35.90	0.6	23	0.278	258.873				
1004						22	Apr	19	2011	1026.8	11	14.43	35.90	0.7	23	0.326	257.954				
1005						23	Apr	19	2011	1026.8	10	14.43	35.90	0.7	23	0.278	257.719				
1006						24	Apr	19	2011	1026.8	11	14.43	35.90	0.7	23	0.284	258.643				
1007	13	2	42.340.218	-12.879.799		1	Apr	19	2011	1027.7	151	12.81	35.83	0.0	135	0.017	235.987	0.444	0.06	7.22	0.025
1008						2	Apr	19	2011	1027.7	149	12.81	35.83	0.0	134	0.019	233.965				
1009						3	Apr	19	2011	1027.7	149	12.81	35.83	0.0	133	0.018	234.107				
1010						4	Apr	19	2011	1027.4	73	13.05	35.87	0.1	159	0.028	235.639	0.409	0.07	6.62	0.037
1011						5	Apr	19	2011	1027.4	73	13.05	35.87	0.1	159	0.026	234.905				
1012						6	Apr	19	2011	1027.2	48	13.36	35.90	0.1	132	0.060	240.665	0.342	0.09	5.49	0.586
1013						7	Apr	19	2011	1027.2	49	13.37	35.90	0.1	131	0.072	241.213				
1014						8	Apr	19	2011	1027.0	30	14.25	35.90	0.7	129	0.261	256.496	0.075	0.30	1.01	0.109
1015						9	Apr	19	2011	1027.0	31	14.25	35.90	0.6	128	0.246	256.877				
1016						10	Apr	19	2011	1026.9	21	14.29	35.90	2.0	121	0.302	258.113	0.063	0.29	0.84	0.090
1017						11	Apr	19	2011	1026.9	21	14.31	35.90	2.3	121	0.289	256.257				
1018						12	Apr	19	2011	1026.9	20	14.31	35.90	2.4	122	0.297	256.336				
1019						13	Apr	19	2011	1026.9	21	14.31	35.90	2.4	123	0.330	258.103				
1020						14	Apr	19	2011	1026.9	21	14.31	35.90	2.6	124	0.279	257.052				
1021						15	Apr	19	2011	1026.9	21	14.30	35.90	2.7	126	0.266	257.090				
1022						16	Apr	19	2011	1026.9	20	14.30	35.90	2.7	127	0.264	257.132				
1023						17	Apr	19	2011	1026.9	10	14.31	35.90	11.6	132	0.289	256.862				
1024						18	Apr	19	2011	1026.9	11	14.31	35.90	12.0	132	0.286	256.330				
1025						19	Apr	19	2011	1026.9	10	14.31	35.90	12.0	134	0.278	257.413				
1026						20	Apr	19	2011	1026.9	11	14.31	35.90	12.3	135	0.285	257.529				
1027						21	Apr	19	2011	1026.9	10	14.31	35.90	13.4	137	0.312	256.354				
1028						22	Apr	19	2011	1026.9	11	14.30	35.90	13.7	138	0.281	256.792				
1029						23	Apr	19	2011	1026.9	10	14.30	35.90	13.4	138	0.281	255.802				
1030						24	Apr	19	2011	1026.9	10	14.30	35.90	14.8	139	0.266	256.281				
1031	13	18	42.377.331	-12.901.931		1	Apr	19	2011	1027.5	103	13.06	35.88	0.0	1199	0.029	236.187	0.391	0.06	6.28	0.031
1032						2	Apr	19	2011	1027.5	103	13.07	35.88	0.0	1266	0.032	237.019				
1033						3	Apr	19	2011	1027.4	76	13.15	35.88	0.1	1503	0.041	240.775	0.375	0.08	5.97	0.073
1034						4	Apr	19	2011	1027.4	74	13.15	35.88	0.1	1529	0.038	239.834				
1035						5	Apr	19	2011	1027.1	51	13.82	35.90	0.6	1451	0.153	249.030	0.227	0.47	3.05	0.429
1036						6	Apr	19	2011	1027.2	54	13.75	35.90	0.5	1381	0.123	245.861				
1037						7	Apr	19	2011	1027.0	32	14.30	35.90	5.4	1326	0.288	255.507	0.065	0.31	0.77	0.084
1038						8	Apr	19	2011	1027.0	30	14.31	35.90	6.9	1520	0.328	257.341				
1039						9	Apr	19	2011	1027.0	29	14.28	35.90	7.3	1554	0.300	256.475				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1105	15					1	Apr	20	2011	1029.5	503	11.02	35.55	0.0	54	0.013	216,644	0.773	0.07	12.79	0.015
1106				-12.610,011		2	Apr	20	2011	1029.5	504	11.02	35.55	0.0	54	0.021	217,964				
1107						3	Apr	20	2011	1029.5	503	11.02	35.55	0.0	54	0.019	216,019				
1108						4	Apr	20	2011	1027.8	150	11.90	35.68	0.0	60	0.023	242,598	0.513	0.07	8.56	0.044
1109						5	Apr	20	2011	1027.8	151	11.90	35.68	0.0	61	0.023	243,473	0.513	0.09	8.56	0.043
1110						6	Apr	20	2011	1027.8	151	11.90	35.68	0.0	61	0.026	244,127				
1111						7	Apr	20	2011	1027.2	40	12.99	35.75	0.2	67	0.120	257,083	0.276	0.86	3.63	0.134
1112						8	Apr	20	2011	1027.2	40	12.93	35.75	0.2	67	0.105	258,481				
1113						9	Apr	20	2011	1026.9	16	13.81	35.82	2.5	69	0.253	262,974	0.095	0.38	1.41	0.060
1114						10	Apr	20	2011	1026.9	15	13.81	35.82	2.9	70	0.262	261,258	0.100	0.38	1.41	0.062
1115						11	Apr	20	2011	1026.9	16	13.82	35.82	2.7	70	0.244	262,908	0.101	0.38	1.42	0.060
1116						12	Apr	20	2011	1026.9	16	13.81	35.82	2.5	70	0.240	261,976				
1117						13	Apr	20	2011	1026.9	15	13.81	35.82	2.8	70	0.249	261,608				
1118						14	Apr	20	2011	1026.9	16	13.81	35.82	3.0	70	0.260	261,226				
1119						15	Apr	20	2011	1026.9	15	13.81	35.82	3.5	70	0.254	260,496				
1120						16	Apr	20	2011	1026.9	14	13.81	35.82	3.6	70	0.283	260,442				
1121						17	Apr	20	2011	1026.9	15	13.81	35.82	3.6	71	0.274	261,165	0.097	0.37	1.38	0.061
1122						18	Apr	20	2011	1026.9	15	13.82	35.82	3.5	70	0.355	261,692				
1123						19	Apr	20	2011	1026.9	16	13.81	35.82	3.2	71	0.268	261,617				
1124						20	Apr	20	2011	1026.9	16	13.81	35.82	3.1	72	0.251	260,925				
1125						21	Apr	20	2011	1026.9	16	13.81	35.82	3.2	72	0.259	262,140				
1126						22	Apr	20	2011	1026.9	16	13.80	35.82	3.0	73	0.285	262,711				
1127						23	Apr	20	2011	1026.9	11	13.82	35.82	6.2	76	0.263	262,439				
1128						24	Apr	20	2011	1026.9	11	13.82	35.82	6.2	76	0.268	263,301				
1129	15	17	44,330,983	-1,256,526		1	Apr	20	2011	1027.5	90	11.99	35.69	0.0	212	0.037	242,814	0.518	0.08	8.45	0.345
1130						2	Apr	20	2011	1027.5	90	12.00	35.69	0.0	220	0.035	243,035				
1131						3	Apr	20	2011	1027.5	90	11.99	35.69	0.0	226	0.037	243,469				
1132						4	Apr	20	2011	1027.4	76	12.14	35.70	0.0	232	0.048	245,249	0.486	0.65	7.37	0.372
1133						5	Apr	20	2011	1027.4	75	12.14	35.70	0.0	233	0.047	246,512				
1134						6	Apr	20	2011	1027.4	75	12.14	35.70	0.0	231	0.051	245,921				
1135						7	Apr	20	2011	1027.2	53	12.77	35.74	0.1	199	0.104	258,980	0.329	1.00	4.28	0.180
1136						8	Apr	20	2011	1027.2	52	12.79	35.74	0.2	199	0.102	258,702				
1137						9	Apr	20	2011	1027.2	52	12.81	35.74	0.2	197	0.108	256,499				
1138						10	Apr	20	2011	1027.0	36	13.72	35.80	1.0	233	0.256	260,521	0.111	0.46	1.52	0.067
1139						11	Apr	20	2011	1027.0	36	13.74	35.81	0.9	233	0.583	260,796				
1140						12	Apr	20	2011	1027.0	35	13.74	35.81	0.9	233	0.279	260,215				
1141						13	Apr	20	2011	1027.0	21	13.88	35.83	5.7	231	0.270	261,887	0.085	0.40	1.17	0.054
1142						14	Apr	20	2011	1026.9	21	13.89	35.83	6.1	238	0.340	260,634				
1143						15	Apr	20	2011	1026.9	21	13.88	35.83	6.0	244	0.282	261,120				
1144						16	Apr	20	2011	1026.9	21	13.88	35.83	6.8	251	0.249	259,280	0.086	0.40	1.19	0.053
1145						17	Apr	20	2011	1027.0	21	13.88	35.83	6.4	258	0.263	261,193				
1146						18	Apr	20	2011	1026.9	21	13.88	35.83	6.6	262	0.280	261,432				
1147						19	Apr	20	2011	1026.9	21	13.88	35.83	7.4	267	0.286	258,542				
1148						20	Apr	20	2011	1026.9	20	13.88	35.83	7.8	269	0.274	259,580				
1149						21	Apr	20	2011	1026.9	10	13.91	35.79	28.8	261	0.340	262,176	0.074	0.34	1.12	0.051
1150						22	Apr	20	2011	1026.9	11	13.91	35.81	29.4	260	0.351	262,855				
1151						23	Apr	20	2011	1026.9	11	13.91	35.81	31.1	267	0.368	262,858				
1152						24	Apr	20	2011	1026.9	10	13.91	35.82	31.6	272	0.310	261,551				
1153																					
1154	16	1	44,914,194	-12,517,894		1	Apr	20	2011	1028.0	199	11.88	35.64	0.0	25	0.017	237,871	0.567	0.07	9.28	0.020
1155						2	Apr	20	2011	1028.1	200	11.68	35.64	0.0	25	0.019	239,880				
1156						3	Apr	20	2011	1027.8	151	11.81	35.66	0.0	22	0.017	242,168	0.543	0.07	8.75	0.024
1157						4	Apr	20	2011	1027.8	151	11.81	35.66	0.0	22	0.021	242,557				
1158						5	Apr	20	2011	1027.3	50	12.27	35.70	0.0	21	0.053	251,277	0.430	0.76	6.18	0.365
1159						6	Apr	20	2011	1027.3	50	12.27	35.70	0.0	21	0.056	250,062				
1160						7	Apr	20	2011	1027.1	40	13.17	35.73	0.0	21	0.363	261,716	0.208	0.58	2.71	0.145
1161						8	Apr	20	2011	1027.1	40	13.17	35.73	0.0	21	0.284	261,053				
1162						9	Apr	20	2011	1027.0	31	13.42	35.74	0.0	20	0.508	261,701	0.140	0.34	1.94	0.107
1163						10	Apr	20	2011	1027.0	31	13.43	35.74	0.0	20	0.511	265,177				
1164						11	Apr	20	2011	1026.9	20	13.70	35.73	0.0	20	0.776	269,186	0.086	0.10	1.20	0.082
1165						12	Apr	20	2011	1026.9	20	13.70	35.73	0.0	20	0.785	269,492				
1166						13	Apr	20	2011	1026.9	11	13.72	35.73	0.2	20	0.772	269,102	0.078	0.10	1.15	0.081
1167						14	Apr	20	2011	1026.9	11	13.72	35.73	0.2	20	0.755	269,744				
1168						15	Apr	20	2011	1026.9	10	13.72	35.73	0.2	20	0.757	266,533				
1169						16	Apr	20	2011	1026.9	10	13.72	35.73	0.2	20	0.760	268,325				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1170						17	Apr	20	2011	1026.9	11	13.72	35.73	0.2	20	0.757	268.407				
1171						18	Apr	20	2011	1026.9	11	13.72	35.73	0.2	20	0.759	267.189				
1172						19	Apr	20	2011	1026.9	10	13.72	35.73	0.2	20	0.767	267.642				
1173						20	Apr	20	2011	1026.9	10	13.72	35.73	0.2	20	0.767	266.692				
1174						21	Apr	20	2011	1026.9	11	13.72	35.73	0.2	20	0.765	268.510				
1175						22	Apr	20	2011	1026.9	12	13.72	35.73	0.2	20	0.768	270.147				
1176						23	Apr	20	2011	1026.9	11	13.72	35.73	0.2	20	0.771	268.454				
1177						24	Apr	20	2011	1026.9	10	13.72	35.73	0.2	20	0.774	266.635				
1178																					
1179	17	1	45,529,783	-12,430,106		1	Apr	21	2011	1028.0	202	11.99	35.70	0.0	20	0.018	243,512	0.491	0.07	8.02	0.022
1180						2	Apr	21	2011	1028.0	202	11.99	35.70	0.0	20	0.017	243,772				
1181						3	Apr	21	2011	1027.8	151	12.09	35.72	0.0	20	0.023	242,955	0.461	0.09	7.48	0.036
1182						4	Apr	21	2011	1027.8	151	12.09	35.72	0.0	20	0.026	244,812				
1183						5	Apr	21	2011	1027.8	151	12.09	35.72	0.0	20	0.025	245,318				
1184						6	Apr	21	2011	1027.3	51	12.45	35.73	0.0	21	0.089	247,963	0.388	0.12	6.25	0.900
1185						7	Apr	21	2011	1027.3	52	12.44	35.73	0.0	21	0.071	250,401				
1186						8	Apr	21	2011	1027.3	52	12.44	35.73	0.0	21	0.070	250,494				
1187						9	Apr	21	2011	1027.1	40	13.12	35.76	0.0	22	0.151	257,146	0.230	0.97	2.68	0.340
1188						10	Apr	21	2011	1027.1	41	13.12	35.76	0.0	22	0.148	255,692				
1189						11	Apr	21	2011	1027.1	41	13.11	35.76	0.0	22	0.147	257,008				
1190						12	Apr	21	2011	1027.0	26	13.83	35.80	0.0	23	0.551	265,166	0.056	0.42	0.42	0.061
1191						13	Apr	21	2011	1027.0	25	13.82	35.80	0.0	23	0.533	264,636				
1192						14	Apr	21	2011	1027.0	25	13.82	35.80	0.0	23	0.519	265,372				
1193						15	Apr	21	2011	1026.9	15	13.96	35.81	0.2	24	0.597	265,951	0.051	0.36	0.32	0.053
1194						16	Apr	21	2011	1026.9	15	13.96	35.81	0.2	24	0.579	264,947	0.051	0.32	0.33	0.054
1195						17	Apr	21	2011	1026.9	16	13.96	35.81	0.2	25	0.585	265,739	0.049	0.34	0.33	0.053
1196						18	Apr	21	2011	1026.9	15	13.96	35.81	0.3	25	0.590	263,404				
1197						19	Apr	21	2011	1026.9	15	13.96	35.81	0.3	25	0.588	266,047				
1198						20	Apr	21	2011	1026.9	15	13.96	35.81	0.3	25	0.584	264,662				
1199						21	Apr	21	2011	1026.9	16	13.96	35.81	0.3	25	0.590	266,466				
1200						22	Apr	21	2011	1026.9	11	13.96	35.81	0.9	27	0.595	266,256	0.039	0.14	0.34	0.052
1201						23	Apr	21	2011	1026.9	10	13.96	35.81	1.1	27	0.592	264,158				
1202						24	Apr	21	2011	1026.9	10	13.96	35.81	1.0	28	0.589	266,687				
1203	17	2	45,530,348	-12,429,724		1	Apr	21	2011	1028.0	201	12.03	35.71	0.0	121	0.021	244,163	0.453	0.05	7.56	0.023
1204						2	Apr	21	2011	1027.8	150	12.09	35.72	0.0	139	0.026	245,637	0.448	0.05	7.37	0.029
1205						3	Apr	21	2011	1027.8	150	12.09	35.72	0.0	141	0.022	244,894				
1206						4	Apr	21	2011	1027.8	150	12.08	35.72	0.0	142	0.021	246,372				
1207						5	Apr	21	2011	1027.3	50	12.35	35.74	0.2	161	0.042	247,020	0.416	0.05	6.90	0.246
1208						6	Apr	21	2011	1027.3	50	12.36	35.74	0.2	167	0.044	247,343				
1209						7	Apr	21	2011	1027.3	50	12.36	35.74	0.2	170	0.046	245,845				
1210						8	Apr	21	2011	1027.3	40	12.42	35.73	0.4	167	0.062	248,552	0.387	0.06	6.39	0.728
1211						9	Apr	21	2011	1027.3	38	12.42	35.73	0.4	165	0.059	248,198				
1212						10	Apr	21	2011	1027.3	39	12.42	35.73	0.4	160	0.063	249,471				
1213						11	Apr	21	2011	1027.0	26	13.65	35.79	1.3	153	0.276	261,756	0.101	0.62	1.04	0.125
1214						12	Apr	21	2011	1027.0	26	13.65	35.79	1.5	162	0.262	259,785				
1215						13	Apr	21	2011	1027.0	26	13.64	35.79	1.4	166	0.255	261,149				
1216						14	Apr	21	2011	1026.9	15	13.91	35.81	7.8	200	0.560	264,973	0.037	0.18	0.44	0.060
1217						15	Apr	21	2011	1026.9	15	13.93	35.81	7.6	199	0.577	265,926	0.034	0.16	0.42	0.058
1218						16	Apr	21	2011	1026.9	16	13.94	35.81	7.2	196	0.576	266,568				
1219						17	Apr	21	2011	1026.9	16	13.91	35.81	6.5	193	0.575	264,929				
1220						18	Apr	21	2011	1026.9	15	13.89	35.81	7.3	188	0.541	264,515				
1221						19	Apr	21	2011	1026.9	15	13.80	35.81	7.8	184	0.541	264,367				
1222						20	Apr	21	2011	1026.9	15	13.85	35.81	6.6	180	0.521	265,724				
1223						21	Apr	21	2011	1026.9	15	13.86	35.80	6.3	176	0.532	264,112				
1224						22	Apr	21	2011	1026.9	11	13.96	35.81	16.7	200	0.608	265,292	0.034	0.12	0.38	0.057
1225						23	Apr	21	2011	1026.9	10	13.96	35.81	18.2	204	0.597	264,666				
1226						24	Apr	21	2011	1026.9	11	13.95	35.81	15.6	204	0.581	265,930				
1227	17	21	45,531,162	-12,430,582		1	Apr	21	2011	1027.3	51	12.55	35.76	0.7	1390	0.047	248,768	0.403	0.20	6.32	0.653
1228						2	Apr	21	2011	1027.3	50	12.57	35.77	0.6	1368	0.049	246,537				
1229						3	Apr	21	2011	1027.3	51	12.56	35.77	0.6	1332	0.047	247,367				
1230						4	Apr	21	2011	1027.1	35	13.22	35.77	2.4	1391	0.232	255,305	0.212	0.68	2.70	0.279
1231						5	Apr	21	2011	1027.1	35	13.21	35.77	2.5	1418	0.290	256,741				
1232						6	Apr	21	2011	1027.1	34	13.36	35.77	2.9	1409	0.272	256,469				
1233						7	Apr	21	2011	1026.9	20	13.83	35.78	6.0	1339	0.750	267,144	0.081	0.34	0.90	0.089
1234						8	Apr	21	2011	1026.9	21	13.78	35.79	6.6	1349	0.806	266,967				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1235						9	Apr	21	2011	1026.9	20	13.80	35.79	6.2	1314	0.689	265.681				
1236						10	Apr	21	2011	1026.9	20	13.82	35.79	6.9	1339	0.689	266.563	0.047	0.24	0.55	0.061
1237						11	Apr	21	2011	1026.9	20	13.81	35.79	7.5	1341	0.664	265.260				
1238						12	Apr	21	2011	1026.9	20	13.75	35.80	9.5	1348	0.658	263.274				
1239						13	Apr	21	2011	1026.9	20	13.75	35.80	10.1	1356	0.602	263.060				
1240						14	Apr	21	2011	1026.9	21	13.79	35.79	10.1	1340	0.611	266.525				
1241						15	Apr	21	2011	1026.9	20	13.80	35.79	9.9	1338	0.599	266.254				
1242						16	Apr	21	2011	1026.9	20	13.80	35.79	11.3	1369	0.599	263.966				
1243						17	Apr	21	2011	1026.9	20	13.84	35.78	9.5	1365	0.645	267.525				
1244						18	Apr	21	2011	1026.9	19	13.81	35.79	10.0	1379	0.703	266.513				
1245						19	Apr	21	2011	1026.9	19	13.85	35.78	8.2	1360	0.709	266.992				
1246						20	Apr	21	2011	1026.9	19	13.84	35.78	7.5	1376	0.761	268.422				
1247						21	Apr	21	2011	1026.9	19	13.81	35.77	5.4	1355	0.938	270.867				
1248						22	Apr	21	2011	1026.8	11	14.00	35.76	23.6	1293	0.724	272.930	0.020	0.07	0.04	0.017
1249						23	Apr	21	2011	1026.8	10	13.92	35.77	15.1	1284	0.760	274.308				
1250						24	Apr	21	2011	1026.8	10	13.86	35.76	13.0	1310	0.778	274.649				
1251																					
1252	17B	1	46,268.504	-12,319.125		1	Apr	21	2011	1027.5	90	12.27	35.67	0.0	30	0.024	240.392	0.511	0.06	8.22	0.061
1253						2	Apr	21	2011	1027.5	90	12.27	35.67	0.0	30	0.029	243.050				
1254						3	Apr	21	2011	1027.4	75	12.38	35.69	0.0	27	0.031	247.351	0.468	0.28	7.27	0.353
1255						4	Apr	21	2011	1027.4	75	12.39	35.69	0.0	25	0.038	248.562				
1256						5	Apr	21	2011	1027.2	50	12.53	35.69	0.1	27	0.052	251.715	0.449	0.46	6.70	0.346
1257						6	Apr	21	2011	1027.2	49	12.53	35.69	0.1	25	0.065	250.546				
1258						7	Apr	21	2011	1027.1	30	12.75	35.68	0.2	23	0.177	259.162	0.368	0.32	5.62	0.215
1259						8	Apr	21	2011	1027.1	30	12.75	35.68	0.2	23	0.171	257.976				
1260						9	Apr	21	2011	1027.1	30	12.75	35.68	0.2	23	0.146	258.298				
1261						10	Apr	21	2011	1027.1	30	12.76	35.68	0.1	23	0.159	259.855				
1262						11	Apr	21	2011	1027.0	19	13.18	35.69	0.2	22	0.104	261.349	0.266	0.27	4.07	0.119
1263						12	Apr	21	2011	1027.0	19	13.19	35.69	0.2	22	0.116	262.631				
1264						13	Apr	21	2011	1026.8	10	13.64	35.68	0.6	21	0.144	261.870	0.232	0.26	3.58	0.095
1265						14	Apr	21	2011	1026.8	9	13.65	35.68	0.6	21	0.085	261.885				
1266						15	Apr	21	2011	1026.8	9	13.63	35.68	0.6	21	0.117	257.887				
1267						16	Apr	21	2011	1026.8	9	13.65	35.68	0.6	21	0.105	261.393				
1268						17	Apr	21	2011	1026.8	10	13.64	35.68	0.5	21	0.100	260.551				
1269						18	Apr	21	2011	1026.8	10	13.64	35.68	0.5	21	0.090	260.390				
1270						19	Apr	21	2011	1026.8	9	13.60	35.68	0.5	21	0.120	260.636				
1271						20	Apr	21	2011	1026.8	9	13.60	35.68	0.5	21	0.099	261.144				
1272						21	Apr	21	2011	1026.8	10	13.57	35.68	0.5	21	0.115	261.408				
1273						22	Apr	21	2011	1026.8	9	13.58	35.68	0.5	21	0.102	259.107				
1274						23	Apr	21	2011	1026.9	10	13.55	35.68	0.5	21	0.117	262.557				
1275						24	Apr	21	2011	1026.9	10	13.54	35.69	0.5	21	0.130	261.493				
1276																					
1277	18	1	47,570.082	-12,110.403		1	Apr	22	2011	1027.8	150	11.59	35.63	0.0	23	0.025	243.913	0.565	0.07	9.03	0.046
1278						2	Apr	22	2011	1027.8	151	11.59	35.63	0.0	23	0.023	244.712				
1279						3	Apr	22	2011	1027.8	150	11.59	35.64	0.0	23	0.025	245.321				
1280						4	Apr	22	2011	1027.5	75	11.79	35.64	0.0	25	0.052	247.772	0.527	0.32	8.14	0.401
1281						5	Apr	22	2011	1027.5	76	11.79	35.64	0.0	25	0.055	248.724				
1282						6	Apr	22	2011	1027.5	75	11.79	35.64	0.0	26	0.046	247.686				
1283						7	Apr	22	2011	1027.3	40	12.06	35.64	0.2	28	0.118	261.908	0.412	0.73	5.92	0.189
1284						8	Apr	22	2011	1027.3	40	12.07	35.64	0.2	29	0.153	261.441				
1285						9	Apr	22	2011	1027.3	40	12.06	35.64	0.2	29	0.161	262.556				
1286						10	Apr	22	2011	1027.3	40	12.06	35.64	0.3	29	0.143	262.190				
1287						11	Apr	22	2011	1027.2	39	12.07	35.64	0.3	29	0.130	259.311				
1288						12	Apr	22	2011	1027.3	40	12.06	35.64	0.3	29	0.171	262.384				
1289						13	Apr	22	2011	1027.3	40	12.07	35.64	0.3	29	0.141	260.401				
1290						14	Apr	22	2011	1027.3	40	12.07	35.64	0.3	30	0.131	262.065				
1291						15	Apr	22	2011	1027.1	20	12.72	35.66	1.1	33	0.066	269.151	0.269	0.49	3.96	0.125
1292						16	Apr	22	2011	1027.1	20	12.69	35.66	1.1	33	0.087	268.202				
1293						17	Apr	22	2011	1027.1	20	12.66	35.66	1.1	33	0.057	267.956				
1294						18	Apr	22	2011	1027.0	11	12.96	35.66	2.7	36	0.093	266.581	0.230	0.38	3.52	0.110
1295						19	Apr	22	2011	1027.0	10	12.68	35.66	2.8	36	0.071	268.190				
1296						20	Apr	22	2011	1027.0	10	12.75	35.66	2.9	38	0.075	270.579				
1297						21	Apr	22	2011	1026.9	10	13.15	35.65	2.8	38	0.069	269.112				
1298						22	Apr	22	2011	1026.9	10	13.24	35.65	2.9	38	0.093	263.671				
1299						23	Apr	22	2011	1026.9	10	13.19	35.66	2.9	39	0.073	263.865				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1300						24	Apr	22	2011	1026.9	11	13.07	35.66	2.9	39	0.076	268.061				
1301	18	2	47.570.297	-12.109.842		1	Apr	22	2011	1028.1	199	11.80	35.63	0.0	150	0.022	245.821	0.560	0.06	9.05	0.037
1302						2	Apr	22	2011	1028.1	199	11.60	35.63	0.0	152	0.025	244.512				
1303						3	Apr	22	2011	1027.8	150	11.64	35.64	0.0	153	0.030	243.456	0.557	0.06	9.00	0.067
1304						4	Apr	22	2011	1027.8	150	11.64	35.64	0.0	153	0.026	244.753	0.557	0.07	8.99	0.066
1305						5	Apr	22	2011	1027.8	150	11.64	35.64	0.0	153	0.026	245.125				
1306						6	Apr	22	2011	1027.3	150	11.64	35.64	0.0	153	0.031	244.368				
1307						7	Apr	22	2011	1027.3	60	12.03	35.64	0.8	114	0.152	259.776	0.413	0.73	6.14	0.202
1308						8	Apr	22	2011	1027.4	60	12.03	35.64	0.8	112	0.135	260.035				
1309						9	Apr	22	2011	1027.3	50	12.20	35.64	1.4	101	0.127	266.719	0.346	0.71	5.19	0.162
1310						10	Apr	22	2011	1027.3	50	12.21	35.64	1.3	96	0.157	266.871				
1311						11	Apr	22	2011	1027.2	40	12.57	35.66	2.4	98	0.070	270.690	0.270	0.59	4.04	0.131
1312						12	Apr	22	2011	1027.2	40	12.59	35.66	2.7	105	0.063	270.406	0.269	0.57	4.03	0.130
1313						13	Apr	22	2011	1027.2	41	12.58	35.66	2.8	109	0.065	271.583				
1314						14	Apr	22	2011	1027.2	40	12.59	35.66	3.2	119	0.124	270.984				
1315						15	Apr	22	2011	1027.2	40	12.58	35.66	3.5	127	0.085	270.233				
1316						16	Apr	22	2011	1027.2	40	12.57	35.66	3.6	130	0.107	270.181				
1317						17	Apr	22	2011	1027.2	40	12.56	35.66	3.5	132	0.098	270.433				
1318						18	Apr	22	2011	1027.1	31	12.60	35.66	6.6	147	0.091	271.907	0.253	0.49	3.85	0.121
1319						19	Apr	22	2011	1027.1	30	12.61	35.66	6.8	148	0.064	269.963				
1320						20	Apr	22	2011	1026.9	11	13.22	35.65	26.0	160	0.077	266.217	0.209	0.35	3.36	0.105
1321						21	Apr	22	2011	1026.9	10	13.22	35.65	26.4	158	0.080	266.106	0.205	0.36	3.35	0.105
1322						22	Apr	22	2011	1026.9	10	13.21	35.65	27.3	157	0.061	266.263				
1323						23	Apr	22	2011	1026.9	10	13.22	35.65	27.1	156	0.087	265.803				
1324						24	Apr	22	2011	1026.9	10	13.21	35.65	27.1	156	0.071	266.509				
1325																					
1326	no station 19																				
1327																					
1328	20	1	49.915.062	-16.356.662		1	Apr	23	2011	1028.0	198	12.11	35.68	0.0	1384	0.015	239.950	0.531	0.05	8.49	0.024
1329						2	Apr	23	2011	1028.0	198	12.11	35.68	0.0	1271	0.015	241.533				
1330						3	Apr	23	2011	1027.7	148	12.21	35.68	0.2	1392	0.020	243.579	0.512	0.06	8.33	0.045
1331						4	Apr	23	2011	1027.7	148	12.21	35.68	0.2	1277	0.017	242.579				
1332						5	Apr	23	2011	1027.4	76	12.21	35.64	4.6	1218	0.080	254.564	0.437	0.56	6.98	0.191
1333						6	Apr	23	2011	1027.4	76	12.21	35.64	5.1	1474	0.063	253.743				
1334						7	Apr	23	2011	1027.3	50	12.22	35.64	21.4	1688	0.080	254.484	0.426	0.28	6.86	0.198
1335						8	Apr	23	2011	1027.3	49	12.22	35.64	21.8	1788	0.066	254.346				
1336						9	Apr	23	2011	1027.3	51	12.22	35.64	16.7	1237	0.079	254.430				
1337						10	Apr	23	2011	1027.3	52	11.28	35.64	14.6	1128	0.082	252.675	0.428	0.26	6.86	0.196
1338						11	Apr	23	2011	1027.3	52	12.22	35.64	13.4	991	0.066	254.622				
1339						12	Apr	23	2011	1027.3	50	12.22	35.64	13.1	959	0.068	254.338				
1340						13	Apr	23	2011	1027.2	31	12.25	35.64	36.8	836	0.088	253.989	0.426	0.25	6.83	0.200
1341						14	Apr	23	2011	1027.2	33	12.25	35.64	32.5	818	0.100	255.810				
1342						15	Apr	23	2011	1027.2	32	12.24	35.64	34.2	830	0.087	255.810				
1343						16	Apr	23	2011	1027.1	20	12.31	35.65	69.7	937	0.068	254.941	0.425	0.24	6.83	0.199
1344						17	Apr	23	2011	1027.1	22	12.30	35.65	62.4	909	0.069	255.907				
1345						18	Apr	23	2011	1027.1	22	12.30	35.65	61.0	901	0.067	254.837				
1346						19	Apr	23	2011	1027.1	22	12.29	35.65	62.3	906	0.062	256.343	0.427	0.23	6.83	0.197
1347						20	Apr	23	2011	1027.1	21	12.30	35.65	62.6	904	0.077	255.726				
1348						21	Apr	23	2011	1027.1	11	12.30	35.65	130.3	995	0.051	255.013				
1349						22	Apr	23	2011	1027.1	11	12.30	35.65	122.0	979	0.048	255.244	0.426	0.23	6.83	0.197
1350						23	Apr	23	2011	1027.1	10	12.30	35.65	137.2	1009	0.058	254.625				
1351						24	Apr	23	2011	1027.1	10	12.30	35.65	150.5	1010	0.053	254.705				
1352																					
1353	no station 21																				
1354																					
1355	22	1	52.621.788	-16.497.225		1	Apr	24	2011	1028.0	200	11.53	35.57	0.0	22	0.021	240.877	0.613	0.08	9.73	0.070
1356						2	Apr	24	2011	1028.0	201	11.53	35.57	0.0	22	0.022	241.931				
1357						3	Apr	24	2011	1027.8	150	11.58	35.56	0.0	24	0.087	253.515	0.530	0.20	8.28	0.161
1358						4	Apr	24	2011	1027.8	150	11.58	35.56	0.0	25	0.089	253.865				
1359						5	Apr	24	2011	1027.8	150	11.58	35.56	0.0	25	0.114	253.344				
1360						6	Apr	24	2011	1027.6	101	11.56	35.55	0.0	27	0.080	256.226	0.511	0.24	7.96	0.185
1361						7	Apr	24	2011	1027.6	101	11.56	35.55	0.0	28	0.086	256.192				
1362						8	Apr	24	2011	1027.3	50	11.54	35.55	0.2	32	0.097	255.718	0.517	0.24	7.95	0.195
1363						9	Apr	24	2011	1027.3	49	11.54	35.55	0.2	33	0.079	256.385				
1364						10	Apr	24	2011	1027.3	49	11.54	35.55	0.2	33	0.082	256.513				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1365						11	Apr	24	2011	1027.3	49	11.54	35.55	0.2	33	0.078	256.006				
1366						12	Apr	24	2011	1027.2	26	11.54	35.55	1.1	36	0.071	256.490	0.512	0.26	7.95	0.193
1367						13	Apr	24	2011	1027.2	25	11.54	35.55	1.1	36	0.103	257.341				
1368						14	Apr	24	2011	1027.2	25	11.54	35.55	1.2	36	0.088	254.521				
1369						15	Apr	24	2011	1027.2	24	11.54	35.55	1.3	36	0.100	255.680				
1370						16	Apr	24	2011	1027.2	25	11.54	35.55	1.2	37	0.088	256.531				
1371						17	Apr	24	2011	1027.2	26	11.54	35.55	1.2	37	0.095	255.324				
1372						18	Apr	24	2011	1027.2	25	11.54	35.55	1.3	37	0.088	256.472				
1373						19	Apr	24	2011	1027.2	26	11.54	35.55	1.2	37	0.083	256.936				
1374						20	Apr	24	2011	1027.2	26	11.54	35.55	1.2	38	0.084	256.970				
1375						21	Apr	24	2011	1027.2	9	11.53	35.55	4.6	39	0.114	255.947	0.506	1.79	7.90	0.187
1376						22	Apr	24	2011	1027.1	9	11.53	35.55	4.7	39	0.093	256.953				
1377						23	Apr	24	2011	1027.2	10	11.53	35.55	4.2	39	0.093	255.831				
1378						24	Apr	24	2011	1027.2	10	11.53	35.55	3.8	39	0.128	255.361				
1379	22	2	52.622.027	-16.497.554		1	Apr	24	2011	1028.0	201	11.48	35.57	0.0	129	0.018	238.557	0.628	0.05	10.10	0.047
1380						2	Apr	24	2011	1028.0	201	11.48	35.57	0.0	129	0.019	236.206				
1381						3	Apr	24	2011	1027.8	151	11.59	35.57	0.0	152	0.034	245.009	0.576	0.09	9.14	0.098
1382						4	Apr	24	2011	1027.8	149	11.59	35.57	0.0	154	0.038	245.599	0.578	0.09	9.12	0.098
1383						5	Apr	24	2011	1027.8	151	11.59	35.57	0.0	157	0.048	244.366				
1384						6	Apr	24	2011	1027.6	99	11.54	35.55	0.1	178	0.093	254.391	0.526	0.23	8.06	0.176
1385						7	Apr	24	2011	1027.6	99	11.54	35.55	0.1	177	0.093	254.566				
1386						8	Apr	24	2011	1027.3	48	11.54	35.55	2.2	172	0.094	255.693	0.526	0.24	7.98	0.184
1387						9	Apr	24	2011	1027.3	49	11.54	35.55	2.1	174	0.078	254.598				
1388						10	Apr	24	2011	1027.3	49	11.54	35.55	2.2	175	0.092	255.183				
1389						11	Apr	24	2011	1027.3	49	11.53	35.55	2.1	175	0.085	256.652				
1390						12	Apr	24	2011	1027.2	26	11.53	35.55	8.8	196	0.085	256.943	0.519	0.50	7.96	0.186
1391						13	Apr	24	2011	1027.2	25	11.53	35.55	9.5	197	0.085	257.162	0.519	0.49	7.94	0.185
1392						14	Apr	24	2011	1027.2	25	11.53	35.55	10.3	199	0.086	254.913				
1393						15	Apr	24	2011	1027.2	25	11.53	35.55	10.0	201	0.114	255.982				
1394						16	Apr	24	2011	1027.2	25	11.53	35.55	10.1	203	0.101	257.566				
1395						17	Apr	24	2011	1027.2	25	11.53	35.55	10.9	204	0.095	254.715				
1396						18	Apr	24	2011	1027.2	25	11.53	35.55	11.1	202	0.107	256.677				
1397						19	Apr	24	2011	1027.2	26	11.53	35.55	9.5	204	0.101	257.176				
1398						20	Apr	24	2011	1027.2	26	11.54	35.55	9.9	207	0.101	254.694				
1399						21	Apr	24	2011	1027.2	11	11.53	35.55	31.1	204	0.088	255.861	0.518	0.23	7.95	0.184
1400						22	Apr	24	2011	1027.2	10	11.53	35.55	32.9	206	0.091	255.129				
1401						23	Apr	24	2011	1027.2	11	11.53	35.55	31.2	205	0.098	254.278				
1402						24	Apr	24	2011	1027.2	11	11.53	35.55	31.7	210	0.100	255.783				
1403																					
1404	22B	1	53.508.041	-16.520.077		1	Apr	24	2011	1028.0	201	11.45	35.56	0.0	25	0.040	247.483	0.587	0.05	9.23	0.222
1405						2	Apr	24	2011	1028.0	200	11.45	35.56	0.0	25	0.040	247.246				
1406						3	Apr	24	2011	1028.0	202	11.45	35.56	0.0	25	0.040	248.566				
1407						4	Apr	24	2011	1027.8	151	11.35	35.51	0.0	23	0.091	256.779	0.505	0.39	7.76	0.244
1408						5	Apr	24	2011	1027.8	150	11.35	35.51	0.0	23	0.072	257.441				
1409						6	Apr	24	2011	1027.8	149	11.35	35.51	0.0	23	0.067	257.594				
1410						7	Apr	24	2011	1027.6	101	11.56	35.56	0.0	22	0.070	254.991	0.507	0.20	8.03	0.200
1411						8	Apr	24	2011	1027.6	102	11.56	35.56	0.0	22	0.079	256.674				
1412						9	Apr	24	2011	1027.6	101	11.56	35.56	0.0	22	0.085	254.868				
1413						10	Apr	24	2011	1027.4	74	11.56	35.56	0.0	21	0.089	255.819	0.510	0.17	8.10	0.200
1414						11	Apr	24	2011	1027.4	74	11.56	35.56	0.0	21	0.079	254.902				
1415						12	Apr	24	2011	1027.4	76	11.56	35.56	0.0	21	0.088	254.769				
1416						13	Apr	24	2011	1027.3	49	11.56	35.56	0.0	20	0.069	254.823	0.508	0.17	8.10	0.196
1417						14	Apr	24	2011	1027.3	49	11.56	35.56	0.0	20	0.076	254.852				
1418						15	Apr	24	2011	1027.3	50	11.56	35.56	0.0	20	0.084	255.920				
1419						16	Apr	24	2011	1027.2	23	11.59	35.56	0.1	20	0.092	257.504	0.498	0.18	7.91	0.200
1420						17	Apr	24	2011	1027.2	23	11.59	35.56	0.1	20	0.087	255.083				
1421						18	Apr	24	2011	1027.2	26	11.58	35.56	0.1	20	0.088	257.199				
1422						19	Apr	24	2011	1027.2	11	11.58	35.56	0.3	20	0.092	256.089	0.497	0.17	7.89	0.200
1423						20	Apr	24	2011	1027.1	10	11.58	35.56	0.3	20	0.113	258.019				
1424						21	Apr	24	2011	1027.2	10	11.58	35.56	0.3	20	0.089	258.159				
1425						22	Apr	24	2011	1027.2	11	11.58	35.56	0.3	20	0.128	257.253				
1426						23	Apr	24	2011	1027.2	11	11.58	35.56	0.3	20	0.073	257.641				
1427						24	Apr	24	2011	1027.2	11	11.58	35.56	0.3	20	0.082	257.968				
1428																					
1429	23	1	54.633.279	-16.508.962		1	Apr	25	2011	1028.1	207	10.91	35.50	0.0	35	0.022	245.127	0.658	0.06	10.42	0.050

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1430						2	Apr	25	2011	1028.1	206	10.91	35.50	0.0	35	0.024	245.677				
1431						3	Apr	25	2011	1027.9	150	10.85	35.47	0.0	40	0.119	256.395	0.583	0.26	9.17	0.186
1432						4	Apr	25	2011	1027.8	148	10.85	35.48	0.0	41	0.081	253.919				
1433						5	Apr	25	2011	1027.8	146	10.85	35.47	0.0	40	0.105	255.481				
1434						6	Apr	25	2011	1027.6	102	10.83	35.46	0.0	45	0.252	263.975	0.502	0.31	7.87	0.217
1435						7	Apr	25	2011	1027.6	101	10.83	35.46	0.0	44	0.270	264.578				
1436						8	Apr	25	2011	1027.6	103	10.83	35.46	0.0	45	0.278	263.757				
1437						9	Apr	25	2011	1027.5	79	10.81	35.45	0.0	51	0.236	264.686	0.493	0.31	7.89	0.216
1438						10	Apr	25	2011	1027.5	79	10.81	35.45	0.0	51	0.239	263.721				
1439						11	Apr	25	2011	1027.5	79	10.81	35.45	0.0	49	0.249	264.615				
1440						12	Apr	25	2011	1027.4	50	10.80	35.45	0.1	56	0.301	263.678	0.493	0.28	7.89	0.216
1441						13	Apr	25	2011	1027.4	50	10.80	35.45	0.1	57	0.270	265.112				
1442						14	Apr	25	2011	1027.4	51	10.80	35.45	0.1	58	0.278	264.624				
1443						15	Apr	25	2011	1027.3	26	10.79	35.45	1.1	65	0.269	263.203	0.491	0.31	7.89	0.217
1444						16	Apr	25	2011	1027.3	26	10.79	35.45	1.0	65	0.264	263.364	0.491	0.29	7.88	0.216
1445						17	Apr	25	2011	1027.3	27	10.79	35.45	1.1	65	0.273	265.001				
1446						18	Apr	25	2011	1027.3	26	10.79	35.45	1.1	63	0.287	266.055				
1447						19	Apr	25	2011	1027.3	26	10.79	35.45	1.1	62	0.283	265.955				
1448						20	Apr	25	2011	1027.3	27	10.79	35.45	1.1	67	0.313	263.338				
1449						21	Apr	25	2011	1027.2	10	10.80	35.45	5.9	72	0.295	263.049	0.488	0.29	7.79	0.216
1450						22	Apr	25	2011	1027.2	10	10.79	35.45	5.8	71	0.286	264.500				
1451						23	Apr	25	2011	1027.2	10	10.80	35.46	6.6	71	0.305	263.506				
1452						24	Apr	25	2011	1027.2	10	10.79	35.45	5.6	70	0.296	264.534				
1453																					
1454	no station 24																				
1455																					
1456	25	1	58,000.163	-16,520.083		1	Apr	28	2011	1029.6	502	9.25	35.34	0.0	81	0.020	257.243	0.792	0.06	12.31	0.048
1457						2	Apr	28	2011	1029.6	502	9.25	35.34	0.0	84	0.023	256.545				
1458						3	Apr	28	2011	1029.2	401	9.32	35.35	0.0	81	0.061	263.185	0.765	0.07	11.74	0.176
1459						4	Apr	28	2011	1029.2	401	9.32	35.35	0.0	80	0.065	263.125				
1460						5	Apr	28	2011	1028.7	300	9.39	35.35	0.0	77	0.062	263.771	0.749	0.07	11.60	0.188
1461						6	Apr	28	2011	1028.7	301	9.39	35.35	0.0	75	0.060	264.636				
1462						7	Apr	28	2011	1028.2	201	9.52	35.36	0.0	74	0.046	260.507	0.751	0.06	11.58	0.181
1463						8	Apr	28	2011	1028.2	201	9.52	35.36	0.0	75	0.046	258.692				
1464						9	Apr	28	2011	1028.0	151	9.54	35.37	0.0	101	0.061	263.260	0.735	0.06	11.38	0.184
1465						10	Apr	28	2011	1028.0	150	9.54	35.37	0.0	104	0.063	261.968				
1466						11	Apr	28	2011	1028.0	151	9.54	35.37	0.0	103	0.062	262.156				
1467						12	Apr	28	2011	1027.5	50	9.54	35.37	3.4	187	0.067	264.119	0.732	0.09	11.31	0.182
1468						13	Apr	28	2011	1027.5	50	9.54	35.37	3.5	189	0.082	262.985				
1469						14	Apr	28	2011	1027.4	27	9.53	35.37	10.0	174	0.067	264.497	0.734	0.07	11.30	0.183
1470						15	Apr	28	2011	1027.4	27	9.53	35.37	9.7	169	0.071	263.948				
1471						16	Apr	28	2011	1027.4	27	9.53	35.37	9.4	158	0.065	264.010				
1472						17	Apr	28	2011	1027.4	27	9.53	35.37	9.4	157	0.067	263.995				
1473						18	Apr	28	2011	1027.4	26	9.53	35.37	10.1	152	0.073	263.941				
1474						19	Apr	28	2011	1027.4	27	9.53	35.37	9.4	154	0.062	264.471				
1475						20	Apr	28	2011	1027.4	11	9.55	35.37	28.5	175	0.086	264.585	0.729	0.08	11.23	0.180
1476						21	Apr	28	2011	1027.4	10	9.54	35.37	35.3	176	0.081	262.796				
1477						22	Apr	28	2011	1027.4	11	9.54	35.37	27.6	169	0.076	265.012				
1478						23	Apr	28	2011	1027.4	11	9.54	35.37	28.9	159	0.066	264.347				
1479						24	Apr	28	2011	1027.4	9	9.54	35.37	30.9	156	0.085	264.029				
1480	25	5	58,000.229	-16,520.117		1	Apr	28	2011	1028.0	151	9.53	35.37	0.0	274	0.061	263.116	0.733	0.06	11.28	0.181
1481						2	Apr	28	2011	1028.0	151	9.53	35.37	0.0	269	0.057	263.124				
1482						3	Apr	28	2011	1028.0	151	9.53	35.37	0.0	266	0.058	262.324				
1483						4	Apr	28	2011	1028.0	151	9.53	35.37	0.0	256	0.054	261.398				
1484						5	Apr	28	2011	1027.8	100	9.55	35.37	0.4	251	0.068	264.029	0.729	0.06	11.28	0.182
1485						6	Apr	28	2011	1027.8	100	9.55	35.37	0.4	251	0.063	263.899				
1486						7	Apr	28	2011	1027.8	100	9.55	35.37	0.4	253	0.082	263.727				
1487						8	Apr	28	2011	1027.6	73	9.55	35.37	1.0	192	0.069	264.566	0.726	0.07	11.28	0.182
1488						9	Apr	28	2011	1027.6	73	9.55	35.37	1.0	193	0.070	264.870				
1489						10	Apr	28	2011	1027.6	74	9.55	35.37	1.0	194	0.072	262.984				
1490						11	Apr	28	2011	1027.5	51	9.55	35.37	2.6	162	0.073	265.885	0.726	0.08	11.23	0.182
1491						12	Apr	28	2011	1027.5	49	9.55	35.37	2.9	169	0.074	263.715				
1492						13	Apr	28	2011	1027.5	49	9.55	35.37	3.0	169	0.082	263.745				
1493						14	Apr	28	2011	1027.4	25	9.55	35.37	7.7	132	0.074	265.316	0.725	0.07	11.26	0.182
1494						15	Apr	28	2011	1027.4	25	9.55	35.37	6.6	132	0.082	265.536				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1495						16	Apr	28	2011	1027.4	25	9.55	35.37	7.3	137	0.083	265.161				
1496						17	Apr	28	2011	1027.4	24	9.55	35.37	8.0	140	0.078	265.285				
1497						18	Apr	28	2011	1027.4	25	9.55	35.37	7.4	142	0.080	265.649				
1498						19	Apr	28	2011	1027.4	25	9.55	35.37	7.4	144	0.071	265.104				
1499						20	Apr	28	2011	1027.4	24	9.55	35.36	7.0	141	0.073	265.480				
1500						21	Apr	28	2011	1027.4	10	9.56	35.37	21.1	122	0.070	264.602	0.724	0.09	11.23	0.181
1501						22	Apr	28	2011	1027.4	9	9.56	35.37	21.3	122	0.078	264.663				
1502						23	Apr	28	2011	1027.4	11	9.56	35.37	16.6	122	0.070	265.526				
1503						24	Apr	28	2011	1027.4	11	9.56	35.37	17.2	122	0.075	263.869				
1504																					
1505	26	1	58.650.223	-17.179.777		1	Apr	28	2011	1029.4	448	9.15	35.31	0.0	94	0.018	253.638	0.824	0.06	12.60	0.030
1506						2	Apr	28	2011	1029.4	448	9.15	35.31	0.0	95	0.016	252.955				
1507						3	Apr	28	2011	1028.7	300	9.34	35.34	0.0	91	0.064	264.895	0.742	0.07	11.49	0.202
1508						4	Apr	28	2011	1028.7	300	9.34	35.34	0.0	92	0.064	263.742				
1509						5	Apr	28	2011	1028.0	151	9.37	35.35	0.0	82	0.080	262.792	0.750	0.06	11.59	0.158
1510						6	Apr	28	2011	1028.0	151	9.37	35.35	0.0	83	0.049	262.556				
1511						7	Apr	28	2011	1027.8	101	9.38	35.34	0.0	85	0.067	264.575	0.725	0.08	11.31	0.184
1512						8	Apr	28	2011	1027.8	101	9.38	35.34	0.0	84	0.086	266.045				
1513						9	Apr	28	2011	1027.6	65	9.34	35.32	0.2	83	0.135	271.707	0.690	0.10	10.66	0.187
1514						10	Apr	28	2011	1027.6	63	9.34	35.32	0.2	83	0.125	271.135				
1515						11	Apr	28	2011	1027.5	38	9.33	35.31	1.1	75	0.127	272.335	0.683	0.10	10.63	0.185
1516						12	Apr	28	2011	1027.5	40	9.34	35.31	1.0	75	0.141	272.345				
1517						13	Apr	28	2011	1027.4	26	9.33	35.31	2.4	67	0.124	273.339	0.690	0.10	10.62	0.186
1518						14	Apr	28	2011	1027.4	26	9.33	35.31	2.3	67	0.131	270.925				
1519						15	Apr	28	2011	1027.4	25	9.33	35.31	2.3	66	0.121	271.440				
1520						16	Apr	28	2011	1027.4	26	9.33	35.31	2.2	65	0.127	273.119				
1521						17	Apr	28	2011	1027.4	25	9.33	35.31	2.4	64	0.151	272.308				
1522						18	Apr	28	2011	1027.4	26	9.33	35.31	2.3	63	0.116	270.881				
1523						19	Apr	28	2011	1027.4	11	9.31	35.31	6.7	55	0.108	271.185	0.690	0.09	10.70	0.187
1524						20	Apr	28	2011	1027.4	11	9.31	35.31	6.2	53	0.112	271.249				
1525						21	Apr	28	2011	1027.4	10	9.31	35.31	6.9	53	0.096	271.135				
1526						22	Apr	28	2011	1027.4	10	9.31	35.31	6.7	52	0.121	271.005				
1527						23	Apr	28	2011	1027.4	11	9.32	35.31	6.2	52	0.122	271.350				
1528						24	Apr	28	2011	1027.4	11	9.31	35.31	6.0	52	0.167	270.541				
1529																					
1530	27	1	59.500.026	-18.069.873		1	Apr	29	2011	1028.5	249	9.23	35.30	0.0	35	0.023	249.634	0.828	0.05	12.54	0.054
1531						2	Apr	29	2011	1028.5	250	9.23	35.30	0.0	35	0.020	251.181				
1532						3	Apr	29	2011	1028.2	200	9.40	35.32	0.0	36	0.045	261.185	0.745	0.17	11.30	0.212
1533						4	Apr	29	2011	1028.2	199	9.40	35.32	0.0	36	0.041	260.490				
1534						5	Apr	29	2011	1028.0	152	9.43	35.33	0.0	42	0.056	263.791	0.719	0.21	10.91	0.230
1535						6	Apr	29	2011	1028.0	152	9.44	35.33	0.0	42	0.054	263.845				
1536						7	Apr	29	2011	1028.0	151	9.44	35.33	0.0	43	0.052	261.166				
1537						8	Apr	29	2011	1028.0	151	9.44	35.33	0.0	43	0.055	263.240				
1538						9	Apr	29	2011	1027.5	50	9.50	35.33	0.5	43	0.069	266.066	0.695	0.16	10.63	0.200
1539						10	Apr	29	2011	1027.5	51	9.50	35.33	0.4	43	0.063	267.120				
1540						11	Apr	29	2011	1027.4	26	9.49	35.33	1.6	43	0.065	267.705	0.691	0.16	10.55	0.202
1541						12	Apr	29	2011	1027.4	25	9.49	35.33	1.7	43	0.071	267.434				
1542						13	Apr	29	2011	1027.4	25	9.49	35.33	1.6	43	0.063	267.074				
1543						14	Apr	29	2011	1027.4	26	9.49	35.33	1.6	43	0.069	266.446				
1544						15	Apr	29	2011	1027.4	25	9.49	35.33	1.7	43	0.062	265.865				
1545						16	Apr	29	2011	1027.4	25	9.49	35.33	1.7	43	0.066	265.580				
1546						17	Apr	29	2011	1027.4	24	9.49	35.33	1.8	45	0.062	266.585				
1547						18	Apr	29	2011	1027.4	25	9.49	35.33	1.7	45	0.056	266.223				
1548						19	Apr	29	2011	1027.3	11	9.49	35.33	5.0	46	0.056	266.611	0.690	0.17	10.61	0.199
1549						20	Apr	29	2011	1027.3	10	9.49	35.33	5.2	46	0.069	266.178				
1550						21	Apr	29	2011	1027.3	11	9.49	35.33	5.0	46	0.080	266.968				
1551						22	Apr	29	2011	1027.3	11	9.49	35.33	4.8	46	0.063	266.127				
1552						23	Apr	29	2011	1027.3	10	9.49	35.33	4.9	46	0.066	266.899				
1553						24	Apr	29	2011	1027.3	11	9.49	35.33	4.7	46	0.073	265.880				
1554	27	2	59.500.166	-18.069.654		1	Apr	29	2011	1028.5	251	9.25	35.30	0.0	123	0.022	254.537	0.809	0.06	12.43	0.081
1555						2	Apr	29	2011	1028.5	252	9.27	35.31	0.0	125	0.031	256.283	0.811	0.06	12.46	0.078
1556						3	Apr	29	2011	1028.0	148	9.45	35.33	0.0	144	0.060	265.068	0.716	0.21	10.75	0.222
1557						4	Apr	29	2011	1028.0	147	9.45	35.33	0.0	146	0.067	264.897	0.714	0.21	10.74	0.222
1558						5	Apr	29	2011	1028.0	148	9.45	35.33	0.0	147	0.060	266.038				
1559						6	Apr	29	2011	1028.0	148	9.45	35.33	0.0	147	0.063	265.166				

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1560					7	Apr	29	2011	1028.0	147	9.45	35.33	0.0	147	0.063	263,416	0.714	0.20	10.76	0.222
1561					8	Apr	29	2011	1028.0	147	9.45	35.33	0.0	148	0.066	263,861				
1562					9	Apr	29	2011	1027.8	101	9.50	35.33	0.1	118	0.067	266,746				
1563					10	Apr	29	2011	1027.8	100	9.50	35.33	0.1	116	0.072	266,387	0.709	0.17	10.68	0.207
1564					11	Apr	29	2011	1027.6	74	9.50	35.33	0.4	89	0.076	264,471	0.704	0.15	10.67	0.202
1565					12	Apr	29	2011	1027.6	74	9.50	35.33	0.4	89	0.073	265,330				
1566					13	Apr	29	2011	1027.6	74	9.50	35.33	0.4	88	0.062	266,236	0.704	0.16	10.66	0.203
1567					14	Apr	29	2011	1027.4	24	9.50	35.33	5.1	88	0.065	267,568	0.706	0.15	10.61	0.201
1568					15	Apr	29	2011	1027.4	24	9.50	35.33	5.0	88	0.071	267,098	0.703	0.15	10.61	0.201
1569					16	Apr	29	2011	1027.4	25	9.50	35.33	4.8	88	0.060	267,640				
1570					17	Apr	29	2011	1027.4	24	9.50	35.33	4.8	87	0.071	266,216				
1571					18	Apr	29	2011	1027.4	24	9.50	35.33	5.3	88	0.062	266,743				
1572					19	Apr	29	2011	1027.4	25	9.50	35.33	5.1	88	0.063	266,977				
1573					20	Apr	29	2011	1027.4	24	9.50	35.33	4.9	88	0.066	267,146				
1574					21	Apr	29	2011	1027.4	25	9.50	35.33	4.9	89	0.069	267,861	0.702	0.15	10.59	0.201
1575					22	Apr	29	2011	1027.3	10	9.49	35.33	18.5	114	0.060	267,915	0.704	0.16	10.60	0.199
1576					23	Apr	29	2011	1027.3	10	9.49	35.33	19.2	115	0.061	266,711				
1577					24	Apr	29	2011	1027.3	9	9.49	35.33	19.1	116	0.066	266,623				
1578	27	59,500.379	-18,070.101		1	Apr	29	2011	1027.8	101	9.49	35.33	0.2	171	0.073	264,810	0.702	0.20	10.69	0.225
1579					2	Apr	29	2011	1027.8	100	9.48	35.33	0.2	171	0.057	264,661				
1580					3	Apr	29	2011	1027.6	63	9.53	35.33	1.3	155	0.064	264,554	0.704	0.17	10.75	0.209
1581					4	Apr	29	2011	1027.6	62	9.54	35.33	1.4	157	0.069	263,131				
1582					5	Apr	29	2011	1027.5	41	9.57	35.33	5.0	186	0.091	266,837	0.694	0.14	10.69	0.206
1583					6	Apr	29	2011	1027.5	41	9.57	35.33	5.1	187	0.060	265,230				
1584					7	Apr	29	2011	1027.4	26	9.58	35.34	11.7	183	0.066	265,862	0.699	0.15	10.59	0.204
1585					8	Apr	29	2011	1027.4	24	9.58	35.34	12.2	179	0.067	265,497				
1586					9	Apr	29	2011	1027.4	25	9.58	35.34	11.5	177	0.066	264,907				
1587					10	Apr	29	2011	1027.4	24	9.58	35.34	11.5	173	0.071	267,256				
1588					11	Apr	29	2011	1027.4	26	9.58	35.34	9.9	172	0.082	264,451				
1589					12	Apr	29	2011	1027.4	26	9.58	35.34	9.9	172	0.068	264,764				
1590					13	Apr	29	2011	1027.4	24	9.59	35.34	11.4	176	0.060	266,530				
1591					14	Apr	29	2011	1027.4	24	9.59	35.34	11.7	177	0.060	265,414				
1592					15	Apr	29	2011	1027.4	25	9.59	35.34	11.4	180	0.068	264,795				
1593					16	Apr	29	2011	1027.4	25	9.59	35.34	11.3	182	0.064	264,122				
1594					17	Apr	29	2011	1027.4	24	9.59	35.34	11.9	185	0.064	265,520				
1595					18	Apr	29	2011	1027.4	25	9.59	35.34	11.4	187	0.063	266,332				
1596					19	Apr	29	2011	1027.4	24	9.59	35.34	12.4	187	0.068	266,371				
1597					20	Apr	29	2011	1027.4	26	9.59	35.34	11.0	188	0.068	266,109				
1598					21	Apr	29	2011	1027.3	11	9.59	35.33	29.0	175	0.066	267,485	0.694	0.15	10.50	0.205
1599					22	Apr	29	2011	1027.3	11	9.59	35.33	27.6	173	0.065	268,267				
1600					23	Apr	29	2011	1027.3	11	9.60	35.34	27.1	172	0.061	267,951				
1601					24	Apr	29	2011	1027.3	10	9.59	35.33	32.3	171	0.061	265,534				
1602																				
1603	28	60,119.958	-18,729.966		1	Apr	29	2011	1028.3	200	8.72	35.24	0.0	31	0.061	267,147	0.786	0.08	12.12	0.165
1604					2	Apr	29	2011	1028.0	152	8.82	35.24	0.0	28	0.076	269,505	0.767	0.09	11.81	0.162
1605					3	Apr	29	2011	1028.0	152	8.81	35.24	0.0	28	0.072	270,744				
1606					4	Apr	29	2011	1028.0	152	8.81	35.24	0.0	28	0.077	270,537				
1607					5	Apr	29	2011	1027.8	99	9.26	35.31	0.0	28	0.045	259,508	0.758	0.11	11.71	0.176
1608					6	Apr	29	2011	1027.8	99	9.26	35.31	0.0	28	0.040	260,625				
1609					7	Apr	29	2011	1027.8	98	9.26	35.31	0.0	28	0.040	260,780				
1610					8	Apr	29	2011	1027.6	75	9.40	35.32	0.1	26	0.056	260,029	0.732	0.13	11.41	0.176
1611					9	Apr	29	2011	1027.6	76	9.41	35.32	0.1	26	0.060	261,299				
1612					10	Apr	29	2011	1027.7	76	9.41	35.32	0.0	25	0.047	262,167				
1613					11	Apr	29	2011	1027.5	50	9.37	35.31	0.1	25	0.063	263,640	0.726	0.15	11.30	0.188
1614					12	Apr	29	2011	1027.5	49	9.37	35.31	0.1	25	0.070	263,396				
1615					13	Apr	29	2011	1027.5	50	9.37	35.31	0.1	25	0.065	261,638				
1616					14	Apr	29	2011	1027.4	25	9.37	35.31	0.5	23	0.065	261,540	0.721	0.15	11.21	0.187
1617					15	Apr	29	2011	1027.4	25	9.36	35.31	0.5	24	0.073	263,444				
1618					16	Apr	29	2011	1027.4	25	9.36	35.31	0.5	24	0.068	261,905				
1619					17	Apr	29	2011	1027.4	25	9.36	35.31	0.5	24	0.074	263,603				
1620					18	Apr	29	2011	1027.4	25	9.36	35.31	0.5	24	0.079	262,867				
1621					19	Apr	29	2011	1027.4	25	9.36	35.31	0.5	25	0.076	264,194				
1622					20	Apr	29	2011	1027.4	25	9.36	35.31	0.5	25	0.071	264,082				
1623					21	Apr	29	2011	1027.4	25	9.35	35.30	0.5	25	0.081	264,934				
1624					22	Apr	29	2011	1027.3	9	9.41	35.31	1.6	23	0.069	263,896	0.715	0.14	11.12	0.178

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1625						23	Apr	29	2011	1027.3	9	9.41	35.31	1.6	23	0.059	263.426				
1626						24	Apr	29	2011	1027.3	9	9.41	35.31	1.5	23	0.074	263.748				
1627																					
1628	29	1	60.680.077	-1.933.984		1	Apr	30	2011	1029.4	450	8.42	35.22	0.0	29	0.018	245.711	0.908	0.06	14.25	0.022
1629						2	Apr	30	2011	1029.4	450	8.42	35.22	0.0	30	0.020	247.051				
1630						3	Apr	30	2011	1028.7	302	8.73	35.26	0.0	36	0.073	264.297	0.797	0.07	12.47	0.158
1631						4	Apr	30	2011	1028.7	302	8.74	35.26	0.0	38	0.060	266.001				
1632						5	Apr	30	2011	1028.5	241	8.77	35.27	0.0	40	0.054	265.907	0.789	0.07	12.38	0.156
1633						6	Apr	30	2011	1028.5	241	8.77	35.27	0.0	40	0.054	266.162				
1634						7	Apr	30	2011	1028.0	149	8.75	35.26	0.0	42	0.054	264.953	0.788	0.08	12.35	0.153
1635						8	Apr	30	2011	1028.0	150	8.75	35.26	0.0	42	0.059	266.361				
1636						9	Apr	30	2011	1028.0	150	8.75	35.26	0.0	42	0.055	265.067				
1637						10	Apr	30	2011	1028.1	150	8.75	35.26	0.0	42	0.054	266.741				
1638						11	Apr	30	2011	1027.8	101	8.78	35.26	0.0	43	0.081	267.614	0.774	0.08	12.10	0.170
1639						12	Apr	30	2011	1027.8	101	8.78	35.26	0.0	43	0.089	267.691				
1640						13	Apr	30	2011	1027.6	48	8.77	35.26	0.3	43	0.085	269.234	0.761	0.08	11.91	0.162
1641						14	Apr	30	2011	1027.6	49	8.77	35.26	0.3	43	0.085	271.210				
1642						15	Apr	30	2011	1027.5	25	8.75	35.25	1.5	48	0.115	271.804	0.756	0.09	11.81	0.163
1643						16	Apr	30	2011	1027.5	25	8.75	35.25	1.6	48	0.115	269.907				
1644						17	Apr	30	2011	1027.5	25	8.75	35.25	1.6	48	0.121	270.306				
1645						18	Apr	30	2011	1027.5	25	8.75	35.25	1.6	49	0.108	271.161				
1646						19	Apr	30	2011	1027.5	25	8.75	35.25	1.6	50	0.115	269.744				
1647						20	Apr	30	2011	1027.5	25	8.75	35.25	1.8	51	0.109	272.200				
1648						21	Apr	30	2011	1027.5	25	8.76	35.25	1.6	52	0.112	272.759				
1649						22	Apr	30	2011	1027.4	11	8.75	35.25	5.5	51	0.132	273.377	0.755	0.10	11.75	0.163
1650						23	Apr	30	2011	1027.4	10	8.75	35.25	5.8	51	0.133	272.378				
1651						24	Apr	30	2011	1027.4	10	8.75	35.25	5.8	51	0.112	272.067				
1652	29	2	60.680.179	-1.933.998		1	Apr	30	2011	1028.3	200	8.79	35.27	0.0	137	0.060	266.806	0.797	0.06	12.25	0.183
1653						2	Apr	30	2011	1028.3	199	8.79	35.27	0.0	140	0.058	265.053				
1654						3	Apr	30	2011	1028.1	152	8.79	35.27	0.0	224	0.057	266.460	0.795	0.08	12.25	0.176
1655						4	Apr	30	2011	1028.1	151	8.79	35.27	0.0	229	0.061	265.689	0.795	0.07	12.23	0.176
1656						5	Apr	30	2011	1028.1	151	8.79	35.27	0.0	233	0.058	267.206				
1657						6	Apr	30	2011	1028.1	152	8.79	35.27	0.0	231	0.057	266.830				
1658						7	Apr	30	2011	1027.8	99	8.78	35.26	0.1	238	0.084	267.953	0.770	0.09	11.94	0.171
1659						8	Apr	30	2011	1027.8	99	8.78	35.26	0.1	241	0.077	269.196				
1660						9	Apr	30	2011	1027.7	76	8.78	35.26	0.4	254	0.088	270.432	0.769	0.09	11.89	0.170
1661						10	Apr	30	2011	1027.7	75	8.78	35.26	0.4	256	0.084	270.500				
1662						11	Apr	30	2011	1027.6	51	8.77	35.26	2.1	294	0.117	271.719	0.754	0.09	11.74	0.165
1663						12	Apr	30	2011	1027.6	50	8.77	35.26	2.3	332	0.122	271.236				
1664						13	Apr	30	2011	1027.5	25	8.75	35.25	12.0	312	0.152	271.083	0.751	0.08	11.69	0.164
1665						14	Apr	30	2011	1027.5	24	8.75	35.25	12.0	309	0.127	271.701	0.752	0.08	11.71	0.164
1666						15	Apr	30	2011	1027.5	25	8.75	35.25	11.6	306	0.134	272.067				
1667						16	Apr	30	2011	1027.5	25	8.75	35.25	11.7	313	0.122	272.206				
1668						17	Apr	30	2011	1027.5	25	8.75	35.25	12.4	335	0.131	272.436				
1669						18	Apr	30	2011	1027.5	25	8.76	35.25	13.4	351	0.138	271.451				
1670						19	Apr	30	2011	1027.5	25	8.75	35.25	11.5	318	0.110	273.089				
1671						20	Apr	30	2011	1027.5	26	8.76	35.25	11.4	312	0.121	273.203				
1672						21	Apr	30	2011	1027.4	10	8.74	35.25	35.4	439	0.132	273.493	0.752	0.10	11.63	0.165
1673						22	Apr	30	2011	1027.4	11	8.74	35.25	32.1	419	0.142	271.534				
1674						23	Apr	30	2011	1027.4	11	8.74	35.25	32.0	396	0.129	271.745				
1675						24	Apr	30	2011	1027.4	11	8.74	35.25	31.6	401	0.167	271.288				
1676	29	20	60.680.391	-19.338.528		1	Apr	30	2011	1027.8	100	8.69	35.24	0.7	967	0.058	267.384	0.786	0.08	12.18	0.183
1677						2	Apr	30	2011	1027.8	102	8.69	35.24	0.6	852	0.068	268.947				
1678						3	Apr	30	2011	1027.8	101	8.69	35.24	0.6	879	0.068	268.430				
1679						4	Apr	30	2011	1027.6	60	8.69	35.24	5.0	763	0.057	268.423	0.785	0.08	12.14	0.178
1680						5	Apr	30	2011	1027.6	60	8.69	35.24	5.0	738	0.070	267.792				
1681						6	Apr	30	2011	1027.6	60	8.69	35.24	5.2	759	0.062	267.443				
1682						7	Apr	30	2011	1027.5	26	8.69	35.23	41.2	838	0.100	270.919	0.772	0.09	11.86	0.175
1683						8	Apr	30	2011	1027.5	27	8.69	35.23	48.0	873	0.105	272.195				
1684						9	Apr	30	2011	1027.5	27	8.69	35.23	43.1	878	0.106	272.520				
1685						10	Apr	30	2011	1027.5	27	8.69	35.23	42.3	865	0.115	272.434				
1686						11	Apr	30	2011	1027.5	27	8.69	35.23	47.9	1033	0.105	272.406				
1687						12	Apr	30	2011	1027.5	27	8.68	35.23	44.8	863	0.111	269.970	0.769	0.08	11.80	0.175
1688						13	Apr	30	2011	1027.5	26	8.69	35.23	45.3	874	0.099	273.580				
1689						14	Apr	30	2011	1027.5	27	8.70	35.23	44.8	874	0.091	273.467				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1690						15	Apr	30	2011	1027.5	27	8.70	35.23	45.3	890	0.091	272.177				
1691						16	Apr	30	2011	1027.5	26	8.70	35.23	59.4	1032	0.097	273.355				
1692						17	Apr	30	2011	1027.5	27	8.71	35.23	50.2	973	0.092	273.143				
1693						18	Apr	30	2011	1027.5	26	8.71	35.23	55.8	1027	0.086	271.921				
1694						19	Apr	30	2011	1027.5	27	8.71	35.23	58.3	1092	0.082	271.377				
1695						20	Apr	30	2011	1027.4	10	8.75	35.22	167.0	1093	0.059	271.797				
1696						21	Apr	30	2011	1027.4	11	8.75	35.22	132.1	789	0.062	273.426		0.09	11.80	0.179
1697						22	Apr	30	2011	1027.4	10	8.75	35.22	128.5	693	0.070	272.646				
1698						23	Apr	30	2011	1027.4	10	8.76	35.22	115.7	886	0.059	271.482				
1699						24	Apr	30	2011	1027.4	11	8.75	35.22	116.3	686	0.060	271.927				
1700	29		60.680.043	-18.340.095		1	Apr	30	2011	1028.3	202	8.75	35.26	0.0	156	0.051	267.246	0.794	0.04	12.22	0.183
1701						2	Apr	30	2011	1028.3	152	8.75	35.26	0.0	155	0.053	267.420				
1702						3	Apr	30	2011	1028.1	202	8.75	35.26	0.0	137	0.049	267.557	0.794	0.04	12.19	0.187
1703						4	Apr	30	2011	1028.1	151	8.75	35.26	0.0	141	0.052	267.160	0.795	0.04	12.19	0.187
1704						5	Apr	30	2011	1028.1	153	8.75	35.26	0.0	144	0.047	267.296	0.795	0.04	12.20	0.184
1705						6	Apr	30	2011	1028.1	153	8.75	35.26	0.0	148	0.052	267.569				
1706						7	Apr	30	2011	1027.8	101	8.74	35.25	0.1	164	0.063	268.167	0.790	0.04	12.17	0.186
1707						8	Apr	30	2011	1027.8	101	8.74	35.25	0.1	159	0.063	267.860				
1708						9	Apr	30	2011	1027.6	61	8.69	35.23	0.6	131	0.070	271.666	0.778	0.04	11.90	0.173
1709						10	Apr	30	2011	1027.6	61	8.69	35.23	0.7	134	0.074	269.925				
1710						11	Apr	30	2011	1027.5	26	8.68	35.22	7.6	152	0.116	274.174	0.769	0.07	11.72	0.176
1711						12	Apr	30	2011	1027.5	26	8.69	35.22	7.4	152	0.104	274.389				
1712						13	Apr	30	2011	1027.5	26	8.69	35.22	6.6	146	0.091	274.101				
1713						14	Apr	30	2011	1027.5	25	8.69	35.22	7.1	140	0.095	271.926	0.768	0.07	11.72	0.175
1714						15	Apr	30	2011	1027.5	25	8.68	35.22	6.4	136	0.098	271.832	0.768	0.06	11.72	0.174
1715						16	Apr	30	2011	1027.5	25	8.68	35.22	5.9	130	0.095	272.315				
1716						17	Apr	30	2011	1027.5	26	8.68	35.22	5.6	130	0.090	271.869				
1717						18	Apr	30	2011	1027.5	25	8.68	35.22	5.5	124	0.103	274.077				
1718						19	Apr	30	2011	1027.5	25	8.68	35.22	5.7	118	0.102	273.815				
1719						20	Apr	30	2011	1027.4	10	8.79	35.23	17.0	123	0.103	273.920				
1720						21	Apr	30	2011	1027.4	10	8.79	35.23	17.1	124	0.102	273.445	0.758	0.08	11.57	0.165
1721						22	Apr	30	2011	1027.4	10	8.79	35.23	17.9	125	0.098	274.256				
1722						23	Apr	30	2011	1027.4	10	8.79	35.23	18.7	127	0.102	273.179				
1723						24	Apr	30	2011	1027.4	10	8.79	35.23	18.9	127	0.093	274.801				
1724																					
1725	30	1	61.710.326	-20.490.256		1	May	1	2011	1028.4	204	7.96	35.18	0.0	233	0.025	258.036	0.918	0.05	14.01	0.084
1726						2	May	1	2011	1028.4	204	7.92	35.17	0.0	233	0.026	260.200				
1727						3	May	1	2011	1028.1	153	8.12	35.20	0.0	255	0.034	262.565	0.879	0.06	13.47	0.147
1728						4	May	1	2011	1028.1	153	8.12	35.20	0.0	252	0.033	262.974				
1729						5	May	1	2011	1028.1	154	8.11	35.20	0.0	250	0.033	262.613				
1730						6	May	1	2011	1028.1	153	8.11	35.20	0.0	251	0.029	263.347				
1731						7	May	1	2011	1027.9	99	8.27	35.22	0.4	231	0.055	267.261	0.817	0.07	12.61	0.148
1732						8	May	1	2011	1027.9	99	8.27	35.22	0.4	235	0.055	266.368				
1733						9	May	1	2011	1027.6	50	8.30	35.21	3.0	182	0.065	267.237	0.839	0.07	12.86	0.176
1734						10	May	1	2011	1027.6	50	8.31	35.21	3.0	181	0.068	266.590				
1735						11	May	1	2011	1027.5	25	8.32	35.20	9.6	170	0.060	268.315	0.830	0.06	12.70	0.160
1736						12	May	1	2011	1027.5	26	8.32	35.21	9.3	169	0.054	270.902				
1737						13	May	1	2011	1027.5	25	8.32	35.20	9.6	169	0.055	269.912	0.828	0.06	12.66	0.160
1738						14	May	1	2011	1027.5	25	8.32	35.20	9.9	169	0.059	268.630				
1739						15	May	1	2011	1027.5	25	8.33	35.21	9.8	168	0.056	269.451				
1740						16	May	1	2011	1027.5	25	8.32	35.21	9.9	168	0.057	268.206				
1741						17	May	1	2011	1027.5	25	8.31	35.20	10.0	168	0.059	268.274				
1742						18	May	1	2011	1027.5	25	8.31	35.20	10.0	168	0.055	267.225				
1743						19	May	1	2011	1027.5	25	8.30	35.20	9.8	168	0.053	270.280				
1744						20	May	1	2011	1027.5	25	8.30	35.20	10.1	168	0.054	269.043				
1745						21	May	1	2011	1027.4	10	8.27	35.18	29.3	180	0.087	272.003	0.820	0.06	12.55	0.162
1746						22	May	1	2011	1027.4	10	8.27	35.18	29.5	180	0.089	271.209				
1747						23	May	1	2011	1027.4	11	8.27	35.18	28.5	181	0.073	269.759				
1748						24	May	1	2011	1027.4	11	8.27	35.18	28.5	181	0.069	272.169				
1749	30	5	61.710.193	-20.490.068		1	May	1	2011	1028.4	204	8.19	35.22	0.0	194	0.043	266.374	0.860	0.04	13.30	0.156
1750						2	May	1	2011	1028.4	204	8.19	35.22	0.0	197	0.044	265.661				
1751						3	May	1	2011	1028.1	151	8.23	35.22	0.0	232	0.048	266.013	0.851	0.05	13.16	0.165
1752						4	May	1	2011	1028.1	151	8.23	35.22	0.0	234	0.048	265.469	0.851	0.05	13.14	0.162
1753						5	May	1	2011	1028.1	151	8.22	35.22	0.0	236	0.048	265.679				
1754						6	May	1	2011	1028.1	151	8.22	35.22	0.0	238	0.050	266.985				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1755						7	May	1	2011	1028.1	151	8.23	35.22	0.0	241	0.047	266.434				
1756						8	May	1	2011	1028.1	152	8.25	35.22	0.0	242	0.050	267.440				
1757						9	May	1	2011	1027.9	100	8.28	35.23	0.3	233	0.068	269.002	0.836	0.06	12.94	0.151
1758						10	May	1	2011	1027.9	100	8.28	35.23	0.3	227	0.071	268.486				
1759						11	May	1	2011	1027.9	100	8.28	35.23	0.3	223	0.069	269.090				
1760						12	May	1	2011	1027.6	51	8.28	35.22	2.9	209	0.054	269.974	0.829	0.06	12.78	0.141
1761						13	May	1	2011	1027.6	51	8.28	35.22	3.0	211	0.057	270.236				
1762						14	May	1	2011	1027.6	51	8.28	35.22	3.0	211	0.058	269.655				
1763						15	May	1	2011	1027.5	25	8.31	35.22	15.3	257	0.067	270.127	0.819	0.06	12.67	0.144
1764						16	May	1	2011	1027.5	25	8.31	35.22	15.6	261	0.063	269.893	0.818	0.05	12.65	0.143
1765						17	May	1	2011	1027.5	25	8.31	35.22	15.6	265	0.067	270.067				
1766						18	May	1	2011	1027.5	26	8.31	35.22	15.6	269	0.066	271.182				
1767						19	May	1	2011	1027.5	26	8.31	35.21	16.2	274	0.070	270.264				
1768						20	May	1	2011	1027.5	26	8.31	35.22	15.7	278	0.066	272.957				
1769						21	May	1	2011	1027.4	11	8.32	35.21	49.7	299	0.065	269.715	0.818	0.06	12.56	0.146
1770						22	May	1	2011	1027.4	11	8.32	35.21	47.3	300	0.066	273.254				
1771						23	May	1	2011	1027.4	10	8.32	35.22	51.9	300	0.064	270.796				
1772						24	May	1	2011	1027.4	10	8.32	35.22	49.7	299	0.061	273.061				
1773																					
1774	30	18	61.710.428	-20.489.069		1	May	1	2011	1027.6	50	8.29	35.23	5.3	331	0.057	269.857	0.834	0.06	12.82	0.144
1775						2	May	1	2011	1027.6	49	8.29	35.23	5.4	333	0.057	269.776				
1776						3	May	1	2011	1027.6	49	8.29	35.23	5.4	335	0.057	270.955				
1777						4	May	1	2011	1027.6	50	8.29	35.23	5.2	337	0.062	270.940				
1778						5	May	1	2011	1027.6	50	8.29	35.23	5.4	340	0.059	269.835				
1779						6	May	1	2011	1027.6	50	8.29	35.22	5.4	343	0.058	269.578				
1780						7	May	1	2011	1027.6	49	8.29	35.23	5.7	346	0.060	269.849				
1781						8	May	1	2011	1027.6	50	8.29	35.23	5.7	349	0.064	268.600				
1782						9	May	1	2011	1027.5	25	8.30	35.22	18.6	311	0.064	271.940	0.833	0.06	12.80	0.147
1783						10	May	1	2011	1027.5	25	8.30	35.22	19.0	312	0.070	268.958				
1784						11	May	1	2011	1027.5	25	8.30	35.22	18.4	315	0.065	269.662				
1785						12	May	1	2011	1027.5	26	8.30	35.22	18.2	317	0.063	271.708				
1786						13	May	1	2011	1027.5	25	8.30	35.22	18.8	320	0.063	271.875	0.832	0.06	12.79	0.145
1787						14	May	1	2011	1027.5	25	8.30	35.22	20.0	324	0.063	269.566				
1788						15	May	1	2011	1027.5	25	8.30	35.22	19.9	326	0.064	270.057				
1789						16	May	1	2011	1027.5	25	8.30	35.22	19.3	329	0.064	271.596				
1790						17	May	1	2011	1027.4	10	8.33	35.22	43.1	260	0.057	273.386	0.822	0.06	12.63	0.152
1791						18	May	1	2011	1027.4	10	8.33	35.22	42.4	255	0.060	273.292				
1792						19	May	1	2011	1027.4	11	8.33	35.22	41.3	251	0.059	273.277				
1793						20	May	1	2011	1027.4	10	8.33	35.22	41.9	248	0.069	271.990				
1794						21	May	1	2011	1027.4	10	8.33	35.22	40.4	245	0.061	273.187				
1795						22	May	1	2011	1027.4	11	8.33	35.22	40.5	243	0.060	272.527				
1796						23	May	1	2011	1027.4	11	8.33	35.22	38.1	240	0.062	272.604				
1797						24	May	1	2011	1027.4	11	8.33	35.22	39.0	237	0.059	271.787				
1798																					
1799	31	1	62.299.777	-21.159.864		1	Apr	30	2011	1028.3	202	8.75	35.26	0.0	156	0.051	267.246	0.856	0.09	13.31	0.156
1800						2	Apr	30	2011	1028.3	202	8.75	35.26	0.0	155	0.053	267.420				
1801						3	Apr	30	2011	1028.1	152	8.75	35.26	0.0	137	0.049	267.557				
1802						4	Apr	30	2011	1028.1	151	8.75	35.26	0.0	141	0.052	267.160	0.864	0.12	13.38	0.163
1803						5	Apr	30	2011	1028.1	151	8.75	35.26	0.0	144	0.047	267.226				
1804						6	Apr	30	2011	1028.1	153	8.75	35.26	0.0	148	0.052	267.569				
1805						7	Apr	30	2011	1027.8	101	8.74	35.25	0.1	164	0.063	268.167	0.859	0.08	13.34	0.156
1806						8	Apr	30	2011	1027.8	101	8.74	35.25	0.1	159	0.063	267.860				
1807						9	Apr	30	2011	1027.6	61	8.69	35.23	0.6	131	0.070	271.666				
1808						10	Apr	30	2011	1027.6	61	8.69	35.23	0.7	134	0.074	269.925	0.855	0.07	13.30	0.149
1809						11	Apr	30	2011	1027.5	26	8.68	35.22	7.6	156	0.116	274.174				
1810						12	Apr	30	2011	1027.5	26	8.69	35.22	7.4	152	0.104	274.389				
1811						13	Apr	30	2011	1027.5	26	8.69	35.22	6.6	146	0.091	274.101	0.847	0.07	13.16	0.139
1812						14	Apr	30	2011	1027.5	25	8.69	35.22	7.1	140	0.095	271.926				
1813						15	Apr	30	2011	1027.5	25	8.68	35.22	6.4	136	0.098	271.832				
1814						16	Apr	30	2011	1027.5	25	8.68	35.22	5.9	130	0.095	272.315				
1815						17	Apr	30	2011	1027.5	26	8.68	35.22	5.6	130	0.090	271.869				
1816						18	Apr	30	2011	1027.5	25	8.68	35.22	5.5	124	0.103	274.077				
1817						19	Apr	30	2011	1027.5	25	8.68	35.22	5.7	118	0.102	273.815				
1818						20	Apr	30	2011	1027.4	10	8.79	35.23	17.0	123	0.103	273.920				
1819						21	Apr	30	2011	1027.4	10	8.79	35.23	17.1	124	0.102	273.445	0.847	0.10	13.15	0.139

APPENDIX 3

Appendix 3. Masterfile STRATIPHYT-II cruise 2011 – per participant

	1	2	3	4	5	6	7	8
1	Stratiphyt-II cruise 2011; 64PE334							
2							<i>Pelagia time</i> (UTC +1)	
3	Station	Cast	Who did the work?	Responsible scientist	What are you sampling for?	Sampling device	time of day	Bottle #
4								
5	0	1	Doggen	Brussaard	abundance phytoplankton	CTD	6:30 AM	23,21,20,16,15,14,13,8,7,6,5,4,3,1
6	0	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:30 AM	23,18,17,15,11,4,2,1
7	0	18	Doggen	Brussaard	abundance phytoplankton	CTD	3:30 PM	7,1
8	0	19	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 PM	13,10,7,4,1
9	1	1	Doggen	Brussaard	abundance phytoplankton	CTD	6:30 AM	21,16,15,7,5,3,1
10	1	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:15 AM	24,16,14,7,5,2,1
11	1	16	Doggen	Brussaard	abundance phytoplankton	CTD	4:00 PM	13,1
12	2	1	Doggen	Brussaard	abundance phytoplankton	CTD	6:30 AM	23,17,16,14,7,6,4,1
13	2	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:30 AM	23,16,14,6,4,1
14	2	13	Doggen	Brussaard	abundance phytoplankton	CTD	3:30 PM	23,15,13,5,3,1
15	2	14	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:30 PM	22,16,13,7,4,1
16	2	18	Doggen	Brussaard	abundance phytoplankton	CTD	6:30 AM	22,15,14,7,4,1
17	2	19	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	23,15,14,6,4,1
18	2B	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:30 PM	21,14,12,5,3,1
19	3	1	Doggen	Brussaard	abundance phytoplankton	CTD	6:30 AM	23,16,14,6,4,1
20	3	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	22,16,15,6,4,1
21	3	19	Doggen	Brussaard	abundance phytoplankton	CTD	3:30 PM	23,15,13,5,3,1
22	5	1	Doggen	Brussaard	abundance phytoplankton	CTD	6:30 AM	22,15,8,6,4,1
23	5	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	23,16,9,7,5,1
24	5	22	Doggen	Brussaard	abundance phytoplankton	CTD	3:30 PM	23,15,13,5,3,1
25	5	23	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:30 PM	19,13,9,5,2
26	5	27	Doggen	Brussaard	abundance phytoplankton	CTD	6:30 AM	23,16,8,6,4,1
27	5	28	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	22,15,8,6,4,1
28	6	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 PM	22,16,10,7,4,1
29	7	1	Doggen	Brussaard	abundance phytoplankton	CTD	6:30 AM	22,15,8,5,1
30	7	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	23,18,9,7,5,1
31	7	20	Doggen	Brussaard	abundance phytoplankton	CTD	2:30 PM	21,13,11,3,1
32	8	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:30 PM	21,15,9,7,5,1
33	9	1	Doggen	Brussaard	abundance phytoplankton	CTD	6:30 AM	23,15,13,5,3,1
34	9	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	23,16,14,6,5,1
35	9	18	Doggen	Brussaard	abundance phytoplankton	CTD	2:30 PM	22,16,13,7,5,1
36	10	2	Doggen	Brussaard	abundance phytoplankton	CTD	1:00 PM	22,16,13,7,4,1
37	11	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	6:30 AM	22,15,8,4,1
38	11	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	23,16,9,7,5,1

Doggen master file stratiphyt-II

	1	2	3	4	5	6	7	8
39	11	21	Doggen	Brussaard	abundance phytoplankton	CTD	3:30 PM	12,8,4,3,1
40	12	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	9:00 PM	23,16,9,7,5,3,1
41	13	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	6:30 AM	15,8,6,4,2,1
42	13	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	17,10,8,6,4,1
43	13	18	Doggen	Brussaard	abundance phytoplankton	CTD	2:30 PM	12,7,5,3,1
44	14	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 PM	21,13,10,7,4,1
45	15	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	6:30 AM	21,13,10,7,4,1
46	15	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	23,17,9,7,4,1
47	16	3	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:30 PM	13,11,9,7,5
48	17	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	6:30 AM	22,15,12,9,6,3,1
49	17	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	22,14,11,8,5,2,1
50	17	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	21,12,9,6,4
51	17	21	Doggen	Brussaard	abundance phytoplankton	CTD	3:30 PM	22,7,4,1
52	17B	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:30 PM	13,11,7,5,3,1
53	18	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	6:30 AM	18,15,7,4,1
54	18	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	20,18,11,9,7,3,1
55	20	1	Doggen	Brussaard	abundance phytoplankton	CTD	1:00 PM	22,16,13,7,5,3,1
56	22	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	6:30 AM	21,12,8,6,3,1
57	22	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	21,12,8,6,3,1
58	22B	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	9:00 PM	19,16,13,10,7,4,1
59	23	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	6:30 AM	21,15,12,9,6,3,1
60	25	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	9:00 AM	20,14,12,9,7,5,3,1
61	25	5	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	10:00 AM	21,14,11,8,5,1
62	26	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:30 PM	19,13,11,9,7,5,3,1
63	27	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	6:30 AM	19,11,9,5,3,1
64	27	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	22,14,11,10,3,1
65	27	21	Doggen	Brussaard	abundance phytoplankton	CTD	4:00 PM	21,7,5,3,1
66	28	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:30 PM	22,14,11,8,5,2,1
67	29	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	6:30 AM	22,15,13,11,7,5,3,1
68	29	2	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	21,13,11,9,7,3,1
69	29	20	Doggen	Brussaard	abundance phytoplankton	CTD	4:30 PM	21,7,4,1
70	29	21	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 PM	21,11,9,7,3,1
71	30	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	21,11,9,7,3,1
72	30	5	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	10:00 AM	21,15,12,9,3,1
73	30	18	Doggen	Brussaard	abundance phytoplankton	CTD	3:30 PM	17,9,1
74	31	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	9:00 PM	21,13,10,7,4,1
75	32	1	Doggen	Brussaard	abundance phytoplankton, bacteria and viruses	CTD	8:00 AM	21,13,10,7,4,1

	9	10
1		
2		
3	Depths	Other comments
4		
5	10,20,30,40,50,60,70,80,90,100,110,120,150,200	
6	10,40,60,90,120,200	Fixed algae, bacteria and viruses
7	40,12	
8	10,25,40,75,100	Fixed bacteria and viruses
9	10,30,70,100,120,200	
10	10,30,50,70,100,200	Fixed algae, bacteria and viruses
11	30,72	
12	10,30,60,74,130,200	
13	10,25,60,72,130,200	Fixed algae, bacteria and viruses
14	10,40,60,77,105,200	
15	10,40,60,74,120,200	Fixed bacteria and viruses
16	10,30,50,72,110,200	
17	10,30,60,65,120,200	Fixed algae, bacteria and viruses
18	10,25,50,70,110,200	Fixed bacteria and viruses
19	10,25,50,72,110,200	
20	10,25,60,76,110,200	Fixed algae, bacteria and viruses
21	10,25,40,80,140,200	
22	10,20,48,80,130,200	
23	10,20,47,90,130,200	Fixed algae, bacteria and viruses
24	10,25,40,61,100,150	
25	20,43,70,100,130	Fixed bacteria and viruses
26	10,20,47,80,110,200	
27	10,20,48,90,140,200	Fixed algae, bacteria and viruses
28	10,25,55,75,95,200	Fixed bacteria and viruses
29	10,25,53,80,200	
30	10,25,48,63,100,200	Fixed algae, bacteria and viruses
31	10,20,35,48,80	
32	10,20,48,80,120,200	Fixed bacteria and viruses
33	10,20,50,66,100,200	
34	10,20,50,64,80,200	Fixed algae, bacteria and viruses
35	10,20,45,61,75,120	
36	10,20,30,38,70,200	
37	10,15,25,50,200	Fixed bacteria and viruses
38	10,15,25,40,80,200	Fixed algae, bacteria and viruses

	9	10
39	10,15,25,60,100	
40	10,15,20,40,60,100,200	Fixed bacteria and viruses
41	10,20,40,100,150,200	Fixed bacteria and viruses
42	10,20,30,50,75,150	Fixed algae, bacteria and viruses
43	20,30,50,75,100	
44	10,20,40,50,75,150	Fixed bacteria and viruses
45	10,20,40,60,75,150	Fixed bacteria and viruses
46	10,15,40,150,500	Fixed algae, bacteria and viruses
47	10,20,30,40,50	Fixed bacteria and viruses
48	10,15,25,40,50,150,200	Fixed bacteria and viruses
49	10,15,25,40,50,150,200	Fixed algae, bacteria and viruses
50	15,25,40,50,150	Fixed algae, bacteria and viruses
51	10,20,35,50	
52	10,20,30,50,75,90	Fixed bacteria and viruses
53	10,20,40,75,150	Fixed bacteria and viruses
54	10,30,40,50,60,150,200	Fixed algae, bacteria and viruses
55	10,20,30,50,75,150,200	
56	10,25,50,100,150,200	Fixed bacteria and viruses
57	10,25,50,100,150,200	Fixed algae, bacteria and viruses
58	10,25,50,75,100,150,200	Fixed bacteria and viruses
59	10,25,50,75,100,150,200	Fixed bacteria and viruses
60	10,25,50,150,200,300,400,500	Fixed bacteria and viruses
61	10,25,50,75,100,150	Fixed algae, bacteria and viruses
62	10,25,40,65,100,150,300,450	Fixed bacteria and viruses
63	10,25,50,150,200,250	Fixed bacteria and viruses
64	10,25,75,100,150,250	Fixed algae, bacteria and viruses
65	10,25,40,60,100	
66	10,25,50,75,100,150,200	Fixed bacteria and viruses
67	10,25,50,100,150,240,300,450	Fixed bacteria and viruses
68	10,25,50,75,100,150,200	Fixed algae, bacteria and viruses
69	10,25,60,100	
70	10,25,60,100,150,200	Fixed bacteria and viruses
71	10,25,50,100,150,200	Fixed bacteria and viruses
72	10,25,50,100,150,200	Fixed algae, bacteria and viruses
73	10,25,50	
74	10,25,50,100,150,200	Fixed bacteria and viruses
75	10,25,50,100,150,200	Fixed algae, bacteria and viruses

1	2	3	4	5	6	7	8	9
1	Stratiphyt-II cruise 2011; 64PE334							
2	<i>Pelagia time</i> (UTC +1)							
3	Station	Cast	Who	What are you sampling for?	Sampling device	time of day in UTC	Depths	Bottle #
4	test	1	Mojica	Phytoplankton losses	CTD	5:30 AM	30,80, 200	18, 19, 7, 8, 9, 2
5	test	5	Mojica	Phytoplankton losses	CTD	9:54 AM	40,80,200	14, 16, 5, 6, 2
6	0	1	Mojica	Phytoplankton losses	CTD	5:23 AM	40, 80, 200	17, 18, 10, 11, 1
7	1	1	Mojica	Phytoplankton losses	CTD	5:19 AM	30, 80, 200	17, 18, 10, 11, 1
8	1	2	Mojica	Phytoplankton losses	CTD	7:16 AM	30, 74, 200	20, 10, 11, 1
9	2	1	Mojica	Phytoplankton losses	CTD	5:35 AM	30, 74, 200	20, 9, 10, 1
10	2	2	Mojica	Phytoplankton losses	CTD	7:19 AM	25,72,200	20, 8, 9, 1
11	2	13	Mojica	Phytoplankton losses	CTD	2:32 PM	40,77,200	19, 8
12	2	14	Mojica	Phytoplankton losses	CTD	7:23 PM	40,74,200	19, 9
13	2	18	Mojica	Phytoplankton losses	CTD	5:24 AM	30, 72, 200	10, 11
14	2	19	Mojica	Phytoplankton losses	CTD	7:00 AM	30, 65, 200	20, 21, 10, 11
15	3	1	Mojica	Phytoplankton losses	CTD	5:26 AM	25, 72, 200	21, 10, 11, 2
16	3	2	Mojica	Phytoplankton losses	CTD	7:03 AM	25, 76, 200	20, 19, 8, 7, 2

1	2	3	4	5	6	7	8	9	
17	5	1	Mojica	Phytoplankton losses	CTD	5:25 AM	20_48_200	19, 20, 11, 12, 2	Ultrafiltrate made for viral production at ML (20m) and DCM (48m), and dilution method at DCM. 0.45 um filtrate made for dilution method for DCM (48m)
18	5	2	Mojica	Phytoplankton losses	CTD	7:11 AM	20_47_200	21, 14, 13, 3	Viral production at 2 depths ML and DCM. Dilution method for DCM depth (47m)
19	5	22	Mojica	Phytoplankton losses	CTD	14:26	25_60_150	18, 8, 9	Ultrafiltrate made for viral production at ML (25m) and DCM (60m), and dilution method at DCM. 0.45 um filtrate made for dilution method for DCM (60m)
20	5	23	Mojica	Phytoplankton losses	CTD	19:27	20_43_130	22, 15	Viral production at 2 depths ML and DCM. Dilution method for DCM depth (47m)
21	5	27	Mojica	Phytoplankton losses	CTD	5:18	20_48_200	11, 12	Ultrafiltrate made for dilution method at DCM. 0.45 um filtrate made for dilution method for DCM (48m)
22	5	28	Mojica	Phytoplankton losses	CTD	7:01	20_48_200	12, 13	Dilution method for DCM depth (48m)
23	7	1	Mojica	Phytoplankton losses	CTD	5:19 AM	25_53_200	17, 10, 9, 2	Ultrafiltrate made for viral production at ML (25m), DCM (53m) and BDCM (200m) and dilution method at DCM. 0.45 um filtrate made for dilution method for DCM (53m)
24	7	2	Mojica	Phytoplankton losses	CTD	6:59 AM	23_48_200	20, 21, 13, 14, 3	Viral production at 2 depths ML and BDCM. Dilution method for DCM depth (48m)
25	9	1	Mojica	Phytoplankton losses	CTD	5:30 AM	20_66_200	18, 9, 10, 2	Ultrafiltrate made for viral production at ML (20m), DCM (66m) and BDCM (200m) and dilution method at DCM. 0.45 um filtrate made for dilution method for DCM (66m)
26	9	2	Mojica	Phytoplankton losses	CTD	7:00 AM	20_64_200	21, 11, 12, 3	Viral production at 3 depths ML, DCM and BDCM. Dilution method for DCM depth (64m)
27	10	2	Mojica	Phytoplankton losses	CTD	12:00 PM	20_38_200	11	SET COL
28	11	1	Mojica	Phytoplankton losses	CTD	5:20 AM	15_25_200	19, 9, 10, 2	Ultrafiltrate made for viral production at ML (15m), DCM (25m) and BDCM (200m) and dilution method at DCM. 0.45 um filtrate made for dilution method for DCM (25m)
29	11	2	Mojica	Phytoplankton losses	CTD	6:56 AM	15_25_200	19, 20, 11, 12, 3, 4	Viral production at 3 depths ML, DCM and BDCM. Dilution method for DCM depth (25m)
30	13	1	Mojica	Phytoplankton losses	CTD	5:36 AM	20_150	10, 11, 3	Ultrafiltrate made for viral production at ML (20m) and BDCM (150m) and dilution method at ML. 0.45 um filtrate made for dilution method for ML (20m).
31	13	2	Mojica	Phytoplankton losses	CTD	7:02 AM	20_150	12, 13, 3	Viral production at 2 depths ML and BDCM. Dilution method for ML depth (20m)

1	2	3	4	5	6	7	8	9	
32	15	1	Mojica	Phytoplankton losses	CTD	5:22 AM	20, 150	16, 17, 2	Ultrafiltrate made for viral production at ML (20m) and BDCM (150m) and dilution method at ML 0.45 um filtrate made for dilution method for ML (20m)
33	15	2	Mojica	Phytoplankton losses	CTD	7:04 AM	15, 100	11, 12, 6	Viral production at 2 depths ML (15m) and BDCM (100m). Dilution method for ML depth (15m)
34	15	17	Mojica	Phytoplankton losses	CTD	12:05 PM	20, 90	17	SET COL
35	17	1	Mojica	Phytoplankton losses	CTD	5:22 AM	15, 150	18, 19, 4	Ultrafiltrate made for viral production at ML (15m) and BDCM (150m) and dilution method at ML 0.45 um filtrate made for dilution method for ML (15m)
36	17	2	Mojica	Phytoplankton losses	CTD	6:56 AM	15, 150	16, 17, 3	Viral production at 2 depths ML (15m) and BDCM (150m). Dilution method for ML depth (15m)
37	18	1	Mojica	Phytoplankton losses	CTD	5:25 AM	10, 40, 150	22, 11, 12, 2	Ultrafiltrate made for viral production at ML (10m), DCM (40) and BDCM (150m) and dilution method at DCM. 0.45 um filtrate made for dilution method for DCM (40m)
38	18	2	Mojica	Phytoplankton losses	CTD	7:01 AM	10, 40, 150	22, 13, 14, 5	Viral production at 3 depths ML, DCM and BDCM. Dilution method for DCM depth (40m)
39	20	1	Mojica	Phytoplankton losses	CTD	12:05 PM	20, 50, 150	16, 17, 18, 9, 4	Ultrafiltrate made for viral production at ML (20m), DCM (50m) and BDCM (150m). 0.45 um filtrate made for dilution method for DCM (50m) Viral production at 2 depths ML and BDCM. Dilution
40	22	1	Mojica	Phytoplankton losses	CTD	5:36 AM	20, 150	15, 16, 4	Ultrafiltrate made for viral production at ML (20m) and BDCM (150m) and dilution method at DCM. 0.45 um filtrate made for dilution method for DCM (20m)
41	22	2	Mojica	Phytoplankton losses	CTD	6:59 AM	25, 150	14, 15, 5	Viral production at 2 depths ML and BDCM. Dilution method for DCM depth (25m)
42	23	1	Mojica	Phytoplankton losses	CTD	5:37 AM	25, 150	16, 19, 20	0.45 um filtrate made for dilution method for DCM (20m). Whole water from same CTD bottle
43	25	1	Mojica	Phytoplankton losses	CTD	7:12 AM	25, 150	17, 18, 19, 11	Ultrafiltrate made for viral production at ML (25m) and BDCM (150m) and dilution method at DCM. 0.45 um filtrate made for dilution method for ML (25m)
44	25	5	Mojica	Phytoplankton losses	CTD	9:05	25, 150	15, 16, 17, 2, 3	Viral production at 2 depths ML and BDCM. Dilution method for ML depth (25m)
45	27	1	Mojica	Phytoplankton losses	CTD	5:21	25, 150	14, 15, 16, 6	Ultrafiltrate made for viral production at ML (25m) and BDCM (150m) and dilution method at DCM. 0.45 um filtrate made for dilution method for ML (25m)
46	27	2	Mojica	Phytoplankton losses	CTD	7:00	25, 150	16, 17, 5	Viral production at 2 depths ML and BDCM. Dilution method for ML depth (25m)

1	2	3	4	5	6	7	8	9
47	29	1	Mojica	Phytoplankton losses	CTD	5:25	17, 18, 19, 9	Ultrafiltrate made for viral production at ML (25m) and BDCM (150m) and dilution method at DCM. 0.45 um filtrate made for dilution method for ML (25m)
48	29	2	Mojica	Phytoplankton losses	CTD	6:59	18, 19, 6	Viral production at 2 depths ML and BDCM. Dilution method for ML depth (25m)
49	29	20	Mojica	Phytoplankton losses	CTD	14:33	8, 9, 10	Ultrafiltrate made for viral production at ML (25m) and DCM (100m), and dilution method at DCM.
50	29	21	Mojica	Phytoplankton losses	CTD	19:00	14, 15	Viral production at 2 depths ML and DCM. Dilution method for ML depth (25m)
51	30	1	Mojica	Phytoplankton losses	CTD	6:57	14, 15, 16, 4, 5	Ultrafiltrate made for viral production at ML (25m) and BDCM (150m) and dilution method at DCM. 0.45 um filtrate made for dilution method for ML (25m)
52	30	5	Mojica	Phytoplankton losses	CTD	7:51	17, 18, 5, 6	Viral production at 2 depths ML and BDCM. Dilution method for ML depth (-m)

1	2	3	4	5	6	7	8	9
Station	Cast	Who did the work?	Responsible scientist	What are you sampling for?	Sampling device	time of day (UTC +1)	Bottle #	Depths
1	Stratiphyt-II cruise 2011; 64PE334							
2								
3								
4								
5	2	Shelford	Shelford	Ammonium Regeneration	CTD	8:30 AM	14	40
6	1	Shelford	Shelford	Ultrafiltrate made	CTD	6:30AM	19	40
7	2	Shelford	Shelford	Ammonium Regeneration	CTD	8:00AM	20	40
8	1	Shelford	Shelford	Ultrafiltrate made	CTD	6:30AM	22	30
9	2	Shelford	Shelford	Ammonium Regeneration	CTD	8:00AM	22	26
10	1	Shelford	Shelford	Ultrafiltrate made	CTD	6:30AM	20	24
11	2	Shelford	Shelford	Ammonium Regeneration	CTD	8:00AM	22, 18	24
12	27	Shelford	Shelford	Ultrafiltrate made	CTD	6:30AM	21	20
13	28	Shelford	Shelford	Ammonium Regeneration	CTD	8:00AM	16	20
14	1	Shelford	Shelford	Ultrafiltrate made	CTD	6:30AM	16	25
15	2	Shelford	Shelford	Ammonium Regeneration	CTD	8:00AM	22	25
16	1	Shelford	Shelford	Ultrafiltrate made	CTD	6:30AM	17	15
17	2	Shelford	Shelford	Ammonium Regeneration	CTD	8:00AM	22	15
18	1	Shelford	Shelford	Ultrafiltrate made	CTD	6:30AM	14	20
19	2	Shelford	Shelford	Ammonium Regeneration	CTD	8:00AM	15	20
20	1	Shelford	Shelford	Ultrafiltrate made	CTD	6:30AM	19	10
21	2	Shelford	Shelford	Ammonium Regeneration	CTD	8:00AM	23	10
22	1	Shelford	Shelford	Ultrafiltrate made	CTD	6:30AM	13	25
23	2	Shelford	Shelford	Ammonium Regeneration	CTD	8:00AM	18	25
24	1	Shelford	Shelford	Ultrafiltrate made	CTD	8:00AM	16	25
25	5	Shelford	Shelford	Ammonium Regeneration	CTD	10:00AM	20	25
26	1	Shelford	Shelford	Ultrafiltrate made	CTD	6:30AM	16	25
27	2	Shelford	Shelford	Ammonium Regeneration	CTD	8:00AM	17	25

A	B	C	D	E	F	G	H	I
1		Stratiphyt-II cruise 2011; 64PE334				<i>Pelagia time</i> (UTC +1)		
2								
3	Station	Who did the work?	Responsible scientist	What are you sampling for?	Sampling device	time of day	Bottle #	Depths
4								
5	0	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	17, 3, 1	40, 120, 200
6	1	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	19, 9, 2	30, 70, 200
7	2	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	17, 7, 2	30, 120, 200
8	3	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	21, 11, 3	25, 76, 200
9	5	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	17, 10, 2	20, 47, 200
10	5	28	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	19, 9, 2	20, 48, 200
11	7	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	19, 12, 2	25, 48, 200
12	9	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	17, 8, 2	20, 64, 200
13	11	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	17, 10, 2	15, 25, 200
14	13	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	11, 2	20, 150
15	15	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	10, 5	40, 150
16	17	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	15, 2	15, 150
17	18	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	21, 12, 4	10, 40, 150
18	20	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	19, 3	20, 150
19	22	van Noort	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	13, 5	25, 150
20	23	1	Brussaard	abundance + grazing microzoopl. and HNF	CTD	6:30 AM	15, 4	25, 150
21	25	1	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	15, 10	25, 150
22	27	2	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	15, 4	25, 150
23	29	2	Brussaard	abundance + grazing microzoopl. and HNF	CTD	8:00 AM	14, 4	25, 150

A	B	C	D	E	F	G	H	I
46	15	3,4,5	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	8:55 AM	
47	16	1	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:30 PM	14
48	16	2,3,4	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	9:15 PM	
49	17	2	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:00 AM	14
50	17	3,4,5	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	8:45 AM	15
51	17B	1	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:00 PM	30
52	17B	2,3,4	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	9:07 PM	
53	18	2	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:00 AM	20
54	18	3,4,5	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	8:45 AM	
55	20	1	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	1:00 PM	16
56	20	2	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	1:45 PM	
57	22	2	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:00 AM	12
58	22	3,4,5	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	8:45 AM	26
59	22B	1	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	9:00 PM	18
60	22B	2,3,4	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	9:50 PM	26
61	25	1	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:30 AM	24
62	25	2,3,4	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	9:15 AM	9
63	25	5	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	10:00 AM	14
64	26	1	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:30 PM	16
65	26	2,3,4	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	9:20 PM	no mg
66	27	2	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:00 AM	14
67	27	3,4,5	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	8:50 AM	24
68	28	1	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	9:00 PM	17
69	28	2,3,4	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	10:30 PM	25
70	29	2	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:00 AM	17
71	29	3,4,5	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	8:45 AM	no mg
72	29	21	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:00 PM	21
73	29	22,23,24	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	8:45 PM	10
74	30	1	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:00 AM	20
75	30	2,3,4	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	8:45 AM	25
76	31	1	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	9:00 PM	16
77	31	2,3,4	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	9:40 PM	25
78	32	1	Kooijman	Mojica/Brussaard	Mesozooplankton	CTD	8:00 AM	19
79	32	2,3,4	Kooijman	Mojica/Brussaard	Grazing Experiment	Vertical net	8:55 AM	25

A	B	C	D	E	F	G	H	I
Station	Cast	Who did the work?	Responsible scientist	What are you sampling for?	Sampling device	time of day (UTC +1)	Bottle #	Depths
1		Stratiphyt-II cruise 2011; 64PE334						
2								
3								
4								
5	1	Timmermans	Timmermans	fluorescence PAM	CTD	6:30 AM	23,21,20,16,15,14,13,8,7,6,5,4,3,1	10,120,150,200
6	2	Timmermans	Timmermans	fluorescence PAM	CTD	8:30 AM	23,17,15,11,3,1	10,40,60,90,120,200
7	18	Timmermans	Timmermans	fluorescence PAM	CTD	3:30 PM	8,7,2,1	20,12
8	19	Timmermans	Timmermans	fluorescence PAM	CTD	8:00 PM	13,10,7,4,1	10,25,40,75,100
9	1	Timmermans	Timmermans	fluorescence PAM	CTD	6:30 AM	21,16,15,7,5,3,1	10,30,70,100,120,200
10	2	Timmermans	Timmermans	fluorescence PAM	CTD	8:15 AM	24,16,14,7,5,1	10,30,50,70,100,200
11	16	Timmermans	Timmermans	fluorescence PAM	CTD	4:00 PM	13,1	30,72
12	1	Timmermans	Timmermans	fluorescence PAM	CTD	6:30 AM	23,17,16,14,6,4,1	10,30,60,74,130,200
13	2	Timmermans	Timmermans	fluorescence PAM	CTD	8:30 AM	23,16,14,6,4,1	10,25,60,72,130,200
14	2	Timmermans	Timmermans	Cd isotopes	CTD	8:30 AM	21,15,12,5,1	25,60,72,130,200
15	2	Timmermans	Timmermans	fluorescence PAM	CTD	3:30 PM	23,15,13,5,3,1	10,40,60,77,100,200
16	2	Timmermans	Timmermans	fluorescence PAM	CTD	8:30 PM	22,16,13,7,4,1	10,40,60,74,120,200
17	2	Timmermans	Timmermans	fluorescence PAM	CTD	6:30 AM	22,15,14,7,4,1	10,30,50,72,110,200
18	19	Timmermans	Timmermans	fluorescence PAM	CTD	8:00 AM	23,15,14,6,4,1	10,30,60,65,120,200
19	1	Timmermans	Timmermans	fluorescence PAM	CTD	8:30 PM	21,14,12,5,3,1	10,25,50,70,110,200
20	3	Timmermans	Timmermans	fluorescence PAM	CTD	6:30 AM	23,16,14,6,4,1	10,25,50,72,110,200
21	3	Timmermans	Timmermans	fluorescence PAM	CTD	8:00 AM	22,16,15,6,4,1	10,25,60,76,110,200
22	3	Timmermans	Timmermans	fluorescence PAM	CTD	3:30 PM	23,15,13,5,3,1	10,25,40,80,140,200
23	5	Timmermans	Timmermans	fluorescence PAM	CTD	6:30 AM	22,15,8,6,4,1	10,20,48,80,130,200
24	2	Timmermans	Timmermans	fluorescence PAM	CTD	8:00 AM	23,16,9,7,5,1	10,20,47,90,130,200
25	5	Timmermans	Timmermans	fluorescence PAM	CTD	3:30 PM	23,15,13,5,3,1	10,15,13,5,3,1
26	5	Timmermans	Timmermans	fluorescence PAM	CTD	8:30 PM	19,13,9,5,2	20,43,70,100,130
27	5	Timmermans	Timmermans	fluorescence PAM	CTD	6:30 AM	23,16,8,6,4,1	10,20,47,80,110,200
28	5	Timmermans	Timmermans	fluorescence PAM	CTD	8:00 AM	22,15,8,6,4,1	10,20,48,90,140,200
29	1	Timmermans	Timmermans	fluorescence PAM	CTD	8:00 PM	22,16,10,7,4,1	10,25,55,75,95,200
30	1	Timmermans	Timmermans	fluorescence PAM	CTD	6:30 AM	22,15,8,5,1	10,25,53,80,200
31	2	Timmermans	Timmermans	fluorescence PAM	CTD	8:00 AM	23,18,9,7,5,1	10,25,48,63,100,200
32	7	Timmermans	Timmermans	fluorescence PAM	CTD	2:30 PM	21,13,11,3,1	10,20,35,48,80
33	8	Timmermans	Timmermans	fluorescence PAM	CTD	8:30 PM	21,15,9,7,5,1	10,20,48,80,120,200
34	1	Timmermans	Timmermans	fluorescence PAM	CTD	6:30 AM	23,15,13,5,3,1	10,20,50,66,100,200
35	2	Timmermans	Timmermans	fluorescence PAM	CTD	8:00 AM	23,16,14,7,5,1	10,20,50,64,80,200
36	9	Timmermans	Timmermans	fluorescence PAM	CTD	2:30 PM	22,16,13,7,5,1	10,20,45,61,75,120
37	10	Timmermans	Timmermans	fluorescence PAM	CTD	1:00 PM	22,16,13,7,4,1	10,20,30,38,70,200
38	11	Timmermans	Timmermans	fluorescence PAM	CTD	6:30 AM	22,15,8,4,1	10,15,25,50,200

A	B	C	D	E	F	G	H	I
39	11	2	Timmermans	fluorescence PAM	CTD	8:00 AM	23,16,9,7,5,1	10,15,25,40,80,200
40	11	21	Timmermans	fluorescence PAM	CTD	3:30 PM	12,8,4,3,1	10,15,25,60,100
41	12	1	Timmermans	fluorescence PAM	CTD	9:00 PM	23,16,9,7,5,3,1	10,15,20,40,60,100,200
42	13	1	Timmermans	fluorescence PAM	CTD	6:30 AM	15,8,6,4,2,1	10,20,40,100,150,200
43	13	2	Timmermans	fluorescence PAM	CTD	8:00 AM	17,10,8,6,4,1	10,20,30,50,75,150
44	13	18	Timmermans	fluorescence PAM	CTD	2:30 PM	12,7,5,3,1	20,30,50,75,100
45	14	1	Timmermans	fluorescence PAM	CTD	8:00 PM	21,13,10,7,4,1	10,20,40,50,75,150
46	15	1	Timmermans	fluorescence PAM	CTD	6:30 AM	21,13,10,7,5,1	10,20,40,60,100,150
47	15	2	Timmermans	fluorescence PAM	CTD	8:00 AM	23,17,9,7,4,1	10,15,40,150,500
48	15	17	Timmermans	fluorescence PAM	CTD	1:00 PM	21,13,10,7,4,1	10,20,35,50,75,100
49	16	3	Timmermans	fluorescence PAM	CTD	8:30 PM	13,11,9,7,5,3	10,20,30,40,50,150
50	17	1	Timmermans	fluorescence PAM	CTD	6:30 AM	22,15,12,9,6,3	10,15,25,40,50,150
51	17	2	Timmermans	fluorescence PAM	CTD	8:00 AM	22,14,11,8,5,2	10,15,25,40,50,150
52	17	2	Timmermans	Cd isotopes	CTD	8:00 AM	21,12,9,6,4	15,25,40,50,150
53	17	21	Timmermans	fluorescence PAM	CTD	3:30 PM	22,7,4,1	10,20,35,50
54	17B	1	Timmermans	fluorescence PAM	CTD	8:30 PM	13,11,7,5,3,1	10,20,30,50,75,90
55	18	1	Timmermans	fluorescence PAM	CTD	6:30 AM	18,15,7,4,1	10,20,40,75,150
56	18	2	Timmermans	fluorescence PAM	CTD	8:00 AM	20,18,11,9,7,3	10,30,40,50,60,150
57	20	1	Timmermans	fluorescence PAM	CTD	1:00 PM	22,16,13,7,5,3	10,20,30,50,75,150
58	22	1	Timmermans	fluorescence PAM	CTD	6:30 AM	21,12,8,6,3	10,25,50,100,150
59	22	2	Timmermans	fluorescence PAM	CTD	8:00 AM	21,12,8,6,3	10,25,50,100,150
60	22B	1	Timmermans	fluorescence PAM	CTD	9:00 PM	19,16,13,10,7,4,1	10,25,50,75,100,150,200
61	23	1	Timmermans	fluorescence PAM	CTD	6:30 AM	21,15,12,9,6,3	10,25,50,75,100,150
62	25	1	Timmermans	fluorescence PAM	CTD	8:00 AM	20,14,12,9,7,5,3,1	10,25,50,150,200,300,400,500
63	25	5	Timmermans	fluorescence PAM	CTD	10:00 AM	21,14,11,8,5,1	10,25,50,75,100,150
64	26	1	Timmermans	fluorescence PAM	CTD	8:30 PM	19,13,11,9,7,5,3,1	10,25,40,65,100,150,300,450
65	27	1	Timmermans	fluorescence PAM	CTD	6:30 AM	19,11,9,5,3,1	10,25,50,150,200,250
66	27	2	Timmermans	fluorescence PAM	CTD	8:00 AM	22,14,11,10,3,1	10,25,75,100,150,250
67	27	2	Timmermans	Cd isotopes	CTD	8:00 AM	21,13,7,2	25,75,150,250
68	27	21	Timmermans	fluorescence PAM	CTD	4:00 PM	21,7,5,3,1	10,25,40,60,100
69	28	1	Timmermans	fluorescence PAM	CTD	8:30 PM	22,14,11,8,5,2,1	10,25,50,75,100,150,200
70	29	1	Timmermans	fluorescence PAM	CTD	6:30 AM	22,15,13,11,7,5,3,1	10,25,50,100,150,240,300,450
71	29	2	Timmermans	fluorescence PAM	CTD	8:00 AM	21,13,11,9,7,3,1	10,25,50,75,100,150,200
72	29	20	Timmermans	fluorescence PAM	CTD	4:30 PM	21,7,4,1	10,25,60,100
73	29	21	Timmermans	fluorescence PAM	CTD	8:00 PM	21,11,9,7,3,1	10,25,60,100,150,200
74	30	1	Timmermans	fluorescence PAM	CTD	8:00 AM	21,11,9,7,3,1	10,25,50,100,150,200
75	30	5	Timmermans	fluorescence PAM	CTD	10:00 AM	21,15,12,9,3,1	10,25,50,100,150,200
76	30	18	Timmermans	fluorescence PAM	CTD	3:30 PM	17,9,1	10,25,50
77	31	1	Timmermans	fluorescence PAM	CTD	9:00 PM	21,13,10,7,4,1	10,25,50,100,150,200
78	32	1	Timmermans	fluorescence PAM	CTD	8:00 AM	21,13,10,7,4,1	10,25,50,100,150,200

A	B	C	D	E	F	G	H	I
1		Stratiphyt-II cruise 2011; 64PE334				<i>Pelagia time</i>		
2						(UTC +1)		
3	Station	Cast	Who did the work?	Responsible scientist	What are you sampling for?	Sampling device	Bottle #	Depths
4								
5	T	1	vd Poll	vd Poll	HPLC/pigments	CTD	16,15,4,3	30,30,80,80
6	T	5	vd Poll	vd Poll	HPLC/pigments	CTD	23,13,12,10,4,3	10,41,51,60,82,82
7	0	1	vd Poll	vd Poll	HPLC/pigments	CTD	16,8	40,80
8	0	2	vd Poll	vd Poll	HPLC/pigments	CTD	23,19,15,11,5	10,40,49,81,110
9	0	18	vd Poll	vd Poll	HPLC/pigments	CTD	8,1	41-120
10	0	19	vd Poll	vd Poll	HPLC/pigments	CTD	13,10,7,4,1	10,25,40,76,100
11	1	1	vd Poll	vd Poll	HPLC/pigments	CTD	16,8	30,79
12	1	2	vd Poll	vd Poll	HPLC/pigments	CTD	24,16,15,7,6	11,31,48,74,100
13	1	16	vd Poll	vd Poll	HPLC/pigments	CTD	14,2	30,72
14	2	1	vd Poll	vd Poll	HPLC/pigments	CTD	18,7	31,75
15	2	2	vd Poll	vd Poll	HPLC/pigments	CTD	24,20,14,10,4	10,26,60,72,117
16	2	13	vd Poll	vd Poll	HPLC/pigments	CTD	17,6	40,77
17	2	14	vd Poll	vd Poll	HPLC/pigments	CTD	23,17,14,8,5	10,40,60,74,120
18	2	18	vd Poll	vd Poll	HPLC/pigments	CTD	18,9	30,72
19	2	19	vd Poll	vd Poll	HPLC/pigments	CTD	24,17,14,8,5	10,30,60,65,120
20	2B	1	vd Poll	vd Poll	HPLC/pigments	CTD	22,15,13,6,4	10,25,50,70,110
21	3	1	vd Poll	vd Poll	HPLC/pigments	CTD	19,9	24,73
22	3	2	vd Poll	vd Poll	HPLC/pigments	CTD	24,17,14,9,5	10,25,60,76,110
23	3	19	vd Poll	vd Poll	HPLC/pigments	CTD	16,6	25,82
24	5	1	vd Poll	vd Poll	HPLC/pigments	CTD	17,9	21,48
25	5	2	vd Poll	vd Poll	HPLC/pigments	CTD	24,19,11,8,6	10,20,47,90,130
26	5	22	vd Poll	vd Poll	HPLC/pigments	CTD	16,6	26,62
27	5	23	vd Poll	vd Poll	HPLC/pigments	CTD	20,14,10,6,3	20,43,70,100,130
28	5	27	vd Poll	vd Poll	HPLC/pigments	CTD	21,18,17,10,9	10,20,47,80,110
29	5	28	vd Poll	vd Poll	HPLC/pigments	CTD	21,17,10,7,5	10,20,48,90,140
30	6	1	vd Poll	vd Poll	HPLC/pigments	CTD	23,17,11,8,5	10,25,55,75,95
31	7	1	vd Poll	vd Poll	HPLC/pigments	CTD	19,12	25,53
32	7	2	vd Poll	vd Poll	HPLC/pigments	CTD	24,17,10,8,6	10,25,48,63,100
33	7	20	vd Poll	vd Poll	HPLC/pigments	CTD	16,7	20,47
34	8	1	vd Poll	vd Poll	HPLC/pigments	CTD	22,16,10,8,6	10,20,48,80,120
35	9	1	vd Poll	vd Poll	HPLC/pigments	CTD	16,6	10,20,50,66,100,200
36	9	2	vd Poll	vd Poll	HPLC/pigments	CTD	24,18,15,9,6	10,20,50,64,80
37	9	18	vd Poll	vd Poll	HPLC/pigments	CTD	17,9	20,61
38	10	2	vd Poll	vd Poll	HPLC/pigments	CTD	23,19,14,9,5	10,20,30,38,70
39	11	1	vd Poll	vd Poll	HPLC/pigments	CTD	20,11	15,25
40	11	2	vd Poll	vd Poll	HPLC/pigments	CTD	24,20,13,8,6	10,15,25,40,80

A	B	C	D	E	F	G	H	I
41	21	vd Poll	vd Poll	HPLC/pigments	CTD	3:30 PM	10,4	15,25
42	1	vd Poll	vd Poll	HPLC/pigments	CTD	9:00 PM	24,17,10,8,6	10,15,20,40,60
43	1	vd Poll	vd Poll	HPLC/pigments	CTD	6:30 AM	17,12	10,20
44	2	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 AM	18,14,9,7	10,20,30,50
45	18	vd Poll	vd Poll	HPLC/pigments	CTD	2:30 PM	10	30
46	1	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 PM	22,14,11,8	10,20,40,50
47	1	vd Poll	vd Poll	HPLC/pigments	CTD	6:30 AM	18	20
48	2	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 AM	24,13,8	10,15,40
49	17	vd Poll	vd Poll	HPLC/pigments	CTD	1:00 PM	23,17,11,8	10,20,35,50
50	3	vd Poll	vd Poll	HPLC/pigments	CTD	8:30 PM	15,12,10,8	10,20,30,40
51	1	vd Poll	vd Poll	HPLC/pigments	CTD	6:30 AM	21	15
52	2	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 AM	24,18,13,10	10,15,25,40
53	21	vd Poll	vd Poll	HPLC/pigments	CTD	2:30 PM	23,11	10,20
54	17B	1	vd Poll	HPLC/pigments	CTD	2:30 PM	14,12,8	30,20,10
55	18	1	vd Poll	HPLC/pigments	CTD	6:30 AM	20,10	10,40
56	2	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 AM	24,19,15	10,30,40
57	1	vd Poll	vd Poll	HPLC/pigments	CTD	9:00 PM	24,20,14,11	50,30,20,10
58	1	vd Poll	vd Poll	HPLC/pigments	CTD	6:30 AM	21,17	25,10
59	2	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 AM	23,16,9,7,3	10,25,50,100,150
60	22B	1	vd Poll	HPLC/pigments	CTD	9:00 PM	20,17,14,11,8	10,25,49,74,102
61	23	1	vd Poll	HPLC/pigments	CTD	6:30 AM	22,17	10,25
62	25	1	vd Poll	HPLC/pigments	CTD	6:30 AM	20,12,6	10,50,300
63	2	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 AM	24,18,10,7,4	10,25,75,100,150
64	1	vd Poll	vd Poll	HPLC/pigments	CTD	9:00 PM	20,14,12,10,4	10,40,25,65,300
65	1	vd Poll	vd Poll	HPLC/pigments	CTD	6:30 AM	22,17,9,8	10,25,50,150
66	2	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 AM	23,19,12,9,8	10,25,75,100,150
67	21	vd Poll	vd Poll	HPLC/pigments	CTD	3:30 PM	22,11	10,25
68	1	vd Poll	vd Poll	HPLC/pigments	CTD	9:00 PM	23,15,12,9,6	10,25,50,75,100
69	1	vd Poll	vd Poll	HPLC/pigments	CTD	6:30 AM	24,21	10,25
70	2	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 AM	23,15,12,10,8	10,25,50,75,100
71	20	vd Poll	vd Poll	HPLC/pigments	CTD	3:30 PM	23,14	10,25
72	21	vd Poll	vd Poll	HPLC/pigments	CTD	9:00 PM	22,12,10	10,25,60
73	1	vd Poll	vd Poll	HPLC/pigments	CTD	6:30 AM	22,17	10,25
74	5	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 AM	22,19,13,10,7	10,25,50,75,100
75	18	vd Poll	vd Poll	HPLC/pigments	CTD	3:30 PM	18,14	10,25
76	1	vd Poll	vd Poll	HPLC/pigments	CTD	9:00 PM	22,14,11,8,5	10,25,50,100,150
77	1	vd Poll	vd Poll	HPLC/pigments	CTD	8:00 AM	22,14,11	10,25,50

A	B	C	D	E	F	G	H	I	J	
1	Stratiphyt-II cruise 2011; 64PE334									
2						Pelagia time				
3	Station	Cast	Who did the work?	Responsible scientist	What are you sampling for?	Sampling device	time of day (UTC +1)	Bottle #	Depths	Other comments
4										
5	T	1	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	16,4	30,80	
6	T	2	vd Poll	vd Poll	a*ph/absorption	CTD	11:00 AM			
7	0	1	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	17,9	40,81	
8	0	2	vd Poll	vd Poll	a*ph/absorption	CTD	8:30 AM			
9	0	18	vd Poll	vd Poll	a*ph/absorption	CTD	3:30 PM	7,2	41,120	
10	0	19	vd Poll	vd Poll	a*ph/absorption	CTD	8:00 PM			
11	1	1	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	20,9	29,78	
12	1	2	vd Poll	vd Poll	a*ph/absorption	CTD	8:15 AM			
13	1	16	vd Poll	vd Poll	a*ph/absorption	CTD	4:00 PM	15,3	30,72	
14	2	1	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	17,8	31,75	
15	2	2	vd Poll	vd Poll	a*ph/absorption	CTD	8:30 AM			
16										
17	2	13	vd Poll	vd Poll	a*ph/absorption	CTD	3:30 PM	18,7	39,77	
18	2	14	vd Poll	vd Poll	a*ph/absorption	CTD	8:30 PM			
19	2	18	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	17,8	31,72	
20	2	19	vd Poll	vd Poll	a*ph/absorption	CTD	8:00 AM			
21	2B	1	vd Poll	vd Poll	a*ph/absorption	CTD	8:30 PM			
22	3	1	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	18,7	24,73	
23	3	2	vd Poll	vd Poll	a*ph/absorption	CTD	8:00 AM			
24	3	19	vd Poll	vd Poll	a*ph/absorption	CTD	3:30 PM	17,7	25,82	
25	5	1	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	18,10	20,48	
26	5	2	vd Poll	vd Poll	a*ph/absorption	CTD	8:00 AM			
27	5	22	vd Poll	vd Poll	a*ph/absorption	CTD	3:30 PM	17,7	25,61	
28	5	23	vd Poll	vd Poll	a*ph/absorption	CTD	8:30 PM			
29	5	27	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	18,10	20,48	
30	5	28	vd Poll	vd Poll	a*ph/absorption	CTD	8:00 AM			
31	6	1	vd Poll	vd Poll	a*ph/absorption	CTD	8:00 PM			
32	7	1	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	20,11	25,52	
33	7	2	vd Poll	vd Poll	a*ph/absorption	CTD	8:00 AM			
34	7	20	vd Poll	vd Poll	a*ph/absorption	CTD	2:30 PM	17,8	20,47	
35	8	1	vd Poll	vd Poll	a*ph/absorption	CTD	8:30 PM			
36	9	1	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	17,7	17,67	
37	9	2	vd Poll	vd Poll	a*ph/absorption	CTD	8:00 AM			
38	9	18	vd Poll	vd Poll	a*ph/absorption	CTD	2:30 PM	18,10	20,61	
39	10	2	vd Poll	vd Poll	a*ph/absorption	CTD	1:00 PM			
40	11	1	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	21,12	15,25	
41	11	2	vd Poll	vd Poll	a*ph/absorption	CTD	8:00 AM			
42	11	21	vd Poll	vd Poll	a*ph/absorption	CTD	3:30 PM	11,7	15,25	
43	12	1	vd Poll	vd Poll	a*ph/absorption	CTD	9:00 PM			
44	13	1	vd Poll	vd Poll	a*ph/absorption	CTD	6:30 AM	18,13	10,20	

A	B	C	D	E	F	G	H	I	J
45	13	2	vd Poll	a*ph/absorption	CTD	8:00 AM			
46	13	18	vd Poll	a*ph/absorption	CTD	2:30 PM	11	30	
47	14	1	vd Poll	a*ph/absorption	CTD	8:00 PM			
48	15	1	vd Poll	a*ph/absorption	CTD	6:30 AM	19	20	
49	15	2	vd Poll	a*ph/absorption	CTD	8:00 AM			
50	15	17	vd Poll	a*ph/absorption	CTD	1:00 PM			
51	16	3	vd Poll	a*ph/absorption	CTD	8:30 PM			
52	17	1	vd Poll	a*ph/absorption	CTD	6:30 AM	20	15	
53	17	2	vd Poll	a*ph/absorption	CTD	8:00 AM			
54	17	21	vd Poll	a*ph/absorption	CTD	2:30 PM	12	10,20	
55	17B	1	vd Poll	a*ph/absorption	CTD	2:30 PM			
56	18	1	vd Poll	a*ph/absorption	CTD	6:30 AM	21,9	10,40	
57	18	2	vd Poll	a*ph/absorption	CTD	8:00 AM			
58	21	1	vd Poll	a*ph/absorption	CTD	8:00 AM	22,18	10,25	
59	23	1	vd Poll	a*ph/absorption	CTD	8:00 AM	23,18	10,25	
60	25	1	vd Poll	a*ph/absorption	CTD	6:30 AM	21,13	10,50	
61	27	1	vd Poll	a*ph/absorption	CTD	6:30 AM	16,23	10,50	
62	27	21	vd Poll	a*ph/absorption	CTD	3:30 PM	23,12	10,25	
63	29	1	vd Poll	a*ph/absorption	CTD	6:30 AM	23,20	10,25	
64	29	20	vd Poll	a*ph/absorption	CTD	3:30 PM	22,13	10,25	
65	30	1	vd Poll	a*ph/absorption	CTD	6:30 AM	22,18	10,25	
66	30	18	vd Poll	a*ph/absorption	CTD	3:30 PM	19,15	10,25	
67	32	1	vd Poll	a*ph/absorption	CTD	8:00 AM	23,15	10,25	

A	B	C	D	E	F	G	H	I	J
Stratiphyt-II cruise 2011: 64PE334									
<i>Pelagia time</i>									
						(UTC+1)			
Station	Cast	Who did the work?	Responsible scientist	What are you sampling for?	Sampling device	time of day	Bottle #	Depths	Other comments
1									
2									
3									
4									
5	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	5	80	
6	2	vd Poll	vd Poll	DGGE/DNA	CTD	11:00 AM			
7	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	9	81	
8	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:30 AM			
9	18	vd Poll	vd Poll	DGGE/DNA	CTD	3:30 PM			
10	19	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 PM			
11	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	19	30	
12	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:15 AM			
13	16	vd Poll	vd Poll	DGGE/DNA	CTD	4:00 PM			
14	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	8	75	
15	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:30 AM			
16									
17	13	vd Poll	vd Poll	DGGE/DNA	CTD	3:30 PM			
18	14	vd Poll	vd Poll	DGGE/DNA	CTD	8:30 PM			
19	18	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	9	72	
20	19	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
21	1	vd Poll	vd Poll	DGGE/DNA	CTD	8:30 PM			
22	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	8	73	
23	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
24	19	vd Poll	vd Poll	DGGE/DNA	CTD	3:30 PM			
25	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	9	48	
26	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
27	22	vd Poll	vd Poll	DGGE/DNA	CTD	3:30 PM			
28	23	vd Poll	vd Poll	DGGE/DNA	CTD	8:30 PM			
29	27	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	21	21	
30	28	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
31	1	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 PM			
32	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	21	25	
33	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
34	20	vd Poll	vd Poll	DGGE/DNA	CTD	2:30 PM			
35	1	vd Poll	vd Poll	DGGE/DNA	CTD	8:30 PM			
36	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	7	67	
37	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
38	18	vd Poll	vd Poll	DGGE/DNA	CTD	2:30 PM			
39	2	vd Poll	vd Poll	DGGE/DNA	CTD	1:00 PM			
40	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	13	15,25	
41	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
42	21	vd Poll	vd Poll	DGGE/DNA	CTD	3:30 PM			

	A	B	C	D	E	F	G	H	I	J
43	12	1	vd Poll	vd Poll	DGGE/DNA	CTD	9:00 PM			
44	13	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	13	10,20	
45	13	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
46	13	18	vd Poll	vd Poll	DGGE/DNA	CTD	2:30 PM			
47	14	1	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 PM			
48	15	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	20	20	
49	15	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
50	15	17	vd Poll	vd Poll	DGGE/DNA	CTD	1:00 PM			
51	16	3	vd Poll	vd Poll	DGGE/DNA	CTD	8:30 PM			
52	17	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	21	15	
53	17	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
54	17	21	vd Poll	vd Poll	DGGE/DNA	CTD	2:30 PM			
55	17B	1	vd Poll	vd Poll	DGGE/DNA	CTD	2:30 PM			
56	18	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	14	40	
57	18	2	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM			
58	20	1	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM	12	50	
59	21	1	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM	12	10	
60	23	1	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM	24	10	
61	25	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	22	10	
62	27	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	23	10	
63	29	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	24	10	
64	30	1	vd Poll	vd Poll	DGGE/DNA	CTD	6:30 AM	23	10	
65	32	1	vd Poll	vd Poll	DGGE/DNA	CTD	8:00 AM	24	10	

A	B	C	D	E	F	G	H	I
1		Stratiphyt-II cruise 2011; 64PE334				Pelagia time		
2						(UTC +1)		
3	Station	Cast	Who did the work?	Responsible scientist	What are you sampling for?	Sampling device	time of day	Depths
4								
5	0	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	16, 8
6	0	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:30 AM	19, 5
7	0	18	Rozema	Van de Poil	PI curve (PAM)	CTD	3:30 PM	7, 1
8	1	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	16, 8
9	1	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:15 AM	16, 7
10	1	16	Rozema	Van de Poil	PI curve (PAM)	CTD	4:00 PM	14, 2
11	2	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	17, 7
12	2	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:30 AM	20, 10
13	2	13	Rozema	Van de Poil	PI curve (PAM)	CTD	3:30 PM	17, 6
14	2	18	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	18, 8
15	2	19	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	17, 8
16	3	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	18, 7
17	3	2	Rozema	Van de Poil	PI curve (PAM)	CTD	8:00 AM	17, 9
18	3	19	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	3:30 PM	16, 6
19	5	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	17, 9
20	5	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	19, 12
21	5	22	Rozema	Van de Poil	PI curve (PAM)	CTD	3:30 PM	16, 6
22	5	27	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	17, 9
23	5	28	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	17, 10
24	7	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	19, 11
25	7	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	17, 10
26	7	20	Rozema	Van de Poil	PI curve (PAM)	CTD	2:30 PM	16, 7
27	9	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	16, 6
28	9	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	18, 9
29	9	18	Rozema	Van de Poil	PI curve (PAM)	CTD	2:30 PM	17, 9
30	11	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	21, 12
31	11	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	20, 13
32	11	21	Rozema	Van de Poil	PI curve (PAM)	CTD	3:30 PM	10, 7
33	13	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	18, 13
34	13	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	18, 14
35	13	18	Rozema	Van de Poil	PI curve (PAM)	CTD	2:30 PM	10
36	15	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	18
37	15	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	24, 13
38	15	17	Rozema	Van de Poil	PI curve (PAM)	CTD	1:00 PM	17
39	17	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	20
40	17	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	24, 18
41	17	2	Rozema	Van de Poil	PI curve size fractionations (PAM)	CTD	8:00 AM	19
42	17	21	Rozema	Van de Poil	PI curve (PAM)	CTD	3:30 PM	23, 11
43	18	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	9
44	18	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	24, 15
45	20	1	Rozema	Van de Poil	PI curve (PAM)	CTD	1:00 PM	20, 11

A	B	C	D	E	F	G	H	I	
46	22	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	22	10
47	22	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	23, 16	10, 25
48	22b	1	Rozema	Van de Poil	PI curve (PAM)	CTD	9:00 PM	17	25
49	23	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	24, 18	10, 26
50	23	1	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	6:30 AM	18	26
51	25	1	Rozema	Van de Poil	PI curve (PAM)	CTD	8:00 AM	21, 13	10, 50
52	25	5	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	10:00 AM	18, 3	25, 151
53	26	1	Rozema	Van de Poil	PI curve (PAM)	CTD	8:30 PM	14	26
54	27	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	22, 9	11, 50
55	27	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	23, 19	10, 25
56	27	21	Rozema	Van de Poil	PI curve (PAM)	CTD	4:00 PM	22, 11	11, 26
57	28	1	Rozema	Van de Poil	PI curve (PAM)	CTD	9:00 PM	15	25
58	29	1	Rozema	Van de Poil	PI curve (PAM)	CTD	6:30 AM	23, 20	10, 25
59	29	2	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	23, 16	11, 25
60	29	20	Rozema	Van de Poil	PI curve (PAM)	CTD	4:00 PM	22, 13	10, 26
61	30	1	Rozema	Van de Poil	PI curve (PAM)	CTD	8:00 AM	23, 17	11, 25
62	30	5	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	10:00 AM	22, 19	11, 26
63	30	18	Rozema	Van de Poil	PI curve (PAM)	CTD	3:30 PM	18, 14	10, 25
64	31	1	Rozema	Van de Poil	PI curve (PAM)	CTD	9:00 PM	22	10
65	32	1	Rozema	Van de Poil	PI curve (PAM)	CTD	8:00 AM	22, 14	10, 25
66	32	1	Rozema	Van de Poil	NPQ relaxation (PAM)	CTD	8:00 AM	23	10

A	B	C	D	E	F	G	H	I
1		Stratiphylt-II cruise 2011: 64PE334				<i>Pelagia time</i>		
2						(UTC +1)		
3	Station	Who did the work?	Responsible scientist	What are you sampling for?	device	time of day	Bottle #	Depths
4								
5	0	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	23,16,8	10,40,80
6	0	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	17,8	40,8
7	0	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	23,19,5	10,41,120
8	0	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	23,19,5	10,41,120
9	1	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	21,16,8	10,30,79
10	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	20,9	30,79
11	1	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	24,17,7	10,31,74
12	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,17,7	10,31,74
13	2	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	23,7,17	10,75,31
14	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	17,7	31,75
15	2	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	24,21,10	10,26,72
16	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,20,10	10,26,72
17	2	Kehoe	Kehoe	absorption spectra	CTD	3:30 PM	23,19,7	10,40,77
18	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	3:30 PM	23,19,7	10,40,77
19	2	Kehoe	Kehoe	absorption spectra	CTD	8:30 PM	23,17,8	10,40,74
20	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:30 PM	23,17,8	10,40,74
21	2	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	22,17,8	10,31,72
22	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	22,17,8	10,31,72
23	2	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	24,17,8	10,30,65
24	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,17,8	10,30,65
25	2b	Kehoe	Kehoe	absorption spectra	CTD	8:30 PM	22,15,6	10,23,75
26	2b	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:30 PM	22,15,6	10,23,75
27	3	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	24,15,7	10,50,73
28	3	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	24,15,7	10,50,73
29	3	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	24,17,9	10,24,77
30	3	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,17,9	10,24,77
31	3	Kehoe	Kehoe	light spectra	RAMSES	10:22 AM	n/a	0,10,20,30,40,60,80,90
32	3	Kehoe	Kehoe	absorption spectra	CTD	3:30 PM	24,16,6	10,25,82
33	3	Kehoe	Kehoe	filtered water absorption spectra	CTD	3:30 PM	24,16,6	10,25,82
34	5	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	23,17,9	10,21,48
35	5	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	17,9	21,48
36	5	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	24,19,11	10,20,47
37	5	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,19,11	10,20,47
38	5	Kehoe	Kehoe	light spectra	RAMSES	10:26 AM	n/a	,90
39	5	Kehoe	Kehoe	absorption spectra	CTD	3:30 PM	23,16,6	10,26,62
40	5	Kehoe	Kehoe	filtered water absorption spectra	CTD	3:30 PM	23,16,6	10,26,62
41	5	Kehoe	Kehoe	absorption spectra	CTD	8:30 PM	20,14	20,42
42	5	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:30 PM	20,14	20,42
43	5	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	24,17,9	10,21,49
44	5	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	24,17,9	10,21,49
45	5	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	23,17,10	10,20,47
46	5	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	23,17,10	10,20,47
47	6	Kehoe	Kehoe	absorption spectra	CTD	8:00 PM	24,17,11	10,20,47

	A	B	C	D	E	F	G	H	I
48	6	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 PM	23,17,11	10,20,47
49	7	1	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	23,19,11	10,25,52
50	7	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	23,19,11	10,25,52
51	7	2	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	24,17,11	10,28,48
52	7	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,17,11	10,28,48
53	7	20	Kehoe	Kehoe	absorption spectra	CTD	2:30 PM	22,16,7	10,20,47
54	7	20	Kehoe	Kehoe	filtered water absorption spectra	CTD	2:30 PM	22,16,7	10,20,47
55	8	1	Kehoe	Kehoe	absorption spectra	CTD	8:30 PM	22,17,10	10,21,48
56	8	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:30 PM	22,17,10	10,21,48
57	9	2	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	24,18,9	10,19,64
58	9	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,18,9	10,19,64
59	9	6	Kehoe	Kehoe	light spectra	RAMSES	10:22 AM	n/a	,90,100
60	9	18	Kehoe	Kehoe	absorption spectra	CTD	2:30 PM	23,17,9	10,20,61
61	9	18	Kehoe	Kehoe	filtered water absorption spectra	CTD	2:30 PM	23,17,9	10,20,61
62	10	2	Kehoe	Kehoe	absorption spectra	CTD	1:00 PM	23,19,9	10,20,30
63	10	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	1:00 PM	23,19,9	10,20,30
64	11	1	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	23,20,11	10,15,25
65	11	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	20,11	15,25
66	11	2	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	24,20,11	10,15,25
67	11	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,20,11	10,15,25
68	11	6	Kehoe	Kehoe	light spectra	RAMSES	10:28 AM	N/A	,90,100
69	11	21	Kehoe	Kehoe	absorption spectra	CTD	3:30 PM	13,10,7	10,15,25
70	11	21	Kehoe	Kehoe	filtered water absorption spectra	CTD	3:30 PM	10,7	15,25
71	12	1	Kehoe	Kehoe	absorption spectra	CTD	9:00 PM	24,18,11	10,15,20
72	12	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	9:00 PM	24,18,11	10,15,20
73	13	1	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	18,12,7	10,20,40
74	13	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	18,12,7	10,20,40
75	13	2	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	18,14,9	10,20,30
76	13	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	18,14,9	10,20,30
77	13	6	Kehoe	Kehoe	light spectra	RAMSES	10:30 AM	N/A	,90,100
78	13	18	Kehoe	Kehoe	absorption spectra	CTD	2:25 PM	17,10,6	20,30,50
79	13	18	Kehoe	Kehoe	filtered water absorption spectra	CTD	2:25 PM	10	30
80	14	1	Kehoe	Kehoe	absorption spectra	CTD	8:15 PM	22,14,11	10,20,40
81	14	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:15 PM	22,14,11	10,20,40
82	15	1	Kehoe	Kehoe	absorption spectra	CTD	6:30 AM	21,18	10,20
83	15	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:30 AM	18	20
84	15	2	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	24,13,8	10,20,40
85	15	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,13,8	10,20,40
86	15	17	Kehoe	Kehoe	absorption spectra	CTD	1:00 PM	22,17,11	10,20,35
87	15	17	Kehoe	Kehoe	filtered water absorption spectra	CTD	1:00 PM	22,17,11	10,20,35
88	16	1	Kehoe	Kehoe	absorption spectra	CTD	8:30 PM	15,12,10	10,20,30
89	16	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:30 PM	15,12,10	10,20,30
90	17	1	Kehoe	Kehoe	absorption spectra	CTD	6:00 AM	23	10
91	17	1	Kehoe	Kehoe	filtered water absorption spectra	CTD	6:00 AM	20	15
92	17	2	Kehoe	Kehoe	absorption spectra	CTD	8:00 AM	24,18,13	10,15,25
93	17	2	Kehoe	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,18,13	10,15,25
94	17	6	Kehoe	Kehoe	light spectra	RAMSES	10:30 AM	N/A	,90,100

A	B	C	D	E	F	G	H	I
95	17	21	Kehoe	absorption spectra	CTD	3:30 PM	23,11,5	10,20,35
96	17	21	Kehoe	filtered water absorption spectra	CTD	3:30 PM	23,11,5	10,20,35
97	17B	1	Kehoe	absorption spectra	CTD	6:30 PM	14,12,8	10,20,30
98	17B	1	Kehoe	filtered water absorption spectra	CTD	6:30 PM	14,12,8	10,20,30
99	18	1	Kehoe	absorption spectra	CTD	6:30 AM	20,16,9	10,20,40
100	18	1	Kehoe	filtered water absorption spectra	CTD	6:30 AM	20,16,9	10,20,40
101	18	2	Kehoe	absorption spectra	CTD	8:00 AM	24,19,15	10,30,40
102	18	2	Kehoe	filtered water absorption spectra	CTD	8:00 AM	24,19,15	10,30,40
103	20	1	Kehoe	absorption spectra	CTD	1:00 PM	24,20,11	10,20,50
104	20	1	Kehoe	filtered water absorption spectra	CTD	1:00 PM	24,20,11	10,20,50
105	22	1	Kehoe	absorption spectra	CTD	6:30 AM	22,17	10,25
106	22	1	Kehoe	filtered water absorption spectra	CTD	6:30 AM	22,17	10,25
107	22	2	Kehoe	absorption spectra	CTD	8:30 AM	23,16,9	10,25,50
108	22	2	Kehoe	filtered water absorption spectra	CTD	8:30 AM	23,16,9	10,25,50
109	22	6	Kehoe	light spectra	RAMSES	10:25 AM	N/A	90,100
110	22B	1	Kehoe	absorption spectra	CTD	9:00 PM	20,14,8	10,50,100
111	22B	1	Kehoe	filtered water absorption spectra	CTD	9:00 PM	20,14,8	10,50,100
112	23	1	Kehoe	absorption spectra	CTD	6:30 AM	22,17	10,25
113	23	1	Kehoe	filtered water absorption spectra	CTD	6:30 AM	22,17	10,25
114	23	2	Kehoe	light spectra	RAMSES	8:00 AM	N/A	0,10,20,30,40,50,60,70
115	25	1	Kehoe	absorption spectra	CTD	6:30 AM	21,13,6	10,50,300
116	25	1	Kehoe	filtered water absorption spectra	CTD	6:30 AM	21,13,6	10,50,300
117	24	2	Kehoe	light spectra	RAMSES	10:30AM	n/a	90,100
118	25	5	Kehoe	absorption spectra	CTD	8:00 AM	22,10,4	10,75,150
119	25	5	Kehoe	filtered water absorption spectra	CTD	8:00 AM	10,40	75,150
120	26	1	Kehoe	absorption spectra	CTD	9:00 PM	20,10,4	10,60,300
121	26	1	Kehoe	filtered water absorption spectra	CTD	9:00 PM	20,10,4	10,60,300
122	27	1	Kehoe	absorption spectra	CTD	6:30 AM	22,17,9	10,25,50
123	27	1	Kehoe	filtered water absorption spectra	CTD	6:30 AM	22,17,9	10,25,50
124	27	2	Kehoe	absorption spectra	CTD	8:00 AM	23,12,8	10,75,150
125	27	2	Kehoe	filtered water absorption spectra	CTD	8:00 AM	23,12,8	10,75,150
126	27	6	Kehoe	light spectra	RAMSES	10:30AM	n/a	90,100
127	27	21	Kehoe	absorption spectra	CTD	3:30 PM	22,11	10,25
128	27	21	Kehoe	filtered water absorption spectra	CTD	3:30 PM	22,11	10,25
129	28	1	Kehoe	absorption spectra	CTD	9:00 PM	23,12,6	10,50,100
130	28	1	Kehoe	filtered water absorption spectra	CTD	9:00 PM	23,12,6	10,50,100
131	29	1	Kehoe	absorption spectra	CTD	6:30 AM	23,20	10,25
132	29	1	Kehoe	filtered water absorption spectra	CTD	6:30 AM	23,20	10,25
133	29	2	Kehoe	absorption spectra	CTD	8:00 AM	21,15,10	10,50,75
134	29	2	Kehoe	filtered water absorption spectra	CTD	8:00 AM	21,15,10	10,50,75
135	29	6	Kehoe	light spectra	RAMSES	10:30AM	22,13	90,100
136	29	20	Kehoe	absorption spectra	CTD	3:30 PM	22,13	10,50
137	29	20	Kehoe	filtered water absorption spectra	CTD	3:30 PM	22,13	10,50
138	29	21	Kehoe	absorption spectra	CTD	9:00 PM	21,12,10	10,25,60
139	29	21	Kehoe	filtered water absorption spectra	CTD	9:00 PM	21,12,10	10,25,60
140	30	1	Kehoe	absorption spectra	CTD	6:30 AM	22,17	10,25
141	30	1	Kehoe	filtered water absorption spectra	CTD	6:30 AM	22,17	10,25

	A	B	C	D	E	F	G	H	I
142	30	2	kehoe	kehoe	absorption spectra	CTD	8:00 AM	22, 19	10, 25
143	30	2	kehoe	kehoe	filtered water absorption spectra	CTD	8:00 AM	22, 19	10, 25
144	30	18	kehoe	kehoe	absorption spectra	CTD	3:30 PM	18, 14	10, 25
145	30	6	kehoe	kehoe	light spectra	RAMSES	10:30AM	n/A	,90,100
146	30	18	kehoe	kehoe	filtered water absorption spectra	CTD	3:30 PM	18, 14	10, 25
147	31	1	kehoe	kehoe	absorption spectra	CTD	9:00 PM	22, 14	10, 25
148	31	1	kehoe	kehoe	filtered water absorption spectra	CTD	9:00 PM	22, 14	10, 25
149	31	17	kehoe	kehoe	light spectra	RAMSES	10:30AM	n/A	,90,100
150	32	1	kehoe	kehoe	absorption spectra	CTD	8:00 AM	22, 14, 11	10, 25, 50
151	32	1	kehoe	kehoe	filtered water absorption spectra	CTD	8:00 AM	22, 14, 11	10, 25, 50
152	32	5	kehoe	kehoe	light spectra	RAMSES	10:30AM	n/A	,90,100

1	2	3	4	5	6	7	8
Station	Casts	Who did the work?	Responsible scientist	What are you sampling for?	Sampling device	time of day (UTC +1)	Depths
1	8-17	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	11:40 AM	69
2	7-18	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	11:42 AM	72
3	7-12 and 20-24	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	11:21 AM	96
4	7-19	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	11:15 AM	75
5	7-21	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	11:07 AM	51
6	6-19	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	10:16 AM	90
7	7-17	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	11:06 AM	69
8	7-20	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	11:09 AM	50
9	7-17	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	11:17 AM	100
10	6-16	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	10:10 AM	100
11	7-21	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	10:10 AM	80
12	7-19	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	10:10 AM	83
13	3-4	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	10:10 AM	55
14	7-16	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	10:10 AM	85
15	7-20	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	10:10 AM	95
16	7-8 and 10-19	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	10:10 AM	90
17	7-17	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	10:10 AM	73
18	7-17	Jurado/ten Doeschate	Jurado	Microstructure C,T,D (conductivity-temperature-depth)	SCAMP	10:10 AM	85

A	B	C	D	E	F	G	H	I	J
1	Stratiphyt-II cruise 2011; 64PE334					<i>Pelagia time</i>			
2						(UTC +1)			
3	Station	Who did the work?	Responsible scientist	What are you sampling for?	Sampling device	time of day	Bottle #	Depths	Other comments
4									
5	T	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	12:00 AM	23	10	teststation
6	0	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	23	10	
7	1	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	23	10	
8	2	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	23	10	one filter possibly contaminated
9	2B	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	23	10	duplicate taken
10	3	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	23	10	
11	5	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	24	10	
12	7	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	23	10	
13	9	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	23	10	
14	11	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	23	10	
15	13	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	19	10	
16	15	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	23	10	
17	17	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	23	10	
18	18	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	20	10	
19	20	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	1:00 PM	23	10	
20	22	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:30 AM	22	10	3 samples because of low [C]
21	23	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	6:30 AM	21	10	
22	25	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	7:15AM	23	10	
23	25	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	9:00 AM	22	10	extra for this station
24	27	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:00AM	23	10	
25	29	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:00AM	22	10	
26	30	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:00 AM	24	10	
27	32	Doeschate	ten Doeschate/Jurado	POC/PON filtration	CTD	8:00 AM	24	10	

APPENDIX 4

Appendix 4. Instruments configuration file STRATIPHYT-II cruise 2011

Date: 04/08/2011

Instrument configuration file: C:\Data\64PE334\UC_CTD_03.con

Configuration report for SBE 911plus/917plus CTD

Frequency channels suppressed : 0
Voltage words suppressed : 0
Computer interface : RS-232C
Scans to average : 1
NMEA position data added : Yes
NMEA depth data added : No
NMEA time added : No
NMEA device connected to : PC
Surface PAR voltage added : Yes
Scan time added : No

1) Frequency 0, Temperature

Serial number : 032211
Calibrated on : 13-Oct-2010
G : 4.34259554e-003
H : 6.44231324e-004
I : 2.19683820e-005
J : 1.91804805e-006
F0 : 1000.000
Slope : 1.00000000
Offset : 0.0000

2) Frequency 1, Conductivity

Serial number : 043263
Calibrated on : 12-Oct-2010
G : -1.00776905e+001
H : 1.29748257e+000
I : 1.65848443e-004
J : 5.06526564e-005
CTcor : 3.2500e-006
CPcor : -9.57000000e-008
Slope : 1.00000000
Offset : 0.0000

3) Frequency 2, Pressure, Digiquartz with TC

Serial number : 942
Calibrated on : 28-nov 2009
C1 : -4.168226e+004
C2 : -1.009559e+000
C3 : 1.325200e-002
D1 : 3.547900e-002
D2 : 0.000000e+000
T1 : 3.007470e+001
T2 : -6.101307e-004
T3 : 3.873800e-006
T4 : 4.642440e-009
T5 : 0.000000e+000
Slope : 1.00000000
Offset : 0.0000
AD590M : 1.250000e-002
AD590B : -1.000000e+001

4) Frequency 3, Temperature, 2

Serial number : 031197
Calibrated on : 23-3-2010
G : 4.89183843e-003
H : 6.85856433e-004
I : 2.87898435e-005
J : 2.37798046e-006
F0 : 1000.000
Slope : 1.00000000
Offset : 0.0000

5) Frequency 4, Conductivity, 2

Serial number : 043385
Calibrated on : 12-10-2010
G : -9.80074274e+000
H : 1.50975056e+000
I : -1.99356605e-003
J : 2.47778323e-004
CTcor : 3.2500e-006
CPcor : -9.57000000e-008
Slope : 1.00000000
Offset : 0.00000

6) A/D voltage 0, Fluorometer, Chelsea Aqua 3

Serial number : 088008
Calibrated on : 6 Oct 2010
VB : 0.325600
V1 : 2.194300
Vacetone : 0.407200
Scale factor : 1.000000
Slope : 1.000000
Offset : 0.000000

7) A/D voltage 1, Oxygen, SBE 43

Serial number : 431932
Calibrated on : 23 nov 2010
Equation : Sea-Bird
Soc : 4.25200e-001
Offset : -5.08500e-001
A : -3.06720e-003
B : 1.90610e-004
C : -3.42250e-006
E : 3.60000e-002
Tau20 : 1.28000e+000
D1 : 1.92630e-004
D2 : -4.64800e-002
H1 : -3.30000e-002
H2 : 5.00000e+003
H3 : 1.45000e+003

8) A/D voltage 2, Altimeter

Serial number : 49562
Calibrated on : 2009
Scale factor : 15.000
Offset : 0.000

9) A/D voltage 3, Transmissometer, Chelsea/Seatech/Wetlab CStar

Serial number : 1311
Calibrated on : 23 dec 2009
M : 21.5471
B : -1.2713
Path length : 0.250

10) A/D voltage 4, Free

11) A/D voltage 5, Free

12) A/D voltage 6, Free

13) A/D voltage 7, PAR/Irradiance, Biospherical/Licor

Serial number : 092
Calibrated on : 4-7-2009
M : 0.89120000
B : 1.28190000
Calibration constant : 1000000000.00000000
Multiplier : 1.00000000
Offset : 0.00000000

14) SPAR voltage, Unavailable

15) SPAR voltage, SPAR/Surface Irradiance

Serial number : 122
Calibrated on : 26 Jan 2010
Conversion factor : 962.10000000
Ratio multiplier : 0.00000000