Garcia de estudios in Cologne how can you hear me

Cologne mrs. station I can hear you loud and clear

how can you hear me station all good

here I now hand the mic over to Eddie a national anchor lks Mira

you have mortar and an exclusive English place partner we have an exclusive conversation part today the German astronaut Alexander Gerst and we're turning over to him in space greetings to you miss a Givaudan fancy knock me a vaccine you apparently grew I heard
three centimeters so in zero gravity

but does that mean you're going even
taller that's my cue you have this
everybody pro-gross these three
centimeters but then the spinal column
expands then I'm going to shrink again
once I'm back down on earth okay

Lavanya best news for the guys that you
were very well prepared but was there
something that surprised you when you
got to space yes things were designing
it yeah there were a few surprises for
me some things that you see as perfectly
normal just doesn't work up here you
can't take things for granted of course

this is physics and which is my subject

I noticed unless the when you rotate

something here in space things react

very very quickly so I have this camera

holder here I took it apart I'm going to

show you I have to come a little closer

to the camera when this rotates it's the

reaction of this thing when it rotates

and flips is very very different from

the way it would be who spent to look

kids and it returns to a stable

condition all the time of the area this

is something I had not seen on earth and
things like that

44 00:02:36,739 --> 00:02:42,060
notice something like that in zero

45 00:02:39,030 --> 00:02:44,069
gravity and things just react very
differently and we use that and we use

46 00:02:42,060 --> 00:02:46,769
that in our experiment I'm annoying

47 00:02:44,069 --> 00:02:47,699
exactly

48 00:02:46,769 --> 00:02:50,969
all kinds of new new experiments for the
european space transport industry and we

49 00:02:47,699 --> 00:02:56,369
might be able to use these experiments

50 00:02:50,969 --> 00:02:58,169
the results of the experiments in

51 00:02:56,370 --> 00:02:59,580
industrial processes on earth okay we're

52 00:02:58,169 --> 00:03:03,899
also interested very much you gave us

53 00:03:03,900 --> 00:03:12,269
two weeks ago you gave us a little two

54 00:03:08,068 --> 00:03:15,298
weeks ago how do you prepare your food

55 00:03:12,269 --> 00:03:18,120
or your coffee and we we saw that you
had some cheese food is all prepared for
us all all we have to do is add water
excuse me I have bit of my breakfast to
show you this is a bag of granola and if
you put if you add water and you can eat
it in two three minutes and it's quite
delicious and other things come in cans
which are already hydrated and we just
have to heat them in a small oven and we
can eat them straight out of the can
mm-hmm expect us Thank You Silvia other
there's a taste more or less the same as
here on earth
my kidding is really taste brand like
this like this granola I could eat one of these every day I love this other things okay they're all right in the beginning but again craving for a nice pizza or grilling something on the barbecue on your Terrace but overall it's not really too bad it's quite and after all but gives me something to look forward to when I return home yes my husband often who position tiramisu but you have the high point of your mission the spacewalk that which was supposed to take place earlier but you're going to do it now that's are you very very
sanguine when it comes to that or
you getting a little bit excited about
it you never know when or whether these
tings these things happen
this spacewalk question of the technical
difficulties that we sometimes run into
and it may have to get postponed again
we had problems with batteries and we
had to get new ones to take place and
respect yes and I have very high respect
for this mission because it's you're a
much more vulnerable outside and it's
the only protection you have is your
spacesuit and you have to know your work
very well and we've prepared for that

and we've prepared for that in a

swimming pool and we've learned how how

to handle situations like that but it's

I have a healthy dose of respect for it

but it's of course it's also very

important to stay calm I miss November

11th of November you'll come back to

earth are you looking forward to it are

you or would you prefer to stay up there

a little bit longer yeah so it's the

same with me it doesn't matter where I

go could be 3 days a long weekend three

weeks by always and also in this case

six months it doesn't make any
difference I always look forward to
go home as wonderful as it is up
there up here and I have a lot of fun
and enjoy looking at the earth but I
have to say I'm looking forward to going
home my home my friends that's an
important part for our human experience
and it's important that we return
to our home is between yes - can you
pass over in bed first of all we wish
you lots of fun up there and thanks for
talking to us very much Alex and I guess
many greetings to you too in Germany
from the International Space Station to
you in Germany

station we now hand over to a TL actual

anchor beta clipper machine here

streamed live we don't have to go should

I stay here okay yeah you want me to sit

yes okay I think I'm done now okay yeah

surely yes I can hear are they sure

Leticia I hear you but I don't hear

anyone else at the moment I can hear you

very well good day to you I guess can

you hear me oh great

okay oh man disregard me okay I get some

makeup here okay all right okay okay as

far as I'm concerned we can start if her
guest is ready then I'm ready to go so

on both Carter's it would pass out from

behind my hole who is and since it's so

convenient let's go up to the ISS can

you tell us where you are in the ISS and

can you tell us where you are over the

earth yes I'd like to help

good day first of all to Germany I'm

very happy to talk to you soon immortal

patient for Chancellor Columbus I'm in

the European via Laboratory of the

European laboratory and this is where

most of the experiments that I'm working

on take place and you can see perhaps on

the monitor behind me just about to just

00:09:07,809 --> 00:09:12,779
about to cross over Germany in about ten

00:09:09,610 --> 00:09:15,250
minutes we'll be directly over overhead

00:09:12,779 --> 00:09:19,000
okay well look up to see if we can find

00:09:15,250 --> 00:09:24,100
you up there for three months you're

00:09:19,000 --> 00:09:26,129
working as a scientist can you give us

00:09:24,100 --> 00:09:28,659
some idea of which experience

00:09:26,129 --> 00:09:29,439
experiments are easier or more effective

00:09:28,659 --> 00:09:33,539
to do

00:09:29,440 --> 00:09:37,840
in space then on earth yeah yeah guys

00:09:33,539 --> 00:09:39,279
it's hot we have 160 experiments it's

00:09:37,840 --> 00:09:43,720
hard to pick up one knows why not

00:09:39,279 --> 00:09:49,120
particularly like often fuel it's an

00:09:43,720 --> 00:09:53,279
electric magnetic melting oven we can

00:09:49,120 --> 00:10:01,799
melt these allegations start to see how
how they dissolve in that is without the surrounding material you can't do that on earth because you can't have drops float in zero gravity for sonic and so perhaps we'll be able to use an airplane engine make an airplane engine with we're trying to stick to control robot from space on earth it wasn't in a robotics kid would might on earth about four teller about it that means a patient could be operated on with the sergeant is a hundred kilometers away and he's using this robot arm to perform the surgery
without having actually to be with the
patient studying osteoporosis we examine
our own bones and we might be able to
help osteo Peres's patients on earth and
we've some new medications were
developed thanks to the experiments that
we have carried out and I always imagine
that you sit there and in your
dome and take fabulous photographs and I
follow your social
it's I think one day we'll all be up you
able to go to space it really is magical
I posted the picture of Aurora and every
time I look at it I just I just
mesmerized by it if you see the southern
light cross the light across the sky
flickering across the sky it's just
magical
and you can't even capture it properly
with the camera and and it's I really
wish that all humans should be able to
see the the earth from up here and see
the thin atmosphere and the
vulnerability of our love if I can show
this as an example or as a comparison
millimeter thick and it looks as though
you could just blow it away and this
this idea is very deal for me but seeing
it actually seeing it really brings home

215
00:12:51,639 --> 00:12:58,089
the idea about how how small the earth

216
00:12:54,578 --> 00:12:59,769
is and everything is connected

217
00:12:58,089 --> 00:13:02,230
it's just a small blue dot and

218
00:12:59,769 --> 00:13:06,039
everything is connected this is this is

219
00:13:02,230 --> 00:13:09,188
the only home that we have where human

220
00:13:06,039 --> 00:13:11,379
beings can live I think I think if we

221
00:13:09,188 --> 00:13:13,860
all had the opportunity to see it from

222
00:13:11,379 --> 00:13:18,399
up here I think maybe human beings would

223
00:13:13,860 --> 00:13:19,870
treat the earth at least we should be a

224
00:13:18,399 --> 00:13:28,740
little bit more careful with the earth I

225
00:13:19,870 --> 00:13:31,240
agree quite close quarters up there and

226
00:13:28,740 --> 00:13:33,308
you go everyw go on each other's nerves

227
00:13:31,240 --> 00:13:34,299
and you if you don't get a chance to

228
00:13:33,308 --> 00:13:36,519
change all the time
you know does some people stink a little

bit and at first I didn't know how this

would be I went when I went to

Antarctica it really wasn't a problem it

was really not a problem here as big as

a 747 might eat a room and we can avoid

each other

and sometimes you've spent all day

working on your own module and you only

see here your co-workers at meal tops

and I can really say that in the last

three months there's been no crosswords

spoken up here we laugh a lot and we

have a sense of humor and it's and it's
a great camaraderie we're all in the same boat and we look at the earth together and have this shared experience yes and we shared the experience with each other it would be really difficult for me to be here up here alone and and not be able to share this experience with someone else that would be really tough for me ice cream scoop and gravity can't help eating bank Aleksandar it's just like in the movie gravity hi guest I wish you continued nice journey
safe journey safe travels all the best

to you and all the best to you from the

ISS station I now introduce you to

anchor from guten morgen Deutschland

good morning to the ISS beautiful I have

a few house housekeeping questions from

the female members of the audience

on the benzion theater brush with

awesome work sushant and then cigarettes

like a fee on that kilometer followed

here in Korea and sand Alexander gasps

on the second if you if you're watching

us in Hamburg

you're about as far from us here in
Cologne as Alexander Gerst

272
00:15:53,519 --> 00:16:01,259
is in the ISS there it's I say good

273
00:15:58,139 --> 00:16:03,629
morning but but it's not really morning

274
00:16:01,259 --> 00:16:06,688
for you but when when do you consider it

275
00:16:03,629 --> 00:16:09,659
to be morning good morning Germany I'm

276
00:16:06,688 --> 00:16:19,409
very happy to speak to you they do have

277
00:16:09,659 --> 00:16:23,389
a morning okay six six times 16 times a

278
00:16:19,409 --> 00:16:28,350
day we have the universal turned at UTC

279
00:16:23,389 --> 00:16:30,870
it's two hours behind the German time I

280
00:16:28,350 --> 00:16:34,199
get up around six o'clock in the morning

281
00:16:30,870 --> 00:16:37,649
and I have a real morning very normal

282
00:16:34,198 --> 00:16:43,409
course of the day and we have an evening

283
00:16:37,649 --> 00:16:49,649
as well creatures of habit and so we

284
00:16:43,409 --> 00:16:55,438
continue our habits up here again Amazon

285
00:16:49,649 --> 00:16:58,470
Nexus console yes we like to have
croissants for breakfast and it smells terrific if you have it but on the ISS what sort of things do you have for breakfast sir I don't suppose you have questions I actually brought today's breakfast with me lucky lucky I didn't! didn't eat it today but I'm doing an experiment to find out exactly how many calories astronauts and so you're lucky that my breakfast comes not even this morning hot water and it really is very tasty in highlights you home they highlight and
this is my orange juice I already had
the coffee this morning and I
larga auntie and this is my orange juice
that I drink it the orange juice is
really really tasty up here and I'm
going to drink some for you right now
well nothing against Michigan it's an
approximate okay after the meal just
teeth brushing how do you do that in
zero gravity you're right
hygiene is a big part of our daily life
here mindful Gong and experience doing
that it was and the same my expedition
to Antarctica and it's very can't let
things slide brush my teeth very

normally twice a day shave and you wash

a little bit differently than you do on

here but we have towels we we wet the
towels with warm water begins my entire
nose we get a fresh one every other day

routine is a little bit different but

but basically you do we do up here

exactly what what you do down on earth

so doesn't TV dad I'm cool okay we had a

little bit of an interruption here but

I'm we have another housekeeping

question we men we of course don't like

to wash very much i I have a whole heap
of laundry to do at home but how do you
get sweat in your clothes and how do
you deal with that when you do your
laundry up there basically it's
basically the same as on earth we do
exercise every day of course we sweat
to me change our clothes just as on
earth the only difference is we don't
have a washing machine up here and we
have to dispose of our clothing but we
have not found a technical solution for
that expert so with that difference
aside things that pretty much the same
up here do you have a favorite spot on
the ISS will you like to spot it always
depends on what sort of day it is out to

myself and to my friends I said that in

the the dome and to take pictures of

what I feel when I'm when I'm having

these impressions but I have those

moments when I just want to be by myself

go into a corner corner and lead

magazine drank a cup of coffee and read

a magazine or watch the news somebody

has sent me and I just read that on my

laptop and that's a routine that I think

we're just creatures of habit up here

just the same as on earth electronic

gasps seeing them down gunfire you know
many thanks Alexander guests many thanks

and have a lot of fun and young on your

spacewalk yeah you know concerned talk

nice day to you to you as well all the

best

to all of you in Germany and many

greetings from us here on the ISS

station that concludes the event in

Cologne

station this is Houston ACR thank you

that concludes our event