

# Suggestion for an extension of the VLBI field system

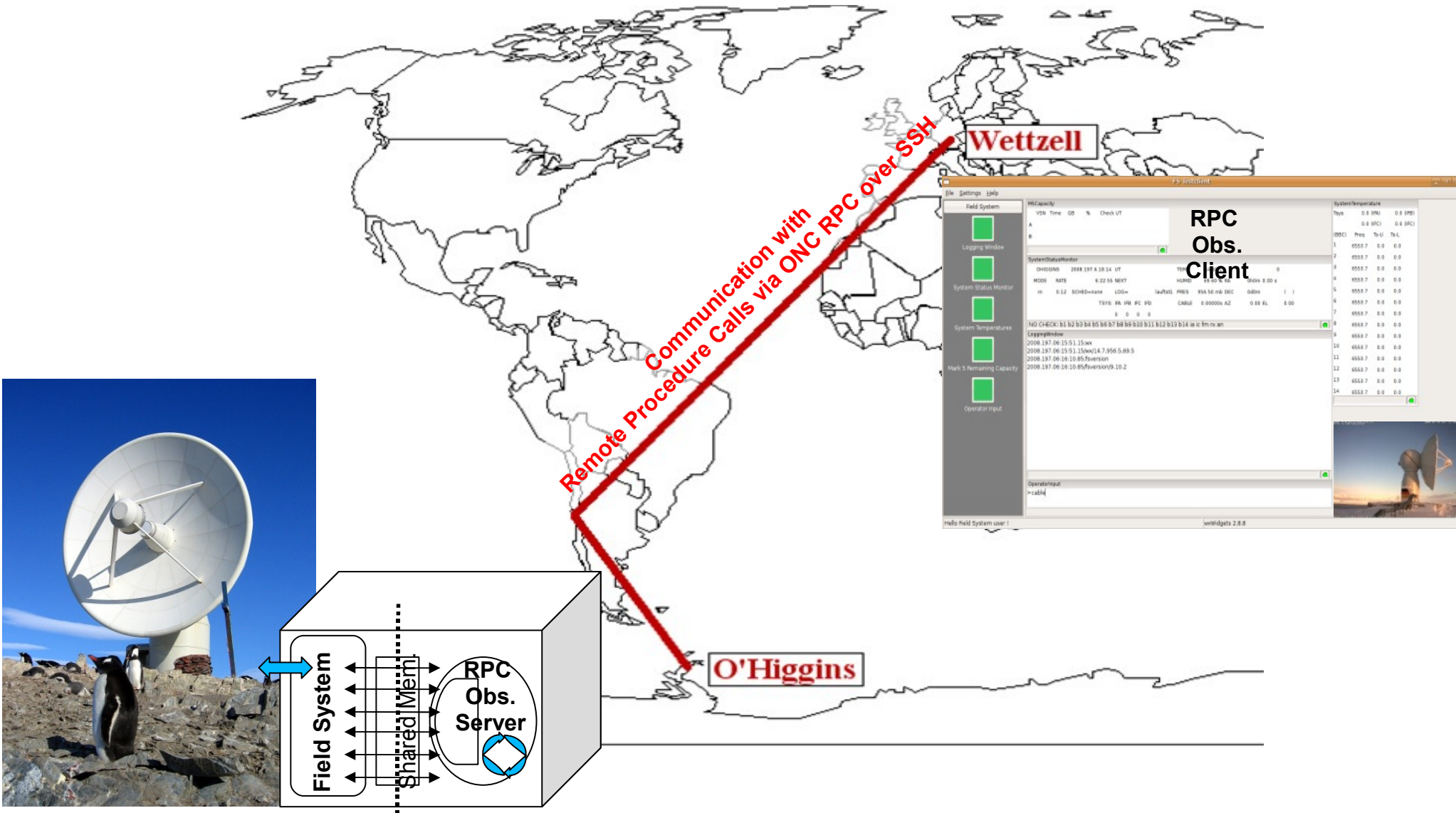


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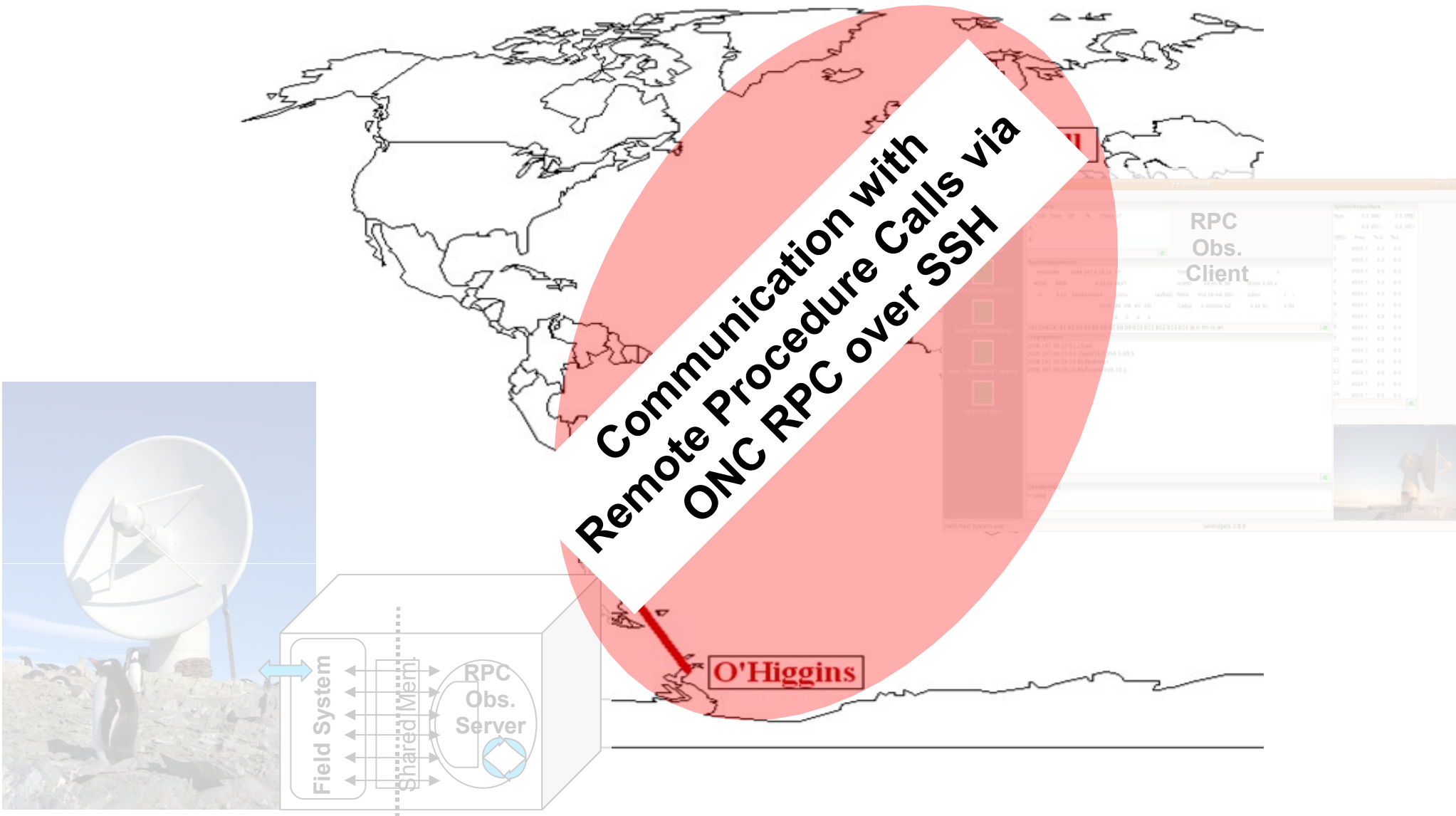


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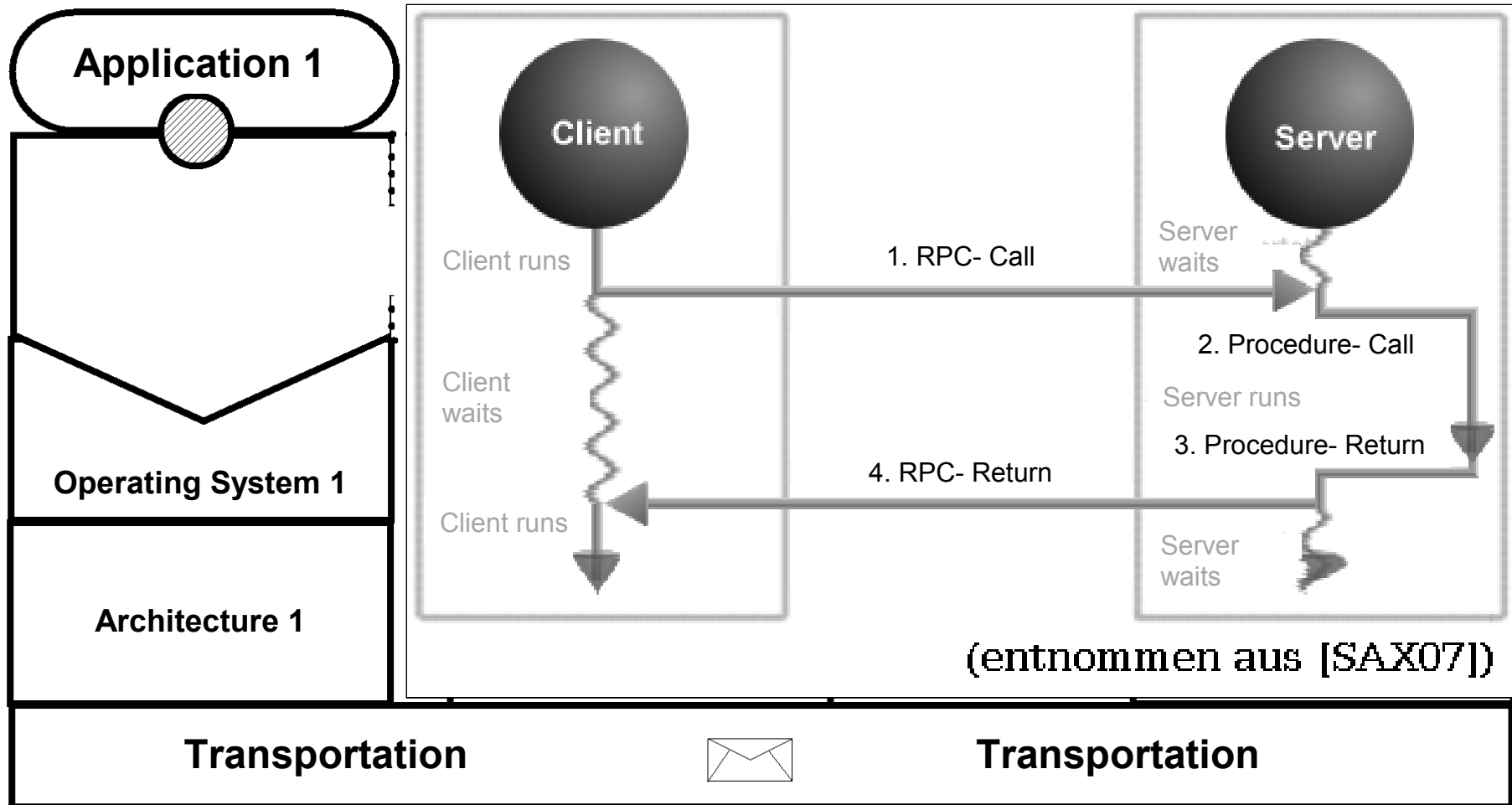
# The idea – remote control of VLBI at O’Higgins/Antarctica



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# Communication – remote procedure call middleware

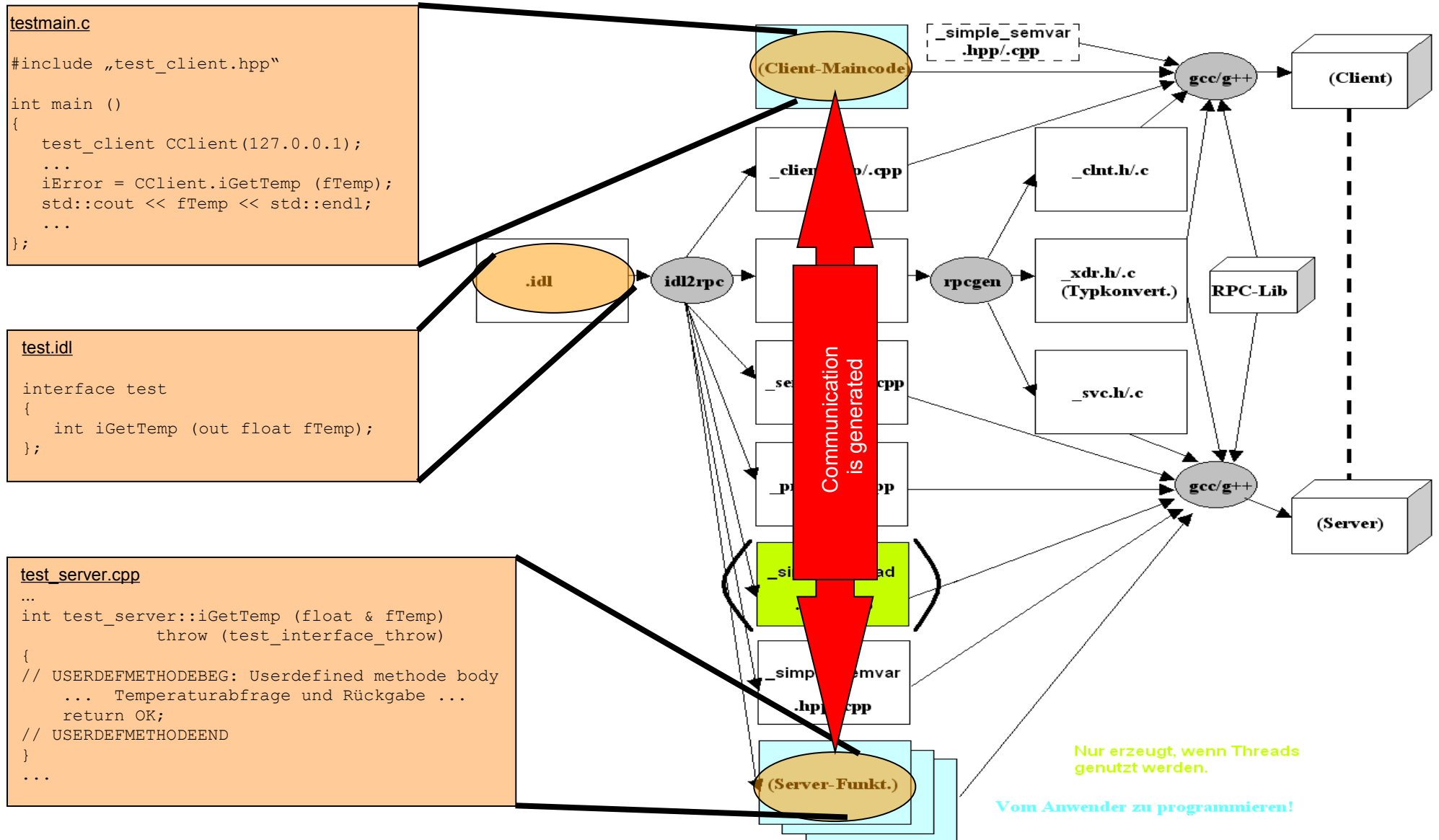


(nach [PUD01] a.a.O. S. 25)

[SAX07]: Saxonia Systems: Remote Procedure Call, <http://www.linuxfibel.de/rpc.htm>, Download 23.04.2007

[PUD01]: Puder, Arno; Römer, Kay: Middleware für vereteilte Systeme, 1.Auflage, dpunkt.verlag GmbH Heidelberg 2001

# Interface description – middleware generator



## Interface description – middleware generator

```
const MYCONST1 = 0;
const MYCONST2 = 0x3333;
const MYCONST3 = 12345;
const MYCONST4 = "Hallo";
const MYCONST6 = MYCONST1;
```

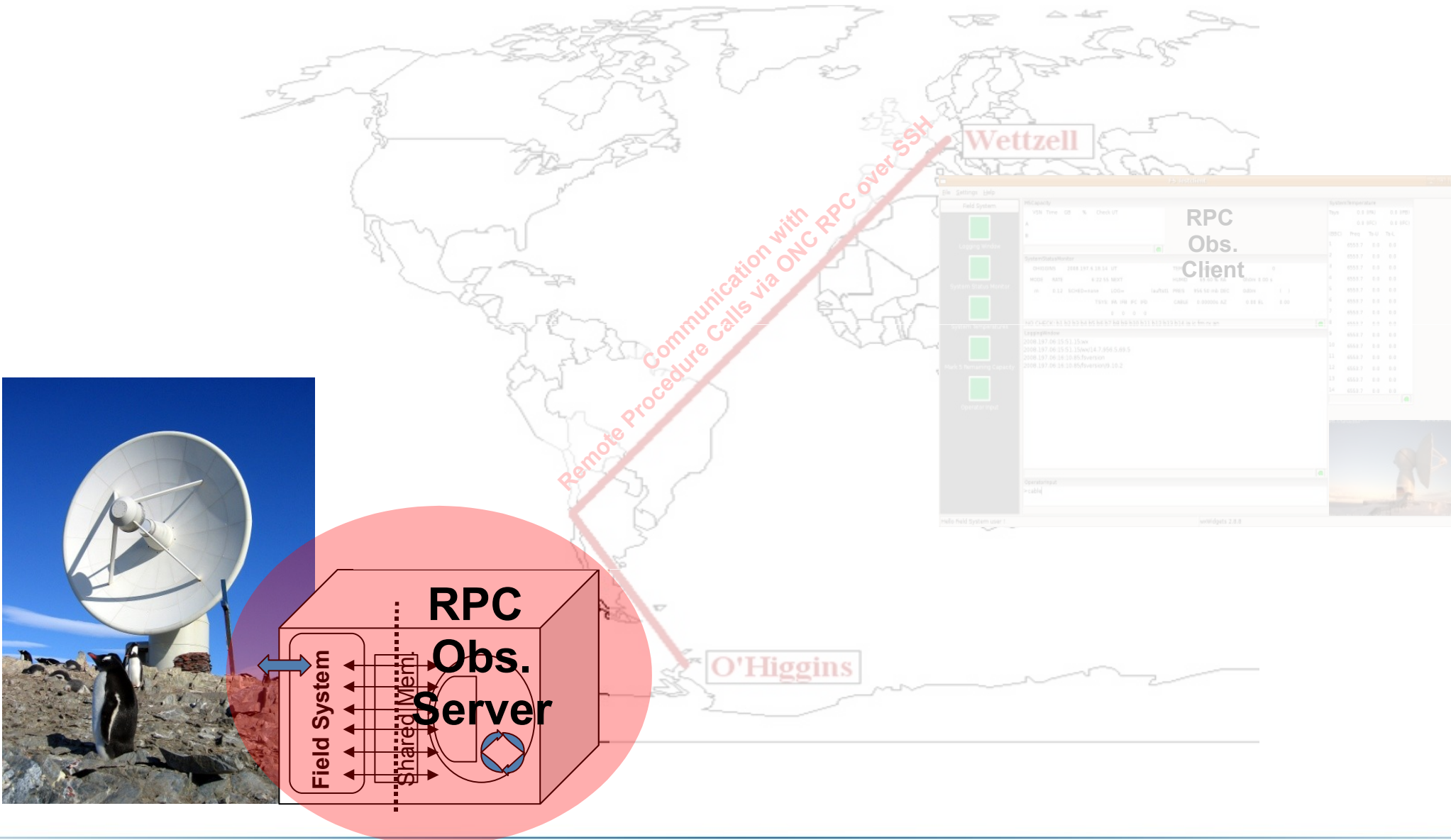
```
typedef struct {
char cVar1;
char cVar2;
char cVar3;
char cVar4;
} MYTYPE;
```

```
typedef struct {
unsigned int iVar1;
int iVar2;
MYTYPE SVar3;
} MYTYPE_COMBINATION;
```

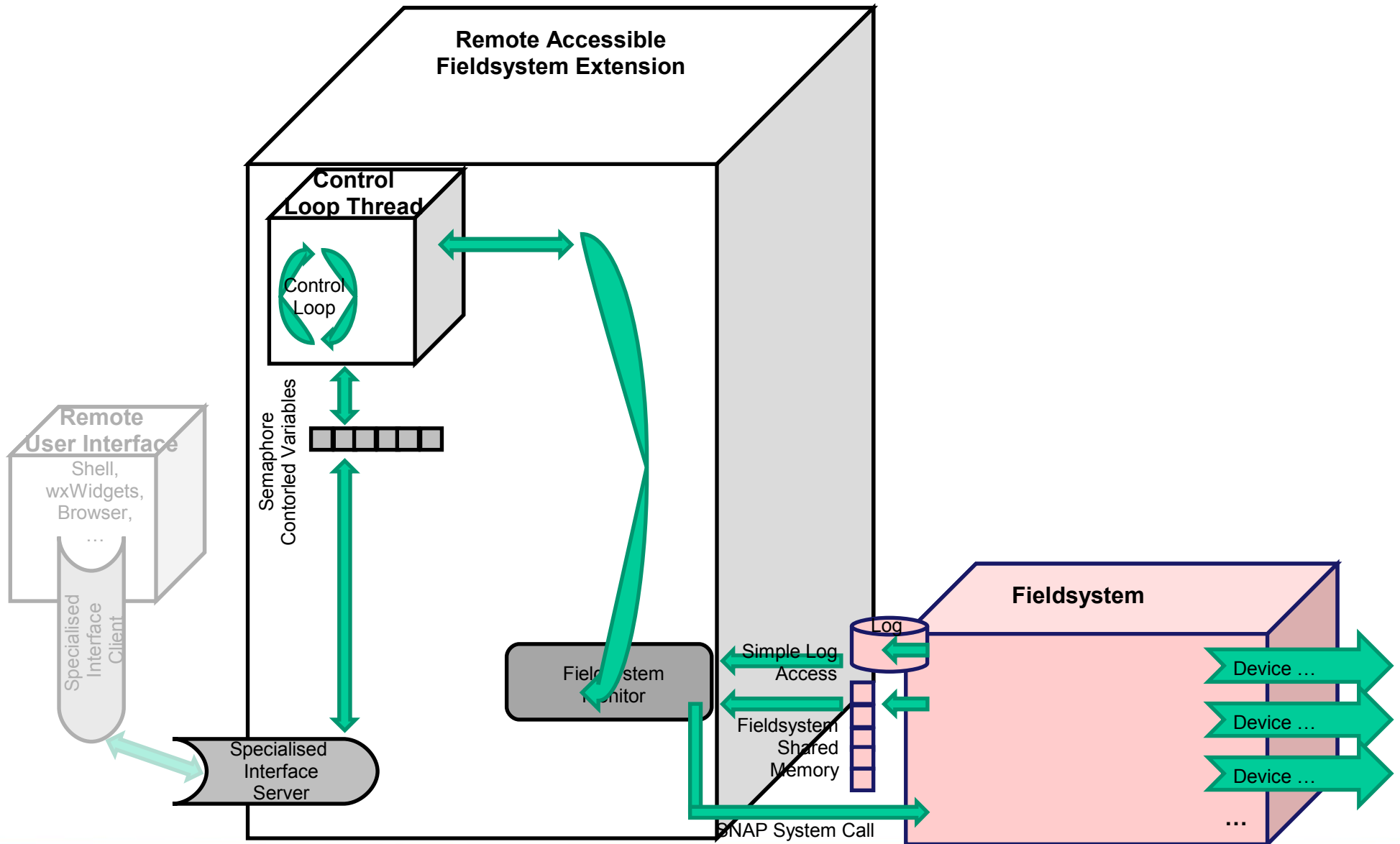
```
interface test
{
// This is a comment
void vFunc ();
int iGet ();
unsigned int uiGet ();
void vSet (in int iVal);
void vSetUnsigned (in unsigned int iVal);
void vGet (out int iVal);
void vSetAndGet (inout int iVal);
void vSetString (in string strText);
void vGetString (out string strText);
void vSetAndGetString (inout string strText);
void vSetMulti (in int iVal, in string strText);
void vGetMulti (out int iVal, out string strText);
void vSetAndGetMulti (inout int iVal, inout string strText);
void vSetArray (in unsigned int Array <>);
void vGetArray (out unsigned int Array <>);
void vSetAndGetArray (inout unsigned int Array <>);
void vSetMultiArray (in unsigned int Array <><><>);
void vGetMultiArray (out unsigned int Array <><><>);
void vSetAndGetMultiArray (inout unsigned int Array <><><>);
};
```



# The idea – remote control of VLBI at O’Higgins/Antarctica

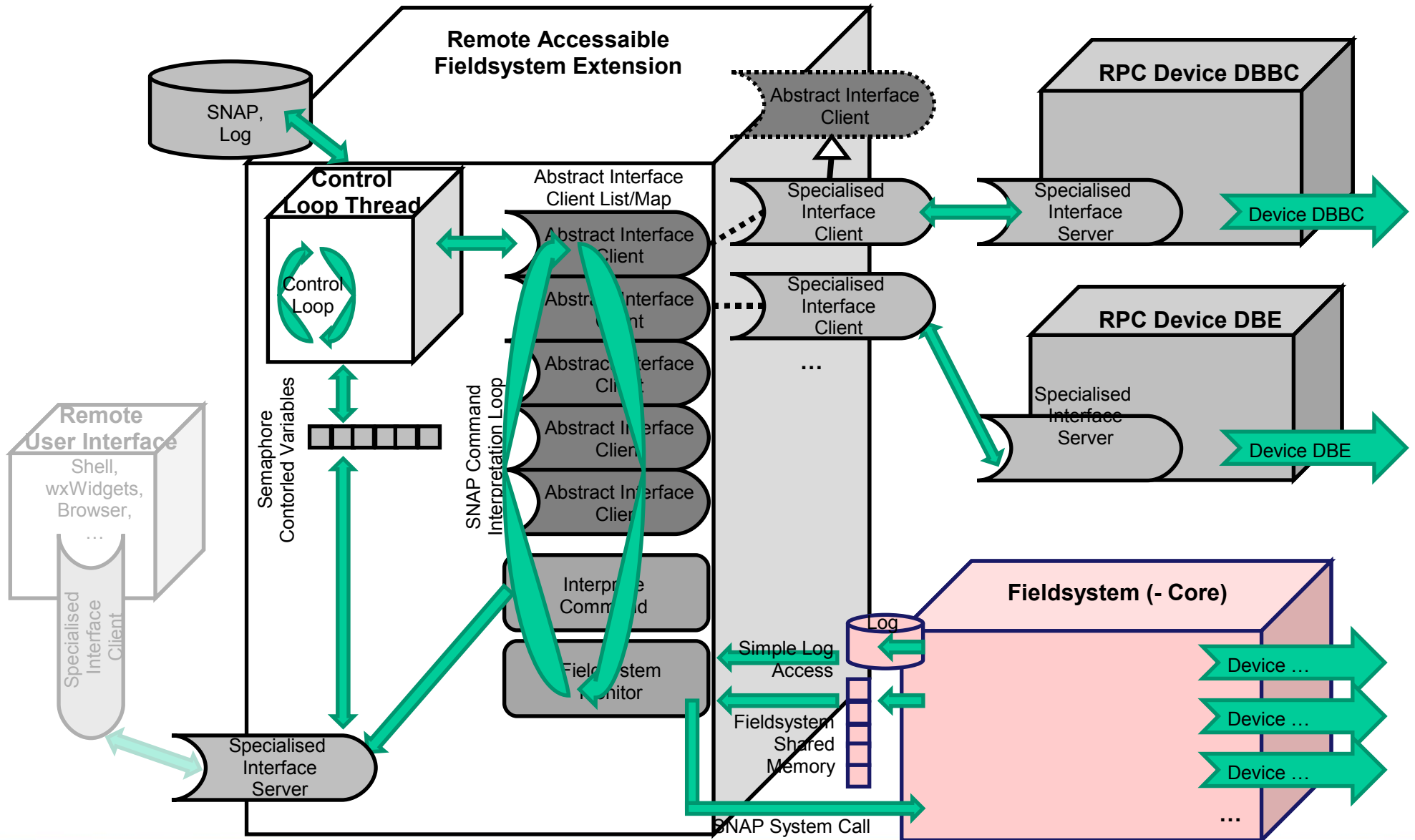


# Remote observation – RPC field system extension

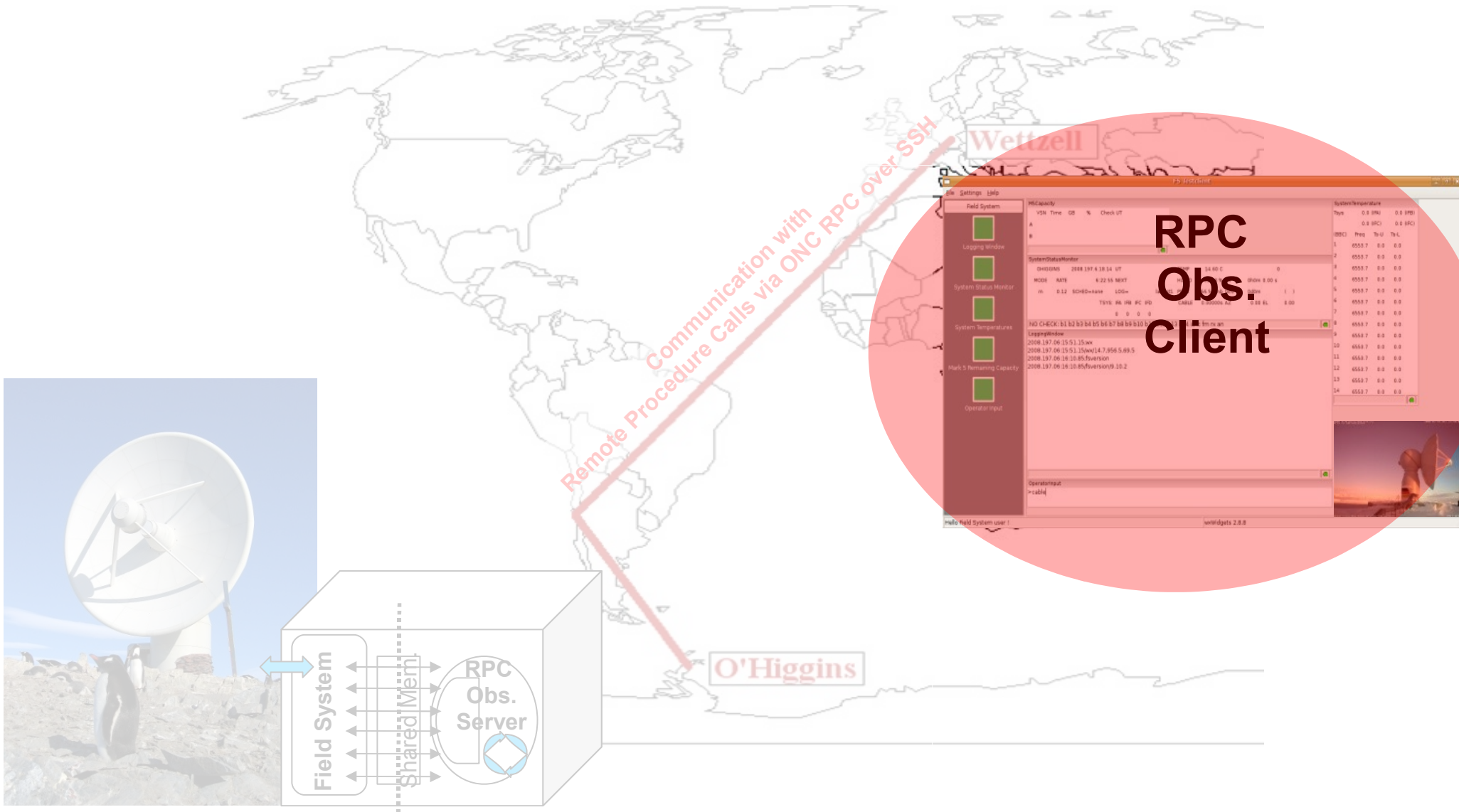




# General approach – general field system extension

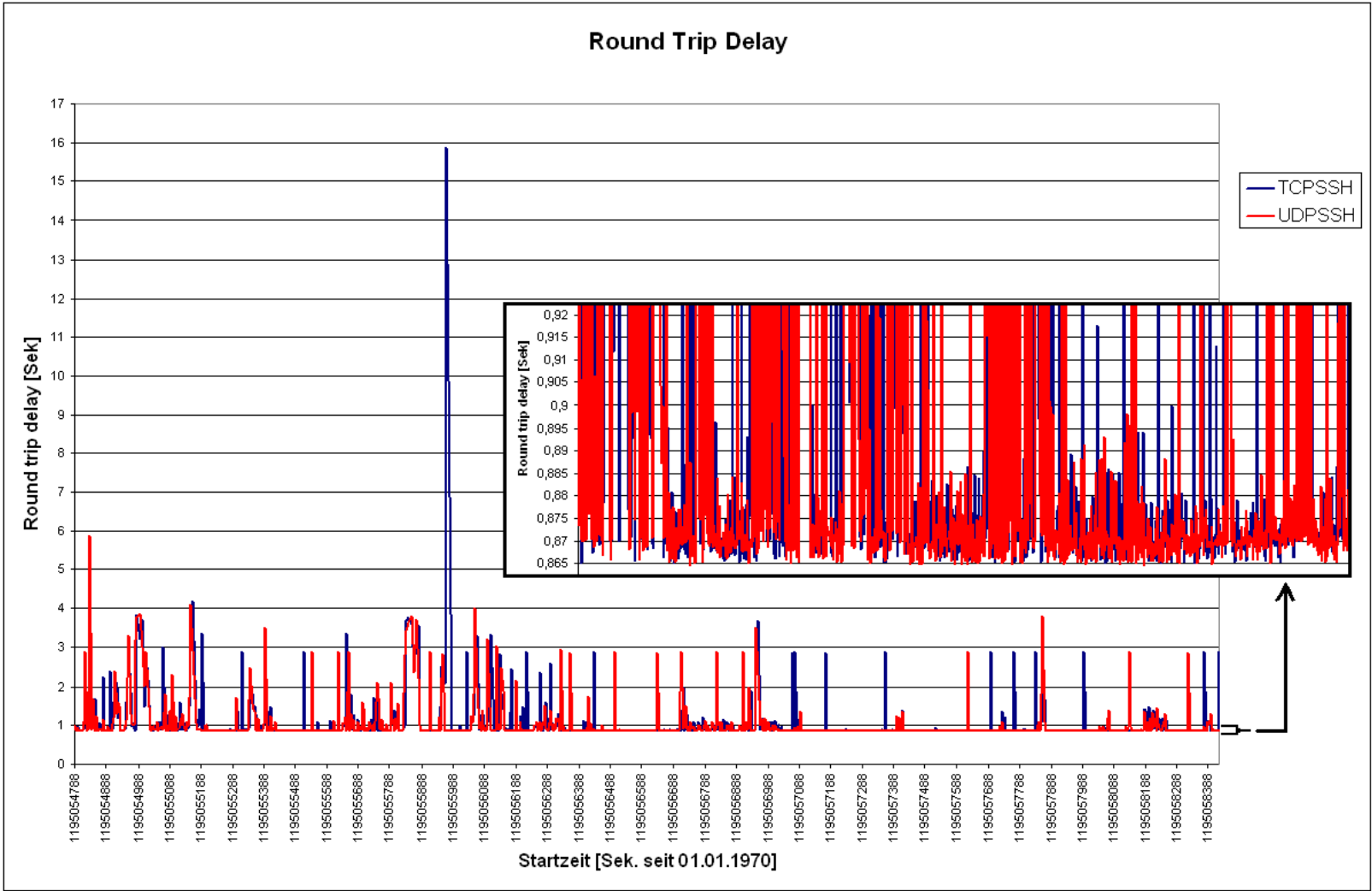


# The idea – remote control of VLBI at O’Higgins/Antarctica





# First test – remote control of VLBI at O’Higgins/Antarctica



First test during VLBI-campagne 02/2007 (first remote controlled experiment is planned for campagne 02/2008)

**Thank you!**