UNIVERSITY OF BERGEN
Department of Physics
Space Physics Section

Satellite projects.

The Staff and students at Space Physics Section, Department of Physics, University of Bergen have contributed in the 10 listed satellite projects as follow:

- *Scientific and Technical Definitions of Concepts (STDC).*
- *Development of instrumentation for flight.*
- *Ground based Support and Bench Checkout Equipment (GSE and BCE).*
- *Design, assembly and test of electrical Flight Modules (FM) and Mechnical Flight units (MF)*
- *Development of Flight Software (FSW) and software for verification and testing (SW).*

The Space Physics Section's scientists, post doc's, dr. grad students and students have put a significant contribution to the data analysis and science in all these projects.

Satellite ***UB Instrument*** ***Participants***	***UB scientific key persons in the project*** ***Technical responsibility / engagement*** ***UB technical key persons in the project***	***Launch site*** ***and date***
ESRO IA *Instrument:* ***S71-C****- particle detector* *UB,DRI*	*Co-I.: Finn Søraas, Kjell Aarsnes.* *Technical responsibility.: STDC, FM, MF, GSE and BCE.* *Terje Ryngøye, Hans Torgilstveit, Asbjørn Dale.*	*Vandenberg – USA* *Okt.3 - 1968*
ESRO IB *Instrument:* ***S71-C****- particle detector* *UB,DRI*	*Co-I.: Finn Søraas, Kjell Aarsnes.* *Technical responsibility.: STDC, FM, MF, GSE and BCE.* *Terje Ryngøye, Hans Torgilstveit, Asbjørn Dale.*	*Vandenberg – USA* *Okt.1 - 1969*
VIKING *Instrument:* ***MICS*** *- time of flight detector* *MPAe, UB, AE, RAL, UoM, LANL, SISP.*	*Co-I.: Finn Søraas, Kjell Brønstad, Kjell Aarsnes.* *Technical responsibility.: STDC, FM, GSE, BCE and SW.* *Svein Njaastad, Arne O.Solberg, Margaret Alme,* *Arne Auen Grimnes.*	*Kourou– Fra.G* *Feb.22 - 1985*
CRRES *Instrument:* ***MICS*** *- time of flight detector* *Instrument:* ***EPAS****, - particle detector* *MPAe, UB, AE, RAL, LANL*	*Co-I.: Finn Søraas, Stein Ullaland.* *Technical responsibility.: FM, BCE.* *Svein Njaastad, Arne O.Solberg, Harald Hanssen.*	*Cape Kennedy – USA* *July 25 - 1991*
GEOTAIL *Instrument:* ***HEP-LD****- time of flight detector* *MPAe, UB.*	*Co-I.: Finn Søraas, Stein Ullaland.* *Technical responsibility.: FM ASIC // BCE.* *Lars Ersland; Åsmund Sandvand //Arne O.Solberg.*	*Cape Kennedy – USA* *July 24 - 1992*
NOAA-13 *(TIROS-I)* *Instrument:* ***MAXIE*** *- Motion controll system* *LPARL, UB, AE.*	*Co-I.: Kjell Brønstad, Johan Stadsnes.* *Technical responsibility.: STDC, FM, FSW, BCE and SW.* *A. Solberg, S. Njaastad, K. Njøten, A. Myskja.*	*Vandenberg – USA* *Aug. 9 - 1995* *MAXIE performed OK.* S/C power failed after 12 days

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Satellite ***UB Instrument*** ***Participants***	***UB scientific key persons in the project*** ***Technical responsibility / engagement*** ***UB technical key persons in the project***	***Launch site*** ***and date***
POLAR *Instrument:* ***PIXIE*** *– pinhole X-ray camera* *LPARL, UB, AE, UoM, LANL.*	*Co-I.: Johan Stadsnes, Jon Bjordal.* *Technical responsibility.: STDC, FM, MF.* *Kåre Njøten, Kåre Slettebakken.*	*Vandenberg – USA* *Feb. 24 - 1996*
CLUSTER *Instrument:* ***RAPID*** *-time of flight detector* *MPAe, UB, AE, RAL, LANL, GSFC, U.OULU, SISP, UoB.*	*Co-I.: Finn Søraas, Stein Ullaland, Kjell Aarsnes.* *Technical responsibility.: STDC, FM ASIC // IES BCE.* *Lars Ersland; Åsmund Sandvand,// Asgeir Myskja,* *Lars Søraas, Svein Njaastad.*	*Kourou – Fra.G* *June 4 - 1996* *No success*
CLUSTER II *Instrument:* ***RAPID*** *- time of flight detector* *MPAe, UB, AE, RAL, LANL, GSFC, U.OULU, SISP.*	*Co-I.: Finn Søraas, Kjell Aarsnes.* *Technical responsibility.: STDC, FM ASIC // IES BCE.* *Lars Ersland; Åsmund Sandvand,// Asgeir Myskja, Lars Søraas, Svein Njaastad.*	*Pair 1 launched:* *Kourou – Fra.G* *July 16 – 2000* *Pair 2 launched:* *Kourou– Fra.G* *Aug. 9 - 2000*
INTEGRAL *Instrument:* ***IBIS*** *- VETO, VME on VDM.* *UB, LABEN, PAS/SRC.*	*Co-I.: Kjell Brønstad, Johan Stadsnes,* *Olav Kjellseth-Moe(Univ. Oslo).* *Technical responsibility.: STDC, FM.* *Arne O.Solberg, Svein Njaastad.*	*Baikonor – Kazakstan* *Oct. 17 – 2002*

Participants:

AE	*The Aerospace Corporation, Los Angles, USA.*
DRI	*Dansk romforsknings institutt, Denmark.*
GSFC	*Goddard Space Flight Center, USA.*
LABEN	*LABEN, Milano, Italy.*
LANL	*Los Alamos National Laboratory, USA.*
LPARL	*Lockheed Palo Alto Research Laboratory, USA.*
UoM	*Univ. of Maryland, USA.*
MPAe	*Max-Planck-Institut für Aeronomie, Lindau, Germany.*
PAS/SRC	*Polish Academy of Sciences, Space Research Center, Warsawa, Poland.*
RAL	*Rutherford Appelton Laboratory. England.*
SISP	*Swedish Institut for Space Physics, Kiruna, Sweden.*
U.OULU	*University of Oulu, Finland.*
UB	*University of Bergen, Dept. of Physics, Norway.*
UoB	*University of Boston, USA.*

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CRRES, GEOTAIL, CLUSTER	*Finn Søraas*	***finn.soraas@fi.uib.no***	*+47 5558 2714*
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Web site. ***http://www.fi.uib.no/Spacephysics/spacephysics.html***