

DDDAS Related Projects Awarded PRIOR TO FY 2005

The work in these projects is either targeted to enable DDDAS capabilities or the efforts can evolve to enable such capabilities

AWARD ID	TITLE	PI NAME	ABSTRACT
0326013	Asynchronous Execution for Scalable Simulation in Cell Physiology	Baden	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0326013
0427183 (L) 0426558 (NL)	A Novel Grid Architecture Integrating Real-Time Data and Intervention During Image Guided Therapy	Baldrige Warfield	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0427183 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0426558
0121667	Real-Time Optimization for Data Assimilation and Control of Large Scale Dynamic Simulations	Biegler	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0121667
0426971	Simulation Transformation for Dynamic, Data-Driven Application Systems (DDDAS)	Brogan	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0426971
0121432	Novel Scalable Simulation Techniques for Chemistry, Materials Science and Biology	Car	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0121432

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0205198	Development of a general Computational Framework for the Optimal Integration of Atmospheric Chemical Transport Models and Measurements Using Adjoints	Carmichael	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0205198
0325846	Synthetic Environment for Continuous Experimentation (Crisis Management Applications)		http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0325846
0219627 (L) 0218229 (NL) 0218721 (NL)	Predictive Contaminant Tracking Using Dynamic Data Driven Application Simulation (DDDAS) Techniques	Douglas Ewing Johnson	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0219627 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0218229 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0218721
0331594 (L) 0331480 (NL) 0331574 (NL) 0331578 (NL) 0331579 (NL)	Linked Environments for Atmospheric Discovery (LEAD)	Droegemeier Gannon Clark Wilhelmson Graves	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0331594 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0331480 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0331574 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0331578 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0331579

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0331586 (NL)		Joseph	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0331586
0331587 (NL)		Ramamurthy	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0331587
0331591 (NL)		Chandrasekar	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0331591
0205327	A Framework for Environment – Aware Massively Distributed Computing	Evans	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0205327
0205663	A Data Driven Environment for Multi-physics Applications	Farhat	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0205663
0426691	In Silico De Novo Protein Design: A Dynamically Data Driven, (DDDAS), Computational and Experimental Framework	Floudas	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0426691
0426972	Dependable Grids	Grimshaw	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0426972
0205671	Representations and Algorithms for Deformable Objects	Guibas	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0205671
0218142	Generalized Polynomial Chaos: Parallel Algorithms for Modeling and Propagating Uncertainty in Physical and	Karniadakis	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0218142

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	Biological Systems		
0121058	Data Driven design Optimization in Engineering Using Concurrent Integrated Experiment and Simulation	Knight	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0121058
0427374	Computational simulation, modeling, and visualization for understanding unsteady bioflows	Laidlaw	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0427374
0121164	The Low Frequency Array (LOFAR) – A Digital Radio Telescope	Lonsdale	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0121164
0326386	A Framework for Discovery, Exploration and Analysis of Evolutionary Data (DEAS)	Machiraju	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0326386
0325314 (L)		Mandel	
0324876 (NL)	DDAS: Data Dynamic	Douglas	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0325314
0324910 (NL)	Simulation for Disaster	Coen	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0324876
0324988 (NL)	Management (Fire	Zhao	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0324910
0324989 (NL)	Propagation)	Vodacek	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0324988

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			http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0324989
0121182	An Ensemble Approach for Data Assimilation in the Earth Sciences	McLaughlin	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0121182
0313184	Stochastic Multicue Tracking of Objects with Many Degrees of Freedom	Metaxas	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0313184
0428231 (L) 0427267 (NL) 0427988 (NL)	DDDAS – Advances in recognition and interpretation of human motion: An Integrated Approach to ASL Recognition	Metaxas Vogler Neidle	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0428231 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0427267 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0427988
0205181	Computational Infrastructure for Reliable Computer Simulations	Oden	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0205181
0121263	Poseidon – Rapid Real-Time Interdisciplinary Ocean Forecasting: Adaptive Sampling and Adaptive Modeling in a Distributed Environment	Patrikalakis	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0121263

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0121028	Flexible Environments for Grand-Challenge Climate Simulation	Pierrehumbert	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0121028
0085969	Adaptive Software for Field-Driven Simulations	Pingali	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0085969
0325459 (L)	Data Mining and Exploration Middleware for Grid and Distributed Computing	Ranka	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0325459
0325949 (NL)		Kumar	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0325949
0325013 (NL)		Grossman	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0325013
0325227 (L)	Building Structural integrity	Sameh	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0325227
0324944 (NL)		Gallivan	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0324944
0325081 (NL)		Sorensen	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0325081
0330244	Sensors Program: Hourglass: An Infrastructure for Sensor Networks	Seltzer	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0330244
0205628	A Real Time Mining of Integrated Weather Data	Trafalis	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0205628
0121523	Data Intense Challenge: The Instrumented Oil Field of the Future	Wheeler	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0121523
0427005 (L)	Data Driven Simulation of the Subsurface:	Wheeler	
0426241 (NL)		Saltz	

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0426354 (NL)	Optimization and Uncertainty Estimation	Parashar	http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0427005 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0426241 http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0426354