

## **Transcript of “Episode 11: Max Vido, Meteorologist at ACES Power in Indianapolis”**

Clear Skies Ahead: Conversations about Careers in Meteorology and Beyond

*March 17, 2020*

### **Kelly Savoie:**

Welcome to the American Meteorological Society’s podcast series on careers in the atmospheric and related sciences. I’m Kelly Savoie, and I’m here with Rex Horner, and we will be your hosts. Our podcast series will give you the opportunity to step into the shoes of an expert working in weather, water, and climate sciences.

### **Rex Horner:**

We are excited to introduce today’s guest, Max Vido, a meteorologist at ACES Power in Indianapolis, Indiana. Welcome, Max. Thanks so much for joining us.

### **Max Vido:**

Hey, thanks for having me on guys.

### **Kelly:**

Max, could you tell us a little bit about your educational background, and what sparked your interest in meteorology?

### **Max:**

Sure, so I got interested in meteorology when I was about 10 years old. I was growing up in Philadelphia at the time, and we had what was the President’s Day snow storm of 2003, and I just had a fantastic time playing in the snow, and making igloos, and having snowball fights, all of that jazz. So, that sparked my interest then, and from there, I was interested in science in high school, and I did well in science classes, and I wanted to go into a meteorology program. And it helped having two parents who went to Penn State, and who were aware of their meteorology program. So I enrolled there, and graduated in four years with a focus in weather risk management, and a minor in energy business finance.

### **Max:**

So I know that energy business finance sounds unique. Essentially, it was a lot of supplemental coursework that revolved around economics and finance classes, particularly focused on the energy industry. So I didn’t want to go to grad school at the time, and I wasn’t interested in broadcasting. So it seemed like a lot of our recent alumni from the meteorology program at Penn State, they had this energy business finance background, and they were finding jobs in the private sector. So that’s kind of the way I wanted to go with my education.

### **Rex:**

So leading off of that, what was the first job that you found in the field, using your degree from Penn State, and how did that first job lead to where you are now?

**Max:**

So right out of school, I took a job at AccuWeather as an operational meteorologist. And I was at AccuWeather for three and a half years and gaining some new responsibilities and skills along the way. At AccuWeather, you often start off as a forecaster, handling some of the lower tiered clients and less critical responsibilities, but then over time I showed some growth, proved my capabilities, as is typical for a young forecaster, and you evolve into more specialized roles. So I ended up finding a niche in our energy and long range product line at AccuWeather, and that gave me just really perfect relevant experience to move into this position at ACES, which is where I recently moved.

**Max:**

Here, I work as an energy meteorologist at the company, providing weather expertise for our internal group of power and natural gas traders. And I also provide some tailored forecast for our many clients, for both short range weather conditions and also more seasonal and sub-seasonal weather. So I'm still doing a lot of the weekly to monthly forecasting that I was doing at AccuWeather. And then, in the near future here, I should be getting more involved with more of our energy load forecasting and modeling, which will tap into some of those skillsets of programming and statistics that I was using back in my undergraduate.

**Kelly:**

Did you find that when you were searching for jobs in the energy field, that there were a lot that were hiring meteorologists? Is the job outlook pretty good?

**Max:**

So for me, I had a reference to go off of, someone who was previously in this position. Had I not known that person, and had not been involved with AMS, which is where I met him on one of the committees I'm involved with, I would have never heard about this job. I'm pretty confident in that. So being involved in the AMS community helped me out a lot, because I know these energy positions, specifically energy meteorologist positions, don't show up very often.

**Kelly:**

Right. And is it because meteorologists don't really know that these positions are available to them, and they don't know where to look to find these jobs? Is that one of the reasons?

**Max:**

You know, I think it's a combination of that, and also that there's not many positions out there. They're nice positions. They're sometimes a little more traditional hours and Monday through Friday hours that you won't have at some other operational roles. So I don't think a lot of people are leaving these positions at energy companies. So you don't find that opening as often as, say, some other positions in the field. But then I also think it can also come down to these jobs not being marketed to the whole community, in that it's often that someone who's in the position hand picks the next person in line. So that can be something that happens as well.

**Kelly:**

So at Penn State, did you pursue any opportunities that you knew would be beneficial to getting a job in the profession? Did you do internships or any type of co-ops?

**Max:**

So I did some things both inside and outside of the classroom. I took part in both of our forecasting classes at Penn State. We had a beginning forecasting class, and then an advanced forecasting class that there was only really like five or six enrollees at the time in that class. So I did both of those courses. And then I was also involved with our campus weather service for my four years in school. So, that was like my in-the-classroom club type of activity. I had two forecasting internships within the department, including one for the Pennsylvania Department of Transportation, and then one forecasting pool usage for a chemical supply company. And I did that both my junior and senior year. So that was basically my forecasting experience as a student. But I knew most companies would probably desire not just a strong student, but someone who was involved and active outside of the classroom.

**Max:**

So I was a part of many other clubs and some volunteer societies at school, and I think that made me a little bit more of a desirable candidate out of my senior year. So for me, it was important keeping that school, job, extracurricular balance while I was a student.

**Rex:**

Among that balance, did you have any mentors, or connect with anyone that provided you with guidance going forward?

**Max:**

Yeah. So, I took part in the Board of Private Sector Meteorologists mentorship program in my junior year, and it was with an energy meteorologist in the field, and he kind of sparked my interest in eventually pursuing this route. And it was one of the reasons that I wanted to get involved in the energy product line and the long range product line at AccuWeather. So I definitely recommend that program, the AMS Private Sector Mentorship Program, and also the Mentorship360 [Mentoring365] Program.

**Max:**

And then, I spoke to alumni from our school all the time and some of the upperclassmen that I had experiences with in the classroom, they were great mentors as well. In my professional career, I thought it was important to develop mentors, people who I thought were successful, or had roles I was interested in. So I had several great mentors at AccuWeather who I could always look to for advice or guidance, and they helped develop the necessary skill sets I needed to move up and expand my role, I guess, with the company.

**Kelly:**

So for the Private Sector Mentoring Program, do you just apply, submit an application, and then did they match you with someone? Is that how it worked?

**Max:**

Yes. So it is a year-long mentorship program, and you fill out, it's less of an application, and more of a survey just saying what you're interested in. I think at the time, I put down agriculture and energy forecasting, and they were able to match me up with a professional in the field who's also a volunteer in the program. And essentially, you meet biweekly or once a month, and discuss whatever you want to make of it. Do you want to build up certain skill sets in the classroom? Do you want to help with your resume? Do you want help in networking? Do you want networking tips or job application tips? This mentor is there to help you and guide you along that path and track. So it was definitely very worthwhile for me, and I think I got a lot out of it.

**Kelly:**

Yeah, that must've been really awesome to just hear about the job and what they do, and then you can kind of have an idea if that's something you want to pursue. So yeah, I agree. That's a great thing.

**Max:**

And it's something expressed to me then, that this is often something that doesn't just happen right out of your undergraduate career. Maybe you need either some more schooling experience, or you need additional private sector experience. So that was expressed to me then. So at the time, I didn't have the expectation of coming out of college and securing one of those positions. But surely enough, four years later, things worked out pretty well.

**Kelly:**

So for our listeners who are interested in a career in the energy field, are there any other courses or skills beyond the required math and science that would be helpful? You mentioned something previously about some business classes and other types of courses that you took. Were those helpful?

**Max:**

Yes. Every day, I'm working with people who have an intense interest in the markets, specifically the natural gas markets and the different energy, day ahead and real time energy markets. So having an understanding of how those electricity markets work is extremely beneficial. I would say statistics as well, specifically time series analysis. That's helped me. It's sometimes offered outside of the normal curriculum. And that can be very beneficial in understanding some of the newer research coming out about long range meteorology and climate dynamics. And then also, that can help you in the position as well. When I was at Penn State, I also took a short course in climate studies, and we learned how to obtain and utilize climate data across the United States. So having this background in climate for pretty much the entire US was super beneficial, and it allowed me to think constructively when making forecasts, specifically long range forecasts, because almost all the information you present, all the forecasts you make, it's how it's different than expectations compared to normal. So it's important to have a pretty good climate background when making these types of forecasts.

**Kelly:**

That's some good advice.

**Rex:**

So returning to where you are now, could you give our listeners an idea of what a typical day on your job is like at ACES Power?

**Max:**

Sure. So at my current company, I work slightly more traditional hours than what I was doing at AccuWeather. I arrive at the office just before 6:00 AM, and spend about the first 30 minutes getting deeply in touch with the weather globally. And then I kind of whittle it down to a more nationally focused, and then eventually, more localized, where I know the weather hot spots are going to be for a given day, or where weather is potentially impacting one of our utility clients. So after that, I spend about four to four and a half hours, until about 11:00 AM, completing all sorts of tasks, which includes jumping on multiple conference calls to brief clients about the next 10 days of weather. I complete specialized forecasts for solar or wind for specific clients. I also do a 1 to 15 day weather discussion that goes out daily.

**Max:**

And so I do all of this while also providing a temperature forecast for select cities that provides a good representation where the energy load is located for our clients. So that's all done by 11:00 AM, and then I have about two hours between 11:00 and 1:00 PM for personal time, like now, when we're doing this podcast. So I often spend that time on side projects, working on some of my programming skills, eating lunch, and then after that from about 1:00 to 3:00 PM, I make updates to the forecast I sent in the morning. So it's a pretty jam packed day, usually runs about 9 to 10 hours. It's an early start, a 6:00 AM start, and it's not over until 3:00 or 4:00. But it's definitely fast paced, and it's fun to look globally and nationally at the weather every day.

**Kelly:**

It sounds like it's a lot of varied tasks. What do you like most about the job?

**Max:**

So that's kind of hard to choose at this point. I'm still getting used to everything. I like looking at the weather all around the world. I think it's fascinating to know that something that's going on thousands of miles away and the weather is impacting people or businesses just how it impacts your daily routines, or my daily routines. I find that very cool and fascinating. I also like the feeling of getting a forecast right. I have daily interactions with the same types of people. So you start to build up a relationship with these people, your clients, and it's always good to know you're giving them great information, and you can be instantly gratified the next day if your forecast was right. I like that part.

**Kelly:**

Yeah. I'm sure.

**Rex:**

So you had mentioned your job being fast paced. Would you say this is a challenging aspect of the job? Are there other aspects that you might also find challenging?

**Max:**

Yeah. I think so. With things being so task oriented, you need to get them out in a certain amount of time every single day. And often, when there's tricky forecast situations, you don't have as much time as you want to look at a particular forecast or particular setup. That can be definitely a challenge, I think, in an energy meteorologist role, especially if you're not looking at one area, but looking nationally as well. You have to do your best and then move on often. So having a lot of tasks that are automated can help. So we have some internal programming that I'm just now getting into that helps automate a lot of the things we do for our clients.

**Max:**

I think one of the other challenging aspects of the job is communicating, I guess, very highly uncertain forecast situations, when you're really not sure what's going to happen but you need to have your client or customer be able to make a smart decision and take action right away. So often, you have to make these forecasts off the cuff, and you only have a few minutes or less of preparation. So I've learned how to kind of anticipate these situations, so that the clients can make these decisions in high impact scenarios.

**Kelly:**

So you mentioned that you have a really long day, you start early and end in the late afternoon. Would you say that your job allows for a good work-life balance?

**Max:**

It's actually not too bad, especially in my new position. It's early bedtimes a lot of the time. Your evening activities are a little more restricted than most, because if you're getting up at 5:00 AM to be in to work at 6:00, you want to get to bed before 10:00 PM most nights. So I try to do that, and I would say that's the biggest thing.

**Kelly:**

That's not too bad.

**Max:**

No it's not. And I think college students will find as they get older, they will start going to bed earlier and earlier. I'm sure that's happened to you guys, as well. But I think the nice thing about my role that's different than most operational positions is that I do have weekends off and most holidays off, essentially in the office when the market is open. So that's different than the operational position I had in the past at AccuWeather, where I was working a little bit more changing hours, but also working more weekends and earlier mornings and sometimes overnight. So it's a little different change up from that previous position I was in.

**Kelly:**

Yeah. I was going to ask you if it was a Monday to Friday, set hour job, and it sounds like it is.

**Max:**

Yes, so Monday to Friday, and then often there's a quick little Sunday task we have to do to make updates to the forecast so we're more prepared when we come in Monday mornings.

**Kelly:**

Right.

**Rex:**

Over the course of your career, Max, do you think there was a particular moment or accomplishment that was the most exciting that happened to you?

**Max:**

That's a tough one to answer. At AccuWeather, I loved the moments in big storm situations, particularly Northeast winter storms, and also hurricane situations. That's when our operational staff was at its busiest. It was stressful and hectic, but it is really cool making forecasts during that time and helping our clients make decisions, when you knew that it was impacting lives and property. I thought that was really exciting and is why, I think, as a meteorologist, you get into this business in the first place, is to make a positive impact on society. And it really felt like I was doing it in those situations.

**Kelly:**

Is there anything you wish you had done differently in your career?

**Max:**

I don't have a lot of regrets. I wish I stayed more on top of my technical skill sets when I was at AccuWeather, specifically with programming and data manipulation. In my new role, there definitely has been a little bit of a steep learning curve, getting back to speed on the programming. It's definitely something my company values and where I can provide additional value to the company. So I just wish, in those three and a half years I was at AccuWeather, I was doing a little bit more programming and staying on top of that, because I think it's not good to lose those skills.

**Kelly:**

So are there opportunities to do that, online courses or any types of seminars where you can brush up on those skills?

**Max:**

Yes, so one thing I was doing at AccuWeather, the last year I was there, I took an online LinkedIn Learning programming course. It was a free Python course, and it was just rehashing the rudimentary skills needed to be a Python programmer. So I was doing that in my last year at AccuWeather, and didn't finish the course actually. But that was one of my goals. I think finding those free online courses can be super helpful.

**Kelly:**

So what programming languages are the most important, do you think, in your position?

**Max:**

From what I've heard, in my position, we do a lot of R programming, and we also do a lot of Excel, and there's some VBA code that goes along with that as well. From what I've heard across the industry though, it's a lot of R programming and a lot of Python at this time, especially in the private sector.

**Kelly:**

Okay, good to know.

**Rex:**

Are there other professional development opportunities that have been beneficial to you, or that you're hoping to pursue to keep current in your field?

**Max:**

Yeah. So here's my AMS plug. I've been involved with the AMS Board of Private Sector Meteorologists and Financial and Climate Weather Risk Committees, both as a student, and then they took me on as a professional member. And I was very lucky to have this experience, and to remain deeply tied to the private sector. And in some ways, it's what got me on this podcast today and is what opened up this new job opportunity for me. So for students, I recommend becoming an AMS member, and trying to find their niche in the field, and looking into all the different opportunities and committees out there. Because there's literally a committee for anything, in every focus of the field. I know a lot of these boards and committees will take on student reps or ad hoc members for a year, so it's pretty easy to get involved with, I think.

**Rex:**

Great.

**Kelly:**

So Max, we always ask our guests one last fun question at the end of each podcast.

**Max:**

Okay.

**Kelly:**

What is your favorite hobby?

**Max:**

I think my favorite hobby is being a crazy fan of all my favorite sports teams. So that includes the Eagles, Penn State football, and the Philadelphia 76ers. I grew up in that area, so I'm Philly sports all the way. It's probably an unhealthy fandom, and I recognize that. I like running and working out pretty consistently. It keeps me in a good mental space for my life and my job. I think one of my favorite hobbies is going leaf-peeping during the fall. October is my favorite



month of the year, and I just love the colors. And especially growing up in the Northeast, it was always a time of the year I looked forward to. So that's my, I guess, more sensitive hobby.

**Rex:**

Thanks so much for joining us, Max, and sharing your work experiences with us.

**Max:**

Hey, thanks for having me as a part of the podcast.

**Rex:**

Well, that's our show for today. And in honor of St Patrick's Day, let us leave you with the traditional, weather-inspired Irish blessing. May the road rise up to meet you. May the wind always be at your back. May the Sun shine warm upon your face, and the rains fall soft upon your fields.